

Clare & Gilbert Valleys Council

Asset & Infrastructure Management Plan

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CLARE & GILBERT VALLEYS COUNCIL

INFRASTRUCTURE AND ASSET MANAGEMENT PLAN

TABLE OF CONTENTS

GLOSSARY	i
1. Overview	
1.1 Introduction	1
1.2 Goals and Objectives of Asset Management	1
1.3 Plan Framework	2
1.4 Service Levels	3
2. Buildings & Structures	
2.1 What Council Provides	4
2.2 Capital Works	4
2.3 Maintenance	5
2.4 Plans for the Future	5
2.5 Measuring our Performance	5
2.6 The Next Steps	5
3. Roads & Road Infrastructure	
3.1 Sealed Roads	7
3.1.1 What Council Provides	7
3.1.2 Capital Works	7
3.1.3 Maintenance	7
3.2 Unsealed Roads	7
3.2.1 What Council Provides	7
3.2.2 Capital Works	8
3.2.3 Maintenance	9
3.3 Kerbing	9
3.3.1 What Council Provides	9
3.3.2 Capital Works	10
3.3.3 Maintenance	10
3.4 Footpaths	10
3.4.1 What Council Provides	10
3.4.2 Capital Works	11
3.4.3 Maintenance	11
3.5 Bridges	11
3.5.1 What Council Provides	11
3.5.2 Capital Works	13
3.5.3 Maintenance	13

3.6	Traffic Management	13
3.6.1	What Council Provides	13
3.6.2	Capital Works	14
3.6.3	Maintenance	14
3.7	Plans for the Future	14
3.8	Measuring our Performance	14
3.9	The Next Steps	14
4.	Community Waste Water	
4.1	What Council Provides	16
4.2	Capital Works	16
4.3	Maintenance	16
4.4	Plans for the Future	16
4.5	Measuring our Performance	17
4.6	The Next Steps	17
5.	Stormwater	
5.1	What Council Provides	18
5.2	Capital Works	18
5.3	Maintenance	18
5.4	Plans for the Future	18
5.5	Measuring our Performance	18
6.	Lifecycle Management Plan	
6.1	Background Data.....	20
6.2	Risk Management Plan.....	20
6.3	Routine Maintenance Plan.....	20
7.	Financial Summary	
7.1	Financial Statements and Projections	21
7.2	Funding Strategy	22
7.3	Valuation Forecasts	22
8.	Plan Improvement and Monitoring	
8.1	Performance Measures	23
8.2	Monitoring and Review Procedures	23
APPENDICES	24

GLOSSARY

Amounts received specifically for new or upgraded assets

Grants, subsidies and contributions received specifically for the construction or acquisition of new or upgraded assets.

Asset Class

Grouping of assets of a similar nature and use in the Council'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 months.

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 Expenditure on New/Upgraded Assets

Expenditure which creates 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. 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 has originally. Upgrade expenditure is discretionary. It will increase operating and maintenance expenditure in the future because of the increase in the Council's asset base, eg sealing an existing unsealed road.

Capital Expenditure on the Renewal/Replacement of Existing Assets

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 Funding

Funding to pay for capital expenditure.

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 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

The current replacement cost of an asset is its cost measure by reference to the lowest cost at which the gross future economic benefits of that asset could currently be obtained in the normal course of business.

Cyclic Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle, including repainting, 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

Depreciated replacement cost is defined as the current replacement cost 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

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

Fair Value

Where the future economic benefits of an asset for Council are not primarily dependent on the assets ability to generate net cash inflows and where the Council would, if deprived of the asset, replace its remaining future economic benefits, fair value shall be determined as the depreciated replacement cost of the asset. If the Council does not intend to replace the asset the fair value is an estimate of the likely cash inflow from disposal.

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 and footways. 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 often have no market value.

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 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 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 apportioning 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 or 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.

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.

Reactive Maintenance

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

Recoverable Amount

The higher of an assets 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.

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.

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 or occurrence.

Useful Life

The period over which an asset is expected to be available for use by the Council. It is the estimated or expected time between placing the asset into service and removing 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.

1 OVERVIEW

1.1 Introduction

The purpose of the infrastructure and 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.

This infrastructure and asset management plan covers the following infrastructure assets:

ASSET CATEGORY	DIMENSION	REPLACEMENT VALUE 30 JUNE 13 \$'000
Buildings & Structures	358	\$67,658
Sealed Roads	205 km	\$66,905
Unsealed Roads	1000 km	\$24,780
Kerbing	98 km	\$20,853
Footpaths	72 km	\$3,652
Bridges	29	\$10,859
Traffic Management	3000	\$422
CWMS – Clare	38 km	\$9,188
CWMS – Riverton	10 km	\$2,664
CWMS – Saddleworth	8 km	\$2,034
Stormwater	7 km	\$3,096
Cross Drains & Floodways	1200	\$8,243
TOTAL		\$220,354

1.2 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 a defined level of service and monitoring performance
- Understanding and meeting the demands of growth through demand management and infrastructure investment
- Managing risks association with asset failures
- Sustainable use of physical resources
- Continuous improvement in asset management practices

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

Council's vision is:

Vibrant communities working together to grow in a dynamic, innovative and sustainable way

Council's goals are:

- **Develop, maintain and manage Council assets and enterprises in a sustainable way for current and future generations**
- **Increase environmental sustainability practices**
- **Provide innovative and effective community services**
- **Provide sound leadership, clear direction and effective communication**
- **Ensure long-term financial viability**
- **Encourage an environment that supports business growth, tourism and employment**

1.3 Plan Framework

Key elements of the plan are:

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

1.4 Service Levels

1.4.1 Current Levels of Services

Council's aim is to maintain or improve on current service levels. In the areas of Community Waste Water Management and Waste Disposal Council will be required to increase the service level in line with environmental standards.

1.4.2 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources, including the LGASA Customer Feedback Survey, resident's feedback to Councillors and Staff, service requests and correspondence. Council has yet to quantify desired levels of service. This will be done in future revisions of this infrastructure and asset management plan.

2 BUILDINGS AND STRUCTURES

Categories of Buildings

Council has resolved to categorise building assets as follows:

- Buildings which would be replaced
These buildings will be maintained and renewal works undertaken as identified.
- Buildings which would not be replaced
These buildings will receive basic maintenance only.
- Buildings for which other bodies have taken responsibility
The responsibility for maintenance and renewal of these buildings will reside with the relevant bodies which include sporting clubs and incorporated committees.
Also included are emergency services buildings and structures which are leased to the Minister for Emergency Services who is completely responsible for those properties.

2.1 What Council Provides

Council provides a wide range of buildings and structures including the following:

Function	No of Buildings & Structures*
CFS	23
Halls/Institutes	11
Parks & Reserves	24
Sport & Recreation	93
Public Toilets	28
Caravan Parks	55
Other	43

*Does not include structures such as swimming pools, fencing and playground equipment.

2.2 Capital Works

2.2.1 Capital Renewal

Inadequate allocation of capital renewal funds in the past has resulted in the deterioration of Council's building assets. Council staff have recently assessed the building assets and the accumulated data has been incorporated into the 2014 plan. This data forecasts an average annual expenditure of \$545k.

2.2.2 New/Upgrade

A speculative allocation has been included in the 2018/2019 year for a possible new community building subject to Council approval and availability of external funding.

2.3 Maintenance

The majority of expenditure is expected to be for reactive maintenance, in response to requests. Council has estimated the total maintenance expenditure required to be spent on buildings and structures in the next 10 years is estimated at \$1.4m.

2.4 Plans for the Future

Council plans to operate and maintain buildings and structures to achieve the following objectives:

- Ensure the building network is maintained at a safe and functional standard.
- Effectively manage and maintain Council buildings

Council currently does not have a formal Maintenance Management System, with maintenance carried out as required basis. 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.

2.5 Measuring our Performance

2.5.1 Quality

Buildings and structures will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired.

2.5.2 Safety

Because of the number of buildings and structures throughout the district, Council currently relies on safety defects being reported by the general public. No formal inspection procedure is in place, apart from regular playground equipment inspections. Any defects identified are prioritised and repaired to ensure they are safe.

2.6 The Next Steps

Council will review this Plan as part of the continuous improvement process of further development and refinement. Actions resulting from the development of this asset management plan are:

- Ongoing collection and storage of condition information.
- Develop specific service levels for the delivery of services including performance targets.

- Develop and establish ongoing assessment in relationship to safety and specified maintenance intervention levels.
- Assessing collected information regarding transport asset condition for developing future maintenance and capital programs.
- Continue to collect important asset data and adopt advanced asset management systems and processes.
- Audit and review of maintenance response times (to confirm whether maintenance works were delivered on time).
- Consultation to ascertain the community's service needs and preferences and confirm target levels adopted.
- Review useful life of all transport assets based on real time assessment of asset deterioration.
- Investigate integration of asset management systems with financial systems.

3 ROADS & ROAD INFRASTRUCTURE

3.1 SEALED ROADS

3.1.1 What Council Provides

Council has two categories of sealed roads, being township (100 km) and rural (110 km).

3.1.2 Capital Works

Capital Renewal

Council staff upon advice has determined that the average life of a seal is 20 years. Although this may seem to be a longer period of time it is considered to be the average ability for a sealed road to be able to withstand general traffic without interim treatment. Within these parameters there will be a necessity for sooner application but sealed roads is one area that will be reassessed each year and adjusted accordingly to gain accuracy in the forecast data.

New/Upgrade

No new sealing work is expected to be undertaken during the life of this Asset Management plan other than that which it funded externally, eg Roads to Recovery Grants. These annual grants currently stand at approximately \$278,000. The continuation of the Roads to Recovery grant is dependent on the policies of future governments.

3.1.3 Maintenance

Council's maintenance standards for both township and rural sealed roads state that seal maintenance shall be carried out as required. This maintenance work includes filling potholes, edge repair, digouts and crack sealing. Council staff has determined that an average of approximately \$216k per year will be required to ensure that sufficient maintenance work is undertaken to keep Council's sealed road network maintained to a required standard. This work will be undertaken in response to needs as identified in addition to regular scheduled bitumen repair programs.

3.2 UNSEALED ROADS

3.2.1 What Council Provides

Unsealed roads make up the majority of Councils road network and accordingly is the asset that requires the greater portion of funding to maintain. Council has four main categories with one of these divided into three

sub-categories of unsealed roads. These roads have been categorised based on traffic volumes and strategic importance of the roads. They are:

Category 1	Major unsealed roads within the Council area that operate as local arterial roads These roads generally carry traffic through the Council area and generally connect with DPTI arterial roads These roads have a higher standard alignment, reasonable sight distance and a formation width to allow heavy vehicles to pass If funds were available, roads would generally be selected for construction and sealing from this category	129 km
Category 2	Unsealed roads within the Council area that are major roads for local traffic and tourist traffic These roads often form part of the school bus routes and have regular truck movements (wineries, farms, etc) Some roads from this category are selected for construction and sealing due to their high maintenance costs, tourist importance or their close proximity to townships	480 km
Category 3a,b,c	These roads are the remainder of Council's unsealed road network that has been formed and sheeted These roads provide all weather access to residences and farms	450 km
Category 4	These roads have generally been formed to provide access to farms for the movement of plant and machinery These roads need not be all weather roads	990 km

3.2.2 Capital Works

Capital Renewal

The average life span of sheeting on the different categories of roads varies extensively depending on the category and the sheeting material used. Roads classed as Category 1 can be between 6 and 12 years while Category 3c may be 30 years plus.

New/Upgrade

No new unsealed roads are expected to be constructed during the life of this Asset Management Plan.

3.2.3 Maintenance

The following maintenance efforts shall be undertaken with suitable seasonal conditions:

Category 1	2 to 4 grades per year Heavy patching as required Pothole repair as required Side drains and culverts cleaned as required Regulatory and warning signs replaced as required
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Category 2	2 to 3 grades per year Heavy patching as required Pothole repair as required Side drains and culverts cleaned as required Regulatory and warning signs replaced as required
Category 3a,b,c	1 to 2 grades per year for the higher sub-category roads, less for lower Heavy patching as required Pothole repair as required Side drains and culverts cleaned as required Regulatory and warning signs replaced as required
Category 4	0 to 1 grades per year Regulatory and warning signs replaced as required

Council staff has determined that an average of approximately \$1m will be required to ensure that sufficient maintenance work is undertaken to keep Council's unsealed road network maintained to a required standard. This work will be undertaken in response to ratepayer complaints and requests, as well as regular scheduled patrol grading programs.

3.3 KERBING

3.3.1 What Council Provides

Council has a kerbing and watertable network in the following areas:

Town	Kerb & Watertable Length
Auburn	12 km
Clare	70 km
Hilltown	0.08 km
Manoora	0.7 km
Marrabel	0.9 km
Mintaro	0.03 km
Rhynie	0.1 km
Riverton	20 km
Saddleworth	10 km
Stockport	1 km

Tarlee	2.6 km
Waterloo	0.06 km
Watervale	2.6 km
TOTAL	120 km

3.3.2 Capital Works

Capital Renewal

The average useful life of kerbing and watertable is 70 years. This means that, apart from individual sections of kerb and watertable damaged from deterioration or tree roots causing restricted stormwater flows, limited capital renewal work should be required over the life of the plan. An average annual allowance of \$48k has been allowed for in the 10 year plan.

New/Upgrade

Council staff has determined that over the course of the 10 year plan an average of \$24 per year should be expended on extending the existing kerb and watertable service to streets where it doesn't presently exist.

3.3.3 Maintenance

As the majority of work carried out on kerbs and watertables will be in the area of renewal a limited amount of maintenance has been allowed for. Council staff has determined that \$8k will be sufficient for annual maintenance.

3.4 FOOTPATHS

3.4.1 What Council Provides

Council has footpath network in the following areas:

Town	Footpath Length*
Auburn	7 km
Clare	30 km
Hilltown	0.08 km
Manoora	0.7 km

Marrabel	1 km
Riverton	15 km
Saddleworth	10 km
Tarlee	2.2 km
Waterloo	0.06 km
Watervale	2 km
TOTAL	70 km

*Does not include earthen or grassed footpaths

3.4.2 Capital Works

Capital Renewal

The total useful life has been determined by Council Staff as 50 years for paving and concrete, 20 years for bitumen and rubble and 15 years for hotmix. The majority of capital renewal work will involve grinding down of concrete footpaths, and relaying of pavers and concrete slabs. An average annual allowance of \$24k has been allowed for in the 10 year plan.

New/Upgrade

Council staff has determined that over the course of the 10 year plan an average of \$56k per year should be expended on extending the existing footpath network to streets where it doesn't presently exist. The length of footpath completed will depend on the type of construction.

3.4.3 Maintenance

Council staff has determined that an average of \$100k per year over the course of the 10 year plan will be sufficient for annual maintenance including weed control.

3.5 BRIDGES

3.5.1 What Council Provides

Council has a network of 29 bridges.

The following table details location and condition as at Mace Engineering's survey of August 2006:

No	Location	Description
1	Steelton Road*	Three span reinforced concrete girder and deck with reinforced concrete column piers
2	Steelton Road	Four span reinforced concrete girder and deck with reinforced concrete column piers
3	Main Street, Mintaro	Single span reinforced concrete deck supported by steel girders
4	Hoyleton Road*	Single span reinforced concrete deck supported by steel girders
5	Marrabel Road, Riverton	Reinforced concrete deck supported b triple span simply supported steel girders on stone piers and abutments, faced with concrete
6	Rhynie/Balaklava Road	Reinforced concrete deck supported by triple span simply supported steel girders on stone piers and abutments
7	Rhynie/Balaklava Road	Three bay in situ concrete culvert
8	Steelton Road	Single span longitudinal steel truss members on outside of reinforced concrete deck on supporting transverse steel truss members
9	Harvey Highway*	Six span continuous reinforced concrete flat deck supported on reinforced concrete abutments and piers
10	Stockport/Giles Corner Rd	Reinforced concrete deck on three span simply supported steel girders
11	Dominic Street, Clare	Reinforced concrete deck on triple span simply supported steel girders
12	Victoria Road, Clare	Single span reinforced concrete deck and steel girders
13	White Hut Road	Double bay precast concrete panelled culvert with reinforced concrete base slab
14	Roach Road*	Single span reinforced concrete deck supported by steel girders
15	Camels Hump Road	Single span reinforced concrete deck supported by steel girders
16	Smart Road	Single span reinforced concrete deck supported by steel girders
17	Riverton/Finnis Pt Road	Single bay precast concrete panelled culvert with reinforced concrete base slab
18	Ayliffes Bridge Road*	Four span simply supported riveted steel plate girders supporting steel transverse girders and reinforced concrete deck
19	Salter Springs Road	Single bay precast concrete panelled culvert with reinforced concrete base slab
20	Rhynie/Balaklava Road	Three 1200mm diameter concrete pipe culverts with reinforced concrete deck
21	Stockport/Giles Corner Road	Culvert under roadway with reinforced concrete deck
22	Rhynie/Balaklava Road	Reinforced concrete floodway over four 800mm diameter concrete pipes
23	Gleeson Street, Clare	Double bay reinforced concrete culvert

24	Mintaro/Farrell Flat Road	Single bay precast concrete with reinforced concrete and stone tablet base slab
25	Steelton Road	Three span reinforced concrete girder deck with reinforced concrete girders and piers
26	Muanu Road	Single bay precast concrete panelled culvert with reinforced concrete base slab
27	Manoora/Mintaro Road	Single bay reinforced concrete box culvert with concrete deck
28	Merildin Road	Single bay reinforced concrete box culvert with concrete deck
29	Blanche Street, Clare	Single span reinforced concrete abutments with precast concrete deck

*10 tonne load limit imposed

3.5.2 Capital Works

Capital Renewal

The Bridge Inspection Report prepared by Mace Engineering Services in 2006 provides details of the condition of each of the above bridges, with recommendations for renewal and strengthening work to be carried out and the programming of the work. As a result of these inspections a number of bridges have has load limits imposed on them and some regular inspections are to be undertaken.

There have been upgrades to a number of these bridge structures following the December 2010 flooding events and a review of the Bridge Inspection Report will need to be undertaken.

New/Upgrade

No new bridge work is expected to be undertaken in the life of this plan.

3.5.3 Maintenance

Maintenance repair work will be carried out as required. Council staff has determined that the average cost of bridge renewal and maintenance over 10 years at \$146k per year, of which \$8k has been deemed as maintenance work.

3.6 TRAFFIC MANAGEMENT

3.6.1 What Council Provides

Council provides a number of different methods of traffic management, including warning, guide and regulatory signs, street name signs and guide posts.

Warning signs are used to warn traffic of potentially hazardous conditions. Warning signs advise of conditions which require caution on the part of the driver, and may call for a reduction in speed in the interest of the

driver's safety and that of other road users. Guide signs inform and advise road users of direction and distance from destinations. They also provide useful information on geographical and historical places of interest and give directions to specific locations such as rest areas, camping sites, or parking areas. Regulatory Signs inform road users about traffic laws or regulations, noncompliance with which would be an offence.

3.6.2 Capital Works

Capital Renewal

With signs having an estimated life of 10 years, it has been determined that an average of \$82k will need to be spent over 10 years to ensure that existing signs are kept up to standard.

New/Upgrade

No new signs are have been separately included in the plan however some new signs have been included in expenditure on capital roadworks.

3.6.3 Maintenance

Council staff has determined that an average of approximately \$35k will be required to ensure that sufficient maintenance work is undertaken to keep Council's sign network maintained to a required standard. This work will be undertaken in response to ratepayer complaints and requests.

3.7 PLANS FOR THE FUTURE

Council plans to operate and maintain roads and road infrastructure to achieve the following objectives:

Provide the community, business, industry and visitors with high quality services and facilities

Maintain and develop roads

Ensure the transport network is maintained at a safe and functional standard

Ensure appropriate traffic management and road safety

Council currently does not have a formal Maintenance Management System, with maintenance carried out on an ad hoc or as required basis. 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.

3.8 MEASURING OUR PERFORMANCE

Quality

Sealed roads will be constructed and maintained to the standards specified in the Clare & Gilbert Valleys Council Roads Manual. Defects found or reported that are outside our service standard will be repaired.

Safety

Staff inspect Council roads while undertaking other inspections and works operations. All field staff record defects and report to supervisors to prioritise and repair defects in accordance with our field observation by staff and public requests. These identified works priorities are scheduled for repair to ensure they are safe for road users.

3.9 THE NEXT STEPS

Council will review this Plan as part of the continuous improvement process of further development and refinement. Actions resulting from the development of this asset management plan are:

Ongoing collection and storage of condition information.

Develop specific service levels for the delivery of services including performance targets.

Develop and establish ongoing assessment in relationship to safety and specified maintenance intervention levels.

Assessing collected information regarding transport asset condition for developing future maintenance and capital programs.

Continue to collect important asset data and adopt advanced asset management systems and processes.

Audit and review of maintenance response times (to confirm whether maintenance works were delivered on time).

Consultation to ascertain the community's service needs and preferences and confirm target levels adopted.

Review useful life of all transport assets based on real time assessment of asset deterioration.

Investigate integration of asset management systems with financial systems.

4 COMMUNITY WASTE WATER MANAGEMENT SCHEMES

4.1 What Council Provides

Council operates three CWMS networks in Clare, (originally constructed in 1974), Riverton (1971) and Saddleworth (1969). These networks incorporate approximately 60 km of reticulation pipework, 6 pump stations and includes 3 newly constructed wastewater treatment plants. Other infrastructure associated with the plants include winter storage facilities and treated water dispersal systems.

4.2 Capital Works

4.2.1 Capital Renewal

The average annual expenditure for capital renewal of the CWMS is \$334k, however this is affected by an allocation of \$2m in 2018/2019 for replacement of the underground pipe network.

Economies of scale suggest that a large pipework renewal contract would be the most cost efficient way to conduct the pipework replacement.

4.2.2 New/Upgrade

No new works have been included in the plan.

4.3 Maintenance

Regular maintenance work is carried out on Council's CWMS network. This generally comprises the clearing of blockages in response to ratepayer requests, and the regular pumping out of all septic tanks that are connected to the CWMS networks. The average amount expected to be expended over the 10 year plan is \$413k.

4.4 Plans for the Future

Council plans to operate and maintain CWMS to achieve the following objectives:

Ensure the CWMS network is maintained at a safe and functional standard.

Maximise the useful life and operational efficiency of CWMS infrastructure via effective and regular maintenance.

Implement programmed renewal of CWMS infrastructure in accordance with long term infrastructure plans.

Maintenance is carried out as required including inspection and condition assessments.

4.5 Measuring our Performance

4.5.1 Quality

CWMS will be maintained in compliance with the legislative frameworks and community environmental expectations. Regular septic pumping out programmes will be maintained and progressive replacement of broken or damaged or outdated pipework will be commenced. Defects found or reported that are outside our service standard will be repaired.

4.6 The Next Steps

Council will review this Plan as part of the continuous improvement process of further development and refinement. Actions resulting from the development of this asset management plan are:

Ongoing collection and storage of condition information.

Develop specific service levels for the delivery of services including performance targets.

Develop and establish ongoing assessment in relationship to safety and specified maintenance intervention levels.

Assessing collected information regarding transport asset condition for developing future maintenance and capital programs.

Continue to collect important asset data and adopt advanced asset management systems and processes.

Audit and review of maintenance response times (to confirm whether maintenance works were delivered on time).

Consultation to ascertain the community's service needs and preferences and confirm target levels adopted.

Review useful life of all CWMS infrastructure assets based on real time assessment of asset deterioration.

Investigate integration of asset management systems with financial systems.

5 STORMWATER

5.1 What Council Provides

Council has a stormwater drainage network which covers both rural and urban areas and includes urban underground drainage, plus fords, floodways, pipes and culverts.

Limited maps exist on existing urban stormwater drainage networks in the district. At last count Council had 13 fords and floodways and 75 pipes and culverts in townships and 79 fords and floodways and 958 pipes and culverts in the rural area.

5.2 Capital Works

5.2.1 Capital Renewal

Rural pipes, culverts, fords and floodways throughout the district were included in the assessment of the rural road network. Renewal has been prioritised based on condition and category of road and cost of renewal included in the road assets.

A five year program to implement projects identified by the AWE stormwater management plan has been included in the plan at an estimated cost of \$1m per year.

5.2.2 New/Upgrade

Any new pipes and culverts are included in the cost of road construction, but will be recorded in the register for future inspections and audits.

5.3 Maintenance

An annual average of \$100k has been allowed for stormwater maintenance.

5.4 Plans for the Future

Council plans to operate and maintain stormwater drainage to achieve the following objectives:

Ensure the stormwater network is maintained at a safe and functional standard.

Minimise expose to local flooding through the regular cleaning and maintenance of stormwater drainage systems.

Renew/replace stormwater drainage infrastructure as required.

Council currently does not have a formal Maintenance Management System, with maintenance carried out on an ad hoc or as required basis. 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.

5.5 Measuring our Performance

5.5.1 Quality

Stormwater drainage will be maintained in compliance with the legislative frameworks and community environmental expectations. Defects found or reported that are outside our service standard will be repaired.

5.5.2 Safety

All pipes and culverts are regularly inspected.

6 LIFECYCLE MANAGEMENT PLAN

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

Initial capital cost constitutes a significant upfront cost and often dominates the decision making process when acquiring new assets. However the ongoing recurrent expenditure (including depreciation) usually represents a high portion of total life-cycle costs of many assets. It is important that they be included in the financial analysis undertaken to evaluate asset investment options. There may also be substantial costs associated with disposal at the end of an asset's service life (eg clean up or demolition costs).

The Clare & Gilbert Valleys Council, as custodians of a significant infrastructure and asset network, is charged with the responsibility to ensure that assets continue to function and meet the community needs and expectations as well as maintaining the assets in a safe and usable condition within a reasonable duty of care.

In all cases the asset functionality and asset maintenance targets need to be clearly defined within the community and the Council to determine the "fit for purpose" having regard to practicality and economics. That is, a level of service provided within a reasonable duty of care in an affordable financially sustainable manner that considers community expectations in regard to safety, accessibility, and overall condition of assets and infrastructure.

Asset functionality as a "level of service" to the community must take into consideration such factors as life cycle, capability and capacity, risk management and strategic compliance to the needs and expectations of the overall community.

Asset maintenance "levels of service" provide for the day to day maintenance programs to ensure that the asset presentation is safe within practical constraints, maintained to perform targets for day to day use and are managed and maintained to minimise risk to the user.

6.1 Background Data

6.2 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.

6.3 Maintenance and Renewal Plans

Other plans such as routine maintenance and renewal plans will be developed over time as resources allow.

7 FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this infrastructure and 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.

7.1 Financial Statements and Projections

The average financial projections are shown below for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets) over a 10 year period.

ASSET CATEGORY	MAINTENANCE (\$,000 per annum)	RENEWAL (\$,000 per annum)	NEW/UPGRADE (\$,000 per annum)
Buildings & Structures	140	320	0
Sealed Roads	216	534	278
Unsealed Roads	1,000	1,543	0
Kerbing	8	48	24
Footpaths	100	24	56
Bridges	8	138	0
Traffic Management	35	82	5
CWMS	413	334	0
Stormwater	100	711	0

The average renewal expenditure shown above includes the expenditure on major projects which is subject to Council approval as part of the annual budget process:

Buildings & Structures – Possible enclosure of the swimming pool at the Valleys Lifestyle Centre, Clare - \$2m in 2018/2019.

Community Wastewater Management Systems – Renewal of pipework - \$2m in 2018/2019.

Stormwater Drainage Infrastructure: Implementation of stormwater mitigation works as per plans prepared for Council by AWE - \$1m per year for 5 years from 2016/2017 to 2020/2021 inclusive.

7.2 Funding Strategy

Projected expenditure 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.

7.3 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.

Depreciation expense values are forecast in line with asset values.

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.

8 PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the infrastructure and asset management plan can be measured in the following ways.

The degree to which the required cash flows identified in this infrastructure and asset management plan can be incorporated into Council's long term Financial Plan and Community Plan 2020;

The degree to which 1-5 year details works programs, budgets, business plans and organisation structures take into account the 'global' works program trends provided by the infrastructure and asset management plan.

8.2 Monitoring and Review Procedures

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

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

APPENDIX

Infrastructure and Asset Management Plan – Capital Expenditure Summary – 2014/2015 to 2023/202

**CLARE & GILBERT VALLEYS COUNCIL
INFRASTRUCTURE & ASSET MANAGEMENT PLAN - CAPITAL EXPENDITURE SUMMARY - 2014/2015 to 2022/2023**

	BUDGET 2014/2015				2015/2016				2016/2017				2017/2018				2018/2019				2019/2020				2020/2021				2021/2022				2022/2023				2023/2024					
	Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade		Renewal / Replacement		New / Upgrade							
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000						
CAPITAL EXPENDITURE BY ASSET TYPE																																										
2123 LAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
2162 TOTAL BUILDINGS	263	140	358	50	330	0	165	0	354	2,242	540	0	198	0	234	0	394	0	419	0																						
TRANSPORT INFRASTRUCTURE																																										
2141 Bridges	40	60	125	0	130	0	135	0	140	0	146	0	152	0	158	0	164	0	171	0																						
2142 Footpaths	20	220	21	31	22	32	22	34	23	35	24	36	25	38	24	26	39	27	41	28	43																					
2143 Kurling	30	20	42	21	43	22	45	22	47	23	49	24	51	25	53	26	55	27	57	28																						
2144 Roads Sealed	132	278	94	278	131	278	31	278	203	278	331	278	521	278	769	278	939	278	2,191	278																						
2145 Roads Unsealed	1,557	0	1,923	0	1,395	0	1,673	0	1,714	0	1,370	0	1,976	0	1,371	0	1,718	0	733	0																						
2148 Traffic Management	50	50	73	0	76	0	79	0	82	0	85	0	89	0	92	0	96	0	100	0																						
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																						
TRANSPORT INFRASTRUCTURE	1,829	628	2,277	330	1,796	332	1,985	334	2,210	336	2,006	339	2,813	341	2,469	344	2,999	346	3,280	349																						
COMMUNITY WASTEWATER MANAGEMENT SYSTEMS (CWMs)	110	0	156	0	162	0	56	0	2,398	0	61	0	190	0	66	0	68	0	71	0																						
2112 STORMWATER	150	0	104	0	1,190	0	1,237	0	1,287	0	1,338	0	1,392	0	132	0	137	0	142	0																						
2121 PARKS & GARDENS INFRASTRUCTURE	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																						
2137 PARKING INFRASTRUCTURE	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																						
21501 COSTED PLANT	550	60	689	0	808	0	811	0	729	0	911	0	1,034	0	991	0	189	0	775	0																						
21505 MINOR PLANT UNCOSTED	4	0	13	0	14	0	14	0	15	0	15	0	15	0	16	0	16	0	17	0																						
2173 Governance - Uncosted Vehicles	40	0	62	0	0	0	109	0	0	0	69	0	47	0	73	0	0	0	129	0																						
2189 Support Services - Uncosted Vehicles	0	0	0	0	26	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0																						
2062 Library - Uncosted Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																						
2047 MNPT - Uncosted Vehicles	59	0	30	0	31	0	32	0	33	0	34	0	35	0	36	0	37	0	38	0																						
2131 Compliance - Uncosted Vehicles	0	0	41	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	52	0																						
2150 Works - Uncosted Vehicles	45	0	26	0	48	0	49	0	28	0	52	0	53	0	31	0	57	0	58	0																						
OTHER UNCOSTED VEHICLES	144	0	159	0	105	0	190	0	89	0	230	0	136	0	140	0	125	0	277	0																						
2062 Library - Other Equipment	44	7	0	0	11	0	33	0	0	0	12	0	0	0	37	0	13	0	0	0																						
2074 Cultural Services - Other Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																						
2084 VC - Other Equipment	0	0	5	0	0	0	5	0	0	0	6	0	0	0	6	0	0	0	6	0																						
2122 Valleys - Other Equipment	0	0	10	0	5	0	0	0	6	0	0	0	18	0	0	0	0	0	0	0																						
2189 Support Services - Other Equipment	0	0	26	0	11	0	11	0	31	0	12	0	30	0	12	0	35	0	13	0																						
OTHER EQUIPMENT	44	7	41	0	26	0	49	0	37	0	29	0	47	0	55	0	54	0	19	0																						
2062 LIBRARY BOOKS	60	0	51	0	53	0	54	0	56	0	58	0	59	0	61	0	63	0	65	0																						
TOTAL CAPITAL BY ASSET TYPE - INDEXED	3,404	855	3,849	380	4,484	332	4,561	334	7,174	2,579	5,188	339	5,885	341	4,163	344	4,045	346	5,065	349																						
COMBINED EXPENDITURE RENEWAL/REPLACEMENT & NEW/UPGRADE	4,259			4,229		4,817	4,895			9,753		5,527		6,227		4,506		4,392		5,414																						