SHIRE OF MINGENEW

INFRASTRUCTURE

ASSET MANAGEMENT PLAN

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ABBREVIATIONS

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

GLOSSARY

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

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

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

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

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

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

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

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

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

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

Capital funding
Funding to pay for capital expenditure.

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

Capital investment expenditure
See capital expenditure definition

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

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

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

expenditures, the total project cost needs to be allocated accordingly.

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

Class of assets
See asset class definition

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

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

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

Current replacement cost "As New" (CRC)
The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

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

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

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

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

Economic life
See useful life definition.

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

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

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

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

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

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

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business (AASB 140.5)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

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

Renewal
See capital renewal expenditure definition above.

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

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

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

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

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

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

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

Sub-component
Smaller individual parts that make up a component part.

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

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

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

Source: DVC 2006, Glossary
Note: Items shown * modified to use DA instead of CRC
Additional glossary items shown **

1. EXECUTIVE SUMMARY

What Council Provides

Council provides a range of infrastructure assets to enable services to be delivered to the community.

This plan covers the following assets:-

Roads comprising roadways (597km), bridges (5), culverts (315), railway crossings (5), road signs (315), floodways (17), footpaths (length to be confirmed) and kerbing (length to be confirmed)

Buildings comprising recreation (12), Council/depot (7), public/civic (11) and housing (8)

Other assets covering recreation (12), public/civic (4) and waste (1)

What does it Cost?

There are two key indicators of cost to provide the services.

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

The life cycle cost to provide the infrastructure service is estimated at $1,758,600 per annum. Council's planned life cycle expenditure for year 1 of the asset management plan is $1,538,600 which gives a life cycle sustainability index of 0.87

The total maintenance and capital renewal expenditure required to provide the infrastructure service in the next 10 years is estimated at $23,693,000. This is an average of $2,369,300 per annum.

Council's maintenance and capital renewal expenditure on the infrastructure service for year 1 of the asset management plan is $2,649,000 giving a 10 year sustainability index of 1.12.

Plans for the Future

This Asset Management Plan is an initial plan and there are a number of areas where the information is limited or confidence in the quality of data is low. It is intended that these issues will be addressed in subsequent versions of the plan.

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

1. Ensure the assets are maintained at a safe and functional standard as set out in this asset management plan.
2. Continue to maintain the infrastructure assets to a standard that ensures that services are delivered to the community effectively and to the Levels of Service contained in this Plan

Measuring our Performance

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

Function
Our intent is that the infrastructure assets are maintained in partnership with other levels of government and stakeholders to deliver services to the community taking into account community expectations,, Council's strategic objectives, legislative requirements, technical standards and affordability

The assets will be maintained at a safe level and associated signage and equipment will be provided as needed to ensure public safety. We need to ensure the following key functional objectives are met:

- Levels of Service and performance targets are met
- Assets are provided to ensure that Demand Forecasts are met in the future
- Lifecycle management costs are optimised
- Asset management practices and systems are implemented to ensure efficient service delivery
- The improvement plan is implemented

Safety

We inspect all our assets in conjunction with normal operational and maintenance work. In addition, buildings have annual safety inspections. Defects and issues are noted and prioritised and defects repaired in accordance with our inspection schedule to ensure they are safe for all users.

The Next Steps

The actions resulting from this asset management plan are detailed in section 8.2 of this Plan.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service.

The asset management plan is to be read in conjunction with the *Mingenew Plan for the Future 2010-13*

This asset management plan covers the following infrastructure assets:

Roads

Bridges

Culverts

Railway Crossings

Road signs/features

Floodways

Kerbing

Footpaths

Buildings

Public/Civic Assets

Recreation Assets

Waste

Table 2.1. Assets covered by this Plan

Asset category	Dimension	Replacement Value ($)
Roads - formation	597 km	$12,301,289
Roads - unsealed	453 km	$17,611,077
Roads - sealed	144km	$3,558,885
Bridges	5	$9,000,000
Culverts	315	$2,719,816
Railway Crossings	5	$270,000
Road signs/features	311	$62,200
Floodways	17	$283,200
Kerbing	8.5km	$477,960
Footpaths	13.7km	$1,453,680

Asset category	Dimension	Replacement Value ($)
Buildings		
Recreation	12	$1,415,021
Council/Depot	7	$1,453,873
Public/Civic	11	$860,261
Housing	8	$1,262,983
Public/Civic Assets	4	$114,745
Recreation Assets	12	$259,708
Waste Assets	1	$40,322
TOTAL		**$53,155,020**

Key stakeholders in the preparation and implementation of this asset management plan are:

Stakeholder	Comment
Council Officers	Council officers play a role in managing infrastructure assets to ensure the assets provide levels of service that meet the needs of residents and other users of the facilities. Council officers implement the asset management plan.
Council Representatives	Councillors and the President of the Council are primarily responsible to ensure that their decisions represent and reflect the needs of the wider community.
Residents and other users	The requirements of residents and other users of infrastructure assets should be reflected in the agreed levels of service.
Lessees / Licensees	Council's lessees or licensees have an interest in ensuring that the assets that they use meet their requirements.
The Crown	In many cases Council is the trust manager of Crown reserves on which Council owned assets are located. The Crown has over riding responsibility to ensure that the land on which the buildings are built is managed such that it complies with the purpose the land was set aside for and Government policy.
Visitors / community groups	The requirements of visitors and community groups should be reflected in the agreed levels of service.
Insurers	Insurers have an interest to ensure that systems are in place to ensure that Council understands the condition and risks associated with insured assets.

Stakeholder	Comment
Government Departments	Government departments have an interest in the management of the infrastructure assets as a result of funding and service delivery
Neighbouring Shires	Mingenew works in conjunction with a number of neighbouring Shires in areas related to infrastructure assets

2.2 Goals and Objectives of Asset Management

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

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

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing defined levels of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.

This asset management plan is prepared in accordance with the Council's mission, objectives and strategies as set out in its Plan for the Future 2010-13.

Council's mission is:

"Council will endeavour to maintain and improve the quality of life in the Shire of Mingenew. The Council will strive for the recognition of a thriving and innovative community with an historical identity and encourage its future development and growth."

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives as contained in the Mingenew Strategic Plan – Plan for the Future 2010-13

Relevant Council objectives and how these are addressed in this asset management plan are:

Table 2.2. Council Objectives and how these are addressed in this Plan

Objective	How Goal and Objectives are addressed in IAMP
To provide an effective, safe and economical system for moving vehicles, pedestrian and cyclists	By providing the basis and objectives for planned maintenance and renewals activities to roads assets to enable the services to be delivered
Protect and enhance community infrastructure	By providing the basis and objectives for planned maintenance, renewals and upgrade activities to Council owned assets to enable the services to be delivered
Provide high quality community infrastructure	By providing the basis and objectives for planned maintenance, renewals and upgrade activities to Council owned assets to enable the services to be delivered

2.3 Plan Framework

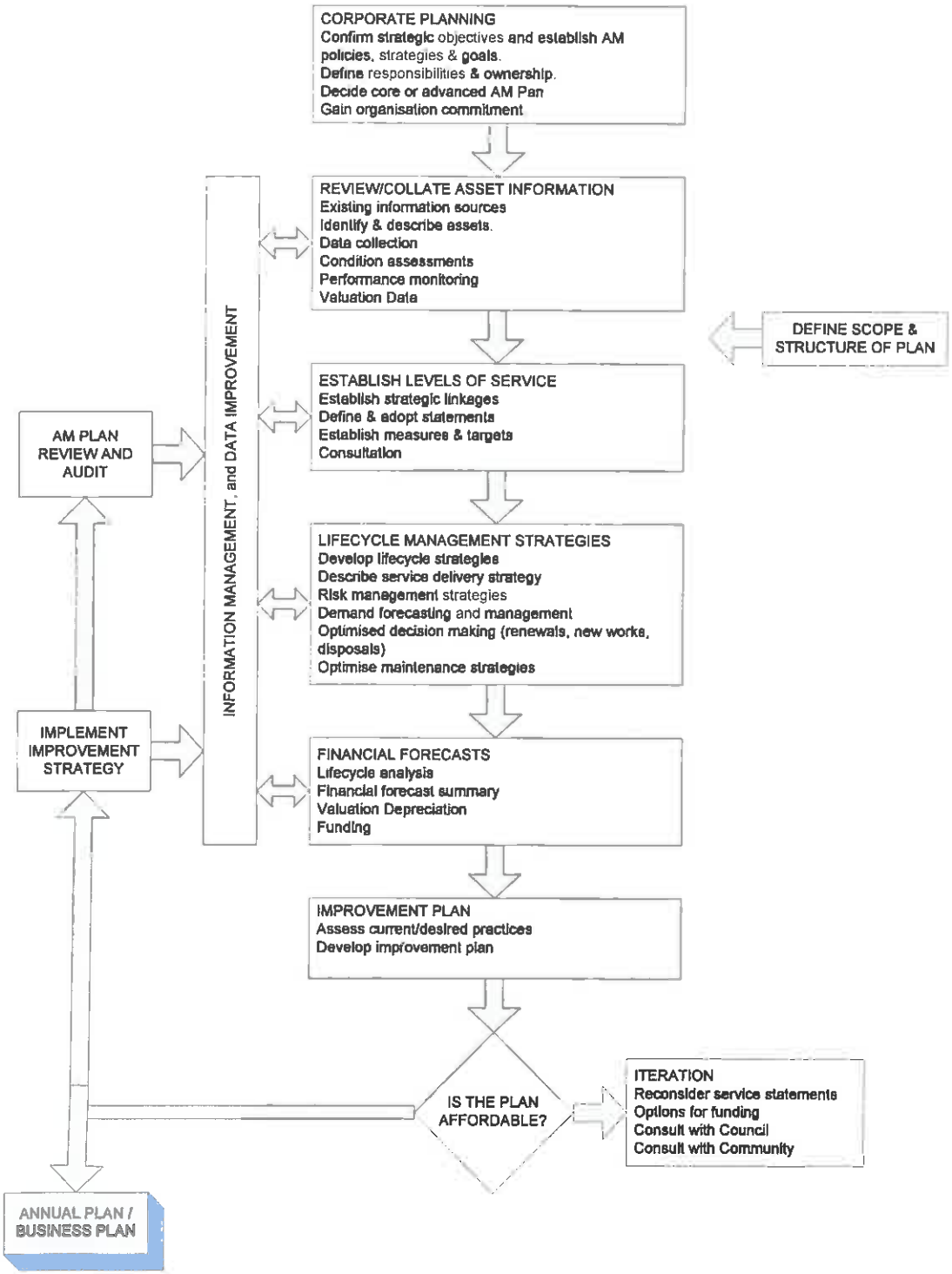
Key elements of the plan are:

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

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

Road Map for preparing an Asset Management Plan

Source: IIMM Fig 1.5.1, p 1.11



2.4 Core and Advanced Asset Management

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

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

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan

3.2 Legislative Requirements

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

Table 3.1. Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out the role, purpose, responsibilities and powers of local governments and will soon include the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Land Use Planning Act and Regulations	Provides a framework for the control and regulation of developments throughout the state. It also provides legislative provisions around environmental controls and impacts on development
Disability Discrimination Act	Eliminates, as far as possible, discrimination against persons on the ground of disability and to ensure, as far as practicable, those persons with disabilities have the same rights to equality before the law as the rest of the community.
Occupational Health and Safety	The purpose of the Act as it relates to infrastructure asset management is to • to protect people at a place of work against risks to health or safety arising out of the activities of persons at work, • to promote a safe and healthy work environment for people at work that protects them from injury and illness and that is adapted to their physiological and psychological needs, • to ensure that risks to health and safety at a place of

Legislation	Requirement
	work are identified, assessed and eliminated or controlled, • to deal with the impact of particular classes or types of dangerous goods and plant at, and beyond, places of work.
Australian Accounting Standard	Ensures that appropriate and consistent accounting standards are implemented across the industry.
Building Code of Australia	Ensures safe standards for building design and constructions throughout Australia

3.3 Current Levels of Service

Council has defined categories of Levels of Service.

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

Technical Levels of Service are operational or technical measures of performance developed to ensure that the Community Levels of Service are met. These Technical Levels of Service relate to service criteria such as:

Service Criteria	**Technical measures may relate to**
Quality	Smoothness of roads
Quantity	Area of parks per resident
Availability	Distance from a dwelling to a sealed road
Safety	Number of injury accidents

Council's current service levels are detailed in Tables 3.2, 3.3 and 3.4

Table 3.2. Current Service Levels - sealed and unsealed roads

Key Performance Measure	Level of Service	Performance Measurement Process	Target Performance	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	A smooth ride is provided	Number of complaints about smoothness of ride	No increase in current number/year	To be confirmed
Function	User requirements for availability and travel time are met	Number of complaints about availability and travel time	No increase in current number/year	To be confirmed
	Customer satisfaction with roads	Community Survey	Current performance rating is maintained	To be confirmed
Safety	Safe roads are provided	Number of injury crashes on shire roads caused by road condition or layout	0	0
	Safe footpaths are provided	Number of trip incidents on footpaths caused by the condition of the footpath	No increase in current number/year	To be confirmed
TECHNICAL LEVELS OF SERVICE				
Condition	Assessed road condition	Condition assessment	Current average unsealed road condition to be maintained	2.7
	Assessed road condition	Condition assessment	Current average sealed road condition to be maintained	1.5
	Assessed footpath condition	Condition assessment	Current average footpath condition to be maintained	2.0
Sustainability	Roads network is managed sustainably	Sealed Road Sustainability Index*	Current ranking in benchmark table of Shires in Group is not worsened	Ranked in the highest 10% of Shires in Group

Key Performance Measure	Level of Service	Performance Measurement Process	Target Performance	Current Performance
	Roads network is managed sustainably	State of the roads assets*	Current ranking in benchmark table of Shires in Group is maintained	Ranked in the highest 25% of Shires in Group
Cost effectiveness	Maintenance undertaken in an efficient manner	Maintenance cost of sealed and unsealed roads	Current costs $/km does not increase (allowing for inflation)	$536/km (2010/11)

* *Appendix 19, WALGA Report of Local Government road assets and expenditure. Group is Agricultural Shires without large towns*

Note:
Asset conditions ratings are summarised below. Refer to section 5.1.3 for details

Rating	Condition	Rating	Condition
1	Excellent	4	Average
2	Very good	5	Poor/Unserviceable
3	Good.		

Table 3.3. Current Service Levels - buildings and structures

Key Performance Measure	Level of Service	Performance Measurement Process	Target Performance	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Buildings and structures are provided to an acceptable quality	Number of complaints about Shire buildings and structures quality	No increase in current number/year	To be confirmed
Function	User requirements for availability are met	Number of complaints about community halls and public/civic buildings availability	No increase in current number/year	To be confirmed
	Customer satisfaction with Shire buildings and facilities	Community Survey	Current performance rating is maintained	To be confirmed
Safety	Safe buildings are provided	Number of injury accidents caused by the quality or condition of Shire buildings and structures	0	0
TECHNICAL LEVELS OF SERVICE				
Condition	Assessed condition of buildings and structures	Condition assessment as part of annual inspection	Current condition to be maintained	2.3
Safety	Compliance with safety legislation	Safety inspection as part of annual inspection	100% compliance with safety legislation	To be confirmed

Note:
Asset conditions ratings are summarised below. Refer to section 5.1.3 for details

Rating	Condition	Rating	Condition
1	Excellent	4	Average
2	Very good	5	Poor/Unserviceable
3	Good.		

Table 3.4. Current Service Levels - recreation

Key Performance Measure	Level of Service	Performance Measurement Process	Target Performance	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Recreation facilities are provided to an acceptable quality	Number of complaints regarding recreation facilities	No increase in current number/year	To be confirmed
Function	User requirements for availability are met	Number of complaints about recreation facilities availability	No increase in current number/year	To be confirmed
	Customer satisfaction with recreation facilities	Community Survey	Current performance rating is maintained	To be confirmed
Safety	Safe recreation facilities are provided	Number of injury accidents caused by the quality or condition of recreation facilities	0	0
TECHNICAL LEVELS OF SERVICE				
Condition	Assessed condition of recreation facilities	Condition assessment as part of annual inspection	Current condition to be maintained	2.5
Safety	Compliance with safety legislation	Safety inspection as part of annual inspection	100% compliance with safety legislation	100% compliance with safety legislation

Note:
Asset conditions ratings are summarised below. Refer to section 5.1.3 for details

Rating	Condition	Rating	Condition
1	Excellent	4	Average
2	Very good	5	Poor/Unserviceable
3	Good.		

3.4 Desired Levels of Service

Council has yet to quantify desired levels of service. This will be done in future revisions of this asset management plan.

4. FUTURE DEMAND

4.1 Demand Forecast

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

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

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	The population of the Shire of Mingenew is currently approximately 500	The population of the Shire is currently forecast to increase to 520 next 20 years	The forecast increase in population is unlikely to significantly increase demand on the current assets
Demographics	In 2010 work age persons represent approximately 60% of the Shire's population whilst persons aged greater than 65 represent 11% (55 persons)	In 2021 it is estimated that work age persons will represent approximately 59% of the Shire's population whilst persons aged greater than 65 will represent 18% (90 persons)	The increase in the %age older persons in the community will lead to an increased demand on older person's services.
Transport Network	A significant proportion of grain from the Shire and surrounding Shires is transported via the rail network	The WA government is proposing to close down significant lengths of the rural rail network.	A significant increase in the amount of grain being transported on roads in the Shire which will increase the rate of deterioration of the roads assets
Tourism	Moves to develop tourism in the Shire are in the process of being implemented	Increase in numbers of visitors to the Shire	Increase in demand on roads assets
Mining	New magnetite mine being developed in area	Some increase in local economy to provide the mine with support services and staff may occur	Some increase in road traffic to and from the mine and increased rail freight movements.
	New rail line being constructed to serve the mine	Temporary camp near Mingenew for construction teams for 12 months	Temporary increase in demand for all assets
Agricultural Practices	The number of farms is reducing as farmers	Farms will increase in size	Larger farm machinery and trucks using the Shire's roads, leading

Demand factor	Present position	Projection	Impact on services
	leave the land		to a requirement for wider roads and greater road clearance
Community Expectations	The communities expectations about the levels and scope of services provided by the Shire have increased over the last few years	The increase in expectation is likely to continue	Likely be wide ranging – depends on affordability

4.2 Changes in Technology

Technology changes may affect on the delivery of services covered by this plan as a result of improvements to construction materials and methods and more efficient operational practices. These may increase the life of some assets and reduce the risk of damage. Technology changes may also affect the level and nature of demand for some assets.

4.3 Demand Management Plan

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

Opportunities for demand management will be developed in future revisions of this asset management plan.

4.4 New Assets from Growth

The following new assets required to meet growth and demand changes will be constructed by Council. (ref Forward Capital Works Plan). The new asset values are summarised in Table 4.2.

Table 4.2. New Assets from Growth

New Asset	Year of construction	Forecast Capital Cost
Staff Housing	2011/12	$583,000
5 aged persons living units	2012/13	$1,533,000
Toilet Block	2012/13	$80,000
Staff Housing	2013/14	$250,000
Depot	2013/14	$750,000
Depot	2014/15	$750,000

Acquiring these new assets will commit council to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operating and maintenance costs.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown below.

Table 5.1 Asset Summary

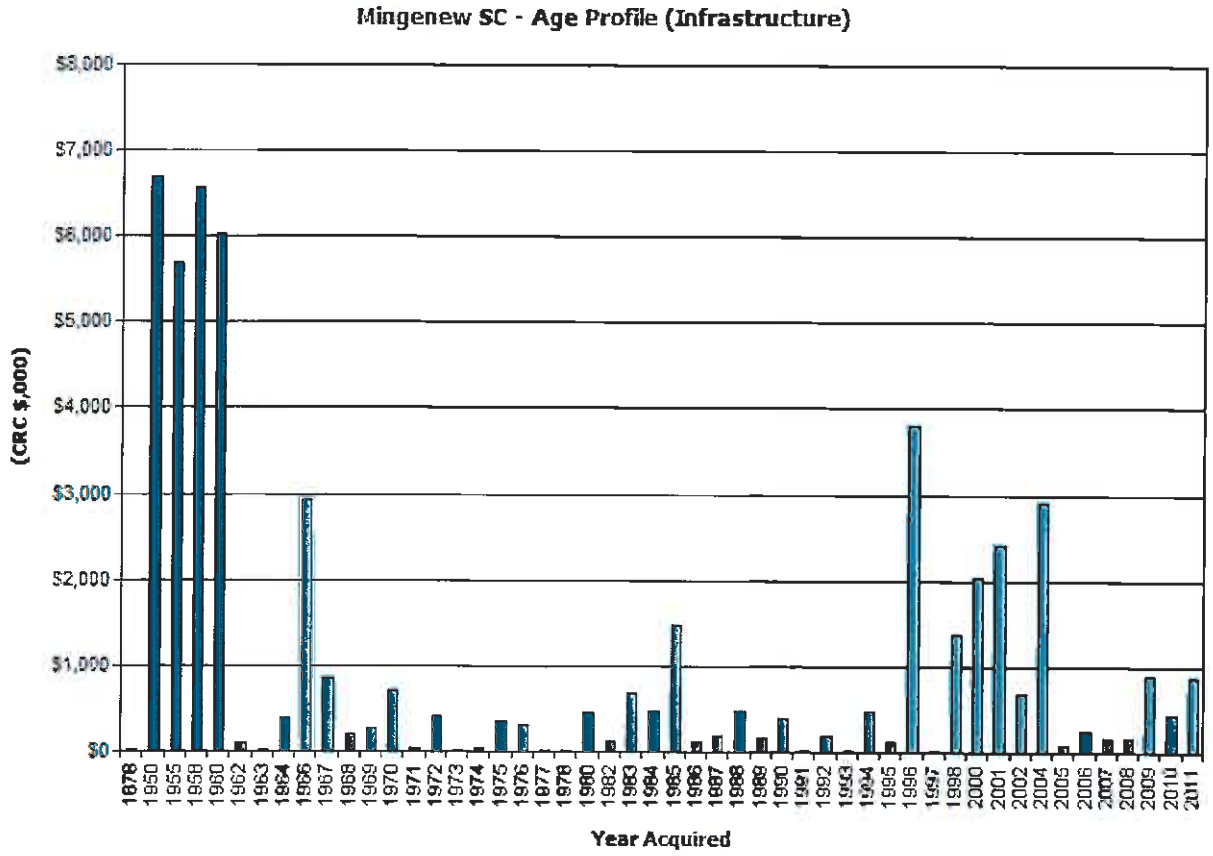
Asset category	Dimension	Replacement Value ($)
Roads - formation	597 km	$12,301,289
Roads - unsealed	453 km	$17,611,077
Roads - sealed	144km	$3,558,885
Bridges	5	$9,000,000
Culverts	315	$2,719,816
Railway Crossings	5	$270,000
Road signs/features	311	$62,200
Floodways	17	$283,200
Kerbing	8.5km	$477,960
Footpaths	13.7km	$1,453,680
Buildings		
Recreation	12	$1,415,021
Council/Depot	7	$1,453,873
Public/Civic	11	$860,261
Housing	8	$1,262,983
Public/Civic Assets	4	$114,745
Recreation Assets	12	$259,708
Waste Assets	1	$40,322
TOTAL		**$53,155,020**

The quality of data regarding the age of Council's infrastructure assets is as follows

Roads- Unsealed	No data. Age estimated based on depreciated amount to date
Roads – Sealed	Satisfactory
Footpaths/Kerbing	Poor
Buildings	Satisfactory
Other Assets	Satisfactory

The age profile of Council's infrastructure assets is shown in Figure 1 below.

Fig 1 Asset Age Profile



Note: There is no information on the date of construction of road formations. It has been assumed that they were all constructed between 1950 and 1960, which leads to the peaks in those years. This has no impact on depreciation amounts as road formations are not depreciated.

5.1.2 Asset capacity and performance

Council's assets and services are generally provided in accordance with design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.2.

Table 5.2. Known Service Performance Deficiencies

Location	Service Deficiency
Aged Persons Living Units	Only 4 units provided at present. It is intended that further units will be constructed in the future

The above service deficiencies were identified from discussions with Council officers.

5.1.3 Asset condition

The average condition of Council's infrastructure assets is shown below.

Table 5.3. Average Asset Condition

		Average Condition
Road Unsealed		2.7
Road Sealed		1.5
Footpaths		2.0
Kerbing		2.0
Buildings	Recreation	2.7
	Council/Depot	3.1
	Public/Civic	2.5
	Housing	1.3
Public/Civic Assets		3.0
Recreation Assets		2.5
Waste Assets		3.0

Condition is measured using a 1 – 5 rating system as shown below

Table 5.4. Condition Rating System

Rating	Condition	Residual Life - %age of Useful Life	Mean %age Residual Life
1	Excellent condition: Only planned maintenance required.	>86	95
2	Very good: Minor maintenance required plus planned maintenance.	65 to 85	80
3	Good: Significant maintenance required.	41 to 64	55
4	Average: Significant renewal/upgrade required.	10 to 40	35
5	Poor: Unserviceable	<10	5

The condition of roads assets is based on a condition assessment carried out by Cardno in June 2011. Pavement Condition has been taken as the cracking index and seal condition has been taken as the worst of binder condition and stone condition.

5.1.4 Asset valuations

The value of assets as at June 2011 covered by this asset management plan is summarised below.

Table 5.5. Asset Valuation

Asset category	Replacement Value ($)	Accumulated Depreciation ($)	Depreciated Replacement cost ($)
Roads - formation	$12,301,289	0	$12,301,289
Roads - unsealed	$17,611,077	$3,810,938	$13,800,139
Roads - sealed	$3,558,885	$1,402,052	$2,156,832
Bridges	$9,000,000	$3,575,810	$5,424,190
Culverts	$2,719,816	$1,080,616	$1,639,200
Railway Crossings	$270,000	$107,274	$162,776
Road signs/features	$62,200	$41,818	$20,382
Floodways	$283,200	$184,454	$98.746
Kerbing	$477,960	$90,469	$387,491

Asset category	Replacement Value ($)	Accumulated Depreciation ($)	Depreciated Replacement cost ($)
Footpaths	$1,453,680	$1,241,414	$212,266
Buildings			
Recreation	$1,415,021	$107,315	$1,307,706
Council/Depot	$1,453,873	$288,578	$1,165,295
Public/Civic	$860,261	$123,929	$736,332
Housing	$1,262,983	$130,701	$1,132,282
Public/Civic Assets	$114,745	$18,819	$95,926
Recreation Assets	$259,708	$134,132	$125,576
Waste Assets	$40,322	$9,288	$31,034
TOTAL	**$53,155,020**	**$12,357,607**	**$40,797,413**

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

Rate of Asset Consumption	1.0% of Replacement Value
Annual Average Asset renewal	1.5% of Replacement Value
Annual Average Upgrade/expansion	1.9% of Replacement value

5.2 Risk Management Plan

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

The identified risks are summarised in Table 5.6.

Table 5.6. Critical Risks and Treatment Plans

Risk	Consequence	Risk Rating	Risk Treatment Plan
Overall condition of assets decreases due to inadequate renewal programs	Levels of Service not achieved	High	Determine renewals priorities based on lifecycle costs and effects on service
Overall condition of assets decreases due to inadequate maintenance programs	Levels of Service not achieved	High	Determine maintenance priorities based on lifecycle costs and effects on service
Incorrect or incomplete asset data	Inaccurate financial forecasts and inappropriate maintenance and renewals programs	High	Undertake a data audit and collection program
Buildings owned by others on the Shire's land	The Shire takes over responsibility for the building if the owner defaults	Medium	Ensure lease conditions clearly identify owners responsibilities regarding building maintenance
Climate Change/major storm event	Demands on assets affected directly and via effects on local economy	Medium	Manage assets taking climate change into account
Asbestos in buildings	Potential for health issues	Medium	Implement program to remove asbestos from buildings
Resource issues affect the management of the assets	Levels of Service not achieved, condition of assets deteriorates	Medium	Establish clear management plans, with forecast costs, to maintain Levels of Service and debate with Council
Unforeseen increases in fuel, plant and materials costs	Increased costs of carrying out maintenance and renewals	Medium	Monitor costs
Failure of materials supplies	Delays to maintenance and renewals and increased materials costs	Low	Identify if there are any alternative supplies for critical materials and establish purchasing arrangements
Health and Safety incident whilst working on assets causes fatality or serious harm injury	Prosecution risk	Low	Ensure Council has H&S procedures and staff are trained in them. Ensure all contractors have H&S policy and procedures and they are complied with

Risk	Consequence	Risk Rating	Risk Treatment Plan
Decline in Population	Reduced income, under used assets	Low	Monitor population trends
Changes in legislation affect the responsibilities of Council	Changes in costs and resource requirements	Low	Monitor legislative changes
Closure of mine	Reduction in local economy and use of assets	Low	Monitor situation

5.3 Routine Maintenance Plan

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

5.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

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

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Maintenance expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will include linking required maintenance expenditures with required service levels.

Reactive maintenance is carried out in response to customer service requests.

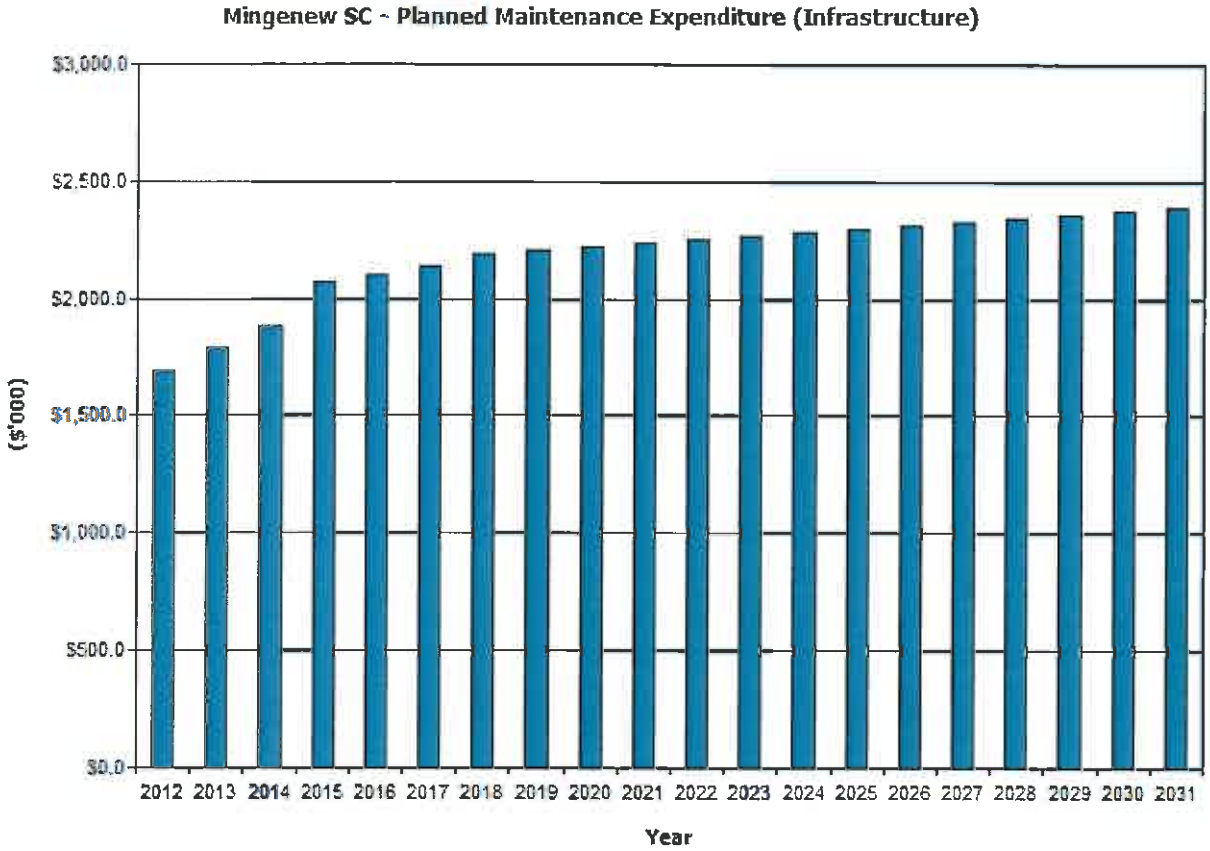
5.3.2 Standards and specifications

Maintenance work is carried out in accordance with all relevant Standards and Specifications.

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 2. Note that all costs are shown in current 2010/11 dollar values.

Fig 2. Planned Maintenance Expenditure



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

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

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register worksheets . Candidate proposals are inspected to verify accuracy of remaining life estimate and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria related to renewals are to be developed

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

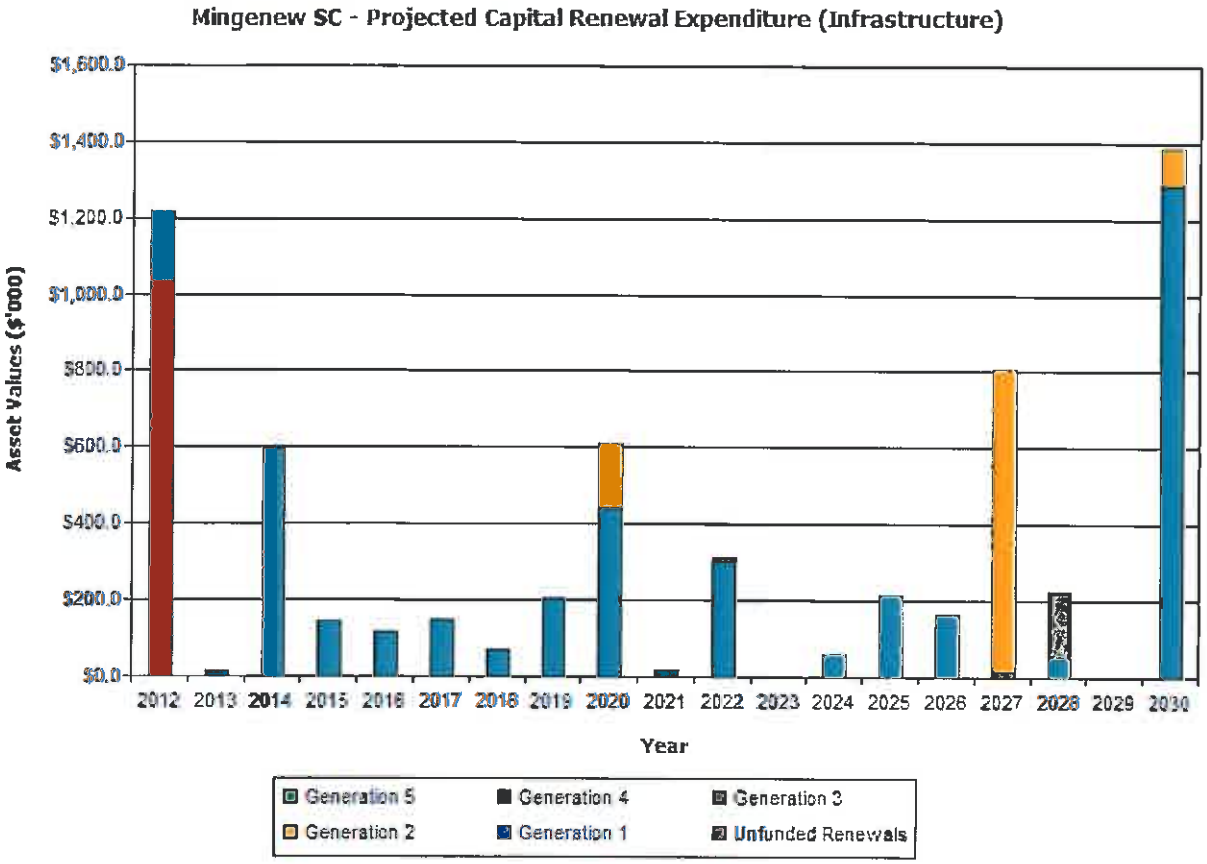
5.4.2 Renewal standards

Renewal work is carried out in carried out in accordance with relevant Standards and Specifications.

5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 3. Note that all costs are shown in current 2010/11 dollar values.

Fig 3. Projected Capital Renewal Expenditure



In the above figure, unfunded renewals is the sum of the replacement costs of assets that have currently passed their renewal date, based on date of construction and useful life.

Generation 2 means assets that are being renewed for the second time in the plan period, e.g. road seals renewed in 2012 should be renewed again in 2027 as road seals have a standard useful life of 15 year life.

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

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

5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

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

Council's Forward Capital Works Plan provides for the Shire's expenditure on asset renewals, expansions and upgrades and any new assets over the five years commencing 2010/11. The Plan includes a project prioritisation process which has been used as the basis of project prioritisation in this asset management plan as follows.

The project prioritisation criteria for the Shire of Mingenew are as follows:

- Develop our town
- Improve social equity
- Demand
- Affordability
- Environment
- Risk

Each project has been evaluated in the Council's Forward Capital Works Plan against each of the above criteria in accordance with the following table (note that only priority ratings are included in the Forward Capital Works Plan).

Table 5.7. Project Prioritisation

Priority Score	Priority Rating	Description
6	Highly beneficial	Major positive impacts resulting in substantial and long-term improvements or enhancements of the existing environment.
5	Moderately beneficial	Moderate positive impact, possibly of short-, medium- or longer-term duration. Positive outcome may be in terms of new opportunities and outcomes of enhancement or improvement.
4	Slightly beneficial	Minimal positive impact, possibly only lasting over the short-term. May be confined to a limited area.
3	Neutral	Neutral – no discernible or predicted positive or negative impact.
2	Slightly detrimental	Minimal negative impact, probably short-term, able to be managed or mitigated, and will not cause substantial detrimental effects. May be confined to a small area.

Priority Score	Priority Rating	Description
1	Moderately detrimental	Moderate negative impact. Impacts may be short-, medium- or long-term and impacts will most likely respond to management actions.

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

The priority scores for the Shire's infrastructure projects, based on the evaluation in the FCWP are shown in table 5.8

The Mingenew Sports and Recreation Master Plan (MSRMP) includes an action plan for the provision of new and upgraded sports and recreation assets. The prioritisation of projects included in the MSRMP for 5 years from 2011/12 is shown in table 5.9.

Table 5.8. Priority scores for infrastructure projects

Project	New/Renewal	Develop our Town	Improve social equity for the Town	Demand	Affordability	Environment	Risk	Total Score
Roads Program	Renewal	6	6	6	2	2	4	26
Aged Accommodation	New	6	4	5	2	3	5	25
Recreation Centre Expansion	New	5	5	5	2	3	5	25
Footpaths Program	Renewal	4	5	4	3	4	4	24
Main Street Refurbishment	Renewal	5	5	4	3	3	4	24
Depot Accommodation	New	6	3	5	2	3	4	23
Recreation Ground Toilet Facilities	New	5	3	4	2	3	5	22
Staff Housing	New	5	2	5	3	3	3	21
Race Track Reticulation	New	4	4	3	3	3	4	21
Office Accommodation Refurbishment	Renewal	5	3	3	2	3	3	19

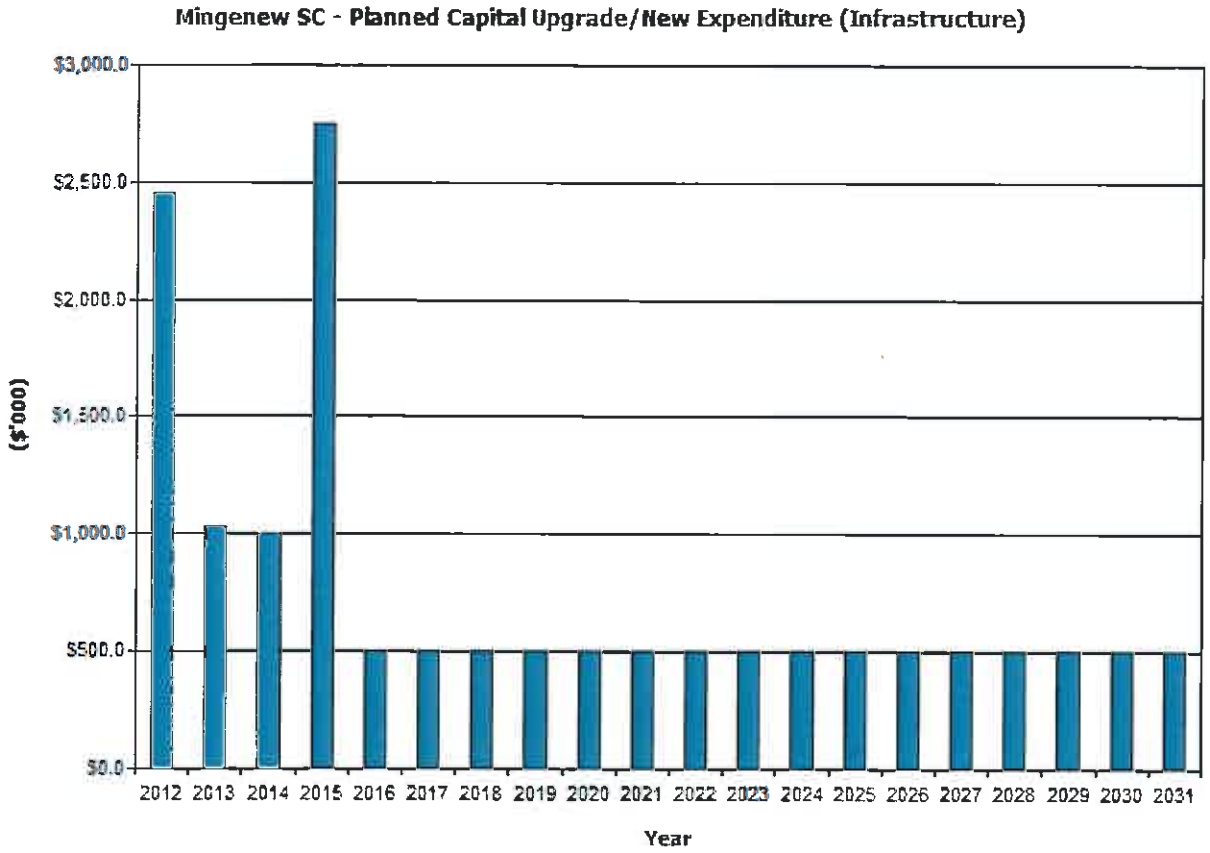
Table 5.9. Prioritisation of Projects in MSRMP

Location	Facility	Improvements	Rating
Mingenew Major Sports Ground.		major upgrades to all Headworks including; Power with minor work to Water and Septic services.	1
Irwin Polocross		Construct new Ablution facilities.	2
Mingenew Sporting Club	Bowling Greens.	Provision of shade shelters to greens.	3
Mingenew Netball Club		Replace current old lighting system to the Netball courts	4
Mingenew Turf Club	Turf Club. Assist the	Replace the old Stewards Tower and relocate Horse Stalls	5
Mingenew Hockey Club		Upgrade and extend lighting	6
Mingenew Sporting Club	Bowling Greens.	Replace Asbestos Fence to the Eastern side of the Bowling Green	7
Mingenew Football Club	Football Oval.	Upgrade on ground infrastructure and replace Coaches and Timekeepers Boxes.	8
Mingenew Golf Club	Golf Tees.	Install Limestone block protective Retainer Walls to all tees	9
Mingenew Turf Club		Upgrade Water Supply to be upgraded and reticulate the track	10
Mingenew Bowling Club	Bowling Greens.	Replace surrounds to greens with a block retaining wall and renew paving.	11
Mingenew Cricket Club	Cricket Practice Wicket.	Upgrade Practice Wicket	12
Mingenew Football Club	Football Oval.	Upgrade Football Oval Lighting to WAFL standard and provide an Electronic Scoreboard	13
Irwin Polocrosse		Upgrade Power will need to be upgraded.	14
Mingenew Hockey Club	Hockey Field.	.Install shaded area for visitors, Perimeter Fence and Fencing to Playground Construct an Equipment Storage Shed and Spectator Seating	15

Location	Facility	Improvements	Rating
Mingenew Football Club	Football Amenities.	New Ventilation system to change rooms, additional outside Spectator Seating and new Public Toilet block to the Eastern side of the oval.	16
Mingenew Golf Club	Golf Fairways & Greens.	Increase maintenance program including the mowing of fairways and brooming of greens.	17
Mingenew Bowling Club	Bowling Greens.	Replace Light Towers	18
Mingenew Tennis Club	Tennis Courts.	Upgrade Reticulation and Pumping systems and provide an outside tap to the new Equipment Shed for line marking purposes.	19
Mingenew Recreation, Centre and Turf Club	Recreation Centre & Pavilion.	Extend Shade Canopies between Rec Centre and Pavilion and install Lighting to Car park.	20

Planned upgrade/new asset expenditures are summarised in Fig 4. The planned forward capital works program is shown in Appendix A. All costs are shown in 2010/11dollar values.

Fig 4. Planned Capital Upgrade/New Asset Expenditure



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

5.6 Disposal Plan

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

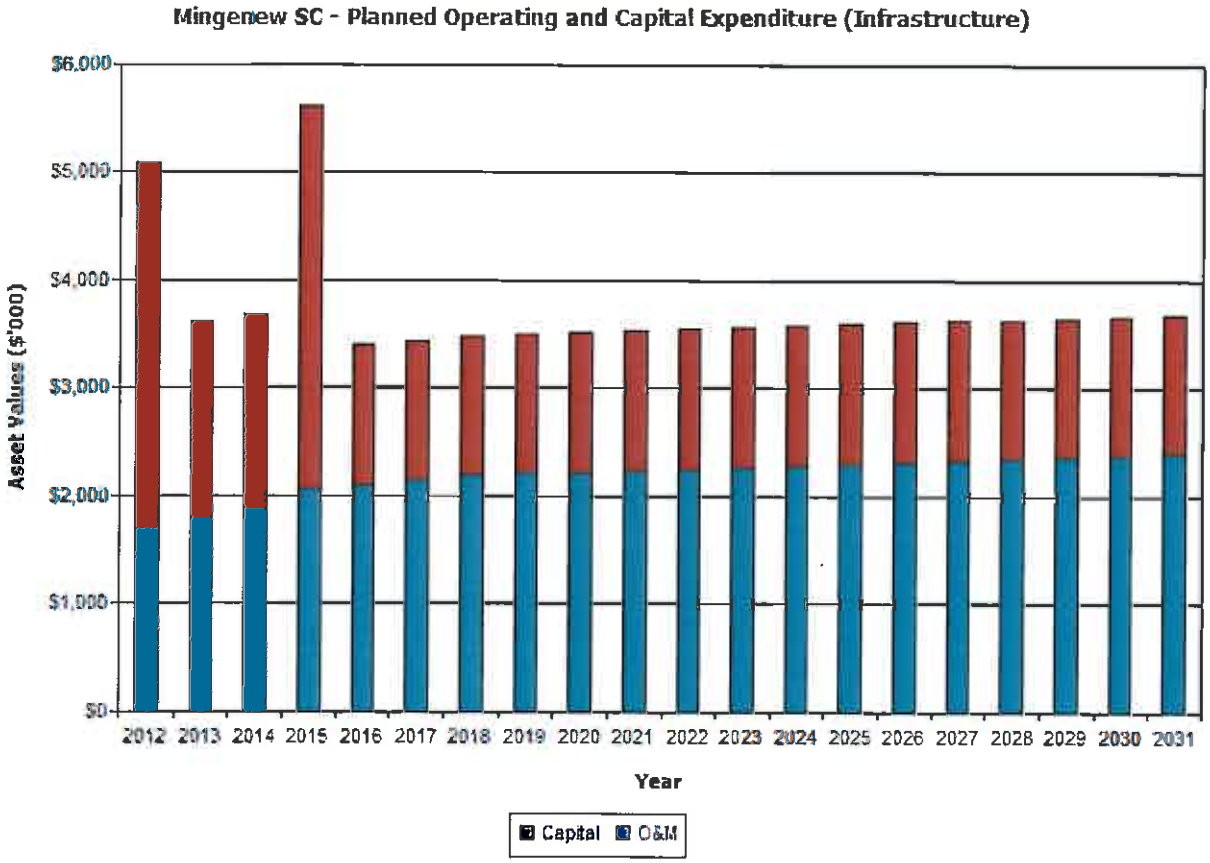
6. FINANCIAL SUMMARY

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

6.1 Financial Statements and Projections

The financial projections are shown in Fig 5 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 5. Planned Operating and Capital Expenditure



Note that all costs are shown in current 2010/11 dollar values.

6.1.1 Sustainability of service delivery

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

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan is $1,758,600

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals.

The annual average life cycle cost and the life cycle expenditure at the start of this plan are shown in table 6.1.

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

The life cycle gap per annum for services covered by this asset management plan and the life cycle sustainability index are also shown in Table 6.1.

Table 6.1. Life Cycle cost and life cycle expenditure comparisons

<table>
<tr><th>Asset category</th><th>Annual Average Lifecycle cost ($)</th><th>Life cycle expenditure at start of this Plan ($)</th><th>Life cycle gap per annum ($)</th><th>Life cycle sustainability index</th></tr>
<tr><td>Roads - formation</td><td rowspan="10">$1,479,800</td><td rowspan="10">$1,127,800</td><td rowspan="10">$352,000</td><td rowspan="10">0.76</td></tr>
<tr><td>Roads - unsealed</td></tr>
<tr><td>Roads - sealed</td></tr>
<tr><td>Bridges</td></tr>
<tr><td>Culverts</td></tr>
<tr><td>Railway Crossings</td></tr>
<tr><td>Road signs/features</td></tr>
<tr><td>Floodways</td></tr>
<tr><td>Kerbing</td></tr>
<tr><td>Footpaths</td></tr>
<tr><td>Buildings</td><td rowspan="4">$250,100</td><td rowspan="5">$411,800</td><td rowspan="5">-$143,000</td><td rowspan="5">1.53</td></tr>
<tr><td>Recreation</td></tr>
<tr><td>Council/Depot</td></tr>
<tr><td>Public/Civic</td></tr>
<tr><td>Housing</td></tr>
<tr><td>Public/Civic Assets</td><td>$18,700</td></tr>
</table>

Recreation Assets				
Waste Assets				
TOTAL	**$1,758,600**	**$1,538,600**	**$209,000**	**0.87**

Note:

Annual Average Life Cycle Costs are based on the following required annual maintenance cost percentages of replacement cost in 2011/12, and annual depreciation costs in 2011/12 calculated using the asset lives indicated in section 6.4 below.

Life cycle expenditure at the start of this plan is based on records of maintenance costs incurred in 2010/11 and annual depreciation costs in 2011/12 calculated using the asset lives indicated in section 6.4 below.

Required annual maintenance costs of roads includes for gravel re-sheet of paved surface unsealed roads every 10 years at a cost of $15,000/km.

Annual maintenance costs for recreation assets includes for parks and gardens maintenance at current levels

Table 6.2. Annual Maintenance Costs

Asset Class	Annual maintenance cost %age of replacement value
Sealed Roads	1.0%
Unsealed roads	0.5%
Bridges	1.0%
Culverts	1.0%
Railway Crossings	2.5%
Road signs/features	2.5%
Floodways	1.0%
Kerbing	0.5%
Footpaths	2.5%
Buildings	2.5%
other assets	2.0%
Airports	2.0%

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

This may be compared to existing or planned expenditures in the 20 year period to identify any gap. In a core asset management plan, a gap is generally due to increasing asset renewals.

Fig 6 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 7. Table 6.3.shows the annual and cumulative funding gap between projected and planned renewals.

Fig 6. Projected Capital Renewal Expenditure

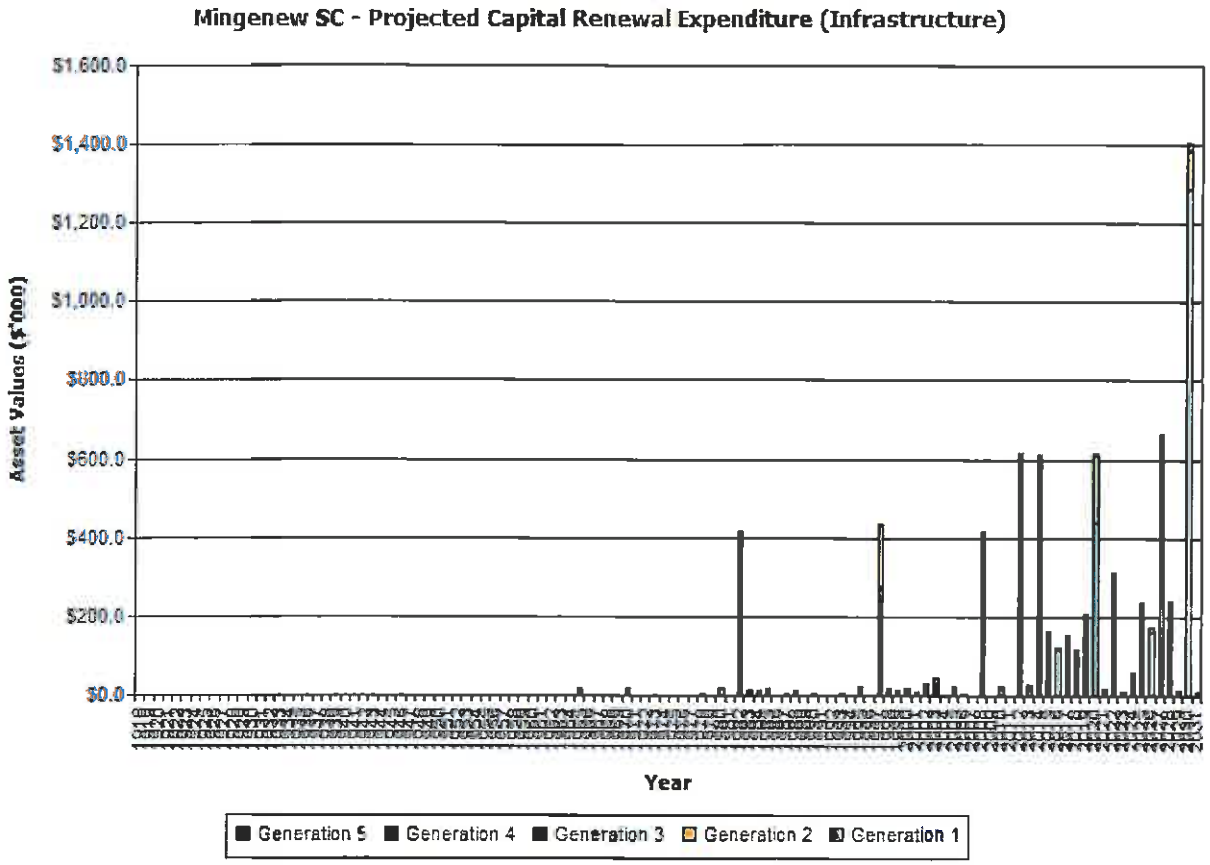


Fig 7. Projected and Planned Renewals and Current Renewal Expenditure

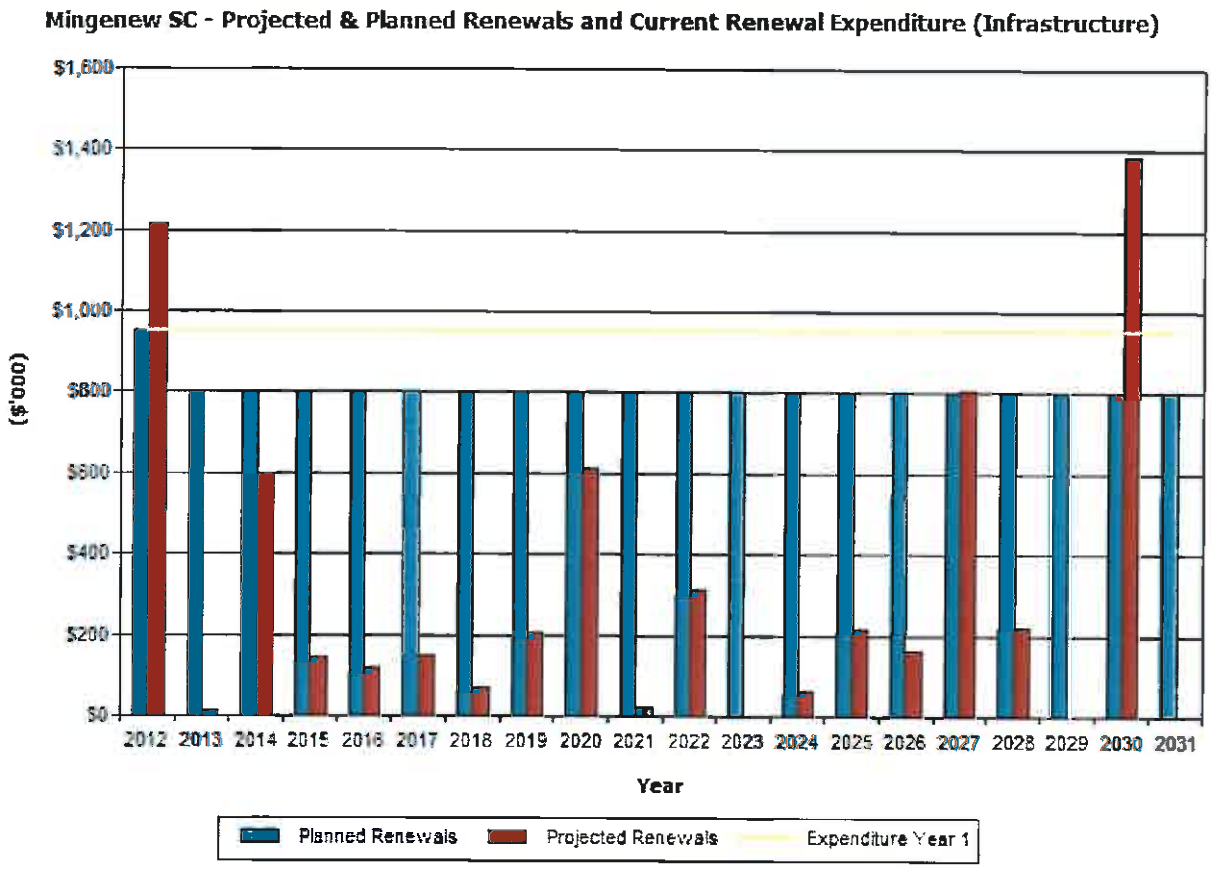


Table 6.3. Projected and Planned Renewals and Expenditure Gap

Year	Projected Renewals $,000	Planned Renewals $,000	Renewal Funding Gap $,000	Cumulative Gap $,000
2012	1,216.14	954.00	262.14	262.14
2013	12.75	800.00	-787.25	-525.12
2014	599.20	800.00	-200.80	-725.92
2015	144.93	800.00	-655.08	-1,380.99
2016	117.34	800.00	-682.66	-2,063.65
2017	150.71	800.00	-649.29	-2,712.94
2018	69.94	800.00	-730.06	-3,443.00
2019	206.03	800.00	-593.98	-4,036.97
2020	612.57	800.00	-187.43	-4,224.41
2021	19.87	800.00	-780.13	-5,004.53
2022	312.26	800.00	-487.74	-5,492.27
2023	0.00	800.00	-800.00	-6,292.27
2024	59.74	800.00	-740.26	-7,032.53
2025	215.86	800.00	-584.14	-7,616.67
2026	165.23	800.00	-634.77	-8,251.45
2027	808.38	800.00	8.38	-8,243.07
2028	222.45	800.00	-577.55	-8,820.62
2029	0.00	800.00	-800.00	-9,620.62
2030	1,385.63	800.00	585.63	-9,034.99
2031	0.00	800.00	-800.00	-9,834.99

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

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap. On the basis of the currently planned annual renewals expenditure, there is no renewals gap after 2012/13.

Council's long term financial plan covers the first 10 years of the 20 year planning period. The total maintenance and capital renewal expenditure required over the 10 years is $23,693,000.

This is an average expenditure of $2,369,300. Estimated maintenance and capital renewal expenditure in year 1 is $2,649,000. The 10 year sustainability index is 1.12

6.2 Funding Strategy

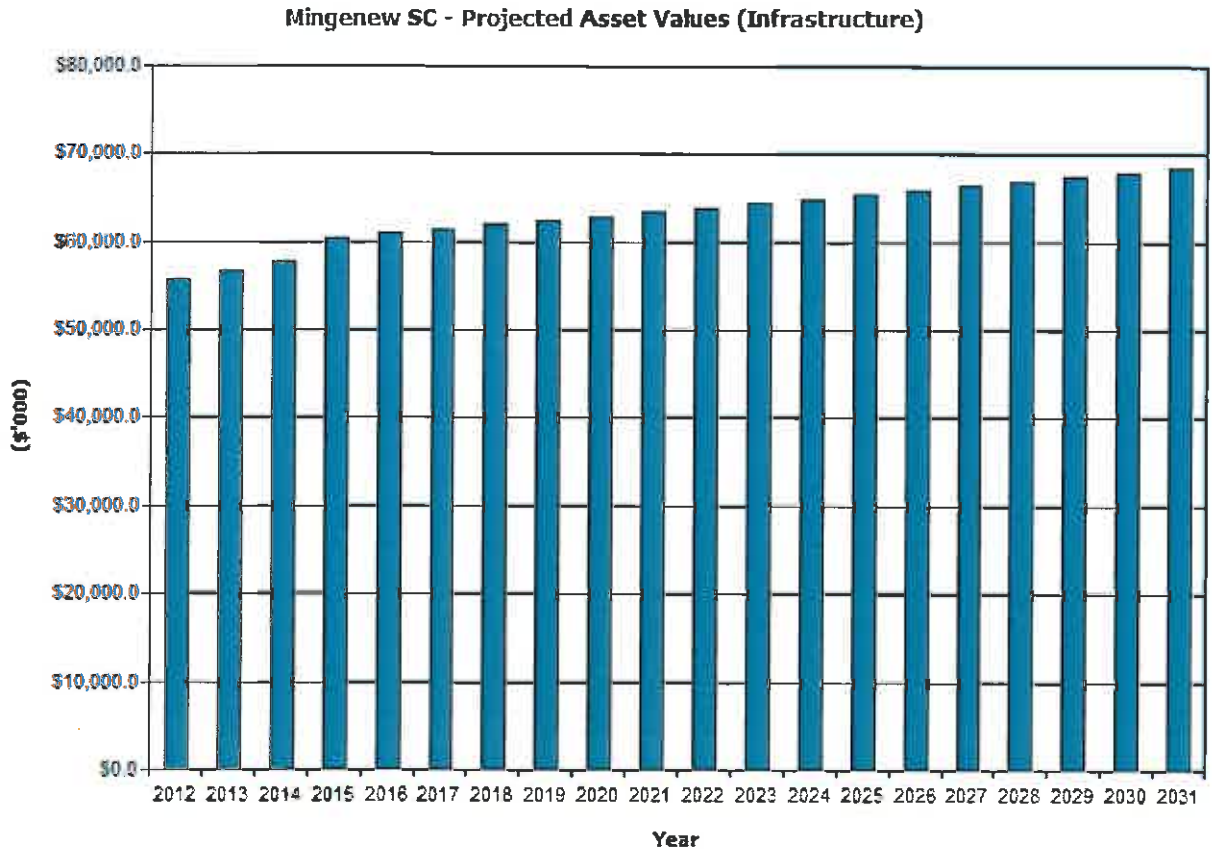
Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan.

Achieving the financial strategy will require Council to obtain Country Local Government Funds, Road Projects grants and the Roads to Recovery program grants, any shortfall being funded by Council.

6.3 Valuation Forecasts

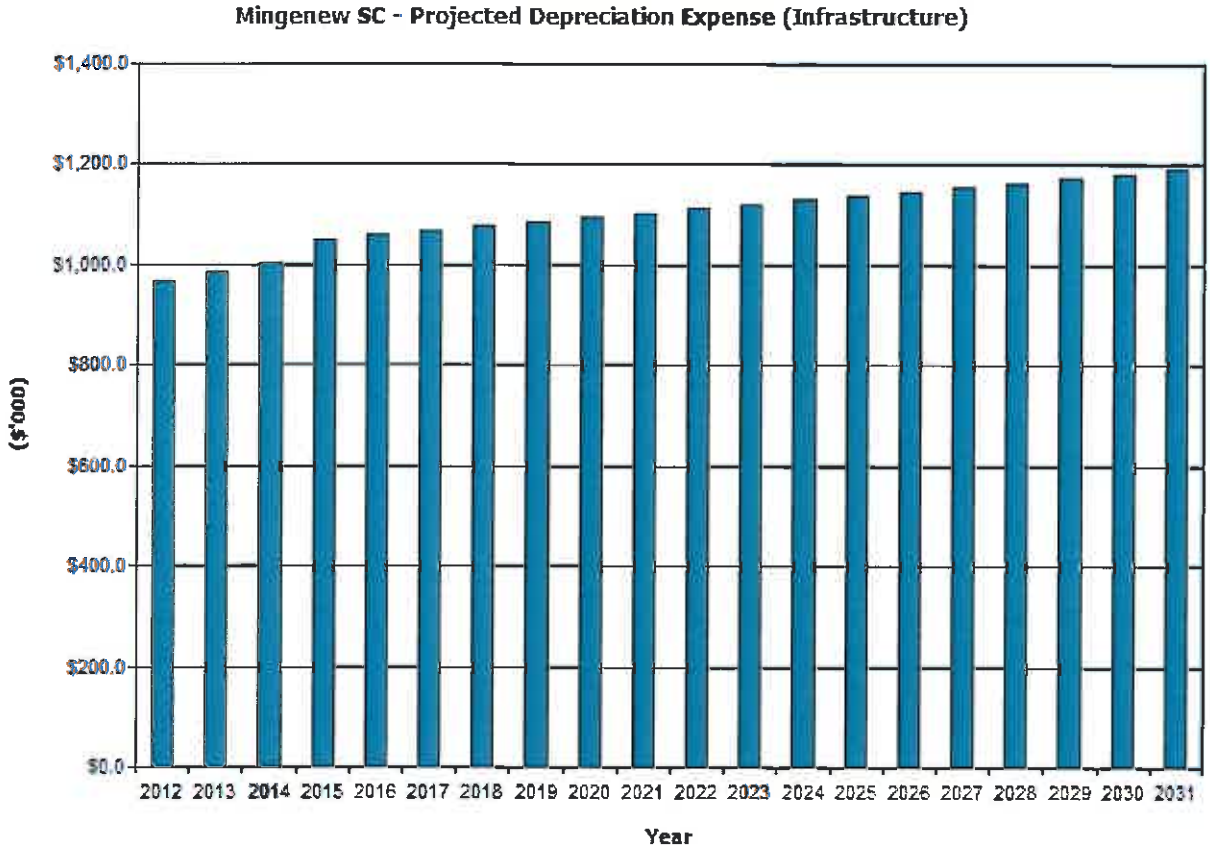
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Fig 8 shows the projected replacement cost asset values over the planning period in current 2010/11 dollar values.

Fig 8. Projected Asset Values



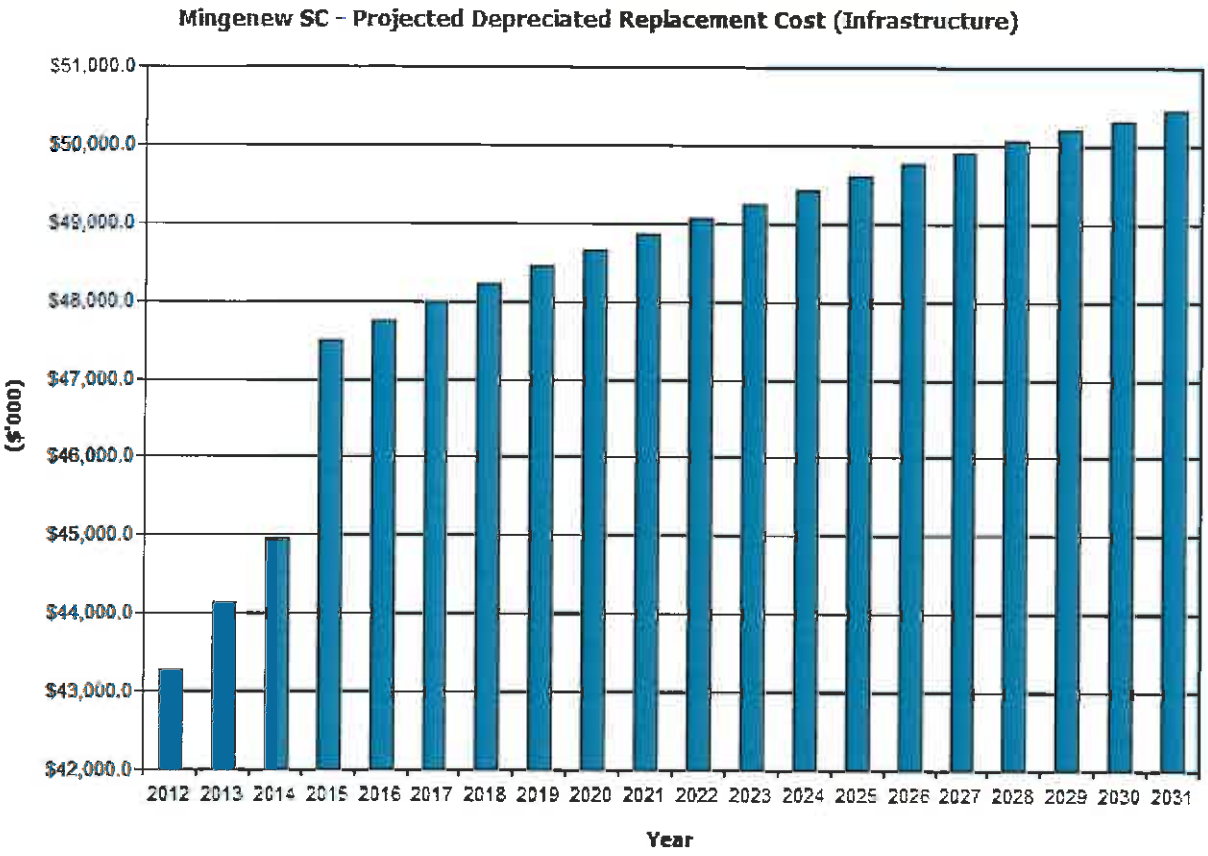
Depreciation expense values are forecast in line with asset values as shown in Fig 9.

Fig 9. Projected Depreciation Expense



The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Fig 10.

Fig 10. Projected Depreciated Replacement Cost



6.4 Key Assumptions made in Financial Forecasts

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

Key assumptions made in this asset management plan are:

- Costs are at a 2010/11 price base. No allowance has been made for inflation
- Renewals and new/upgrade capital forecasts are in accordance with the Forward Capital Works Plan
- Maintenance costs allow for the forecast increase in assets due to development and increase demand on assets due to demand changes
- The average useful life and average remaining life of assets are based on current local knowledge, industry standards, historical trends and condition assessment
- Operations and maintenance forecasts have been based on current expenditure levels and percentages of replacement costs for each asset class
- Standard asset useful lives are as shown below. Some specific assets, as identified by council officers, have non standard useful lives. These have been allowed for in the asset data.

Table 6.4 Standard Asset Lives

Asset Class	Standard asset life (years)
Sealed and gravel road construction/road base	50
Bridges	80
Culverts	80
Railway Crossings	50
Road signs/features	15
Floodways	50
Kerbing	50
Footpaths	50
Road seal	15
Buildings	30 to 50

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

- Carrying out a condition assessment of the following assets to enable their remaining useful lives to be more accurately determined
    - Buildings
    - Bridges, culverts, railway crossings, road signs and features and floodways
    - Recreation assets
    - Public/civic assets.
- Collecting financial information so that maintenance (planned and reactive), operational, renewal and new/upgrade costs can be separately identified

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Changes to the existing cost ledger will be required to ensure that some form of asset based costing is achievable. The costs for each asset should be broken down such that operational, maintenance and capital expenditure can be identified.

Under the present system there is no clear break down of costs based on the above delineation.

7.2 Asset Management Systems

Council currently utilises ROMAN to manage its road assets. However the system is not fully utilised. ROMAN has been upgraded to allow easier modelling and as such better management of the road assets. Apart from ROMAN there is no integrated asset management system at the present time. There is no direct link between the finance system and the asset system.

7.3 Information Flow Requirements and Processes

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

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

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

- The assumed Works Program and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

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

There are currently no formal processes for the transfer of information from the AM to the financial systems and for the recognition of new assets in either system. Refer to Improvement Plan.

7.4 Standards and Guidelines

There are currently no AM policies or procedures. Refer to Improvement Plan.

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

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

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

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.1.

Table 8.1. Improvement Plan

Task No	Task	PRIORITY	Responsibility	Resources Required
1	Prepare an asset management policy and strategy and obtain Councillors approval to them	1		
2	Prepare an asset condition inspection and assessment plan that describes condition inspection and assessment processes and frequencies and condition data management for all asset classes	1		
3	Collect financial information so that maintenance costs (planned and reactive) and operational costs can be separately identified for each asset class	1		
4	Improve financial reporting so that all capital work is separately identified as either renewal, upgrade or new and costs are correctly allocated	1		
5	Review property leases and negotiate amendments as necessary to ensure the Shires risks regarding on-going liabilities are managed	2		
6	Carry out a condition assessment of buildings, point roads assets, recreation and public/civic assets	2		
7	Prepare a program to investigate for and remove asbestos from buildings	2		
8	Prepare a Demand Management Plan that describes how forecast demand	3		

Task No	Task	PRIORITY	Responsibility	Resources Required
	changes will be managed			
9	Prepare maintenance plans for all asset classes that cover the type and frequency of maintenance required to ensure that the Levels of Service are achieved	3		
10	Develop priority ranking criteria for renewals projects	3		
11	Prepare formal processes for the transfer of information from the AM to the financial systems and for the recognition of new assets in either system	3		
12	Hold a workshop with key staff, the management team and councillors to tell them about the plans and processes that have been prepared, the benefits and how they will be affected	3		

8.3 Monitoring and Review Procedures

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

The Plan has a life of 4 years and is due for revision and updating within 1 year of each Council election.

REFERENCES

Shire of Mingenew Plan for the Future 2010 - 2013

Shire of Mingenew Future Capital Works Plan February 2011

Shire of Mingenew Financial Plan for year ended 30th June 2009

Mingenew Sport and recreation Strategic Plan March 2011

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

APPENDICES

Appendix A Forward Capital Works Plan

FORWARD CAPITAL WORKS PLAN

FIGURES ROUNDED TO THE NEAREST '000

Asset Group	Project		2009-2010	2010-2011				2011-2012				2012-2013				2013-2014				2014-2015				
				Council	CLGF (Local)	CLGF (Regional)	Other Grants	Total	Council	CLGF (Local)	CLGF (Regional)	Other Grants	Total	Council	CLGF (Local)	CLGF (Regional)	Other Grants	Total	Council	CLGF (Local)	CLGF (Regional)	Other Grants	Total	Council	CLGF (Local)	CLGF (Regional)	Other Grants	Total
Roads			1,092																							
	Road Program	Renewal		554			330	400	554				400	450				350	450				350	450				350
		Expansion						450					450					500					500					500
		New																										
								1,734					1,404					1,300					1,300					1,300
Footpaths																												
	Footpath Program	Renewal																										
		Expansion			20																							
		New						20					0					0					0					0
Land and Buildings			440																									
	Staff Housing	Renewal			20																							
		Expansion								283	300									250								
		New			123			143					583					0					250					0
	Aged Accommodation	Renewal																										
		Expansion												800	283		450											
		New						0					0					1,533					0					0
	Toilet Block	Renewal																										
		Expansion												80														
		New						0					0					80					0					0
	Recreation Centre Expansion	Renewal																										
		Expansion																						667	667		667	
		New						0					0					0					0					2,000
	Office Accommodation Refurbishment	Renewal			25									400														
		Expansion																										
		New						25					0					400					0					0
	Depot Accommodation	Renewal																										
		Expansion																	750					750				
		New						0					0					0					750					750
	Race Track Reticulation	Renewal																										
		Expansion																										
		New			35			35					0					0					0					0
	Main Street Refurbishment	Renewal			100																							
		Expansion																										
		New						100					0					0					0					0
	Water Park	Renewal																										
		Expansion														300												
		New																300										
		Total						2,057					1,987					2,313					2,300					4,050

SHIRE OF MINGENEW

INFRASTRUCTURE
ASSET MANAGEMENT POLICY

Version 0 January 2012

Document Control	

Rev No	Date	Revision Details	Author	Reviewer	Approver
0	January 2012		P Johnson		

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1.0 Purpose

The purpose of this Policy is to provide the basis for and to guide the strategic management of the Shire's infrastructure assets in order to deliver the Shire's long term strategic objectives.

The purpose will be achieved by

a) Developing and implementing an Asset Management Strategy
b) Preparing and maintaining an Infrastructure Asset Management Plan
c) Preparing operations and maintenance plans for each infrastructure asset class
d) Maintaining up to date and validated Asset Management Systems and Processes that are aligned and integrated with the Shire's business practices

2.0 Scope

This Policy applies to all the infrastructure assets owned by Mingenew Shire Council. The asset types covered are as follows:-

Roads assets comprising

- Sealed and Unsealed Roads
- Bridges
- Culverts
- Railway Crossings
- Road signs/features
- Floodways
- Kerbing
- Footpaths

Buildings comprising

- Recreation
- Council/Depot
- Public/civic
- Housing

Other assets comprising

- Public/Civic Assets
- Recreation Assets
- Waste

3.0 Objective

The objective of this Policy is to provide a consistent framework that is aligned and integrated with the Shire's business practices and is consistent with the State Government's Integrated Planning and Reporting requirements such that

a) Infrastructure assets are managed in accordance with the requirements of relevant legislation;
b) Infrastructure assets are managed in accordance current best practice, taking affordability into account;
c) A "whole of life" approach is taken to operational, maintenance, renewal and acquisition plans;
d) Funding levels to ensure that infrastructure assets deliver the required Levels of Service are identified and reported;
e) Levels of Service and risks are taken into account in the development of operational, maintenance, renewal, and acquisition plans;
f) The performance of infrastructure assets is measured and reported against the required levels of service and associated target performance levels;
g) Infrastructure assets are accounted for in accordance with the requirements of the appropriate accounting standards and reporting requirements;

4.0 Organisational Context

The Shire's most recent Strategic Plan (Plan for the Future 2010- 2013) includes a set of objectives and strategies that form the basis for the development of the Shire as follows:-

Objectives

Governance
Provide leadership to the community.
Consult and communicate with all sectors of our community.
Provide quality local government services and facilities.

Environment
Ensure the recognition & retention of places of heritage
Support & promote environmental management principles
Support the protection of natural resources such as water
Promotion tourism opportunities that are environmentally focused

Economic
To provide an effective, safe and economical system for moving vehicles, pedestrian and cyclists
Support and encourage tourism development
Support Sustainable farming and other industry developments including mining
Protect and enhance community infrastructure

Social
Facilitate a happy and healthy life style for all shire residents
Provide high quality community infrastructure
Ensure the best use of community infrastructure

Strategies

Governance
Provision of professional development opportunities for Councillors & staff.
Ensure a planned approach to decision making by introduction of the Asset Management Plan process
Lobby government to ensure adequate services & facilities are available for our community such as residential aged care facilities
Work co-operatively with surrounding local governments
Continue to actively participate in the amalgamation process
Maintain a staff organisational structure to ensure the Shire is properly resourced to service the community including the current resource sharing arrangements.

Environment
Continue to support the Mingenew Irwin Group.
Develop & implement a Waste Management Plan.
Support & promote the efficient use of resources.
Promote recycling where practical.
Investigate options for water harvesting at the CBH facility
Investigate grant funding opportunities for water projects
Lobby Governments for the protection of natural resources

Economic
Development Asset Management Plans for all community assets such as roads, footpaths and Council owned buildings
Provide good quality tourism facilities such as rest areas and toilets
Continue to consult and support the Mingenew Tourist and Promotions committee

Social
Develop new housing for the aged through a Joint Venture Program
Implement strategies contained in the Community Safety & Crime Prevention Plan
Undertake improvements to the Mingenew Main Hall to ensure that it is continued to be used
Continue to consulate and support the Mingenew Sports Advisory committee
Undertake recreation facilities planning

.

Asset Management plays an important role in the development and management of the Shire. Asset Management contributes to the achievement of all the above objectives and strategies, particularly in relation to the economic and social objectives and strategies.

5.0 Principles

The Shire is the owner of public assets and is responsible for the sustainable management of them and to provide for their replacement or renewal.

Asset management is a structured process which seeks to ensure best value for money from assets to deliver the strategic objectives of the Shire and which informs the operations and maintenance, renewal, disposal and acquisition of assets with an overall objective to optimize service delivery and manage related risks and costs over the asset's life cycle.

Infrastructure assets are fundamental to the Shire's overall service delivery.

The Shire recognises Asset Management as a core activity. Accordingly, every employee of the Shire is either directly or indirectly involved in the management of Shires' assets.

This Policy supports the Shires' intent to raise its Asset Management Practice to a level that is best practice, subject to affordability, through the provision of assets and their timely maintenance and renewal at appropriate levels to meet service needs.

The Shire recognises that its assets incur ongoing operating costs and require maintenance and the replacement of components to ensure that they remain serviceable throughout their life. Some assets may also be disposed of. This combined cost, together with the capital cost of asset acquisition is termed „lifecycle cost". This policy supports the Shires' commitment to ensure that the Levels of Service delivered by the assets are achieved at the best lifecycle cost.

The Shire also acknowledges through this policy that the acquisition of new assets will take into account the full cost of acquisition, operation, maintenance, renewal and disposal over its life cycle. Accordingly, the future cost impact of new assets will be fully considered as part of any new asset approval.

In undertaking asset management of the infrastructure assets, we will:-

- Develop an Infrastructure Asset Management Strategy and a life-cycle based Infrastructure Asset Management Plan in accordance with this Policy and review them every 4 years;
- Ensure that the Infrastructure Asset Management Strategy and the Infrastructure Asset Management Plan are aligned to the Shire's Strategic Plan and to the State Governments Integrated Planning and Reporting Requirements;
- Determine future levels of service taking consultation with the community and affordability into account;
- Make decisions regarding asset operations and maintenance, renewal, disposal and acquisitions taking levels of service and affordability into account and based on lifecycle costs;
- Ensure compliance with relevant accounting standards;

- Ensure that all relevant legislation is taken into account;
- Collect, store, manage and analyse data on asset utilization, performance and condition and utilize the data to inform operations and maintenance, renewal, disposal and acquisition plans;
- Manage the risks of injury, liability and asset failure through risk and condition assessments;
- Carry out demand forecasting to inform operations and maintenance, renewal, disposal and acquisition plans;
- Develop Long Term Financial Plans on the basis of funding the asset operations and maintenance, renewal, disposal and acquisitions plans in accordance with this Policy;
- Taking affordability into account, ensure that best practice asset management practices and systems are employed to support the management of the Shire's infrastructure assets.

6.0 Roles and Responsibilities

Councilors

Adopt the Infrastructure Asset Management Policy;
Adopt the Infrastructure Asset Management Strategy;
Adopt the Infrastructure Asset Management Plan;
Support the use of asset management planning throughout the organization;
Make decisions regarding infrastructure assets in accordance with the Infrastructure Asset Management Policy, Strategy and Plan.

Chief Executive Officer

Develops and maintains the Infrastructure Asset Management Policy;
Develops and maintains the Infrastructure Asset Management Strategy;
Develops and maintains the Infrastructure Asset Management Plan;
Ensures alignment between the Infrastructure Asset Management Policy, Strategy and the Asset Management Plan with other policies and processes in the organization;
Ensures compliance with legislative requirements;
Ensures infrastructure assets are managed in accordance with Infrastructure Asset Management Policy, Strategy and Plan;
Supports the use of asset management planning throughout the organization;
Facilitates best practice asset management.

7.0 Review of Policy

This policy will be reviewed in conjunction with the review of the Infrastructure Asset Management Strategy and Infrastructure Asset Management Plan.

SHIRE OF MINGENEW

INFRASTRUCTURE

ASSET MANAGEMENT STRATEGY

Version 0 January 2012

Document Control	

Rev No	Date	Revision Details	Author	Reviewer	Approver
0	January 2012		P Johnson		

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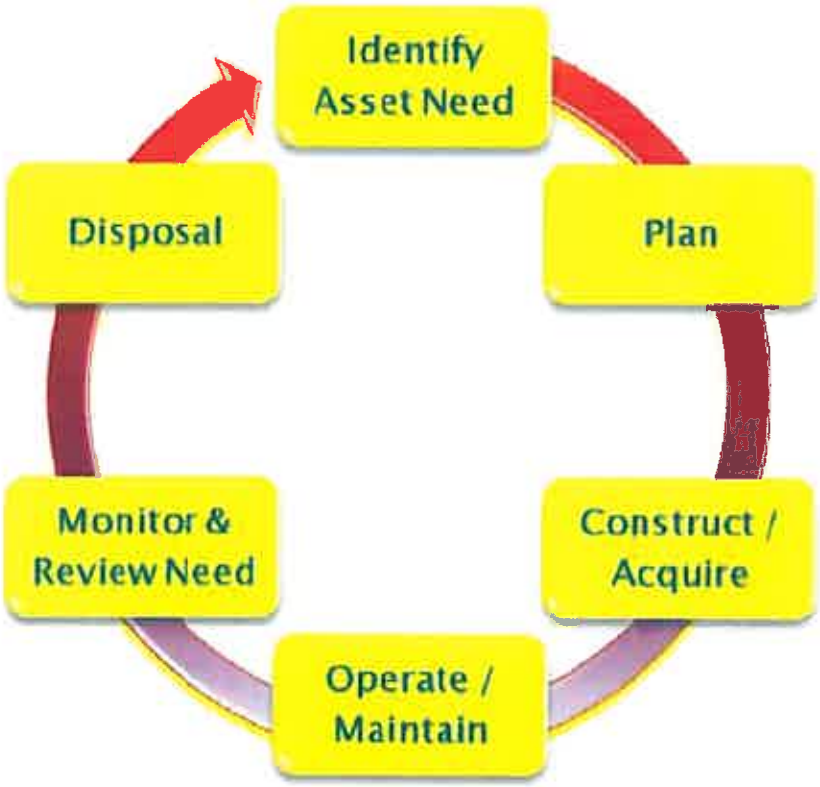
1.0 Introduction

Asset management is a systematic process used to guide the planning, acquisition, operation and maintenance, renewal and disposal of assets. Its aim is to maximise asset service delivery potential and manage related risks and costs over their entire lifecycle.

In simple terms, asset management is about the way in which the Shire looks after its assets, both on a day-to-day basis (i.e. maintenance and operations) and in the medium to long term (i.e. strategic and forward planning).

The following diagram illustrates the typical lifecycle of an asset and associated asset management functions from planning for the need to create an asset through to its ultimate disposal including audit and review of performance of that asset.



Mingenew Shire Council is the owner of and responsible for the asset management of the following infrastructure assets which deliver services to the communities in the Shire:-

Roads assets comprising

- Sealed and Unsealed Roads
- Bridges
- Culverts
- Railway Crossings
- Road signs/features
- Floodways
- Kerbing
- Footpaths

Buildings comprising

- Recreation
- Council/Depot
- Public/civic
- Housing

Other assets comprising

- Public/Civic Assets
- Recreation Assets
- Waste

This Infrastructure Asset Management Strategy covers all the Shire's infrastructure assets.

There are a number of issues that are affecting the assets and the current and future associated service delivery as follows:-

- Increasing community awareness and focus of the Council on economic development and lifestyle;
- Increasing community expectations about the levels of service delivered by Council;
- The introduction by the State Government of Integrated Planning and Reporting requirements;
- Availability of funding for operations and maintenance, future developments and asset renewals;
- Ageing infrastructure;
- Changes in demand as a result of growth, demographic changes and changes to economic activity in the Shire.

Asset Management plays a key role in addressing these issues by ensuring sustainable and cost effective operations, maintenance, renewal and acquisition of infrastructure assets.

It is therefore essential that the Shire utilizes sound, affordable and appropriate asset management practices in a consistent way across all the asset classes.

This Infrastructure Asset Management Strategy provides the basis for ensuring that the Shire develops its current practices to achieve the "core" asset management approach as defined by NAMS PLUS.

2.0 Objective

The objective of this Infrastructure Asset Management Strategy is to provide a set of structured strategic actions to enable the Shire to implement asset management practices and systems to ensure that the issues identified above are addressed and to support the Shire's Strategic Plan and Infrastructure Asset Management Policy.

3.0 Current Asset Management Position

3.1 Gap Analysis

An initial asset management gap analysis has been undertaken. This compares the current asset management practices and systems used in the Shire with the practices and systems that should be used in order to conform to the core level of asset management in accordance with NAMS PLUS.

The analysis has been based on information provided by Shire officers during the preparation of the infrastructure Asset Management Plan

The basis of the gap analysis scoring is shown below.

In general, the desired score is 6, which represents the core level of asset management and is a situation where data is verified and of acceptable quality and coverage, and where satisfactory written procedures are generally used across the organization and across all asset classes.

Score	Data	Procedures/processes
10	Data verified, 100% quality and coverage	Comprehensive written procedures used 100% of time by all organisation
9	Data verified, excellent quality and coverage	Comprehensive written procedures widely and consistently used
8	Data verified, very good quality and coverage	Good written procedures widely and consistently used
7	Data verified, good quality and coverage	Good written procedures generally used
6	**Data verified, acceptable quality and coverage**	**Satisfactory written procedures generally used**
5	Data verified, poor quality/coverage, or good level of unverified information	Satisfactory written procedures but not widely or consistently used
4	Reasonable level of unverified data	Unwritten procedures in most parts of organisation or written procedures but of limited value
3	Some unverified data	Unwritten procedures in some parts of organisation or written procedures of no real value
2	Very limited unverified data	Unwritten procedures used on ad hoc basis
1	Does not exist	Does not exist

The results of the gap analysis are summarised below. The detailed results are attached as Appendix A.

	Roads assets	Buildings	Other Assets	Current Average Score	Desired Score
Asset Knowledge / Data	5.3	3.8	3.8	4.3	
Data processes	4.8			3.3	
Strategic Asset Planning	4.0	4.0	4.0	4.0	
Operations Maintenance and Work Processes	5.0	4.8	4.8	4.9	
Information Systems	4.3	3.2	3.2	3.6	
Organizational / Commercial Context	4.3	4.3	4.3	4.3	
Current Average Score	4.7	3.8	3.8	4.1	

The analysis shows that work is required in all asset management categories and all asset classes in order to achieve the desired standard.

Particular issues relate to asset data, asset management practices, asset management systems and roles and responsibilities as described below.

3.2 Asset Data

There are no written procedures for the collection, review/audit and management of location, physical attribute, condition and performance data. Roads asset location, physical attribute, condition data was collected in June 2011 as part of the roads asset valuation and is up to date and of good quality. The data for other asset classes is not up to date and is of unverified quality.

The roads assets were valued in June 2011. There has been no recent valuation of the other asset classes.

3.3 Asset Management Practices

Asset management is practiced in an ad hoc and inconsistent way across the asset classes in a number of areas

There are currently no formal written asset management procedures which set down the practices that are currently followed. This leads to uncertainty regarding the quality and comprehensiveness of the asset data and how it is managed.

3.4 Asset Management Systems

The Shire currently utilises ROMAN to manage its road assets. However the system is not fully utilised. ROMAN has been upgraded to allow easier modeling and as such better management of the road assets.

There is currently no asset management system used for buildings and other assets. Asset management data is held on a series of excel spreadsheets that are updated manually as required.

There is no direct link between the ROMAN asset management system, the asset management spreadsheets and the finance and other management systems used by the Shire.

Asset management data is currently managed by the Shire's Manager of Finance and Administration in conjunction with the Works Manager and is stored on the Shire's main server and backed up in accordance with the Shire's IT Maintenance Procedure.

3.5 Asset Management Roles and Responsibilities

Specific roles and responsibilities regarding asset management are not clearly defined, but in general will involve the Chief Executive Officer, the Manager of Finance and Administration and the Works Manager.

4.0 Asset Management Improvement Plan

The following asset management improvement plan is based on the results of the gap analysis. Separate actions are identified for each asset class. The actions have been prioritized, but no timeframe has been included at this stage. The timing of implementation of the plan will depend on the availability of resources and funding.

The full improvement plan is included as Appendix B.

Priority 1 Actions

Asset Management Activity	Action required	Asset classes covered			Comments
		Roads	Buildings	Other Assets	
Valuation, depreciation and effective life data	Undertake valuation and recalculate depreciation	X	✓	✓	Roads asset revaluation in 3 years
Asset identification / classification procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes
Condition assessment procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes
Asset handover procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes
Data management procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes
Critical assets	Critical assets to be identified	✓	✓	✓	Covers all asset classes
AM roles and responsibilities	To be clarified	✓	✓	✓	Covers all asset classes

Priority 2 Actions

Asset Management Activity	Action required	Asset classes covered			Comments
		Roads	Buildings	Other Assets	
Condition data	Complete condition assessment	X	✓	✓	To be in accordance with procedure
Asset Classification / hierarchy	Update and extend existing asset data as necessary.	✓	✓	✓	To be in accordance with procedure
Physical attributes and location data	Verify and update existing data as necessary. Future data collection in accordance with procedure.	✓	✓	✓	To be in accordance with procedure
Operational / Maintenance data	Verify and update existing data as necessary. Future data collection in accordance with procedure.	✓	✓	✓	To be in accordance with procedure

Priority 3 Actions

Asset Management Activity	Action required	Asset classes covered			Comments
		Roads	Buildings	Other Assets	
Demand forecasting	Prepare demand management plan	✓	✓	✓	Covers all asset classes
Asset rationalisation procedure	Prepare written procedure covering renewals, acquisitions and disposals and including priority ranking criteria	✓	✓	✓	Single procedure for all asset classes
Maintenance strategies and management	Prepare maintenance management plan, taking corporate strategy and Levels of Service into account	✓	✓	✓	Covers all asset classes
Asset management system / modules	Prepare written procedure for and implement formal asset management system	X	✓	✓	Covers all asset classes
Systems integration	Prepare written procedure detailing processes for transfer of data between systems	✓	✓	✓	Covers all asset classes
Training and awareness	Continue training of relevant staff. Workshop with management team and councillors required	✓	✓	✓	Covers all asset classes

Priority 4 Actions

Asset Management Activity	Action required	Asset classes covered			Comments
		Roads	Buildings	Other Assets	
Risk management	Prepare risk management policy and plan, with critical assets identified and a risk assessment undertaken	✓	✓	✓	Covers all asset classes
Capital investment planning	Prepare procedure to ensure consistency with organizational financial plans	✓	✓	✓	Single procedure for all asset classes
Asset register	Review and update register	X	✓	✓	Covers all asset classes
Works / maintenance cost management	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes
Customer request system	Implement system to record complaints, requests for service and responses	✓	✓	✓	Covers all asset classes
Levels of service	To be confirmed following community consultation	✓	✓	✓	Covers all asset classes
Lifecycle planning	Prepare written guidelines for lifecycle planning	✓	✓	✓	Covers all asset classes

An indicative schedule, based on a 3 year program is shown below. A more detailed schedule will be required prior to commencement of the improvement plan.

It is expected that the improvement plan and schedule may be implemented with an average of 0.25 to 0.33 full time equivalent staff, supplemented by specialist resources where necessary, e.g. valuations of non roads assets.

	YEAR 1				YEAR 2				YEAR 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Undertake valuation of non roads assets												
Prepare data, condition assessment and management procedures												
Prepare asset handover procedure												
Critical assets to be identified												
Clarification of AM roles and responsibilities												
Complete condition assessment of non roads assets												
Verify and update existing asset data as necessary												
Verify and update existing O&M data as necessary												
Prepare demand management plan												
Prepare procedure for renewals, acquisitions and disposals												
Prepare maintenance management plan												
Prepare procedure for and implement asset management system												
Prepare written procedure for transfer of data between systems												
Workshop with management team and councillors												
Prepare risk management policy and plan												
Prepare capital investment planning procedure												
Review and update asset register												
Prepare written works/maintenance cost procedure												
Implement customer request/complaints system												
Revised Levels of Service												
Prepare written guidelines for lifecycle planning												

5.0 Asset Management Performance Monitoring

Performance in relation to asset management will be measured using the Key Performance Indicators in the table below. The overall objective is to reach the target performance levels by the end of year 3 following the approval of this strategy.

Key Performance Indicator	Description	Current Performance 2011/12	Target Performance Year 3
Implementation of Improvement Plan	To be based on achieving Priority 1 actions in year 1 etc.	n/a	100%
Lifecycle sustainability Index	Ratio of planned lifecycle costs/year to required lifecycle costs per year	0.87	1.00
10 year sustainability index	Ratio of planned renewal and maintenance costs/year to requiredrenewal and maintenance costs per year	1.12	1.00
Asset consumption Index	Ratio of depreciated replacement cost to replacement value	0.77	0.77
Customer satisfaction level	Current performance based on June 2010 customer survey	n/a	90%
Level of Service performance	Compliance with target Levels of Service performance levels, measured on a simple compliance basis	to be confirmed	90%
10 year renewal funding index	Ratio of 10 year planned renewals funding to required renewals funding	2.59	1.00
Asset sustainability index	Ratio of annual renewals funding to annual depreciation	0.87	1.00

6.0 Review of Strategy

This strategy will be reviewed in conjunction with the review of the Infrastructure Asset Management Policy and Infrastructure Asset Management Plan.

7.0 Appendix A – Gap Analysis

Roads assets	Current Score	Desired score	1	2	3	4	5	6	7	8	9	10
Asset Knowledge / Data	5.3	5.8										
Asset Classification / hierarchy	6	6										
Physical attributes and location	6	6										
Operational / Maintenance data	4	6										
Condition data	6	6										
Lifecycle cost data	4	5										
Valuation, depreciation and effective life data	6	6										
Data processes / techniques	4.8	6.0										
Asset identification / clarification processes	5	6										
Condition assessment processes / rating systems	6	6										
Asset handover procedures	3	6										
Data capture and management	5	6										
Strategic Asset Planning Processes	4.0	5.6										
Levels of service	3	6										
Demand forecasting	5	6										
Risk management	3	5										
Lifecycle planning and funding projections	3	4										
Capital investment planning	4	6										
Asset rationalisation	4	6										
Asset management plans	6	6										
Operations Maintenance and Work Processes	5.0	5.6										
Maintenance strategies	4	5										
Emergency response plans	6	6										
Contract administration	5	5										
Design / construction standards	6	6										
Critical assets	4	6										
Information Systems	4.3	5.7										
Asset register	6	6										
Plans & records	5	5										
Works / maintenance management	4	6										
Customer Request System	3	6										
Asset management system / modules	5	5										
Systems integration	3	6										
Organisational / Commercial Context	4.3	6.0										
Organisational strategy	6	6										
Corporate sponsorship / commitment	4	6										
AM roles and responsibilities	3	6										
Training and awareness	4	6										

Buildings	Current Score	Desired score	1	2	3	4	5	6	7	8	9	10
Asset Knowledge / Data	3.8	5.8										
Asset Classification / hierarchy	4	6										
Physical attributes and location	4	6										
Operational / Maintenance data	4	6										
Condition data	3	6										
Lifecycle cost data	4	5										
Valuation, depreciation and effective life data	4	6										
Data processes / techniques	2.5	6.0										
Asset identification / clarification processes	3	6										
Condition assessment processes / rating systems	2	6										
Asset handover procedures	3	6										
Data capture and management	2	6										
Strategic Asset Planning Processes	4.0	5.9										
Levels of service	3	6										
Demand forecasting	5	6										
Risk management	3	5										
Lifecycle planning and funding projections	3	6										
Capital investment planning	4	6										
Asset rationalisation	4	6										
Asset management plans	6	6										
Operations Maintenance and Work Processes	4.8	5.6										
Maintenance strategies	3	5										
Emergency response plans	6	6										
Contract administration	5	5										
Design / construction standards	6	6										
Critical assets	4	6										
Information Systems	3.2	5.7										
Asset register	3	6										
Plans & records	4	5										
Works / maintenance management	4	6										
Customer Request System	3	6										
Asset management system / modules	2	5										
Systems integration	3	6										
Organisational / Commercial Context	4.3	6.0										
Organisational strategy	6	6										
Corporate sponsorship / commitment	4	6										
AM roles and responsibilities	3	6										
Training and awareness	4	6										

Other Assets	Current Score	Desired score	1	2	3	4	5	6	7	8	9	10
Asset Knowledge / Data	3.8	5.8										
Asset Classification / hierarchy	4	6										
Physical attributes and location	4	6										
Operational / Maintenance data	4	6										
Condition data	3	6										
Lifecycle cost data	4	5										
Valuation, depreciation and effective life data	4	6										
Data processes / techniques	2.5	6.0										
Asset identification / clarification processes	3	6										
Condition assessment processes / rating systems	2	6										
Asset handover procedures	3	6										
Data capture and management	2	6										
Strategic Asset Planning Processes	4.0	5.9										
Levels of service	3	6										
Demand forecasting	5	6										
Risk management	3	5										
Lifecycle planning and funding projections	3	6										
Capital investment planning	4	6										
Asset rationalisation	4	6										
Asset management plans	6	6										
Operations Maintenance and Work Processes	4.8	5.6										
Maintenance strategies	3	5										
Emergency response plans	6	6										
Contract administration	5	5										
Design / construction standards	6	6										
Critical assets	4	6										
Information Systems	3.2	5.7										
Asset register	3	6										
Plans & records	4	5										
Works / maintenance management	4	6										
Customer Request System	3	6										
Asset management system / modules	2	5										
Systems integration	3	6										
Organisational / Commercial Context	4.3	6.0										
Organisational strategy	6	6										
Corporate sponsorship / commitment	4	6										
AM roles and responsibilities	3	6										
Training and awareness	4	6										

8.0 Appendix B – Improvement Plan

Asset Management Activity	Action required	Asset classes covered			Comments	Priority
		Roads	Buildings	Other Assets		
Valuation, depreciation and effective life data	Undertake valuation and recalculate depreciation	X	✓	✓	Roads asset revaluation in 3 years	1
Asset identification / classification procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes	1
Condition assessment procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes	1
Asset handover procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes	1
Data management procedure	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes	1
Critical assets	Critical assets to be identified	✓	✓	✓	Covers all asset classes	1
AM roles and responsibilities	To be clarified	✓	✓	✓	Covers all asset classes	1
Condition data	Complete condition assessment	X	✓	✓	To be in accordance with procedure	2
Asset Classification / hierarchy	Update and extend existing asset data as necessary.	✓	✓	✓	To be in accordance with procedure	2
Physical attributes and location data	Verify and update existing data as necessary. Future data collection in accordance with procedure.	✓	✓	✓	To be in accordance with procedure	2
Operational / Maintenance data	Verify and update existing data as necessary. Future data collection in accordance with procedure.	✓	✓	✓	To be in accordance with procedure	2
Demand forecasting	Prepare demand management plan	✓	✓	✓	Covers all asset classes	3
Asset rationalisation procedure	Prepare written procedure covering renewals, acquisitions and disposals and including priority ranking criteria	✓	✓	✓	Single procedure for all asset classes	3
Maintenance strategies and management	Prepare maintenance management plan, taking corporate strategy and Levels of Service into account	✓	✓	✓	Covers all asset classes	3
Asset management system / modules	Prepare written procedure for and implement formal asset management system	X	✓	✓	Covers all asset classes	3

Asset Management Activity	Action required	Asset classes covered			Comments	Priority
		Roads	Buildings	Other Assets		
Systems integration	Prepare written procedure detailing processes for transfer of data between systems	✓	✓	✓	Covers all asset classes	3
Training and awareness	Continue training of relevant staff. Workshop with management team and councillors required	✓	✓	✓	Covers all asset classes	3
Risk management	Prepare risk management policy and plan, with critical assets identified and a risk assessment undertaken	✓	✓	✓	Covers all asset classes	4
Capital investment planning	Prepare procedure to ensure consistency with organizational financial plans	✓	✓	✓	Single procedure for all asset classes	4
Asset register	Review and update register	X	✓	✓	Covers all asset classes	2
Works / maintenance cost management	Prepare written procedure based on current practices	✓	✓	✓	Single procedure for all asset classes	4
Customer request system	Implement system to record complaints, requests for service and responses	✓	✓	✓	Covers all asset classes	4
Levels of service	To be confirmed following community consultation	✓	✓	✓	Covers all asset classes	4
Lifecycle planning	Prepare written guidelines for lifecycle planning	✓	✓	✓	Covers all asset classes	4
Asset management plans	First cut infrastructure AMP prepared 2011.	X	X	X	Covers all asset classes	no immediate action
Emergency response plans	Emergency Response Plan in place	✓	✓	✓	Covers all asset classes	no immediate action
Contract administration	No immediate action required	✓	✓	✓	Covers all asset classes	no immediate action
Design / construction standards	No immediate action required	✓	✓	✓	Covers all asset classes	no immediate action
Plans & records	No immediate action required	✓	✓	✓	Covers all asset classes	no immediate action
Organizational strategy	Asset Management Policy and Strategy now developed	✓	✓	✓	Covers all asset classes	no immediate action
Corporate sponsorship / commitment	No immediate action, other than regular updates and confirmation of support	✓	✓	✓	Covers all asset classes	no immediate action