



# **Warrumbungle Shire Council**

## **Asset Management Plan**

**2011/12 to 2021/22**



## Executive Summary

### Asset Management at Warrumbungle Shire

Warrumbungle Shire Council is the custodian of \$377m of community assets including roads, bridges, water and sewer assets, drains, footpaths, public buildings, recreational facilities and parks and gardens.

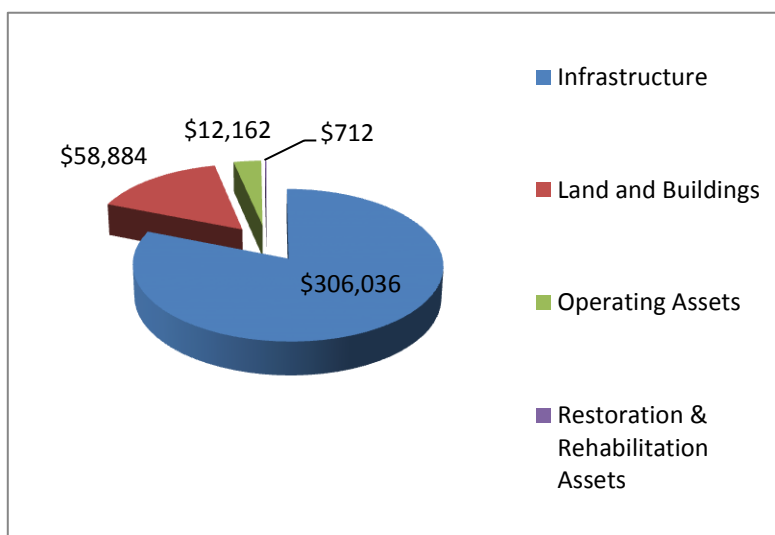
As custodian, Council is responsible for effectively accounting for and managing these assets as well as considering the long-term and cumulative effects of the decisions it makes vis-à-vis these assets. This is a core function of Council and is reflected in the Charter in Section 8 of the Local Government Act 1993.

In order to effectively manage Council's assets, Council has prepared an Asset Management Plan (AMP). This asset management plan is the first plan that Warrumbungle Shire Council has prepared and as a result Council can now obtain a clearer picture of the condition of its asset base, Council's asset maintenance and renewal requirements going forward, and the challenges that Council faces in improving its asset management practices.

### Our Assets

As mentioned above Council is the custodian of \$377m (\$370m post proposed accounting changes) of community assets. A breakdown of these assets by Council's four major asset categories is provided in the chart below (note figures are in \$'000).

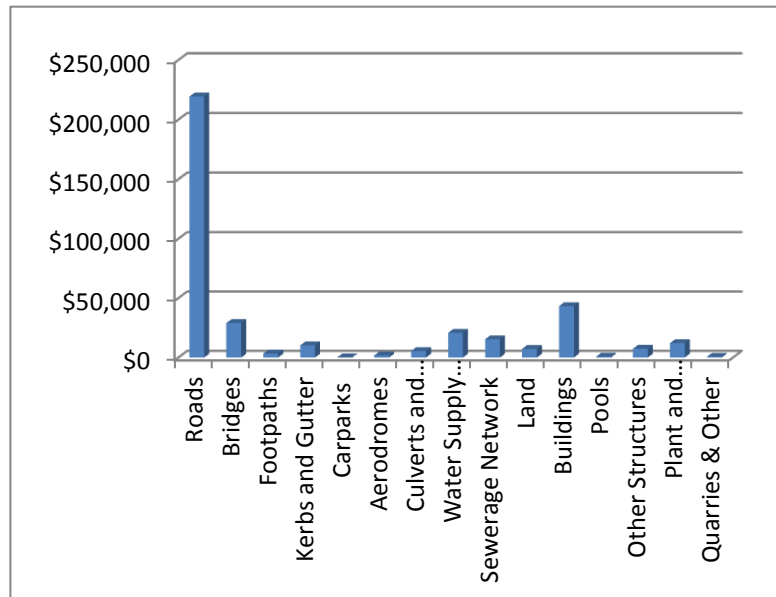
The chart indicates that over 81% of Council's total asset base relates to infrastructure assets such as roads, and the water and sewer network. These assets provide the transport and water/sewerage infrastructure that the community relies on for the transportation of people and goods between centres within and outside the Shire, and the provision of water and sewerage services to the residents of the shire.



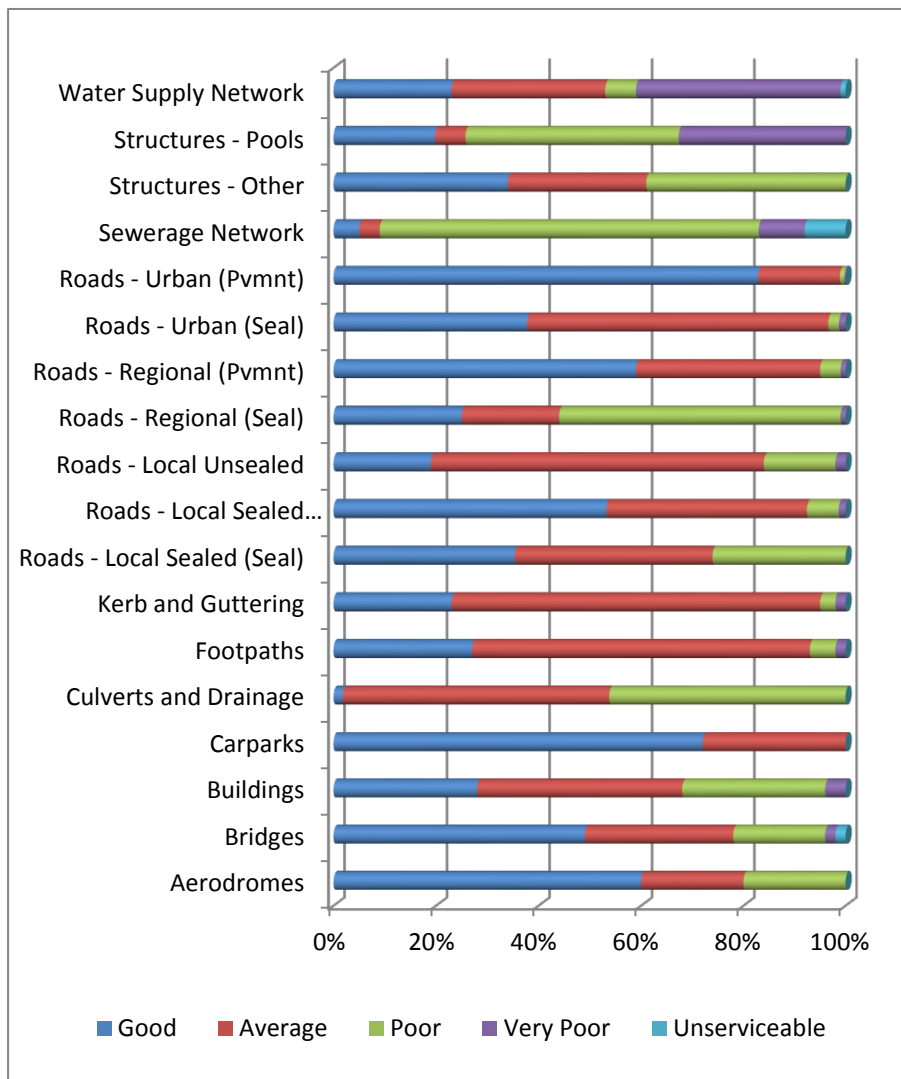
Council's land and buildings assets are categorised as either land including operational land (such as land used by council), community land (such as parks) and land improvements or buildings and structures which includes town halls, swimming pools, council offices, buildings in rest areas and residential properties owned by council.

Council’s operational assets are the often unseen assets that Council uses to maintain/expand its infrastructure base and to conduct its day to day operations, such as back hoes, graders and photocopiers.

Each of Council’s major asset classes is dealt with in detail in a separate section of this AMP, and a breakdown of the value of all of Council’s assets can be found in the chart to the right (figures are in \$’000).



### Condition of Our Assets



Council has condition tested all its infrastructure and building assets over the last two years, and the results of Council’s condition testing are detailed in the table to the left.

The condition ratings of Council’s assets vary significantly by asset class, with Council’s pool structures, water supply and sewerage network having the lowest condition ratings.

Council’s road pavement (excluding seal), carparks, aerodromes and bridges are the asset classes with the highest ratings.

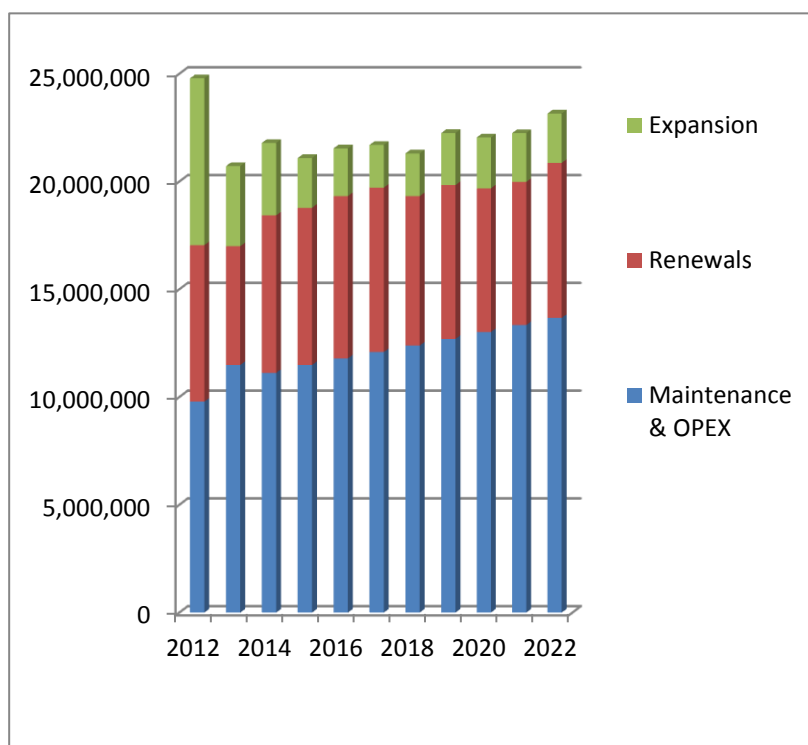
## Demand for New Assets

Warrumbungle Shire Council currently faces the following external factors that are driving demand for new assets within the shire (full details can be found in Part 3 of this plan):

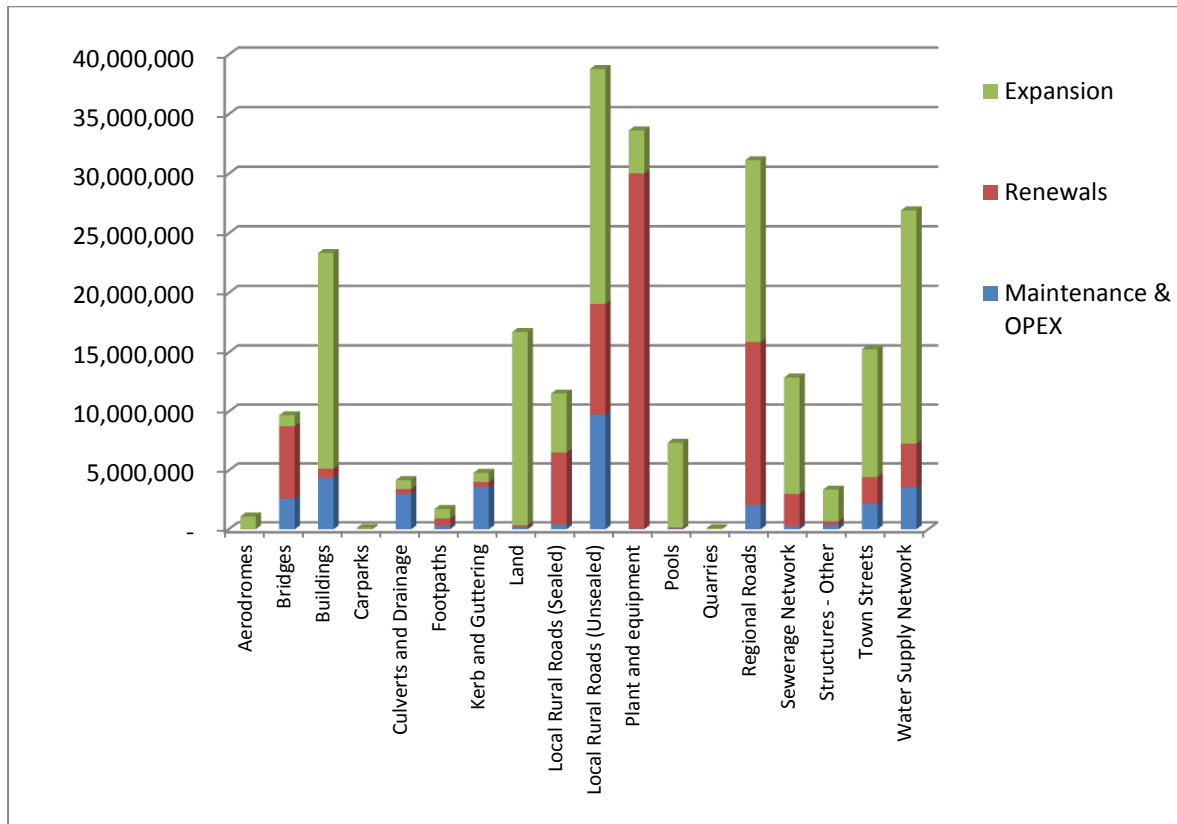
- **Demographics** – A projected ageing and declining population will put downward pressure on demand for infrastructure and impact the type of services provided by Council.
- **Mining** – Council has forecast that the opening of Cobbora mine will result in increase in Council’s operation, maintenance and renewal costs for Council owned assets. Council expects that these increased costs will be funded by the mine.
- **Agriculture** – Council has forecast increased future demand from the agricultural sector for improved road infrastructure capable of carrying heavier loads. This expected increase in demand is as a result of forecast increased global demand for agricultural products, and the expected decline in alternative freight transport as the regional rail network is further abandoned.
- **Community Strategic Plan** – As part of the CSP Council has approached the Community for feedback on what the Community values and what their future aspirations are for the Shire. Future delivery programs are expected to impact on the level and breakup of assets to be provided by Council.

## Whole of Lifecycle Costs

Central to asset management is the concept of asset lifecycles and asset lifecycle management. There are four key phases of an asset’s lifecycle, namely asset acquisition, asset operations and maintenance, asset renewal and asset disposal. This plan has been prepared with consideration of the principles of asset lifecycle management and the long term costs associated with each asset class have been disclosed by lifecycle cost type in the plan. A breakdown of Council’s total asset related expenditure is provided (by lifecycle cost) as show in the table to the right:



The total lifecycle cost for all of Council’s assets by asset class is detailed in the following chart. More information on asset lifecycle costing can be found in Part 2 of this plan.

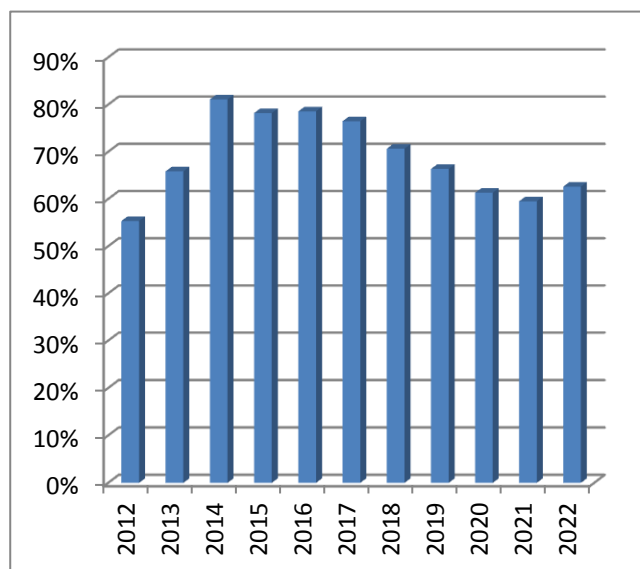


## Sustainability of Council’s Asset Network

All the information in this plan indicates that the condition of and services provided by Council’s asset network are not sustainable in the long run under current budget assumptions.

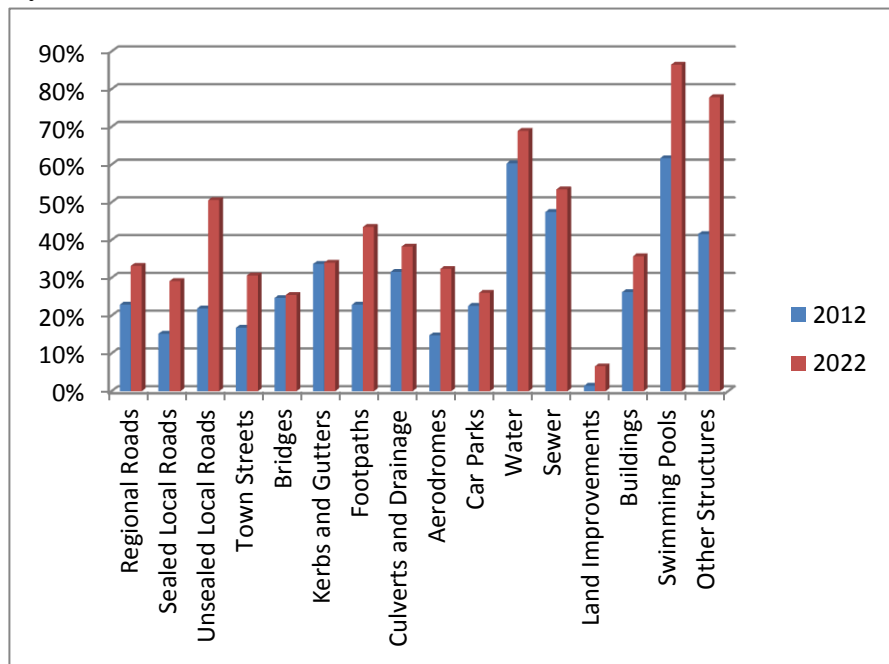
Council’s asset renewal ratio (the rate at which Council is renewing its assets relative to their decline in value) across the network is forecast to average 69% over the life of this plan, well below the desired ratio of 100% (see chart to the right).

Council is also forecast to incur a total asset renewal deficit (the dollar measure of Council’s shortfall in renewals) of \$43.65m in this time period. As a result of the asset renewal deficit above, Council is expected to consume a further 12% of the future service potential of its assets over the following 10 years, leading to worsening asset conditions across the network.



If asset renewals continue to fail to keep up with the level of asset deterioration (as measured by depreciation), many of Council’s assets will need to be decommissioned over the following ten years as they will have reached the end of their useful lives.

The degree of unsustainability varies by asset class and many asset classes such as Council’s bridges are sustainable at current spend levels, while other assets such as pools and road seals are not sustainable (see asset consumption ratio chart to the right).



Council is subject to funding limitations, and without assistance from other

levels of government or a special rate variation, Council will find it difficult to fund its forecast 11 year \$43.65m asset renewal deficit, and both residents and businesses within the Shire will have to bear decreased service levels as a result.

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## Part 1: Introduction

### 1.1 About Warrumbungle Shire

The Warrumbungle Shire is strategically positioned on the Newell Highway mid-way between Brisbane and Melbourne. A number of highways and main roads traverse the shire providing links with surrounding regional centres.

The landscape ranges from extensive plains to undulating hills, from the high basaltic plateau of the Coolah Tops in the east to the rugged mountainous peaks of extinct volcanoes in the Warrumbungle National Park, west of Coonabarabran.

The geography, flora and fauna of the Shire is where east meets west. The mountainous terrain of the Great Divide gives way to rolling hills then the inland plains. The flora and fauna of the wide open plains mix with coastal animal and vegetation progressively across the Shire. A striking example of this is on the eastern boundary of the shire we have the large grey kangaroo and on the western boundary of the shire the large red kangaroo.

The shire is also a meeting place for the nations of our traditional owners and custodian of the land. The northern part of the shire is home to the Gamilaraay people while the southern part of the shire is home to the Wiradjuri people. Also the nations of the Weilwan and Kawambarai (Werriri) come into the Shire on the western border. The history, traditions and culture are being recognised as an important part of the Shire's history.

The stunning night skies, formed by a combination of low pollution, very low humidity and limited cloud cover have drawn astronomers and researchers to Coonabarabran in their search for what lies beyond the confines of the visual night sky.

Siding Spring Observatory, located 25kms from Coonabarabran is the site of a number of internationally owned and operated optical telescopes where major research has recorded amazing truths of the universe, supporting Coonabarabran's claim to the name "Astronomy Capital of Australia".

The towns and villages of the shire comprise Coonabarabran, Baradine, Binnaway, Coolah, Dunedoo and Mendooran; all provide wonderful opportunities to experience real country Australian lifestyles. Each of the communities has their own special claim to fame. Bush Poetry Festivals, rivalry over ownership of the name The Black Stump, a Steamrail Village, The Oldest town on the Castlereagh, The Gateway to the mighty Pilliga or the Astronomy Capital of Australia – each of our villages reflects the personalities of its residents and the lifestyles.

The shire was traditionally built on agricultural pursuits with the early establishment of wool growing and beef cattle production followed by cereal cropping, prime lamb production and today a burgeoning vine growing and horticultural industry.

The communities enjoy the services of quality schools and health services. The shire boasts a broad range of cultural, sporting and recreational activities.

Retailing in each centre provides services to those communities and the provincial centres of Tamworth and Dubbo, located within 2 hours of the centre of the Shire complements local level services.

## 1.2 What Services does Warrumbungle Shire Council Provide?

Warrumbungle Shire Council provides a wide range of services to the residents of the shire including but not limited to:

- Transport services including the management, maintenance and improvement of over 2,600 km of local and regional roads, 97 bridges, an extensive network of culverts and other drainage assets, kerbs and gutters, footpaths, and quarries;
- Aged care, child care and youth development services, including Warrumbungle Community Care, Yuluwirri Kids, Castlereagh Family Day Care and Connect Five supported play groups;
- The management, maintenance and improvement of a range of buildings and structures from town halls, playgrounds, community facilities, and meeting rooms, to aerodromes all of which provide valuable services to the community;
- Promotion of economic development and tourism within the Shire;
- Provision of water, sewerage and waste services to the residents of the Shire;
- Town planning, regulatory services, town beautification and environmental management;
- Emergency services;
- Library services;
- Road safety programs;
- Management of Public Cemeteries;
- Provision of ovals, and other sport and recreation facilities including pools and parks;
- Support to agencies such as Centrelink and Banks to provide services locally;
- Health, environmental and emergency bush fire services.

As is clear from the list above, the role of Local Government goes far beyond roads and water, and the effective management of the resources required to provide the above mentioned services is critical for the long term future of Warrumbungle Shire Council.

In order to ensure that the provision of the above services is cost effective, efficient, and sustainable in the long term, Council has prepared an Asset Management Plan. This Plan, together with Council's Long Term Financial Plan and Workforce Management Plan, will be used as a blueprint to ensure that Council has the resources going forward to maintain and improve on the service level it currently provides.

## 1.3 What is an Asset Management Plan (AMP)?

Asset Management Plans are long-term plans that outline the assets required for each service provided by an entity, the expected service level to be provided from these assets, and most importantly, what funds are required to ensure that the services that these assets provide to the community can continue to be provided well into the future.

The International Infrastructure Management Manual (IIMM) defines an Asset Management Plan as “...a written representation of the intended asset management programs for one or more infrastructure networks based on the controlling organisation's understanding of customer requirements, existing and projected networks, and asset conditions and performance”

Asset Management Plans generally include information on:

- A demand forecast of future asset and service requirements (Part 3 of this AMP);
- The expected service level to be provided by the assets controlled by the entity (Part 4 of this AMP);
- What assets an entity controls (Part 5 of this AMP);
- Long-term cash flow predictions for maintaining/renewing the assets controlled by an entity so that the required level of service can be achieved (Details by asset class in Part 5, high level summary in Part 7 of this AMP);
- Indicators that can be used to ensure that assets are managed effectively over their lifecycle (Details by asset class in Part 5, high level summary in Part 7 of this AMP);
- Critical assets including a risk assessment on how to manage risks associated with critical assets (Part 6 of this AMP);
- The way forward to improve asset management within an organisation (Part 9 of this AMP);

### 1.4 The role of the Asset Management Plan in the IP&R Framework

This Asset Management Plan is one of three components of the Resourcing Strategy under the new Integrated Planning and Reporting framework. The Resourcing Strategy details the resources required to fulfill the outcomes requested by the community in the community's Community Strategic Plan (CSP), and includes an Asset Management Plan (AMP), a Workforce Management Plan (WMP), and a Long Term Financial Plan (LTFP). The linkage between the Resourcing Strategy and the Integrated Planning and Reporting framework is detailed in the following diagram:

Diagram 1.1: Local Government Planning and Reporting Framework



As mentioned above, the Asset Management Plan details Council's asset base and the service level expectations of the community, as well as forecasting the future maintenance and capital expenditure required to maintain the community's desired service level as detailed in the Community Strategic Plan.

The AMP's assumptions around future capital and maintenance expenditure, depreciation and asset renewal, as well as the projected book value of the community's assets all inform the asset related assumptions in the Long Term Financial Plan. In effect, the forward estimates found in Part 7 of the AMP have been transferred verbatim to the LTFP, and have been used to inform decisions on whether the Community's desired service level (as per the CSP) is feasible given the resources projected to be available to Council in future years.

### **1.5 Community's Expectations in the CSP and their Impact on the AMP**

In order to prepare a Community Strategic Plan, Warrumbungle Shire Council undertook extensive community consultation by staging a total of 38 forums throughout the shire over a three and a half week period in September 2011. The results of this community consultation have been summarised into one document which post review and council approval has become Warrumbungle Shire Council's Community Strategic Plan.

The Community Strategic Plan is a critical document that will be used by Council to discern what the community values and what are its service expectations, and to inform future investment and funding allocation decisions. As such, the outcomes desired by the community in the CSP have been incorporated into future asset planning in this Asset Management Plan. Information on capital projects to be completed by Council can be found in Council's ten year capital program in Part 7 of the AMP. Information on non-capital outcomes and projects can be found in Council's Delivery Program on the Warrumbungle Shire Council website.

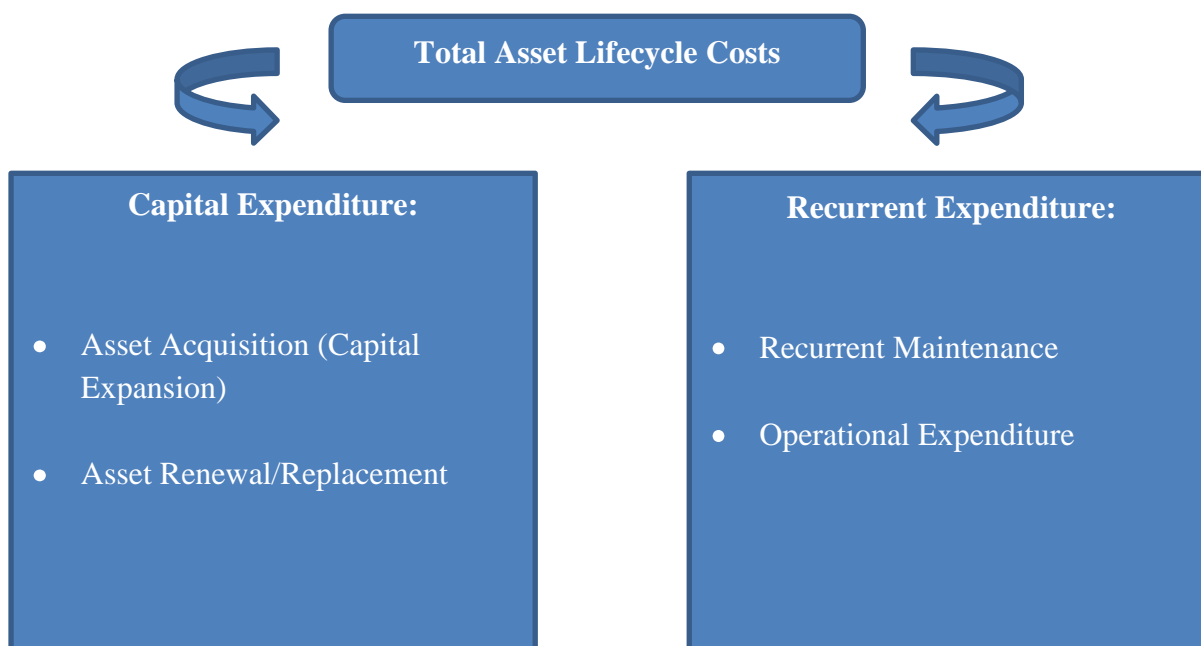
## Part 2: Asset Lifecycle Management

### 2.1 Asset Management and Lifecycle Costing

As a large rural Council that is responsible for an extensive asset network, effective asset management is critical to Warrumbungle Shire Council’s operations. Effective asset management assists Council in:

- Demonstrating to the residents of the shire that Council is accountable and is delivering its services effectively and efficiently;
- Ensuring the long term sustainability of Council’s operations;
- Managing risks associated with assets under Council’s control;
- Ensuring that services are provided at the lowest cost by improved decision making and cost benefit analysis.

Central to asset management is the concept of asset lifecycles and asset lifecycle management. There are four key phases of an asset’s lifecycle, namely asset acquisition, asset operations and maintenance, asset renewal and asset disposal. Each asset lifecycle has an associated cost, and these lifecycle costs can be split into recurrent and capital expenditure per the diagram below:



For most organisations, the initial capital cost of an asset is generally significant and often dominates decision making around asset acquisitions. Effective asset lifecycle management however, requires that analysis of investment options should always be based on total lifecycle costs, including ongoing operation and maintenance expenditure and future renewal costs.

Asset lifecycle management is defined by the International Infrastructure Manual as encompassing all practices associated with considering management strategies as part of the asset lifecycle, from planning to disposal. The objective of asset lifecycle management is to

look at the lowest long-term cost, rather than short term savings when making decisions (International Infrastructure Manual, 2011). This plan has been prepared with consideration of the principles of asset lifecycle management, and all projections for asset expenditure include all associated lifecycle costs. Each asset lifecycle cost is explained below and forecast expenditure by lifecycle cost is detailed by asset class in part 5 of the plan and at a whole of Council level in part 7 of this Plan.

## 2.2 Asset Acquisition (Capital Expenditure - Expansion)

Asset acquisition costs refer to the cost of purchasing an asset and is generally referred to as capital expenditure, although it should be noted that asset renewals also meet the definition of capital expenditure. Asset acquisition costs are generally the largest single cost in an assets lifecycle.

The accounting rules surrounding the recognition of an asset are found in AASB 116 and the *Framework for the Preparation and Presentation of Financial Statements* (the Framework), specifically the recognition criteria in Para 7 of AASB 116 and the definition of an asset in the Framework. Para 7 of AASB116 states that the cost of an item of property, plant and equipment shall be recognised as an asset if, and only if it is probable that future economic benefits associated with the item will flow to the entity, and that the cost of the item can be measured reliably. The Framework describes an asset as ‘a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.

In layman’s terms expenditure can only result in an asset (i.e be capitalised) if the entity gains economic benefits from the item it is purchasing, the entity controls the asset, and the cost of the item can be reliably measured. For public service entities the term economic benefits is synonymous with the concept of “service potential”. Thus a road is an asset even though it does not provide cash benefits to Council, as it assists Council in providing services to the community.

The initial cost of purchasing an asset is not the only form of expenditure that can result in capital expansion. When Council widens a road or seals a previously unsealed road it is increasing the service potential of the asset and thus expanding its asset base. This form of expenditure would also be treated as capital expansion. Details of forecast capital expansion expenditure by asset class can be found in Part 5 of this plan, with a summary of Council’s total capital expansion program provided in Part 7 of this plan.

## 2.3 Routine Operations and Maintenance

Routine operations and maintenance expenditure are both recurrent expenditure, i.e. they don’t result in the creation/renewal of an asset. Maintenance refers to expenditure that maintains an asset in a working condition and allows an asset to reach its expected useful life. Maintenance expenditure includes all costs incurred in planning, supervising, managing or executing works involved in or related to maintaining the assets owned or controlled by an entity. These costs include labour and materials for such maintenance works, whether undertaken by the agency’s employees or carried out under contract to an entity or by another entity on its behalf (TPP07-1, Guidelines for the Capitalisation of Expenditure on PP&E,

P.10). Examples of maintenance expenditure include the fixing of potholes, the cleaning of gutters and culverts, and the mowing of grass and pruning of trees in Council owned parks.

Expenditure that extends an asset's original useful life is not categorised as maintenance expenditure, and AASB 116 distinguishes between maintenance expenditure that allows an asset to reach its original useful life, and expenditure that can be better described as the replacement of a part of an asset (AASB 116, Para 13). Any expenditure that represents the replacement or an enhancement of an asset (or a part of an asset) is generally treated as expenditure on asset renewal or expansion and is capitalised. An example of this is road reseals. In this case the original part (the old seal) is disposed and replaced by a new part (the new seal) which has a new useful life and meets the asset recognition criteria and must be capitalised.

Routine operations expenditure relates to expenditure required to provide a service, and can include operating costs such as fuel, salaries and plant hire. Only routine operations expenditure that can be directly attributable to an asset is included in this Plan.

Details of Council's various maintenance programs and forecast operations and maintenance expenditure by asset class can be found in Part 5 of this plan, with a summary of Council's total maintenance/operations program provided in Part 7 of this plan.

## 2.4 Asset Renewal/Replacement

Asset renewal refers to capital expenditure that renews an existing asset to its original condition and returns the life/service potential of the asset to that which it had originally. Examples of asset renewal include resurfacing of roads, replacing of a bridge with a similar bridge or the replacing of kerbs and gutters. Renewals are typically undertaken to either ensure the reliability of the existing infrastructure to deliver the services they were installed for (e.g. to replace a bridge that is about to collapse), or to ensure that infrastructure is of sufficient quality to meet service requirements (e.g. to reseal a road to reduce roughness).

Council's traditional approach to asset renewal/replacement has been a bottom up approach where needs are identified via observation of defects in the existing asset, and a project list of required renewals developed by Council engineers. Council allocates a budget for renewals (generally by asset class) and this budget is then used to complete projects in the listing. This forecasting approach has several deficiencies and does not allow Council to accurately predict future renewal requirements, or assess the effectiveness of current budgeted expenditure on ensuring the long term sustainability of Council's asset base.

As Council gathers more information on its assets, and improves its asset management processes Council plans to develop a renewal program that will estimate renewal requirements based on asset useful lives and current condition assessments and then allocate budgets across financial years accordingly to ensure timely renewal of assets as they reach the end of their useful life. This will need to be done within current funding limitations, and thus Council will need to prioritise the renewal of certain assets over others. Details of both Council's various asset renewals programs and forecast asset renewal expenditure by asset class can be found in Part 5 of this plan, with a summary of Council's total renewal program provided in Part 7 of this plan.

## 2.5 Asset Disposals

When an asset reaches the end of its useful life it is generally disposed of by the entity that controls it. The accounting transaction to recognise this event involves the book value of this asset being written off. Council has a disposal program for plant and equipment, and derecognises the book value of these assets (if they are not fully depreciated) when they are written off.

## 2.6 Depreciation

Depreciation is a non-cash expense that can be simply described as the consumption of an asset's future service potential. Depreciation is used to allocate an asset's cost (net of residual value) over its estimated useful life, and as it represents the decline in an asset's future service potential, depreciation expense can be compared to asset renewal expenditure to measure whether or not the current level of asset renewal expenditure is adequate to maintain a desired condition/service potential for each asset class.

Details of the useful life, replacement cost and residual value assumptions (which drive the quantum of depreciation expenditure) for all of Council's assets can be found in Part 5 of this Plan. Forecast depreciation expenditure is also detailed in Part 5 of this Plan and a summary of Council's total depreciation expenditure forecasts for the following 10 years is provided in Part 7 of this plan.

## 2.7 Asset Revaluations

Council values its infrastructure assets at fair value per the requirements of AASB 116, and has implemented a rolling 5 year revaluation cycle to ensure that all asset classes are revalued at least once every five years. Council also indexes its infrastructure assets on a yearly basis to ensure that current values best reflect fair value. If Council is aware that the value of a particular asset class has deviated materially from fair value between revaluation years, Council will revalue all assets within this asset class. All revaluation adjustments within this Plan assume a 1% annual increase in infrastructure asset values due to revaluation across the life of this plan.



## Part 3: Planning for the Future

### 3.1 Factors Affecting the Demand for Services

When planning for the future, Council must take into account a range of factors that will impact both the future demand for services (and hence assets that provide such services), and Council's ability to provide the services (and assets) the community requires.

The factors affecting future demand for services (demand drivers) in Warrumbungle Shire include:

- Demographic trends;
- The possible impact of mining;
- Transport requirements of the agricultural sector;
- Community expectations associated with the Community Strategic Plan.

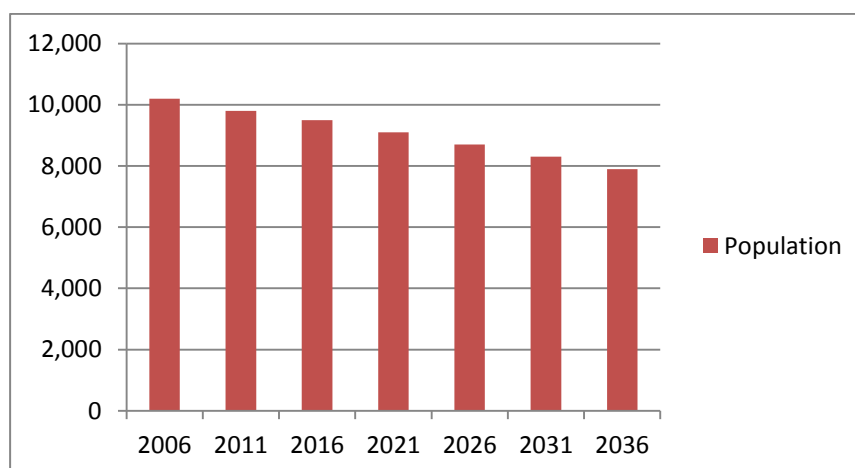
#### 3.1.1 Demographic trends

As with most rural inland LGAs the population of Warrumbungle Shire Council has been in decline for several years as a result of outwards migration from the Shire (especially amongst young adults). This trend in population decline in rural areas has been exacerbated by the recent drought and is particularly pronounced in the Orana Region of Councils (OROC) to which Warrumbungle Shire Council is a part.

All Orana Region of Councils LGAs (excluding Dubbo) are expected to undergo population decline in the following years which will critically affect the availability of services, as well as reduce employment/business opportunities, and access to facilities and clubs within these LGAs. In many cases Councils may be expected to step in and provide the services that are no longer available, which will be increasingly difficult as their rates base and ability to recruit staff decreases with the population decrease.

According to the Department of Planning, Warrumbungle Shire Council's population has been predicted to decrease from roughly 10,236 in 2006 to roughly 7,900 in 2036 (Source: Department of Planning and Infrastructure (DP&I) SLA Population Projections 2006-2036, 2010).

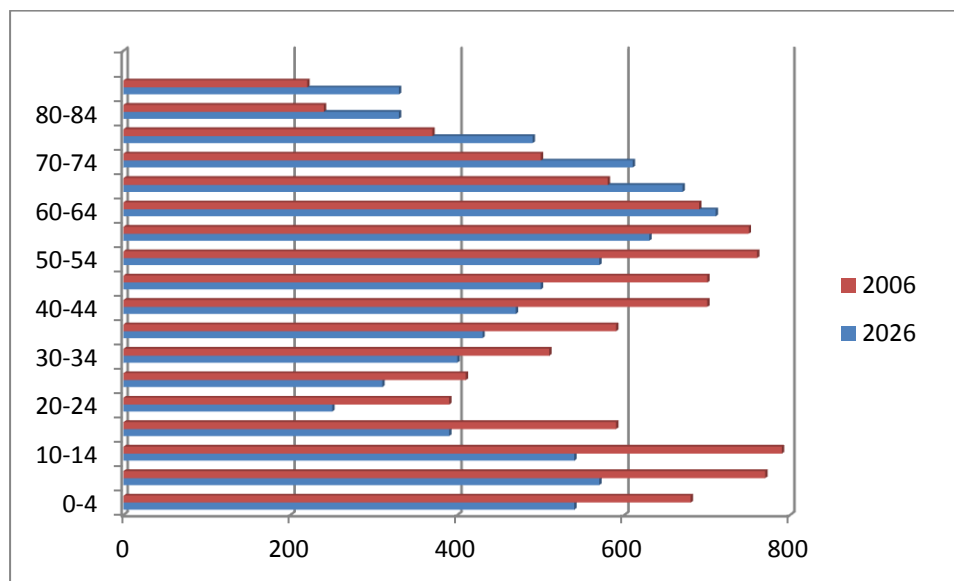
Chart 3.1 – Warrumbungle Shire Council Projected Population



This population decrease if it eventuates will put significant pressure on Council, and is arguably the single largest challenge that Council currently faces.

Unfortunately, population decline is not the only demographic problem that council currently faces. As young adults migrate out from the Shire, the dependency ratio of the population remaining will increase. The changing age structure of the population is best captured in the following diagram (Source: Department of Planning and Infrastructure (DP&I) SLA Population Projections 2006-2036, 2010):

Chart 3.2 – Warrumbungle Shire Council Age Distribution



The impact of these demographic trends on Council's long term financial position is addressed in great detail in Council's long term financial plan (LTFP). In relation to asset management, a decreasing and increasingly senior population will have the following impacts on Council's ability to manage its asset base:

- A decreasing population will generally reduce the level of expenditure on capital expansion required by Council due to the fact that Council will generally not be required to spend large amounts on building new streets, or connecting new houses to water and sewer services;
- Council's capital expenditure will be more geared towards maintaining the current inventory of assets;
- Council may face significant challenges in funding the renewal of its assets in the long run as its rates base declines (this is dealt with in detail in the LTFP);
- The structure of asset expenditure will change, with increased demand for aged care and other services for seniors which may require the construction of new aged care centres, or vehicles for meals on wheels etc. It is expected that the cost of most of these services will be met by funding from the State and Federal government.

Council's assumption in this plan is that the Shire's population will either stay constant or more likely decrease and future demand for services in some areas such as aged care will increase. The Shire's demographic trends however, mean that Council will not face the same increased demand for services and assets from population growth as LGAs in Sydney.

### 3.1.2 The possible impact of mining

On 5 January 2010 a proposal for an open cut coal mine at Cobbora, about 22km south west of Dunedoo was submitted to the Department of Planning and Infrastructure. The project application area covered 246 square kilometers (later increased to 274 square km) with a proposed life of 21 years. Construction of the mine is expected to commence in July 2013 and construction crews will be located both within the towns of the shire and within a temporary accommodation village which will not be required during the operation of the mine.

It is expected that the mine will result in roughly 50-100 new dwellings being required in the area to accommodate new staff, and that the mine will commence operations in 2015. The direct impact of the mine on the future demand for services from Council is expected to be:

- Increased infrastructure asset operation, maintenance and renewal requirements from extra wear and tear of roads and bridges within the south of the Shire, and higher demand for water and sewer services near the mine;
- Increased funding from the mine to fund asset expansion/renewal;

Indirect impacts from the mine include the possibility of an improved demographic outlook for the shire, and loss of experienced Council staff to the mines.

It can be reasonably assumed that Council will face extra asset operation, maintenance and renewal requirements from the opening of Cobbora mine. Council is still in the process of developing models to measure these expected cost increases, and consequently the impact of the mine on Council's capital and maintenance program has not been factored into the forecasts in this plan. Council expects that these increased costs will be funded by the mine.

### 3.1.3 Transport Requirements of the Agricultural Sector

Warrumbungle Shire is a predominantly agricultural shire, and the agricultural sector plays a pivotal role in the local economy. Although the demographic forecasts from DP&I indicate a reduction in demand for transport and other infrastructure assets due to a projected declining population, the presence of large cropping and livestock enterprises within the Shire requires that Council maintain sufficient transport assets to ensure access to markets for these enterprises.

The demand for improved road infrastructure capable of carrying heavier loads will most likely increase in the future due to forecast increased global demand for agricultural products, and the expected decline in alternative freight transport as the regional rail network is further abandoned. The increased maintenance cost on Council roads will also most likely fall on Council without the requisite funding.

It should be noted that a significant portion of Council's planned capital expansion expenditure involves sealing and widening roads, or replacing causeways with bridges to ensure access to markets for the agricultural sector.

### 3.1.4 Community expectations associated with the CSP

As part of the Community Strategic Plan, Council has approached the Community for feedback on what the Community values and what their aspirations are going forward for the Shire. This feedback has then resulted in the development of Council's Delivery Program (a copy of which can be found on Council's internet site). Council's Delivery Program includes a listing of deliverables that Council is expected to provide over the following four years. Many of these deliverables are "business as usual" items such as maintaining town streets, but several deliverables are new services/outcomes or increases to existing services that Council has previously not provided. Capital items approved for inclusion in the delivery plan have been factored into the demand forecast in this plan, and wish list items not included in the plan are detailed in part 3.3.

## 3.2 Factors Affecting the Supply of Services

The factors affecting Council's ability to provide services (factors affecting supply) include:

- Increased costs associated with service provision;
- Capital expenditure (capex) backlogs;
- Staff and resource shortages;
- Funding uncertainties.

The increased costs associated with service provision have been incorporated into maintenance and capex forward estimates. Projections of maintenance and capital expenditure in this model assume the following:

- Positive economic growth over the forecast period, a CPI rate of 2.5% (as per the average for the last 20 years), a cash rate of 4.25% (current figure) and fuel cost increases slightly above CPI at 3.5%;
- Electricity and heating increase at 10% (per Treasury estimates) in 2012/13 to capture the impact of the Carbon price then at 5% thereafter;
- Employee related expenditure assumes award increases of 3.25% in 2013/14 and 2014/15 and 3% thereafter. An additional increase of 1% from 2014/15 has also been factored into forecast employee related costs to capture the increased difficulty in competing for staff with the mines and employing/retaining skilled staff west of the Great Dividing Range. Superannuation and on-costs have been assumed to increase per wages (although super will also increase per the forecast increase in the Super Guarantee Levy), and workers compensation is forecast to increase by CPI.

Council's capital expenditure backlog can affect the supply of services as Council will have to delay other capital or recurrent works to catch up with incomplete works from previous years. It is currently expected that Council will have a \$5.8m capital backlog at the end of the 2011/12 financial year. This plan assumes that Council will catch up on roughly \$1m of this capital backlog each year (i.e. the \$5.8m backlog will be reduced to zero over six years).

Staff and resource shortages have only been factored into the models via the increased costs mentioned above, and it is assumed in the plan that Council is able to obtain skilled staff, just at an increased cost. Funding uncertainties are captured in the LTFP and have not been specifically dealt with in the AMP.

### 3.3 Demand Forecast

Council has forecast expected demand for new assets based on the factors mentioned in part 3.2. A summary of Council’s demand forecast for the next 10 years by asset class can be found in the following table.

Asset Class	Details	Estimated Cost
Regional Roads	Pavement widening and road re-alignment on MR129, MR396 and Forest rd. Note pavement rehabilitation work on MR55 is treated as asset renewals.	\$2,062,400
Local Roads Rural Sealed	Pavement widening and road re-alignment on Coolah Neilrex Rd	\$47,300
Local Roads Rural Unsealed	Sealing of unsealed roads including sections of Mount Nombi road, Piambra road, Cobborah road, Gentle Annie road, Coolah Neilrex road, Napier lane and Merryula road.	\$10,094,570
Town Streets	Pavement widening and sealing of unsealed town streets.	\$2,169,700
Bridges	Bridge construction works at Yuggel Creek, Salt Water Creek, Mow Creek, Orana Rd Coolaburagundy River Crossing and Merrygoen Creek on Digilah rd. Note replacement of timber bridges is treated as asset renewals	\$2,608,981
Kerbs and Gutters	General expansion of Council’s network of kerbs and gutters, particularly in Dunedoo.	\$3,574,681
Footpaths	General expansion of Council’s footpath network including the Coolah Cycleway project.	\$299,000
Culverts & Drainage	General expansion of Council’s culverts and drainage network.	\$2,984,200
Carparks	No forecast demand for in the following ten years	-
Aerodromes	No forecast demand in the following ten years	-
Water Supply Network	General expansion of Council’s network, particularly mains extension.	\$3,570,127
Sewerage Network	Expansion of sewerage network, predominantly effluent re-use system	\$275,500
Land	Land improvements	\$177,147
Buildings	Construction of new Council Chambers (\$2.97m); Yuluwirri Kids Building Extension (\$870k) and other expansion work required on Council’s halls	\$4,326,864
Structures – Swimming Pools	Construction of toddler shade structures	\$32,240
Structures – Other	Construction of new shire entrance signs, skate park and other park structure upgrades	\$377,900
Operating Assets	New IT and office equipment	\$38,000

The figures in the demand forecast only include asset acquisition (capital expansion) costs and do not include costs associated with asset renewals or maintenance costs associated with Council's current network. A listing of planned capital works over the next ten years can be found in Council's capital program in Part 7.

The figures in the demand forecast above also do not include wish list items from the CSP that did not make it into Council's ten year capital program. Some of these items include:

- Retirement Units in Baradine
- Retirement Units in Binnaway
- Binnaway Sewerage System
- Mendooran Sewerage System
- Heated Pool at Coolah
- Heated Pool at Dunedoo
- Refurbishment and Upgrade Robertson Oval Dunedoo
- Upgrade Jubilee Hall Dunedoo
- Baradine Memorial Hall Upgrade
- Bowen Oval Upgrade – second Oval, New Netball Courts, Lights
- Youth and Community Hall Coolah
- Visitor Information Centre in Dunedoo
- Upgrade Sewerage and Water Treatment Plants in Dunedoo
- Art Gallery/Cultural Centre Coonabarabran
- Museum in Coonabarabran
- PCYC in Coonabarabran
- Aquatic Centre in Coonabarabran 50m heated competition pool, hydrotherapy
- Bike Track to National Park
- Truck Stop in Coonabarabran
- Retirement Units at Dunedoo former hospital site
- Upgrade of Rest Area amenities at Mendooran
- Town Street Tree plantings
- New canteen Facilities at Baradine oval

## Part 4: Service Level Expectations

Service level expectations are subjective, hard to define and differ from individual to individual. In order to define a set of measurable service levels that can be used to assess Council’s performance in service delivery, Council must first define the relevant service attributes. Service attributes are aspects or characteristics of a service and can include:

- Accessibility/Availability;
- Reliability;
- Capacity;
- Cost/Affordability;
- Condition;
- Environmental sustainability;
- Safety.

A road for example would score highly on the above service attributes if it was: 1.) never closed due to flooding/maintenance (accessibility and reliability); 2.) was accessible to the public regardless of ability to pay (accessibility); 3.) was capable of handling a large traffic volume (capacity); 4.) featured extensive guard rails and signage (safety); and 5.) was just recently constructed to the highest modern standard and was still in very good condition (condition).

Warrumbungle Shire Council has not yet defined a set of relevant service level benchmarks and will endeavour to include service level benchmarks into subsequent revisions of this Plan. For the purpose of this Plan all reference to service levels will be to the condition attribute only, although future plans will need to develop service level benchmarks in line with SMARTER performance measures (i.e. service level benchmarks that are **S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**ime-bound and subject to **E**valuation and **R**eassessment).

To measure the condition levels of Council’s assets, Council has adopted an amended version of the five category assessment model as suggested by the Division of Local Government in its Integrated Planning and Reporting Manual with some minor amendments to the wording of the different condition levels. Warrumbungle Shire Council’s amended five category model is detailed in the following table:

Level	Condition	Description
1	Good	No work required
2	Average	Maintenance work required
3	Poor	Renewal required
4	Very Poor	Urgent renewal/upgrading required
5	Unserviceable	Asset is unserviceable

It should be noted that a separate variant of this model has been used for roads.

## Part 5: The Community's Assets

### 5.1 Introduction

Warrumbungle Shire Council maintains an extensive inventory of assets that Council uses to provide the services mentioned in Part 1.2 of this plan. These assets can be broadly classified into four main asset categories:

- **Infrastructure assets** – These are the assets that provide the transport and water/sewerage infrastructure that the community relies on for the transportation of people and goods between centres within and outside the Shire, and the provision of water and sewerage services to the residents of the shire. Infrastructure assets include roads, bridges, footpaths, culverts, kerbs and gutters, car parks, aerodromes, drainage assets, reticulation systems, pumping stations, treatment works and reservoirs.

Infrastructure assets are the most valuable of Council's assets and comprise roughly 81% of council's total asset base. Infrastructure assets are also the asset class with the highest requirements for recurrent and capital maintenance expenditure.

- **Land and buildings** – These are land and buildings owned by council and include both operational land (such as land used by council) and community land (such as parks) as well as a wide range of buildings and structures including town halls, swimming pools, council offices, buildings in rest areas and residential properties owned by council. Land and buildings are used to provide a majority of the services mentioned in Part 1.2, including recreation and community care services, and all other services provided from Council offices.
- **Operating assets** – These are the often unseen assets that council uses to maintain/expand its infrastructure base, and to conduct its day to day operations. Operating assets include plant and equipment such as backhoes and utes, office equipment, and furniture, fixtures and fittings. Operating assets are the second least valuable of Council's asset categories but are still critical to Council's operations.
- **Other** – This category includes quarry assets and other minor assets whose total value is immaterial. Quarry assets are "rehabilitation & restoration assets" and are valued at the net present value of the cost to restore the quarries once council has finished using them.

### 5.2 Asset Values and Valuation Assumptions

Council has commenced a major review of its asset accounting and asset data this financial year. Accounting data, assumptions and estimates to be reviewed include:

- Replacement cost assumptions for Council's road assets;
- Depreciation assumptions for earthworks (to be reviewed with reference to UIG Interpretation 1055 – *Earthworks*);
- The depreciation method used for depreciating infrastructure assets (excluding water and sewer) and buildings; Council plans to return to the straight line method;



- Infrastructure asset data integrity and completeness;
- Residual value and useful life assumptions for all infrastructure assets.

Projected changes to asset values resulting from this review have been incorporated into this asset management plan where possible. Changes relate predominantly to Council's roads, bridges, buildings, structures, kerb and gutters and pools. The latest water and sewer valuation information was not available as at the date of finalisation of this plan and therefore the results of this valuation have not been included.

The total value of each of Council's asset classes as at 30 June 2011 (per Council's audited financial statements) are detailed in the following table (figures are in \$'000):

Asset Type	Replacement Cost	Accumulated Depreciation	Depreciation Expense	WDV
<b>Infrastructure Assets:</b>				
Roads				
- Regional	61,061	7,436	766	53,625
- Local – Rural (sealed)	62,856	6,896	561	55,960
- Local – Rural (unsealed)	106,626	14,130	2,996	92,496
- Local – Town Streets	19,324	1,977	202	17,347
Bridges	32,011	2,944	116	29,067
Footpaths	4,417	1,011	106	3,406
Kerbs and Gutter	12,666	2,337	85	10,329
Carparks	195	23	1	172
Aerodromes	2,062	258	58	1,804
Culverts and Drainage	8,072	2,550	135	5,522
Water Supply Network	52,644	31,766	800	20,878
Sewerage Network	29,346	13,916	288	15,430
<b>Total Infrastructure</b>	<b>391,280</b>	<b>85,244</b>	<b>6,114</b>	<b>306,036</b>
<b>Land and Buildings:</b>				
Operational Land	5,221	-	-	5,221
Community Land	1,426	-	-	1,426
Land improvements	766	106	36	660
Buildings	51,641	8,272	1,067	43,369
Pools	4,530	1,715	166	2,815
Other Structures	6,815	1,422	79	5,393
<b>Total Land and Buildings</b>	<b>70,399</b>	<b>11,515</b>	<b>1,348</b>	<b>58,884</b>
<b>Operating Assets:</b>				
Plant and Equipment	22,719	12,193	2,072	10,526
Office Equipment	1,644	1,506	58	138
Furniture and Fittings	536	419	28	117
WIP	1,381	-	-	1,381
<b>Total Operating Assets</b>	<b>26,280</b>	<b>14,118</b>	<b>2,158</b>	<b>12,162</b>
<b>Restoration &amp; Rehab Assets</b>				
Quarries & Other	1,010	298	52	712
<b>Total</b>	<b>488,969</b>	<b>111,175</b>	<b>9,672</b>	<b>377,794</b>

## 5.3 Roads

Warrumbungle Shire has an extensive road network consisting of State Roads, Regional Roads and Local Roads that is over 2,661km long (not including State Roads). These roads link the town centres, villages and outlying farms of the Shire and also link the residents of the Shire with population centres in neighbouring Local Government Areas (LGAs). These assets provide an invaluable transport and communication function and the economic life of the Shire would come to a halt if the maintenance/renewal of these roads could not be funded.

Roads within the Shire’s road network are categorised as either:

- State Roads (not controlled or maintained by Council);
- Regional Roads (controlled and maintained by Council);
- Local Roads (controlled and maintained by Council).

As at 30 June 2011 the Shire’s regional road network had a written down replacement cost of \$53.6m (\$84.519m following Council’s proposed asset accounting adjustments), while the local road network was valued at \$165.8m (\$141.517m post proposed accounting adjustments). Council does not include the value of State roads in its books as these roads are controlled by Roads and Maritime Services (previously the RTA). The map on the following page provides a high level view of the Shire’s road network, with State roads in red, regional roads in dark brown and local roads in light brown.

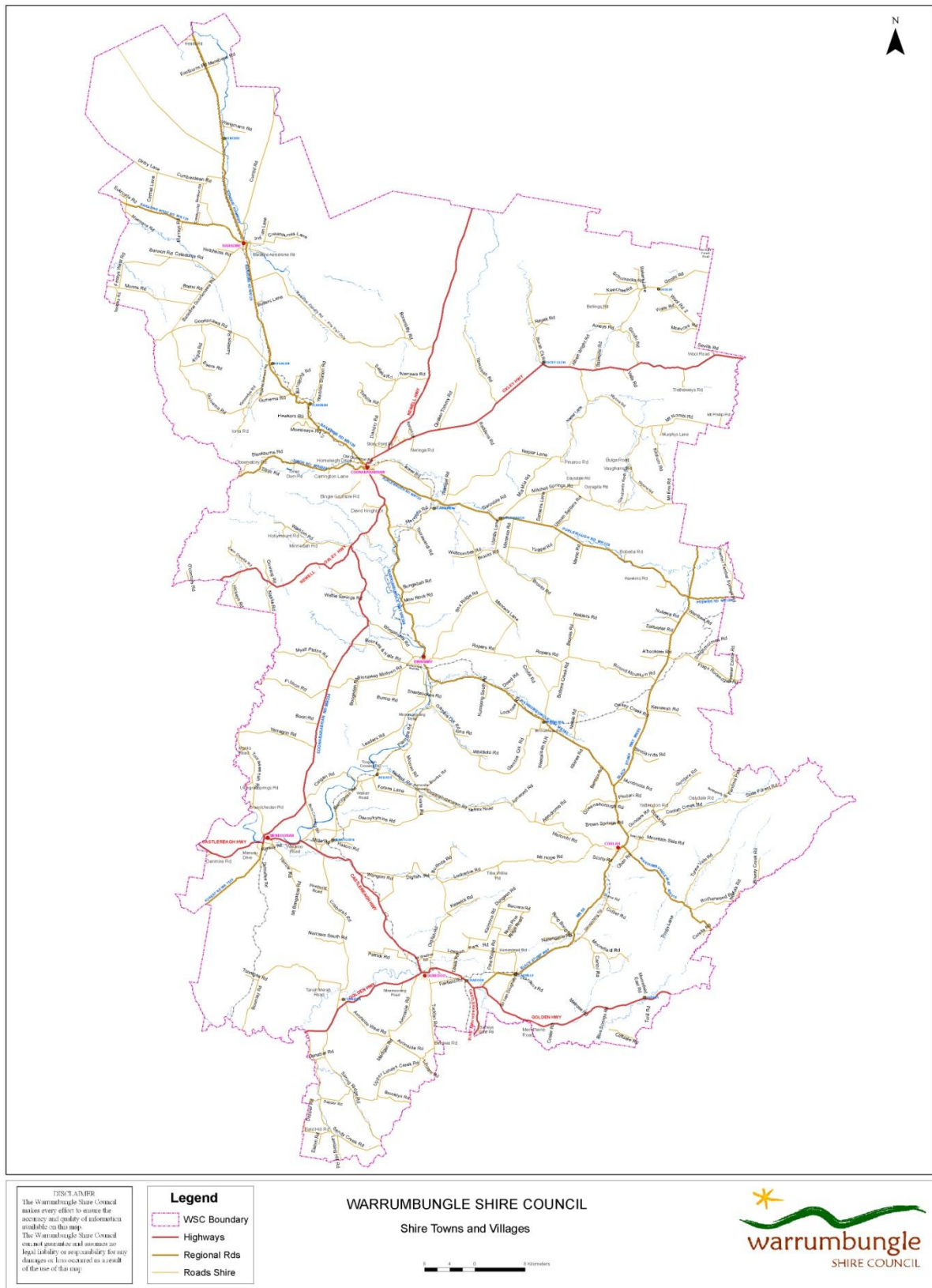
### Condition Rating

In order to estimate the current condition of the network, Council staff have recently analysed each segment on all of Council’s regional roads and have condition rated these segments between 1 and 5 based on the five category model for roads recommended by the Division of Local Government (DLG) in the IP&R Manual. The five condition categories are detailed in the table below:

Level	Condition	Description
1	Good	No work required
2	Average	Some surface/pavement structure deterioration - patching only needed for repair
3	Poor	Serious surface/pavement structure deterioration – requires resurfacing or recycling of pavement structure
4	Very Poor	Deterioration materially affecting entire surface/pavement structure - requires renovation within 1 year
5	Unserviceable	Deterioration is of sufficient extent to render the surface/pavement structure unserviceable.

Condition levels for local roads have been taken from a recent external valuation and have been linked back to the 5 category model above. In future years a program of yearly or rolling (by asset class) condition testing will be implemented by council to ensure that estimates of long term renewal and maintenance requirements are correct. All condition levels for both regional and local roads include a condition level for road pavement and road surfacing (seal).

Diagram 5.3.1: Road Map of Warrumbungle Shire Council



Note: State roads are in red, regional roads in dark brown, and local roads in light brown.

Road condition ratings are best represented for the non-engineer through the images below:

Condition 1: Good (Sealed)



Condition 2: Average (Sealed)



Condition 3: Poor (Sealed)



Condition 4: Very Poor (Sealed)



Condition 1: Good (Unsealed)



Condition 2: Average (Unsealed)



Condition 3: Poor (Unsealed)



Condition 4: Very Poor (Unsealed)



### 5.3.1 State Roads

State roads are the major arterial roads that pass through the Shire. These roads are controlled by Roads and Maritime Services (previously the Roads and Traffic Authority) and are recognised as Roads and Maritime Services (RMS) assets. State roads include the following five highways:

- Newell Highway;
- Oxley Highway;
- Golden Highway;
- Castlereagh Highway.
- Main Road 334

As Warrumbungle Shire Council does not control state roads, State roads are not included in this Plan. However, Council does maintain and manage sections of the state road network under RMCC contracts on behalf of RMS.

### 5.3.2 Regional roads

Regional roads comprise the secondary road network and provide the main links between the various towns of the Shire. Council is the government entity responsible for the maintenance and management of all regional roads within Warrumbungle Shire, although Council does receive block grants from RMS to fund the maintenance/capital renewal of these roads.

Regional roads are all sealed (with the exception of roughly one kilometre on MR129), and generally feature a single carriageway with one trafficable lane in each direction. The surface is a spray seal and regional roads in the Shire feature good shoulders, and average sealed widths of just under 7 metres. Regional roads generally have line markings in the centre dividing the two lanes and on the side separating the trafficable width of the road with the shoulders as well as extensive signage, guideposts and occasional safety barriers.

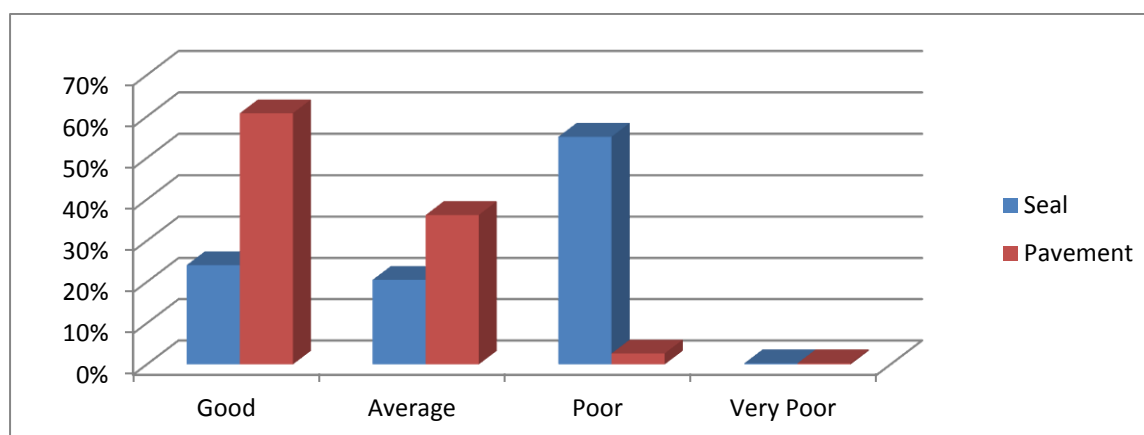
There are seven regional roads within the Shire with a total length of 385km. As at 1 July 2011 (post proposed accounting changes) Council’s estimated written down replacement cost for the whole regional road network was \$84.52m. See table for details:

Road Number	Road Name	Length Km	Replacement Cost (\$'000)	Accumulated Depreciation (\$'000)	Written Down Value (\$'000)
MR129	Quirindi -Quambone Rd	132	36,961	(8,430)	28,531
MR329	Gwabegar Road	36	10,434	(2,379)	8,055
MR396	Warrumbungle Way	69	19,771	(4,505)	15,266
MR4053	Timor Road	23	5,660	(1,273)	4,387
MR55	Black Stump Way	89	26,167	(6,170)	19,997
MR618	Cassilis Road	21	6,163	(1,400)	4,763
MR7519	Forest Road	15	4,469	(949)	3,520
<b>Total:</b>		<b>385</b>	<b>109,625</b>	<b>(25,106)</b>	<b>84,519</b>

#### Condition Rating – Regional Roads

The results of Council’s condition testing for regional roads road surfacing (seal) and pavement are detailed in the following chart:

Chart 5.3.2 – Condition Rating – Regional Roads



The average condition rating for each of the regional roads is detailed in the table below.

Road Number	Road Name	Average Condition Rating (seal)	Average Condition Rating (Pvmnt)
MR129	Quirindi -Quambone Rd	2.5	1.3
MR329	Gwabegar Road	1.9	1.3
MR396	Warrumbungle Way	2.4	1.6
MR4053	Timor Road	2.8	1.3
MR55	Black Stump Way	2.2	1.5
MR618	Cassilis Road	1.8	1.8
MR7519	Forest Road	1.5	1.1
<b>Total:</b>		<b>2.3</b>	<b>1.4</b>

### Valuation – Regional Roads

Council’s regional roads are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
Road surfacing useful life	12 yrs
Road pavement useful life	50-60 yrs
Road earthworks useful life	Unlimited
Seal and pavement residual value	40%
Seal replacement cost (2010 dollars)	\$6.50 per m2
Pavement replacement cost – Gravel1 (2010 dollars)	\$18.00 per m2
Earthworks replacement cost (2010 dollars)	\$40.00 per m3

All of Council’s sealed roads (including regional roads) are separated into three separate components: earthworks, pavement and road surfacing. As per the table above, these three components are subject to differing useful lives and valuation assumptions and are valued and depreciated separately per the requirements of AASB 116.

Council is currently forecast to spend roughly \$2.062m on expanding the regional road network over the following ten years (an average of \$187k per annum). Council is also expected to spend a total of \$13.823m on capital renewals in this time frame (roughly \$1.257m per annum). Annual maintenance and operations expenditure is forecast to average \$1.387m per annum. Details of Council’s various regional roads related activities are found in the following table:

Activity	Activity Type	Details
Resurfacing/ Resealing	Renewal	<p>Involves either:</p> <ul style="list-style-type: none"> <li>Removal and replacement of the existent seal (surfacing) of the road with a new seal; or</li> <li>Placement of additional aggregate and bitumen onto an existing seal to renew its useful life.</li> </ul> <p>The end result of this activity is the replacement of an existent surfacing asset with a new asset.</p>

Activity	Activity Type	Details
Pavement Rehabilitation	Renewal	Involves removing and or stabilising the existent pavement and replacing it with a new re-shaped pavement. Pavement rehabilitation is carried out to repair the pavement shape of a road. The end result of this activity is the replacement of an existent pavement asset with a new asset.
Patching	Maintenance	Involves the repair of potholes or cracking and other surfacing/pavement damage and includes both heavy and light patching.
Line-marking	Maintenance	Involves re-doing line-markings on regional roads.
Corridor asset maintenance	Maintenance	Involves the repair of culverts, causeways, guard rails, guideposts, signage and roadside furniture.
Road re-alignment	Capital Expansion	Involves improvement to either the vertical or horizontal alignment of a road.
Pavement / Shoulder Widening	Capital Expansion	Involves widening the area of sealed pavement on a segment.

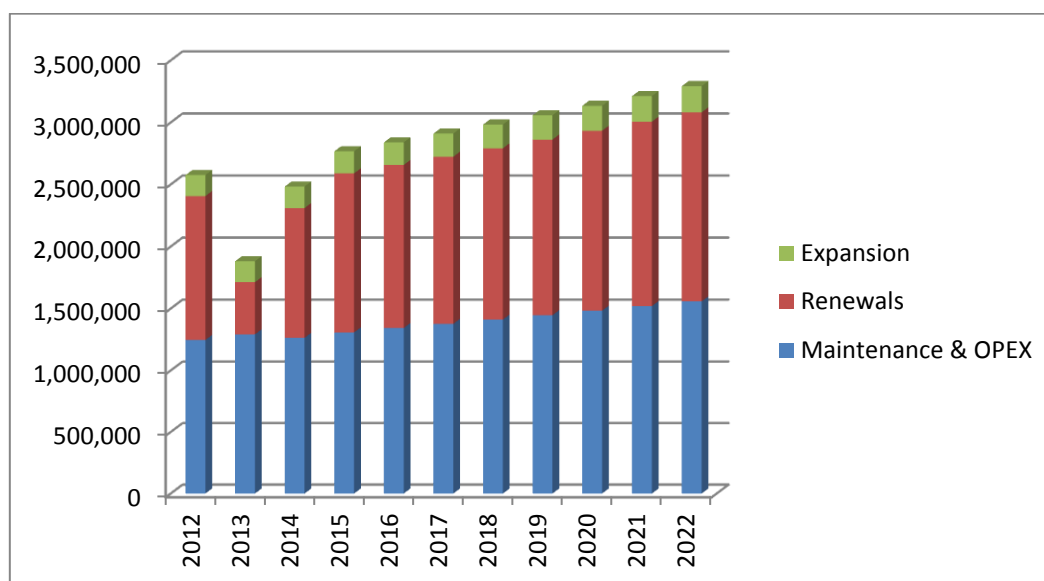
The future projected expenditure for regional roads are detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	1,247,000	1,160,000	169,000	2,576,000
2013	1,292,707	420,000	169,000	1,881,707
2014	1,264,719	1,045,500	173,200	2,483,419
2015	1,307,832	1,281,800	177,600	2,767,232
2016	1,343,532	1,313,800	182,000	2,839,332
2017	1,377,120	1,346,700	186,500	2,910,320
2018	1,411,548	1,380,300	191,200	2,983,048
2019	1,446,837	1,414,900	196,000	3,057,737
2020	1,483,007	1,450,100	200,900	3,134,007
2021	1,520,083	1,486,400	205,900	3,212,383
2022	1,558,085	1,523,600	211,100	3,292,785
<b>Total:</b>	<b>15,252,469</b>	<b>13,823,100</b>	<b>2,062,400</b>	<b>31,137,969</b>

Note: the drop in asset renewal expenditure between 2012 and 2014 is due to the 2012 figure including work on Deadman's Gully (\$800k) and the pavement rehab work on MR55 only commencing in the 2013/14 financial year. The 2012/13 figure of \$420k is for road resealing. These figures are represented graphically below:



Chart 5.3.3 – Projected Expenditure – Regional Roads



It should be noted that Council currently receives a large portion of funding for the regional road network from RMS as block grants (roughly \$2.4m per annum) as well as roughly \$400k per annum of 50/50 funding under the Repair program for major capital upgrades. Council’s regional roads expenditure is not fully funded under these programs as Council is also forecast to spend an additional \$1.2m on bridges on regional roads.

Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of regional roads over the next 10 years is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value (book value)	Annual Depreciation Expense
2012	112,052,270	(26,765,070)	85,287,200	(1,407,000)
2013	113,761,793	(28,470,848)	85,290,945	(1,438,127)
2014	116,118,111	(30,215,624)	85,902,487	(1,460,068)
2015	118,738,692	(32,008,090)	86,730,602	(1,490,310)
2016	121,421,879	(33,852,114)	87,569,765	(1,523,943)
2017	124,169,297	(35,749,016)	88,420,282	(1,558,381)
2018	126,982,490	(37,700,148)	89,282,342	(1,593,642)
2019	129,863,215	(39,706,897)	90,156,318	(1,629,748)
2020	132,812,847	(41,770,687)	91,042,161	(1,666,720)
2021	135,833,276	(43,892,971)	91,940,305	(1,704,577)
2022	138,926,309	(46,075,243)	92,851,066	(1,743,343)

## Ratios

Based on the information above, Council has calculated the projected asset renewal requirements for road surfacing on regional roads and compared these numbers with its projected road re-surfacing renewals expenditure. The renewal requirements for road surfacing assume that each segment will need to be resurfaced (resealed) at 12 years of age (i.e. a 12 year reseal rate).

As Council lacks accurate information on the latest year of reseal and pavement rehabilitation for a large portion of the regional road network, required road re-surfacing and pavement renewals has been estimated as being equal to the yearly depreciation expense for road seals and pavements.

Estimated depreciation expenditure for road seals and pavement (note: figures are in \$'000):

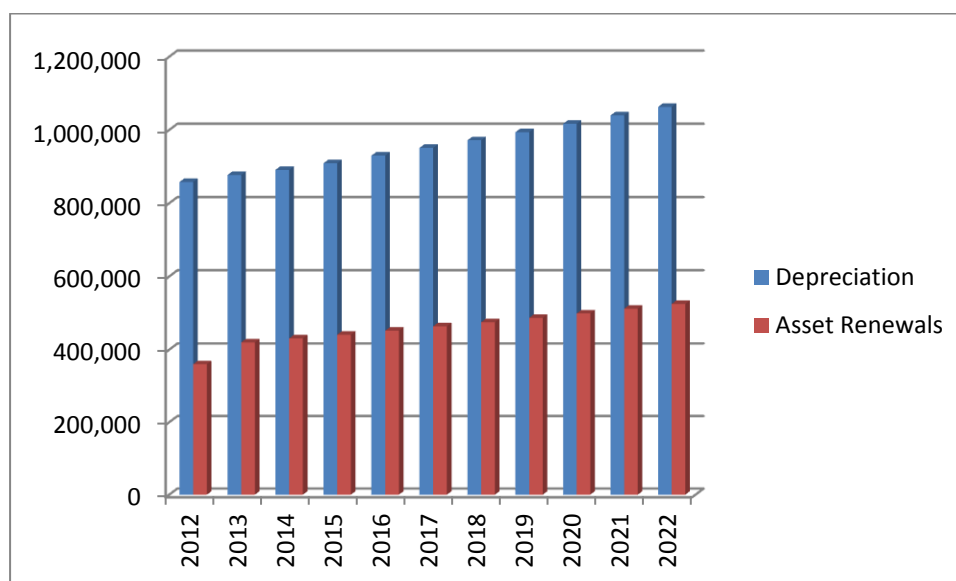
Asset	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Seal	858	877	891	909	930	951	972	994	1,017	1,040	1,063
Pvmnt	549	561	569	581	594	607	622	636	650	665	680

Current renewals expenditure by regional road component (note: figures are in \$'000):

Asset	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Seal	360	420	431	441	452	464	475	487	499	512	525
Pavement	800	-	615	841	862	883	905	928	951	975	999

Based on the information above, Council's current resealing expenditure is only 49% of the balance required to achieve a 12 year reseal rate, resulting in a current reseal rate of once every 25 years, i.e. each segment of road is only resealed once every 25 years. The resealing requirements for the regional road network have been presented graphically in the following chart against Council's forecast asset renewals expenditure:

Chart 5.3.4 – Resealing Requirements vs Renewals – Regional Roads

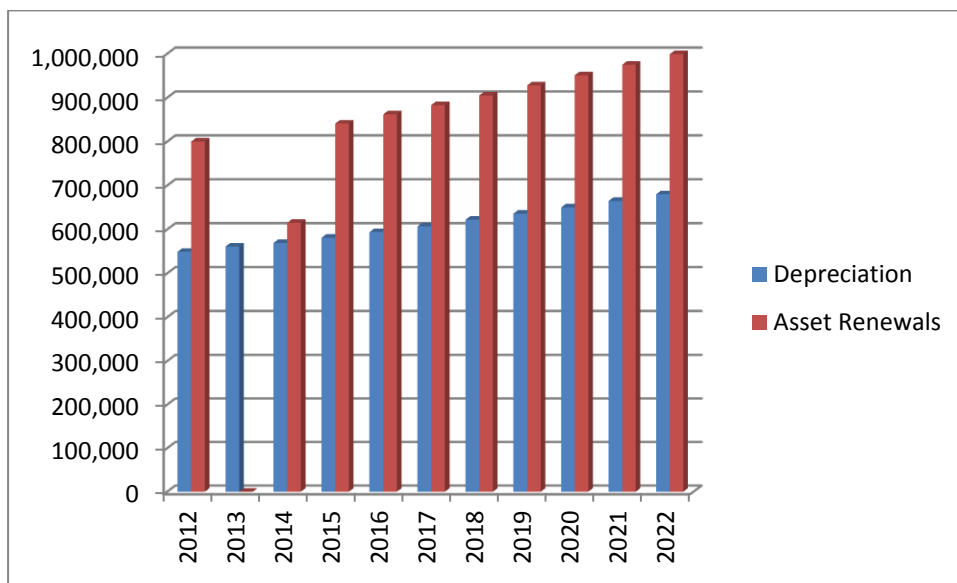


As per chart 5.3.4, Council’s asset renewal ratio (the rate that Council is renewing its assets with 100% being full i.e. sustainable renewal) for its seal assets is 49% and the total renewal deficit (the shortfall for funding on renewals) for Council’s seals is \$5.4m over the life of this plan.

Assuming current depreciation, residual value and seal valuation assumptions are correct, Council would have to spend an additional \$494k per annum on regional road reseals to achieve its desired 12 year reseal rate.

Council’s pavement rehabilitation requirements are compared in the following chart against Council’s forecast pavement rehabilitation expenditure:

Chart 5.3.5 – Pavement Rehabilitation Requirements vs Renewals – Regional Roads



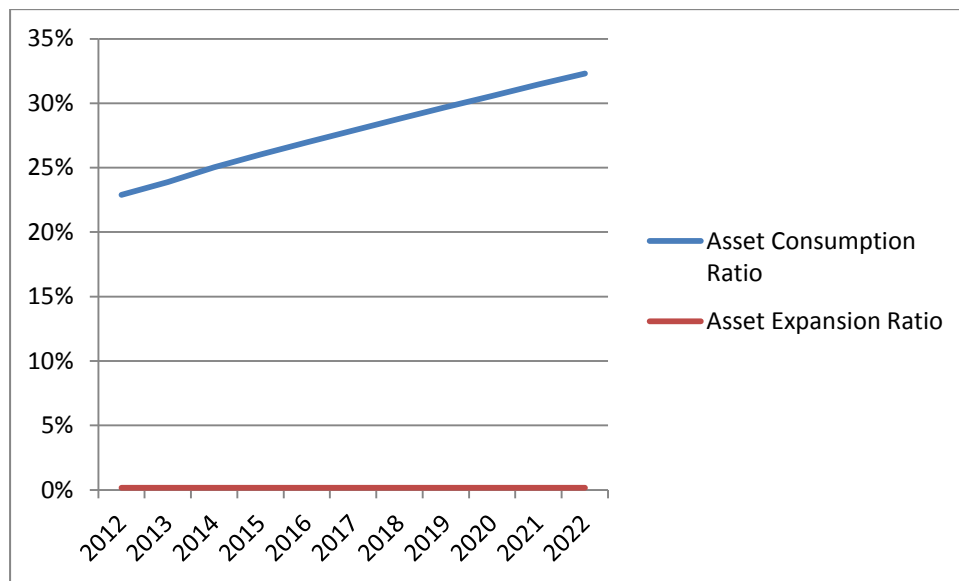
According to the chart above, Council’s renewal ratio for its pavement assets is 130% and Council will record an asset renewal surplus (i.e. a catch up in renewals expenditure) of \$2m over the life of the plan.

Chart 5.3.5 indicates that Council is forecast to spend a considerably higher amount on asset renewals than depreciation. This indicates that the condition of Council’s pavement assets going forward should improve. The reason for this high spend relative to depreciation is that pavements have a very long useful life, and annual depreciation expense is therefore relatively low. Council is now replacing several major sections of pavement on MR55, and thus it appears that Council is well ahead of its minimum asset renewal requirements.

As Council is only now starting to spend money on replacing these sections of the road, it will appear over a ten year timeframe that this expenditure will be significantly higher than depreciation. However, once these assets have been renewed Council will then most likely not spend any money on pavement rehab on these sections of road for another 60 years. It is for this reason that in the case of assets with long useful lives such as road pavements and bridges, a 10 year time frame is too short to gain an accurate picture of Council’s asset renewal performance.

Council’s asset consumption ratio and asset expansion ratio are detailed in the following chart. This chart indicates that the consumption ratio for Council’s regional roads will increase from 23% to 32% over the life of the plan. It should be noted that the consumption ratio for the pavement and seal portion of Council’s regional roads (i.e. excluding earthworks which is non depreciable) is actually higher, starting at 35% in 2012 and ending at 49% in 2022. Council’s asset expansion ratio for its regional roads averages 0.15% over the life of the plan.

Chart 5.3.6 – Asset Consumption and Asset Expansion Ratios



### 5.3.3 Local roads

Local Roads are roads controlled and maintained by council and include rural sealed and unsealed roads and town streets. Council maintains a total of 2,276km of local roads including 599km of sealed roads and 1,677km of unsealed roads. As at 30 June 2011 Council’s local road network was valued at \$165.8m (\$141.516m post proposed accounting changes). See table below for a breakdown (including valuation) of Council’s local roads:

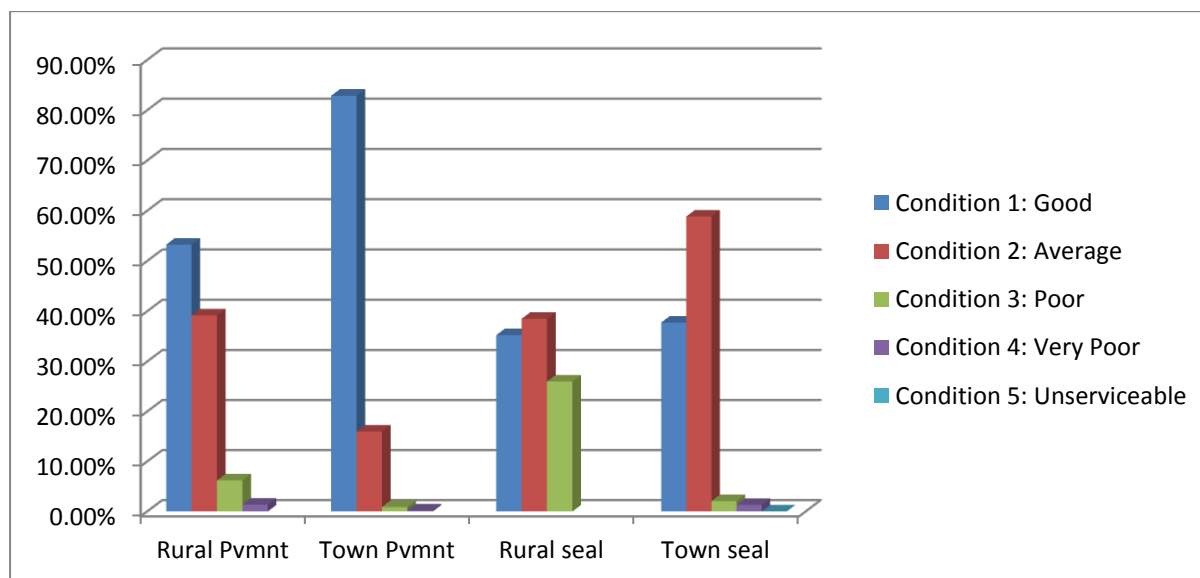
Road Name	Length Km	Replacement Cost	Accumulated Depreciation	Written Down Value
Rural roads (sealed)	474km	89,911	(13,661)	76,250
Rural roads (un-sealed)	1,677km	53,149	(11,638)	41,511
Town streets	125km	28,542	(4,787)	23,755
<b>Total:</b>		<b>171,602</b>	<b>(30,086)</b>	<b>141,516</b>

Local roads in the shire generally feature lower traffic volumes and provide a lower service level than regional roads. Sealed local roads in towns will often (but not always) feature kerbs and gutters, and signage, while sealed local roads outside of towns will generally consist of a narrower pavement width (generally 5 meters) than regional roads, although as per regional roads rural local roads will also feature culverts and signage where necessary.

#### Condition Rating – Local Roads Sealed (includes rural roads and town streets)

The results of the condition testing for sealed local roads are detailed in the following chart:

Chart 5.3.7 – Condition Rating Sealed Local Roads

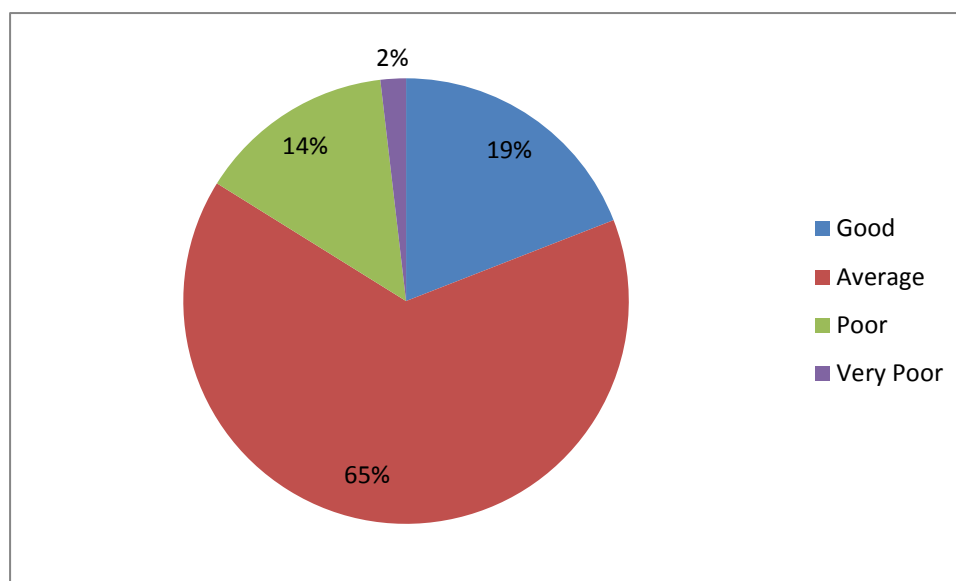


From the chart above we can see that seals on the local road network tend to be in much worse condition than pavement, and the condition of town streets (particularly pavement in town streets) is much better than on rural roads.

### Condition Rating – Local Roads (un-sealed)

Council maintains an extensive network of unsealed roads (over 1,677km). Council’s latest condition rating information for unsealed roads is currently over two years old and is therefore considerably dated as the condition of unsealed roads is highly variable over time due to the impact of weather events and traffic volume on unsealed road conditions. The condition rating figures below are indicative only of the condition as at 30 June 2009 and are no longer current.

Chart 5.3.8 – Condition Rating Unsealed Local Roads



Due to the high cost to Council to condition rate over 1,677km of unsealed roads, and the high variability of unsealed road condition over time, Council has decided to not individually re-condition rate each of its unsealed roads this financial year. In future years Council plans to compile information on the average time between grading for each unsealed road road class and use this information as an indication of unsealed road condition levels.

As each road class is subject to varying traffic volumes, delays in grading of a higher road class imply a worse condition rating than would be the case for a lower road class. Details of Council’s suggested mapping of grading times to condition ratings for each road class can be found in the following table:

Road Class	< 6 months since grading	< 1 year since grading	< 2 years since grading	< 3 years since grading	< 4 years since grading	> 4 years since grading	> 5 years since grading
1	Good	Average	Poor	Very Poor	UNS	UNS	UNS
2	Good	Good	Average	Poor	Very Poor	UNS	UNS
3	Good	Good	Good	Average	Poor	Very Poor	UNS

Note: UNS refers to unserviceable

### Valuation – Local Roads

Council’s local roads are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
<b>Sealed Roads</b>	
Road surfacing useful life	12 yrs
Road pavement useful life	50-60 yrs
Road earthworks useful life	Unlimited
Seal and pavement residual value	40%
Seal replacement cost (2010 dollars)	\$6.50 per m2
Pavement replacement cost – Gravel1 (2010 dollars)	\$18.00 per m2
Pavement replacement cost – Gravel (2010 dollars)	\$15.00 per m2
Earthworks replacement cost (2010 dollars)	\$40.00 per m3
<b>Unsealed Roads</b>	
Road surfacing useful life (no surfacing)	N/A
Road pavement useful life – Formed	10–18 years
Road pavement useful life – Unformed	N/A
Road earthworks useful life	Unlimited
Road pavement residual value – Formed	0%
Road pavement residual value – Unformed	N/A
Pavement replacement cost – Formed	\$3.20 per m2
Pavement replacement cost – Unformed	N/A
Earthworks Replacement Cost (2010 dollars)	\$40.00 per m3

Council currently spends roughly \$1.119m on expanding the local road network each year. Council also has a capital renewal program of roughly \$1.612m per annum, and an annual maintenance and operations program of \$3.230m. Details of Council’s various local roads related activities are detailed in the following table:

Activity	Activity Type	Details
Resurfacing/ Resealing	Renewal	Activity per regional roads.
Pavement Rehabilitation	Renewal	Activity per regional roads.
Patching	Maintenance	Activity per regional roads.
Corridor asset maintenance	Maintenance	Activity per regional roads.
Road re- alignment	Capital Expansion	Activity per regional roads.
Pavement / Shoulder Widening	Capital Expansion	Activity per regional roads.

Activity	Activity Type	Details
Line-marking	Maintenance	Activity per regional roads.
Sealing of unsealed roads (Unsealed Roads only)	Capital Expansion	Sealing of unsealed roads involves the placement of a spray seal on top of the gravel pavement.
Gravel Re-sheeting (Unsealed Roads only)	Renewal	Gravel re-sheeting involves replenishment of the gravel pavement on unsealed roads by placing roughly a depth of 100mm (compacted) of gravel pavement on the unsealed road when the existing pavement has worn away.  Council generally spends over \$700k per year on re-sheeting unsealed roads. When re-sheeting an unsealed road Council generally re-sheets the whole length of the road.
Grading of unsealed roads (Unsealed Roads only)	Maintenance	Grading of unsealed roads involves the reshaping and compacting of the existing gravel pavement on the road. Unsealed roads are graded at different rates depending on the road class, with class 1 roads generally graded 2 times per year, class 2 roads once per year and class 3 roads approximately once every 2-5 years.

Local road expenditure is funded from Financial Assistance Grants (local road component), roads to recovery funding, other grant assistance from RMS, and Council's general funds.

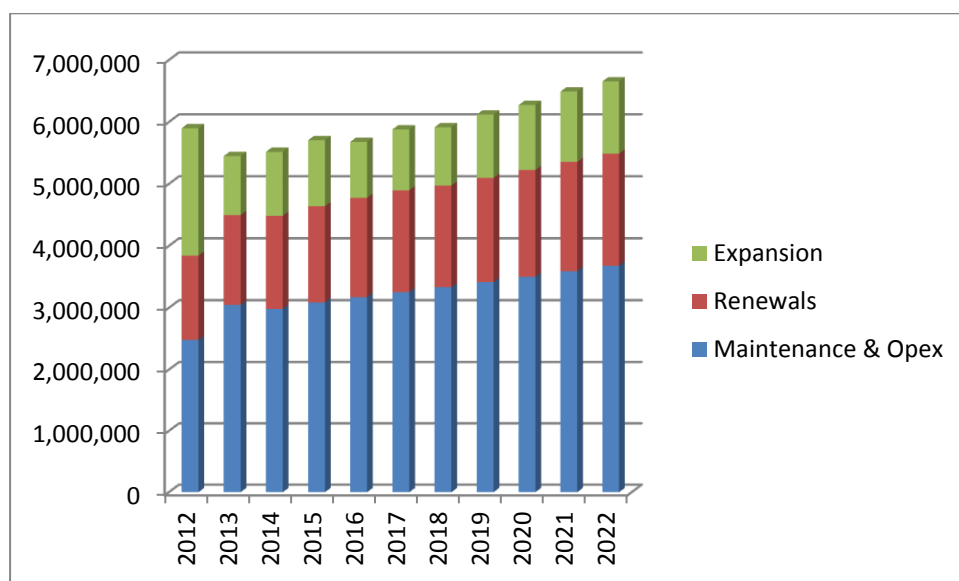


The future projected expenditure for the three sub categories of local roads is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure \$'000	Asset Renewal \$'000	Capital Expansion \$'000	Total Expenditure \$'000
<b>Rural Local Roads – Sealed</b>				
2012	417,434	410,000	-	827,434
2013	421,978	510,000	45,000	976,978
2014	413,031	522,800	46,100	981,931
2015	427,891	535,900	47,300	1,011,091
2016	439,772	549,200	-	988,972
2017	450,767	563,000	-	1,013,767
2018	462,036	577,000	50,900	1,089,936
2019	473,587	591,500	52,200	1,117,287
2020	485,427	606,300	53,500	1,145,227
2021	497,562	621,300	54,800	1,173,662
2022	510,001	636,900	56,200	1,203,101
<b>Total: Rural Sealed</b>	<b>4,999,486</b>	<b>6,123,900</b>	<b>406,000</b>	<b>11,529,386</b>
<b>Rural Local Roads - Unsealed</b>				
2012	1,250,000	765,000	1,786,770	3,801,770
2013	1,709,135	765,000	900,000	3,374,135
2014	1,671,154	784,100	792,600	3,247,854
2015	1,724,110	803,700	682,900	3,210,710
2016	1,770,133	823,800	700,000	3,293,933
2017	1,814,386	844,400	767,200	3,425,986
2018	1,859,746	865,500	735,400	3,460,646
2019	1,906,240	887,200	811,800	3,605,240
2020	1,953,896	909,300	832,000	3,695,196
2021	2,002,743	932,100	853,000	3,787,843
2022	2,052,812	955,400	874,200	3,882,412
<b>Total: Unsealed</b>	<b>19,714,355</b>	<b>9,335,500</b>	<b>9,735,870</b>	<b>38,785,725</b>
<b>Town Streets</b>				
2012	813,565	186,300	269,000	1,268,865
2013	915,283	174,300	8,000	1,097,583
2014	898,732	194,100	194,200	1,287,032
2015	932,788	214,800	335,700	1,483,288
2016	961,827	230,900	202,400	1,395,127
2017	985,872	236,600	216,300	1,438,772
2018	1,010,519	197,300	156,100	1,363,919
2019	1,035,782	202,200	160,100	1,398,082
2020	1,061,677	207,100	164,100	1,432,877
2021	1,088,219	212,500	229,000	1,529,719
2022	1,115,424	217,600	234,800	1,567,824
<b>Total: Town Streets</b>	<b>10,819,688</b>	<b>2,273,700</b>	<b>2,169,700</b>	<b>15,263,088</b>
<b>Grand Total:</b>	<b>35,533,529</b>	<b>17,733,100</b>	<b>12,311,570</b>	<b>65,578,199</b>

These figures are represented graphically below:

Chart 5.3.9 – Projected Expenditure – Local Roads



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of local roads by local road sub category over the next 10 years is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value (book value)	Annual Depreciation Expense
<b>Rural Local Roads - Sealed</b>				
2012	91,220,110	(15,074,610)	76,145,500	(1,277,000)
2013	92,687,311	(16,520,949)	76,166,362	(1,295,593)
2014	94,183,084	(18,002,591)	76,180,494	(1,316,432)
2015	95,708,115	(19,520,293)	76,187,822	(1,337,676)
2016	97,214,396	(21,074,832)	76,139,565	(1,359,336)
2017	98,749,540	(22,666,310)	76,083,231	(1,380,730)
2018	100,364,936	(24,295,506)	76,069,430	(1,402,533)
2019	102,012,285	(25,963,937)	76,048,347	(1,425,477)
2020	103,692,208	(27,672,451)	76,019,757	(1,448,874)
2021	105,405,230	(29,421,909)	75,983,321	(1,472,734)
2022	107,152,382	(31,213,191)	75,939,191	(1,497,064)
<b>(Cont. next page)</b>				

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value (book value)	Annual Depreciation Expense
<b>Rural Local Roads - Unsealed</b>				
2012	56,232,260	(13,348,380)	42,883,880	(1,594,000)
2013	58,459,583	(15,168,334)	43,291,248	(1,686,471)
2014	60,620,878	(17,073,288)	43,547,590	(1,753,271)
2015	62,713,687	(19,062,111)	43,651,576	(1,818,090)
2016	64,864,624	(21,133,589)	43,731,036	(1,880,856)
2017	67,124,870	(23,290,290)	43,834,581	(1,945,365)
2018	69,397,019	(25,536,345)	43,860,674	(2,013,153)
2019	71,789,989	(27,873,005)	43,916,984	(2,081,297)
2020	74,249,189	(30,304,800)	43,944,389	(2,153,065)
2021	76,776,781	(32,834,667)	43,942,114	(2,226,819)
2022	79,374,149	(35,465,638)	43,908,510	(2,302,624)
<b>Town Streets</b>				
2012	29,282,720	(5,285,870)	23,996,850	(451,000)
2013	29,757,847	(5,801,433)	23,956,414	(462,704)
2014	30,443,726	(6,329,659)	24,114,066	(470,212)
2015	31,298,663	(6,874,006)	24,424,657	(481,050)
2016	32,044,950	(7,437,304)	24,607,645	(494,559)
2017	32,818,299	(8,018,029)	24,800,271	(506,351)
2018	33,499,882	(8,616,780)	24,883,102	(518,571)
2019	34,197,181	(9,232,288)	24,964,892	(529,341)
2020	34,910,353	(9,864,970)	25,045,382	(540,359)
2021	35,700,956	(10,515,248)	25,185,708	(551,628)
2022	36,510,366	(11,184,521)	25,325,844	(564,121)

## Ratios

To determine whether Council’s current level of asset renewals on the local road network is adequate, Council must compare expected renewal requirements for the following asset components against forecast renewals:

1. Pavement on unsealed roads (compare to pavement re-sheeting)
2. Seals on town streets (compare to town streets reseals)
3. Seals on rural roads (compare to rural reseals)
4. Pavement on town streets (compare to town streets pavement rehab)
5. Pavement on rural roads (compare to rural pavement rehab)

As Council does not have accurate information on the last year of reseals or pavement rehabilitation across the network, forecast depreciation expense has been used as a proxy for asset renewal requirements in the analysis below.

The estimated depreciation expenditure for road seals and pavement on the local road network is detailed in the following table (note: figures are in \$'000):

Asset	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Seal Rural	838	850	864	878	892	906	921	936	951	967	983
Seal Urban	296	304	309	316	325	332	340	347	355	362	370
Pvmnt Sealed Rural	439	445	452	460	467	475	482	490	498	506	515
Pvmnt Sealed Urban	155	159	162	165	170	174	178	182	186	190	194
Pvmnt Un-Sealed	1,594	1,686	1,753	1,818	1,881	1,945	2,013	2,081	2,153	2,227	2,303

Council's current renewals expenditure by local road category and component is detailed in the table below (note: figures are in \$'000):

Asset	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Seal Rural	410	410	420	431	442	453	464	476	487	500	512
Seal Urban	174	174	179	183	188	192	197	202	207	213	218
Pvmnt Sealed Rural	-	100	103	105	108	110	113	116	119	122	125
Pvmnt Sealed Urban	12	-	15	32	43	44	-	-	-	-	-
Pvmnt Un-Sealed	765	765	784	804	824	844	866	887	909	932	955

Based on the information above, Council's current resealing expenditure for its rural local roads is only 50% of the balance required to achieve a 12 year reseal rate, resulting in a current reseal rate of once every 24 years, i.e. each segment of road is only resealed once every 25 years. The same asset renewal ratio for town streets is 58% which results in a reseal rate of once every 21 years.

The asset renewal deficit for Council's seal assets on its local rural roads is \$4.981m over the life of this plan, and the equivalent ratio for Council's town streets is \$1.529m. This means that Council would have to spend an additional \$453k per annum on rural local road reseals

and an additional \$139k per annum on town street reseals to achieve a 12 year reseal rate for these assets.

Council’s current pavement expenditure results in an asset renewal ratio for pavements of 21% for sealed rural roads, 48% for unsealed rural roads, and 8% for town streets. These figures are equivalent to a total asset renewal deficit over the life of the plan of \$4.108m for sealed rural roads, \$12.119m for unsealed rural roads, and \$1.769m for town streets.

It should be noted that the use of asset renewal ratios to measure the long term sustainability of long life assets such as road pavement results in the same accuracy issues as mentioned in section 5.3.2 (regional roads). The exception to this is pavement on unsealed roads which is generally depreciated over between 10 and 18 years. See following charts for details:

Chart 5.3.10 – Asset Renewal Ratio – Local Roads

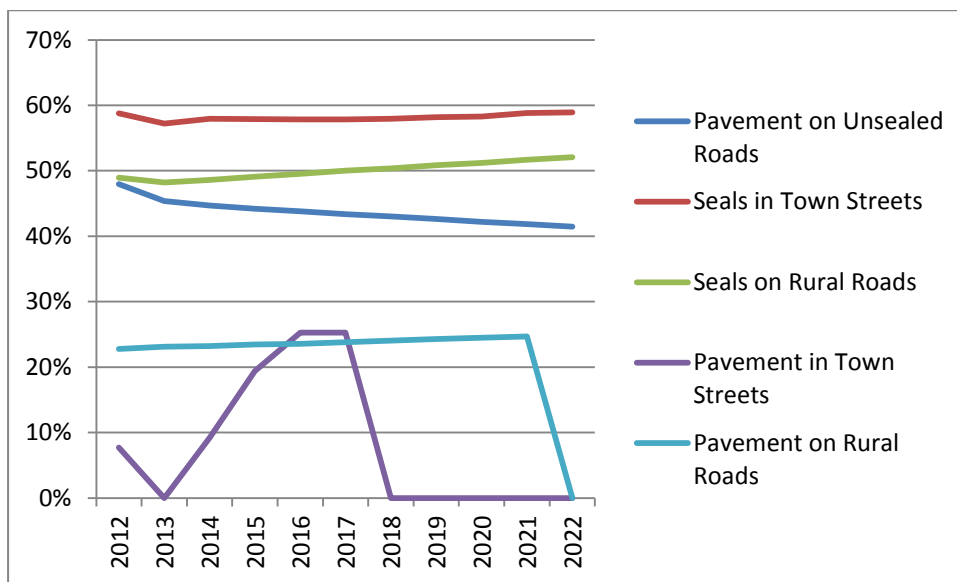
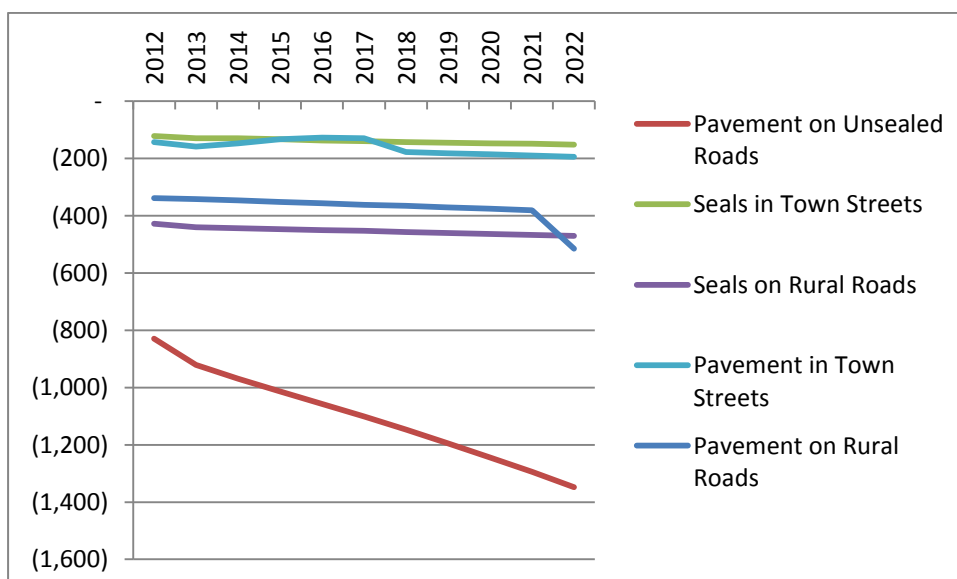
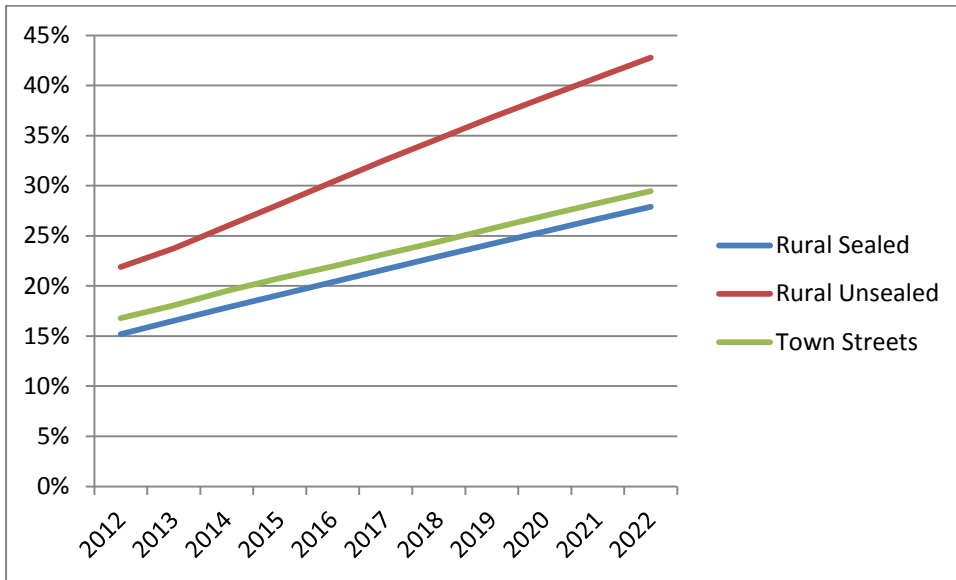


Chart 5.3.11 – Asset Renewal Deficit – Local Roads



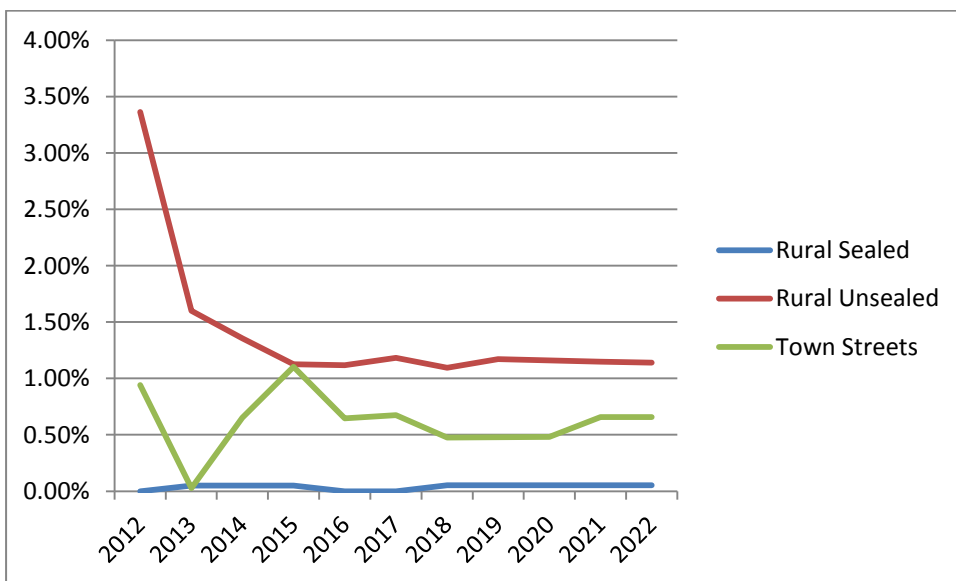
As can be seen from the chart below Council’s asset consumption ratio for the local road network is forecast to increase from lows of around 20% to roughly 30% in the case of sealed roads and 43% in the case of unsealed roads by 2022 due to insufficient expenditure on asset renewals.

Chart 5.3.12 – Asset Consumption Ratio – Local Roads



The chart below indicates that most of Council’s expansion efforts on the local road network relate to unsealed roads (sealing of unsealed roads) and town streets, with very little expansion work being done on local rural sealed roads.

Chart 5.3.13 – Asset Expansion Ratio – Local Roads



## 5.4 Bridges

Bridges can be defined as structures built to span physical obstacles such as a body of water for the purpose of providing passage over the obstacle. Council maintains and controls a significant network of bridges (including bridge size culverts which are culverts over 6 metres in length) on both its local and regional road network. Council is also responsible for causeways on the regional and local road network, however the value of these assets are currently captured under Council's road assets.

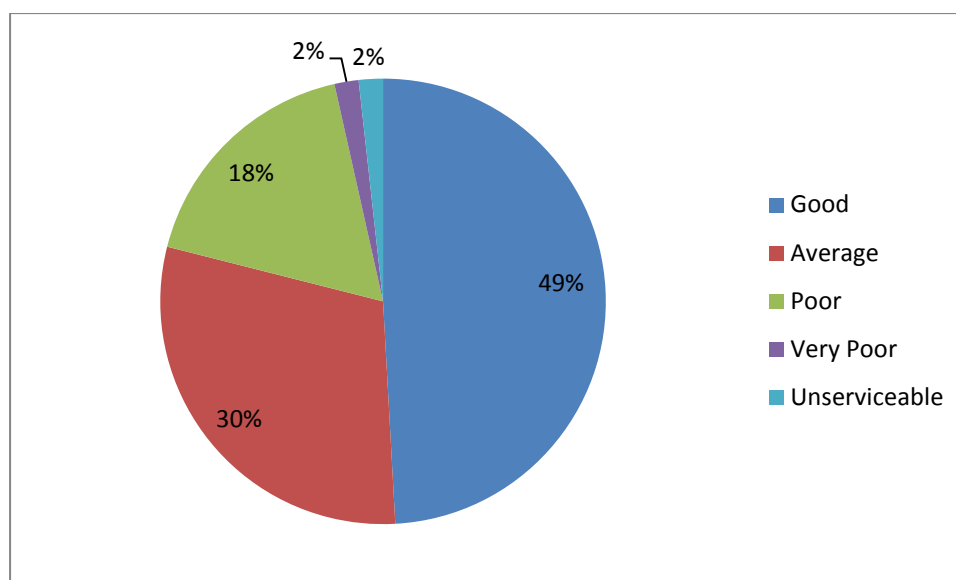
As causeways are captured in the roads section of this plan, and Council is still in the process of compiling information on bridge size culverts for accounting purposes, the analysis below deals solely with non-culvert bridges.

Council's network of bridges was valued at \$29m as at 30 June 2011 (\$25m post proposed accounting adjustments). This reduction is due to changed depreciation assumptions resulting in an increase in accumulated depreciation and thus a decreased final bridge written down value.

### Condition Rating

An external consultant has recently condition rated all of Council's bridges, and it was found that close to 50% of Council's bridges are currently rated as good (i.e. not requiring major maintenance work). The results of Council's condition testing is represented graphically in the following chart:

Chart 5.4.1 – Condition Rating – Bridges



These bridge condition ratings can be better understood by non-engineers by reference to the following photos:

Condition 1: Good



Condition 2: Average



Condition 3: Poor



Condition 4: Very Poor



## Valuation

Council's bridges are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
Bridge useful life	100 years
Bridge replacement cost (per m2 of deck area – 2010 dollars)	\$2,200
Bridge residual value	40%

Council is forecast to spend \$6.148m over the period of this plan replacing old bridges (predominantly timber bridges) as part of its timber bridge replacement program. Most of the funding for this program is forecast to come from loans under the LIRS scheme which provides Council with a 4% discount on loans for infrastructure renewal projects. Council is also forecast to expand the bridge network by \$2.6m over this period, and to spend roughly \$0.084m per annum on bridge related maintenance and operations expenditure.

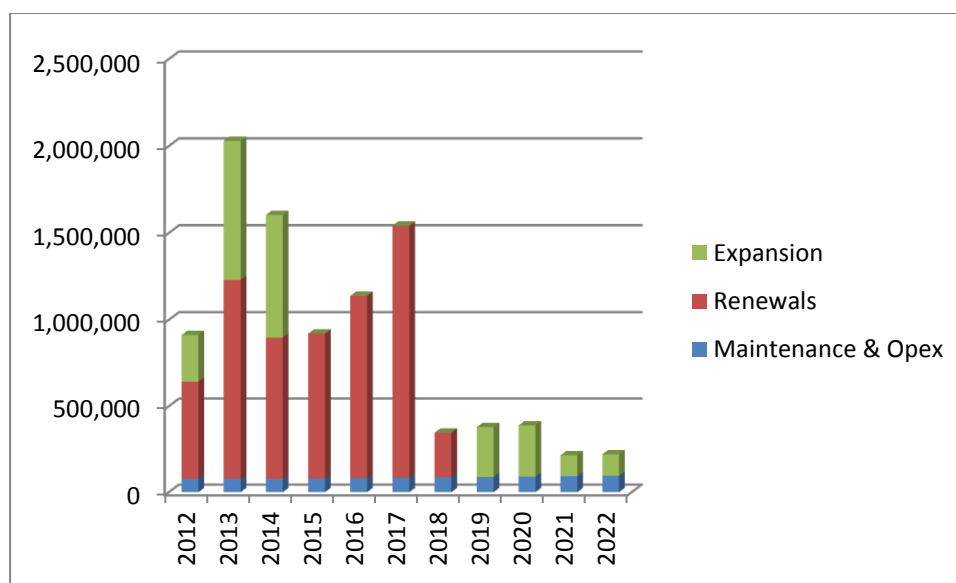


The future projected expenditure for bridges under Council’s current planned capital program and LTFP assumptions are detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	76,980	565,000	270,181	912,161
2013	79,127	1,150,000	800,000	2,029,127
2014	77,390	820,100	705,000	1,602,490
2015	79,932	840,500	-	920,432
2016	82,089	1,055,300	-	1,137,389
2017	84,142	1,457,200	-	1,541,342
2018	86,245	260,200	-	346,445
2019	88,401	-	289,900	378,301
2020	90,611	-	297,200	387,811
2021	92,877	-	121,800	214,677
2022	95,199	-	124,900	220,099
<b>Total:</b>	<b>932,994</b>	<b>6,148,300</b>	<b>2,608,981</b>	<b>9,690,275</b>

These figures are represented graphically below.

Chart 5.4.2 – Projected Expenditure – Bridges



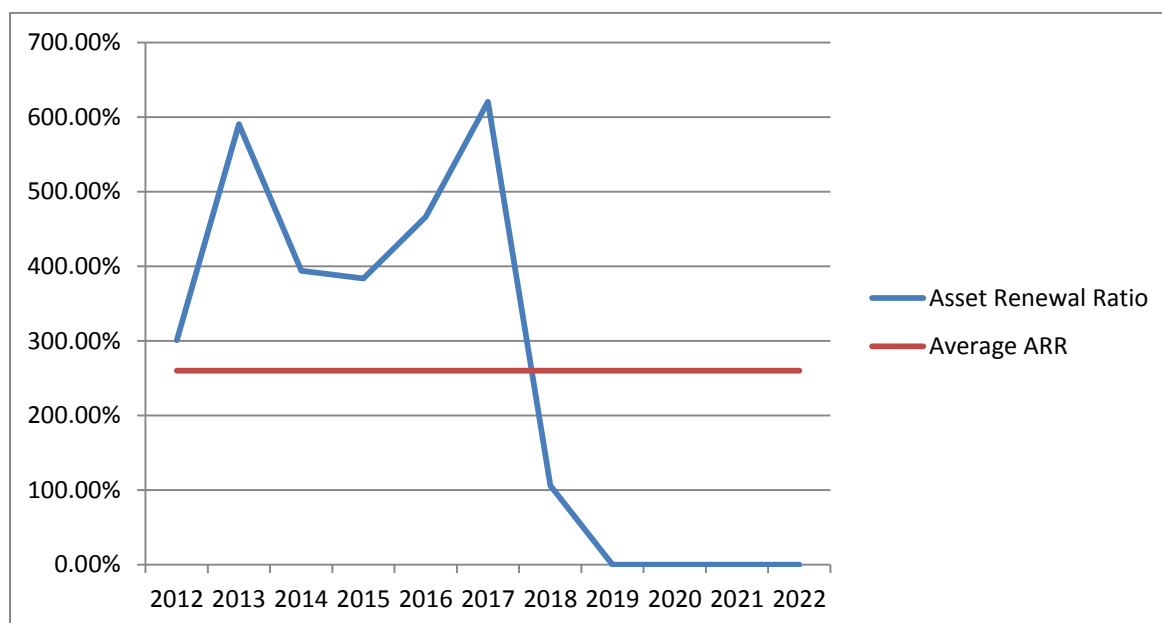
Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of Council’s bridges over the term of this plan are detailed in the following table.

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	33,166,291	(8,159,930)	25,006,361	(188,000)
2013	35,447,954	(8,436,314)	27,011,640	(194,785)
2014	37,327,533	(8,728,863)	28,598,671	(208,185)
2015	38,541,309	(9,035,375)	29,505,934	(219,224)
2016	39,982,022	(9,352,081)	30,629,941	(226,352)
2017	41,839,042	(9,680,416)	32,158,626	(234,814)
2018	42,517,633	(10,022,940)	32,494,693	(245,720)
2019	43,232,709	(10,372,874)	32,859,834	(249,705)
2020	43,962,236	(10,730,508)	33,231,728	(253,905)
2021	44,523,658	(11,096,003)	33,427,656	(258,189)
2022	45,093,795	(11,468,449)	33,625,346	(261,487)

### Ratios

The information in the table above has been used to benchmark Council’s performance for this asset class against four asset management KPIs. The results of this benchmarking exercise are detailed in the following charts.

Chart 5.4.3 – Asset Renewal Ratio



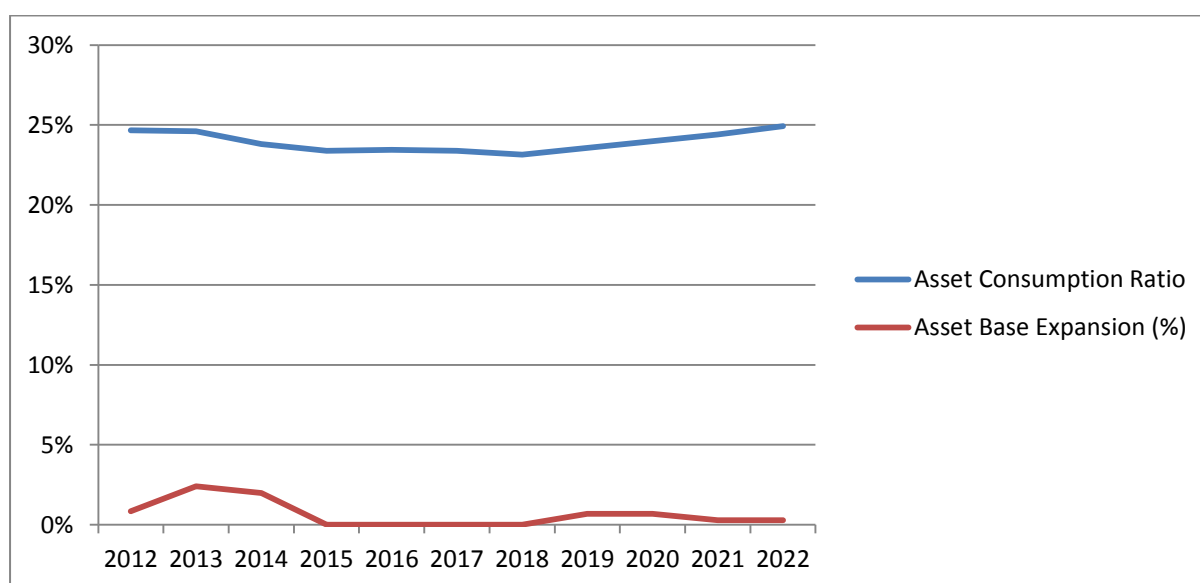
The chart above indicates that Council’s expenditure on bridge asset renewal is more than sufficient when compared to depreciation expense for these assets. As Council will be spending \$6.1m on bridge asset renewals over the term of the plan while only incurring \$2.5m of depreciation expense over this period, Council will report an asset renewal surplus of \$3.6m for its bridge assets.

Although analysis of renewal expenditure requirements through the use of asset renewal ratios based on yearly depreciation expense can be useful for road seals and other short lived

assets, these ratios tend to be less accurate when used for long life assets such as bridges. For example, assuming Council spent nothing on bridge renewals for 30 years, this outcome could still be sustainable assuming all bridges were built recently as bridges would only require replacement at the end of their 100 year useful life. An asset renewal ratio based on depreciation however, would indicate that Council was not renewing its assets.

In future Asset Management Plans, Council will need to compile accurate bridge (and other long life assets) construction data that can be used in conjunction with yearly condition ratings to predict future renewal requirements, and use this information to measure Council's renewal performance for long life assets such as bridges.

Chart 5.4.4 – Asset Consumption and Expansion Ratios



Council's forecast renewals and expansion expenditure results in the maintenance of an asset consumption ratio of 25% across the period of this plan. This result indicates that Council's current level of spend is sufficient to ensure that the condition and future service potential of these assets remains constant between the 2012 and 2022 financial years.

The asset base expansion ratio also indicates that Council will expand its bridges network by an average of 0.65% per annum over the period of the plan.

## 5.5 Kerbs and Gutters

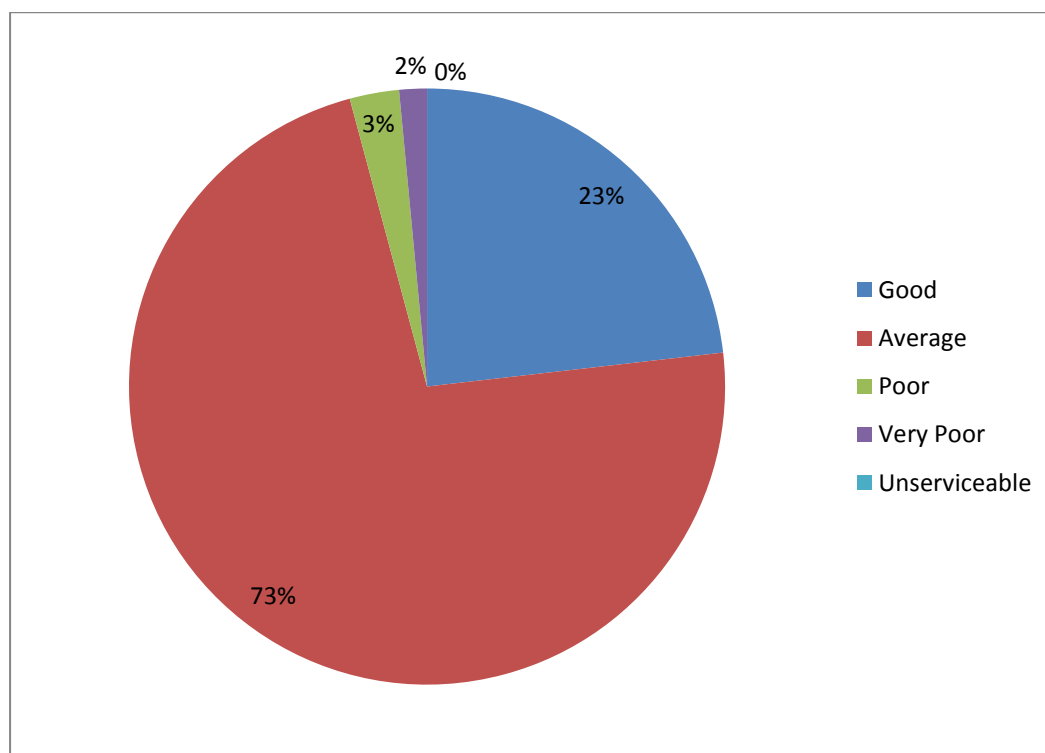
Council is responsible for 102km of kerbs and gutters with a book value of \$10.329m as at 30 June 2011 (\$8.399m post proposed accounting adjustments). Council’s kerbs and gutters provide a separation between the road carriageway and adjoining properties and are generally located in urban areas only (i.e. in the six towns of the Shire). The main purpose of kerbs and gutters is to convey stormwater runoff to Council’s drainage network.

Currently 50% of sealed town streets in the Shire have some form of kerb and guttering. Kerb and guttering also includes medians in town centres valued at \$0.298m (less than 3% of the total kerb and gutter value).

### Condition Rating

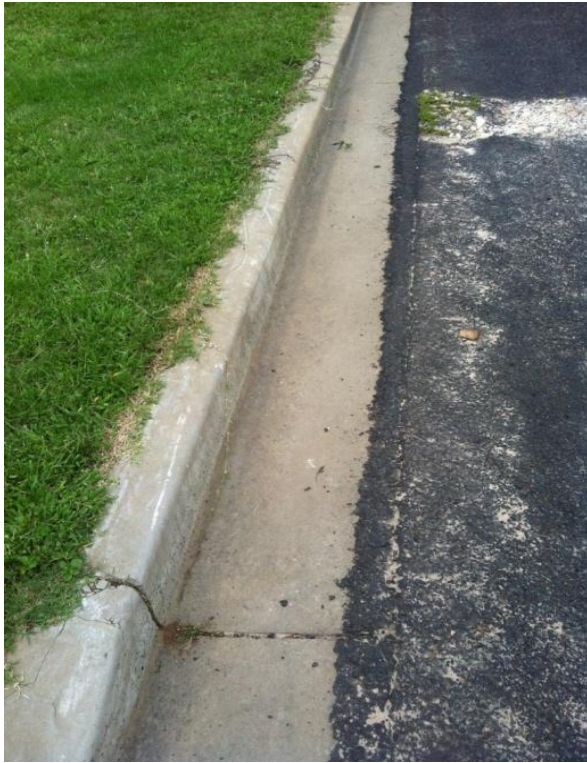
An external consultant has recently condition rated all of Council’s kerbs and gutters and only 5% of Council’s kerb and gutter network was rated poor or below (i.e. in need of renewal). The results of Council’s condition testing are detailed in the following chart:

Chart 5.5.1 – Condition Rating Kerbs and Gutters

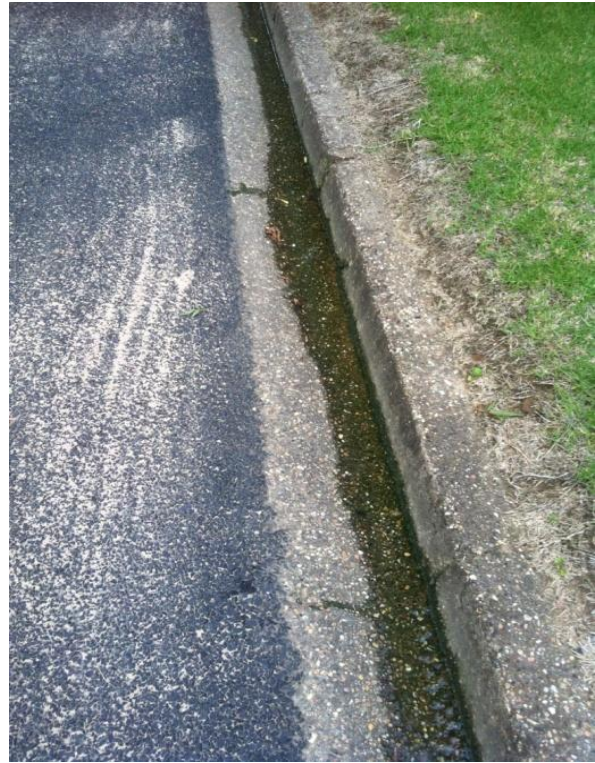


The condition ratings can be better understood by non-engineers by reference to the following diagrams:

Condition 1: Good



Condition 2: Average



Condition 3: Poor



Condition 4: Very Poor



## Valuation

Council’s kerbs and gutters are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
Kerb and gutter useful life	70 years
Kerb and gutter replacement cost (per meter – 2010 dollars)	\$120
Kerb and gutter residual value	40%

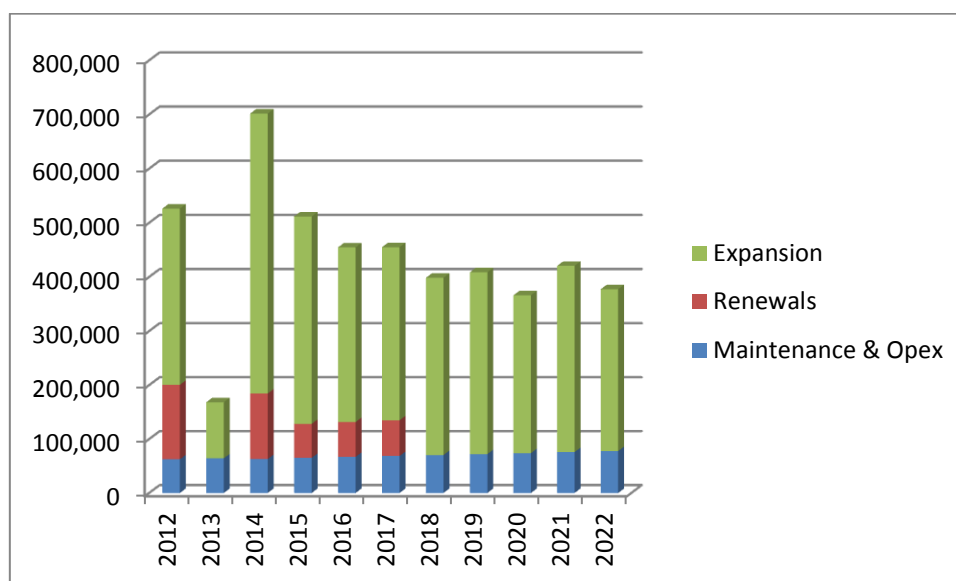
Council is forecast to spend roughly \$0.325m on expanding the kerb and gutter network each year (i.e. building new kerbs and gutters where there previously were none) and also has a forecast capital renewal program of roughly \$0.041m per annum. Council’s annual maintenance and operations program is combined with the town streets drainage maintenance and repair budget, and is estimated to be roughly 50% of this budget (i.e. an average of \$0.069m per annum).

The future projected expenditure for kerbs and gutters under Council’s current planned capital program and LTFP assumptions are detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	62,500	138,000	325,581	526,081
2013	64,252	-	104,000	168,252
2014	62,884	121,500	517,300	701,684
2015	65,125	63,000	383,500	511,625
2016	66,927	64,600	323,000	454,527
2017	68,600	66,200	320,100	454,900
2018	70,315	-	328,100	398,415
2019	72,073	-	336,400	408,473
2020	73,875	-	292,300	366,175
2021	75,722	-	344,700	420,422
2022	77,615	-	299,700	377,315
<b>Total:</b>	<b>759,888</b>	<b>453,300</b>	<b>3,574,681</b>	<b>4,787,869</b>

These figures are represented graphically on the following page.

Chart 5.5.2 – Projected Expenditure – Kerbs and Gutters



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of kerbs and gutters over the next 10 years are detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	13,256,241	(4,416,670)	8,839,571	(107,000)
2013	13,492,803	(4,572,823)	8,919,980	(111,986)
2014	14,266,531	(4,732,536)	9,533,996	(113,985)
2015	14,855,697	(4,900,382)	9,955,315	(120,521)
2016	15,391,854	(5,074,884)	10,316,970	(125,498)
2017	15,932,072	(5,255,661)	10,676,412	(130,028)
2018	16,419,493	(5,442,808)	10,976,685	(134,591)
2019	16,920,088	(5,635,945)	11,284,143	(138,709)
2020	17,433,989	(5,835,242)	11,598,746	(142,938)
2021	17,900,629	(6,040,874)	11,859,755	(147,279)
2022	18,379,335	(6,252,504)	12,126,831	(151,221)

### Ratios

The information in the table above has been used to benchmark Council’s performance for this asset class against four asset management KPIs. The results of this benchmarking exercise are detailed in the following charts.

Chart 5.5.3 – Asset Renewal Ratio

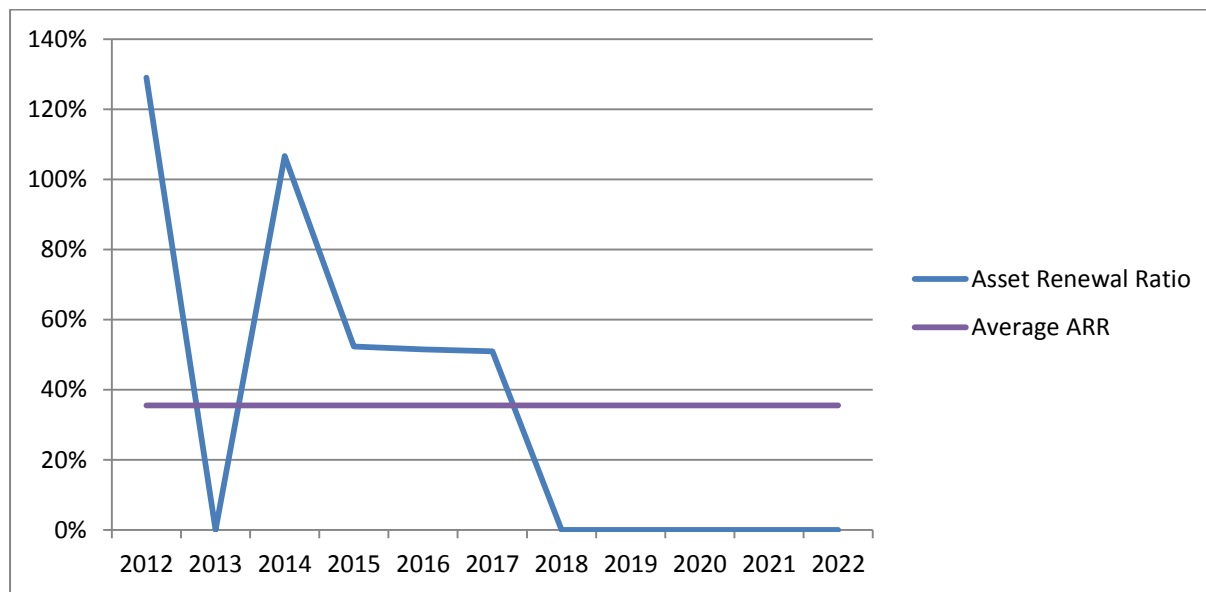
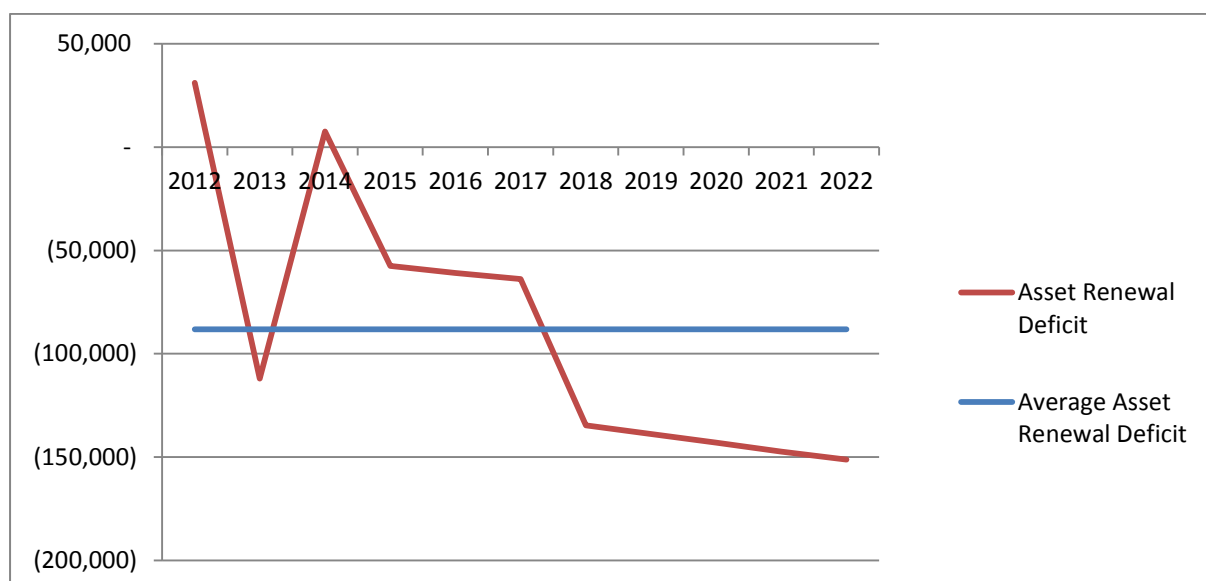


Chart 5.5.4 – Asset Renewal Deficit



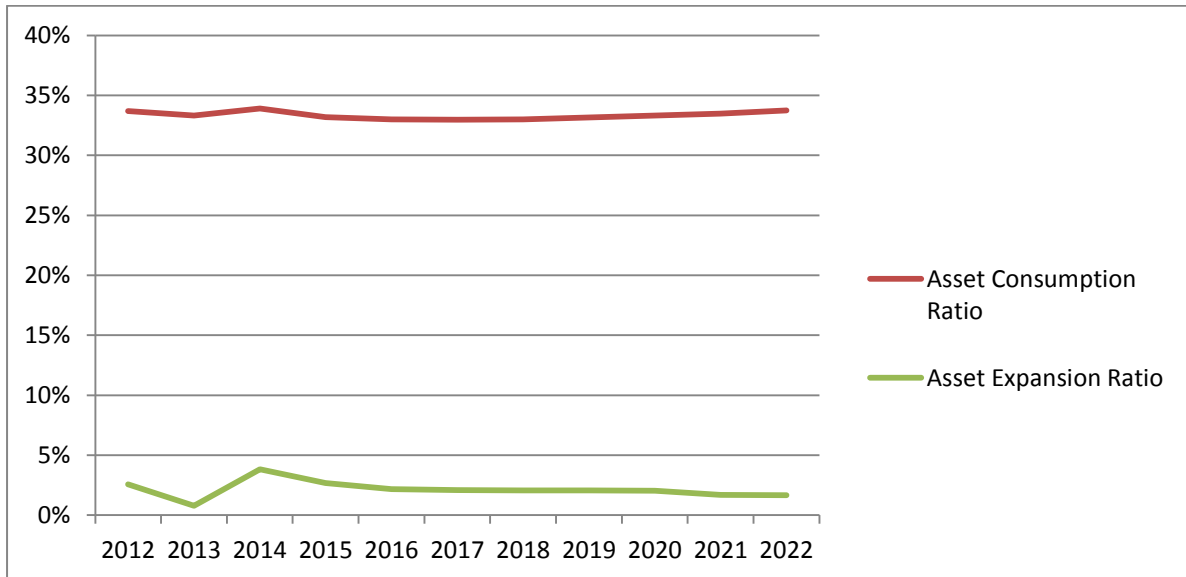
The first two charts indicate that Council is currently only renewing 35% of the depreciation in value of its kerbs and gutters network (through asset renewals), which implies that the condition of these assets are deteriorating over time. In order to maintain the current condition level of these assets Council would need to spend on average an additional \$88k each year on asset renewals for kerbs and gutters.

The following chart shows that Council’s asset consumption ratio is projected to stay constant over the next 10 years. This is due to Council’s high level of expenditure on expanding the kerb and gutter network, offsetting any underspend on asset renewals.



Council is forecast to expand its asset base (for kerbs and gutters) at an average rate of 2.15% per annum over the next 10 years. This level of expansion if redirected to renewals will more than compensate for the projected decline in kerb and gutter asset condition across Council’s current network of kerbs and gutters.

Chart 5.5.5 – Asset Consumption and Expansion Ratios



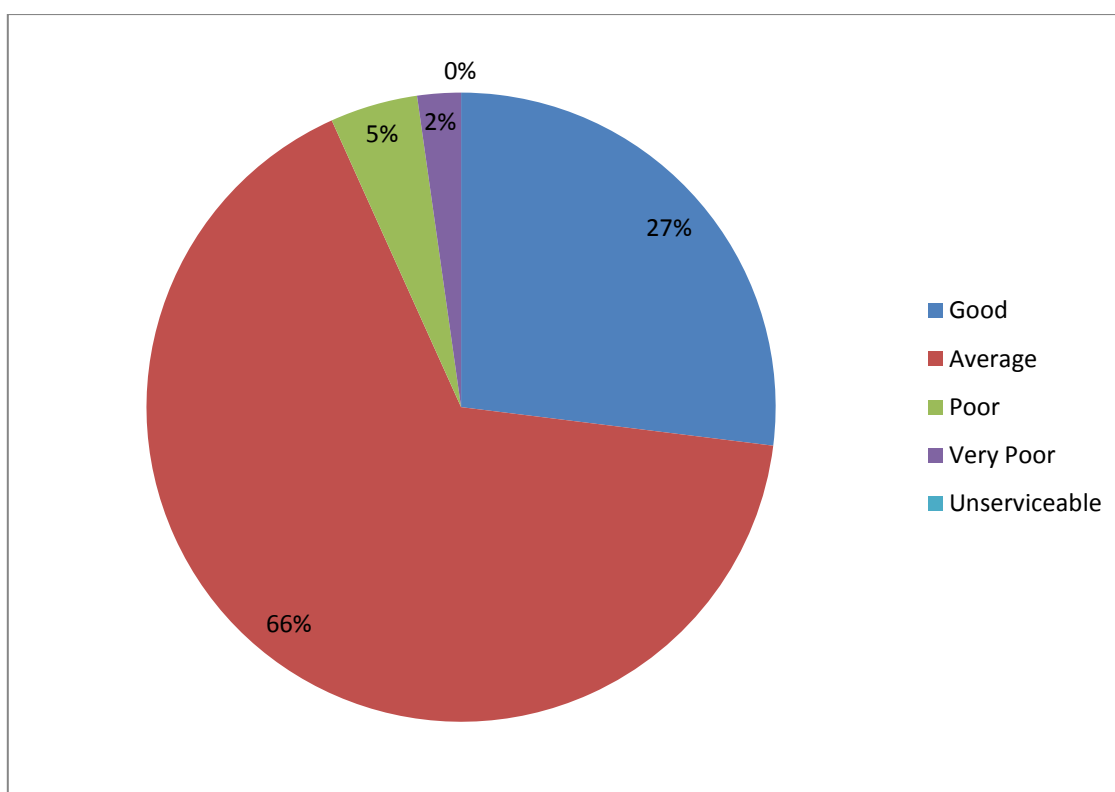
## 5.6 Footpaths

Council is responsible for roughly 21km of footpaths across the six towns of the Shire. Council's footpath assets were valued at \$3.406m as at 30 June 2011. Footpaths provide clearly identifiable walkways for residents of the Shire and also increase the amenity of the Shire's towns. Footpaths within the Shire are either constructed with concrete or pavers, and currently roughly 8% of the Shire's town streets have some form of footpath on at least one side of the street.

### Condition Rating

Council has recently condition rated all its footpaths, and roughly 7% of Council's footpaths were rated as either in poor or very poor condition, although none of Council's footpaths are currently rated as being unserviceable. The results of Council's condition testing are detailed in the following table:

Chart 5.6.1 – Condition Rating Footpaths



These condition ratings can be better understood by non-engineers by reference to the following diagrams:

Condition 1: Good



Condition 2: Average



Condition 3: Poor



Condition 4: Very Poor



**Valuation**

Council’s footpaths are valued at depreciated replacement cost based on the following assumptions:

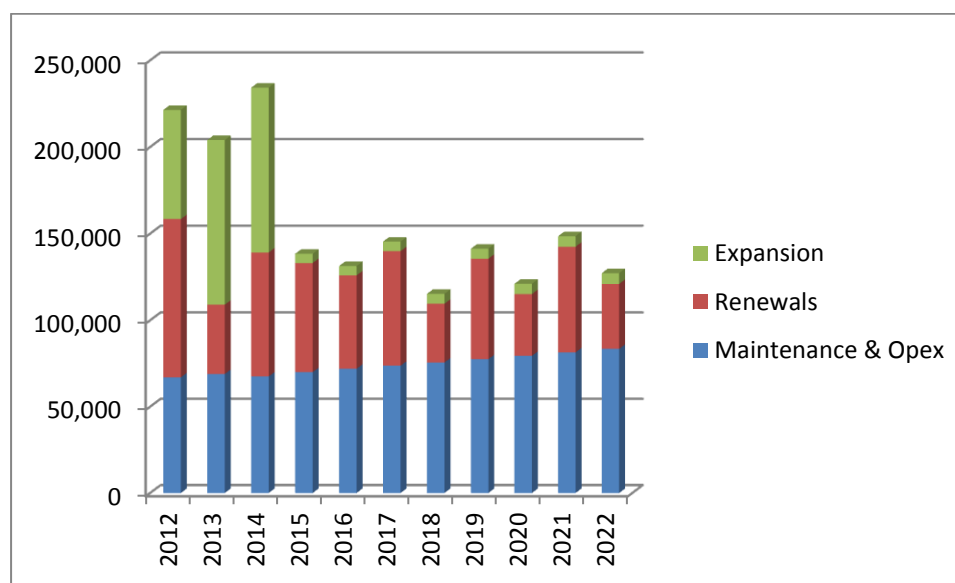
Assumption	Value
Footpath useful life	30 years
Footpath replacement cost - Concrete (per meter – \$2010)	\$130
Footpath replacement cost - Pavers (per meter – \$2010)	\$80
Footpath residual value	0%

Council currently spends roughly \$27k on expanding its network of footpaths each year and also has a capital renewal program of roughly \$56k per annum, and an annual maintenance and operations program of \$74k. The future projected expenditure for footpaths is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	67,000	91,384	63,000	221,384
2013	68,960	40,000	95,000	203,960
2014	67,515	71,600	95,100	234,215
2015	70,012	63,000	5,300	138,312
2016	71,974	53,900	5,400	131,274
2017	73,774	66,100	5,500	145,374
2018	75,618	33,900	5,700	115,218
2019	77,509	58,000	5,800	141,309
2020	79,446	35,700	5,900	121,046
2021	81,432	61,000	6,100	148,532
2022	83,468	37,500	6,200	127,168
<b>Total:</b>	<b>816,709</b>	<b>612,084</b>	<b>299,000</b>	<b>1,727,793</b>

These figures are represented graphically below:

Chart 5.6.2 – Projected Expenditure – Footpaths



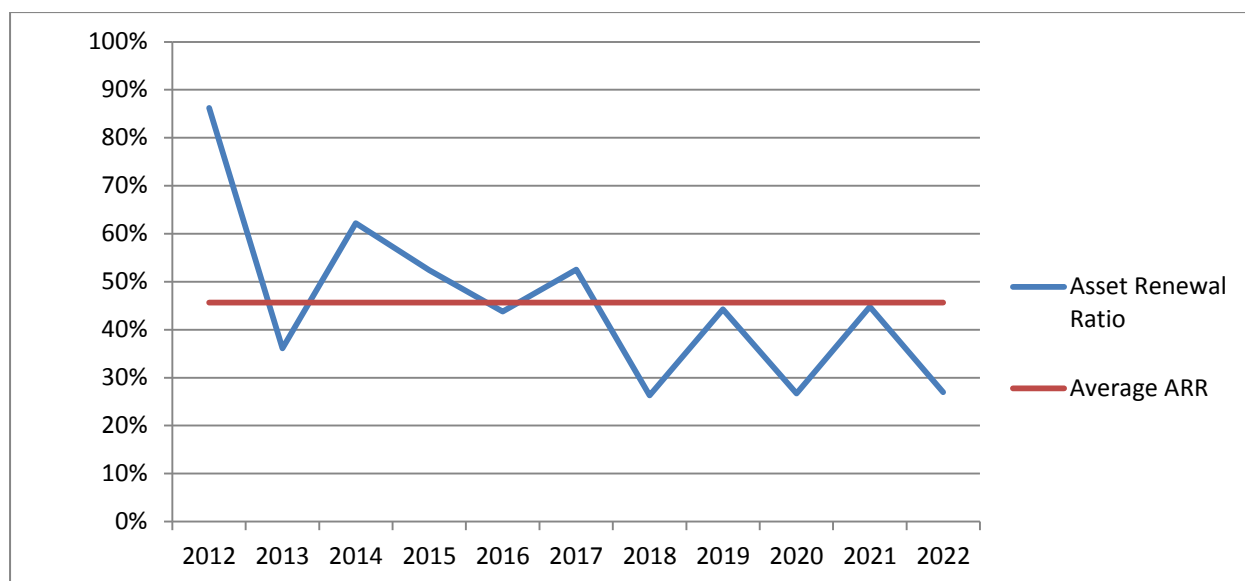
Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of footpaths over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	4,615,554	(1,127,110)	3,488,444	(106,000)
2013	4,796,710	(1,249,146)	3,547,564	(110,765)
2014	5,011,377	(1,376,750)	3,634,627	(115,112)
2015	5,129,790	(1,510,781)	3,619,009	(120,264)
2016	5,240,388	(1,648,995)	3,591,394	(123,106)
2017	5,364,392	(1,791,245)	3,573,148	(125,760)
2018	5,457,636	(1,937,893)	3,519,743	(128,736)
2019	5,576,012	(2,088,245)	3,487,767	(130,973)
2020	5,673,373	(2,242,942)	3,430,431	(133,814)
2021	5,797,206	(2,401,522)	3,395,685	(136,151)
2022	5,898,878	(2,564,659)	3,334,219	(139,122)

### Ratios

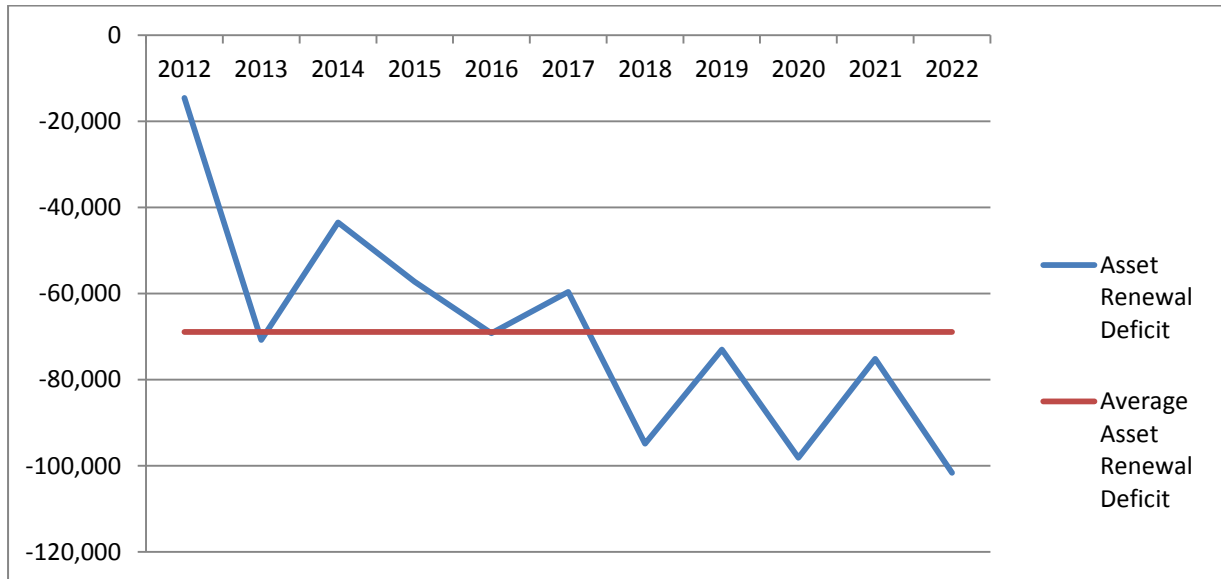
The relevant ratios for Council’s footpath assets are detailed in the following charts:

Chart 5.6.3 – Asset Renewal Ratio



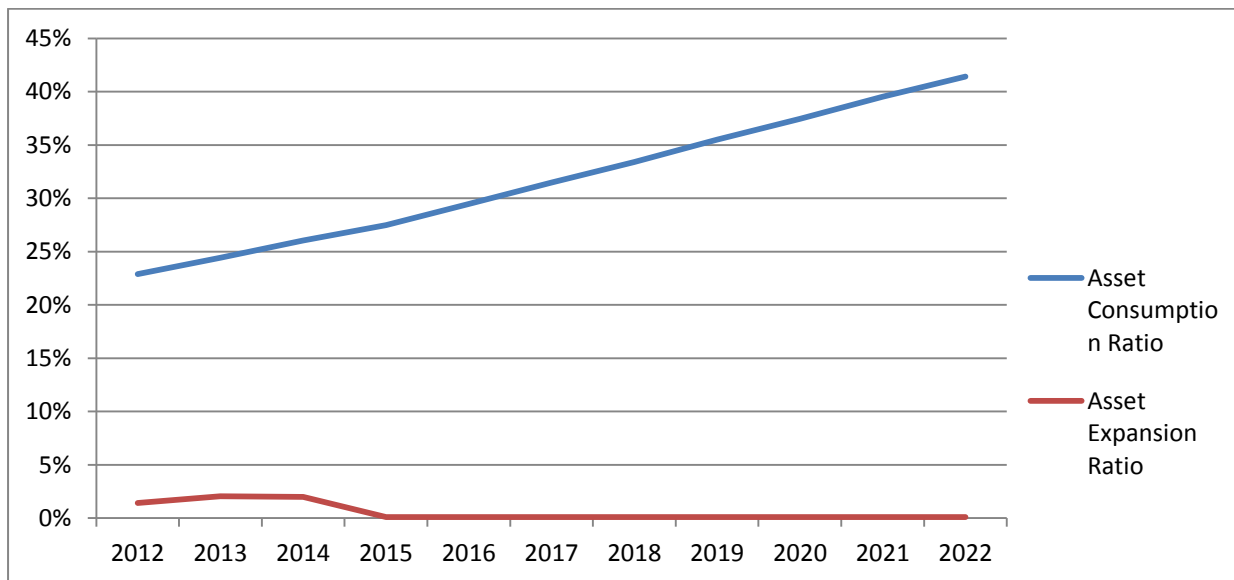
The chart above and the chart following indicate that Council is currently only renewing 46% of the depreciation in value of its footpaths (through asset renewals), which implies that the condition of these assets will continue to deteriorate over time. In order to maintain the current condition level of these assets Council would need to spend on average an additional \$69k each year on asset renewals on its network of footpaths.

Chart 5.6.4 – Asset Renewal Deficit



The following chart shows that Council’s asset consumption ratio is projected to increase from roughly 23% to 42% over the next 10 years. The projected increase is due to insufficient renewals (per charts 5.6.3 and 5.6.4 above), and limited expenditure on capital expansion of the footpath network. This implies that by 2022 Council will have consumed close to half of the future service potential of its footpath assets.

Chart 5.6.5 – Asset Consumption and Expansion Ratios



## 5.7 Culverts and Stormwater Drainage

Culverts and stormwater drainage are used to either re-direct water or to bypass impediments to the natural watercourse. Culverts and drainage generally include:

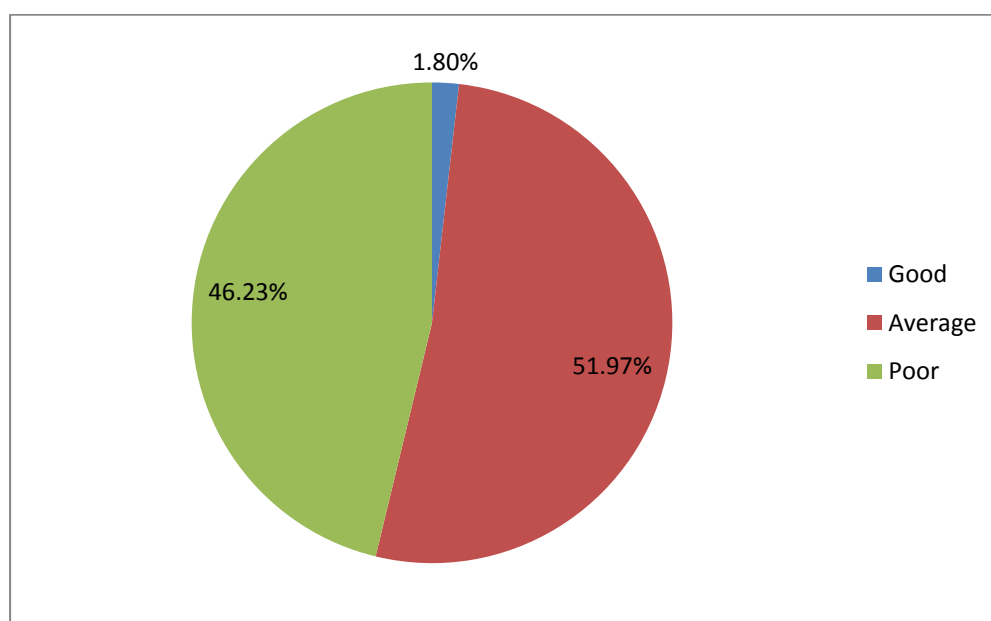
- Culverts;
- Headwalls;
- Pits (including drainage inlet and outlet structures and ancillary hardware such as grates, frames, and step irons).

Council currently captures data on all culverts and drainage assets within the six towns of the Shire, and is collecting information on major culverts (culverts greater than 6m in length) in rural areas, although major culverts are categorised under bridges for asset management purposes. Council does not currently capture information on minor culverts outside of the six towns however the total value of minor culverts in rural areas has been deemed to be immaterial by Council. Council’s culverts and stormwater drainage assets are currently valued at \$5.522m.

### Condition Rating

An external consultant has recently condition rated all of Council’s culverts and stormwater assets. For the purpose of this plan, condition rating for this asset class (as disclosed in the pie chart below) is calculated on a weighted average by asset value basis, as different pipe and pit sizes/replacement costs means that an asset count approach is not accurate. This approach best reflects the future liability to Council if Council were to choose to expend funds to improve the current condition rating of its culverts and stormwater drainage assets. The results of this condition testing are detailed in the following chart:

Chart 5.7.1 – Condition Rating Culverts and Stormwater Drainage



## Valuation

Council’s culverts and stormwater drainage assets are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
Pipe replacement cost based on cost per metre (depending on pipe diameter) ranging from \$387 for 300mm concrete reinforced pipes to \$1,446 for larger multicelled pipes (2010 dollars)	Varies
Pit replacement cost based on pit size and features. Value ranges from \$677 to \$12,908	Varies
Headwall replacement cost (2010 dollars)	\$664
Pit & Headwall Useful Life	50 years
Pit & Headwall Residual Value	40%
Pipe Useful Life	60 Years
Pipe Residual Value	0%

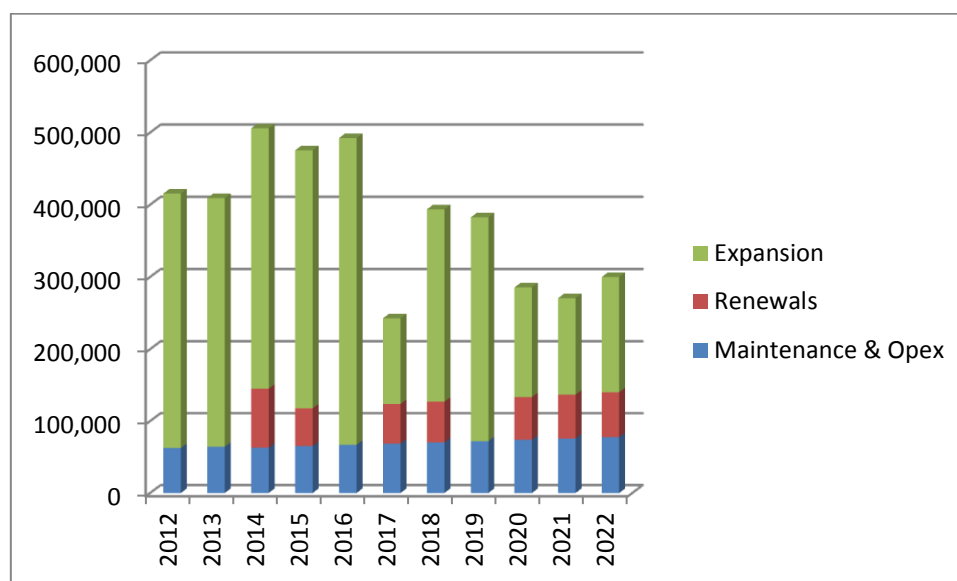
Council is currently forecast to spend an average of \$271k on expanding the culvert and stormwater drainage network each year over the next 10 years. The equivalent figure for asset renewals is \$39k per annum, and Council plans to spend roughly \$69k annually on maintaining and operating its culverts and stormwater drainage network over the life of the plan. The future projected expenditure for culverts and stormwater drainage is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	62,500	-	353,000	415,500
2013	64,252	-	345,000	409,252
2014	62,884	82,000	360,900	505,784
2015	65,124	52,500	357,700	475,324
2016	66,927	-	425,400	492,327
2017	68,600	55,200	118,900	242,700
2018	70,315	56,600	266,700	393,615
2019	72,073	-	310,500	382,573
2020	73,875	59,400	152,200	285,475
2021	75,722	60,900	134,000	270,622
2022	77,615	62,400	159,900	299,915
<b>Total:</b>	<b>759,887</b>	<b>429,000</b>	<b>2,984,200</b>	<b>4,173,087</b>

These figures are represented graphically below:



Chart 5.7.2 – Projected Expenditure – Culverts and Stormwater Drainage



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of culverts and stormwater drainage over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value (book value)	Annual Depreciation Expense
2012	8,505,720	(2,710,500)	5,795,220	(135,000)
2013	8,935,777	(2,879,859)	6,055,918	(142,254)
2014	9,468,035	(3,058,104)	6,409,931	(149,446)
2015	9,972,915	(3,247,033)	6,725,883	(158,348)
2016	10,498,044	(3,446,295)	7,051,750	(166,792)
2017	10,777,125	(3,656,332)	7,120,793	(175,574)
2018	11,208,196	(3,873,137)	7,335,059	(180,242)
2019	11,630,778	(4,099,320)	7,531,458	(187,451)
2020	11,958,686	(4,334,832)	7,623,854	(194,519)
2021	12,273,173	(4,578,183)	7,694,990	(200,003)
2022	12,618,204	(4,829,227)	7,788,977	(205,262)

### Ratios

The relevant ratios for Council’s culverts and stormwater drainage assets are detailed in the following charts. As can be seen from the chart 5.7.3, Council’s asset renewal ratio for culverts and drainage is well below replacement level, indicating that the quality of Council’s culverts and drainage assets are in decline. Chart 5.7.4 shows the amount of underspend in asset renewals on Council’s culvert and drainage assets. Council is currently underspending an average of \$134k per year on this asset class. Chart 5.7.5 shows Council’s asset expansion ratio which is quite high at 2.78% and an increase in Council’s asset consumption ratio over the ten years in the AMP timeframe from 32% to 37%.

Chart 5.7.3 – Asset Renewal Ratio

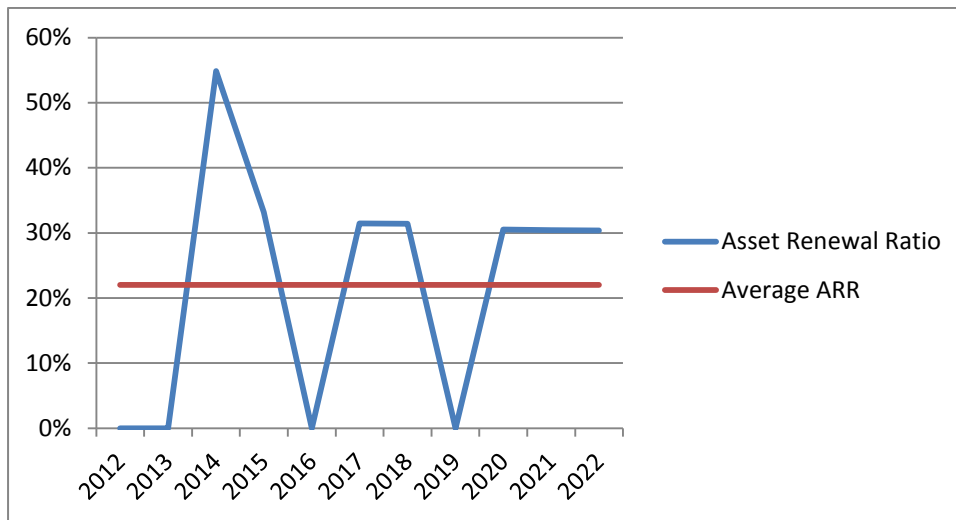


Chart 5.7.4 – Asset Renewal Deficit

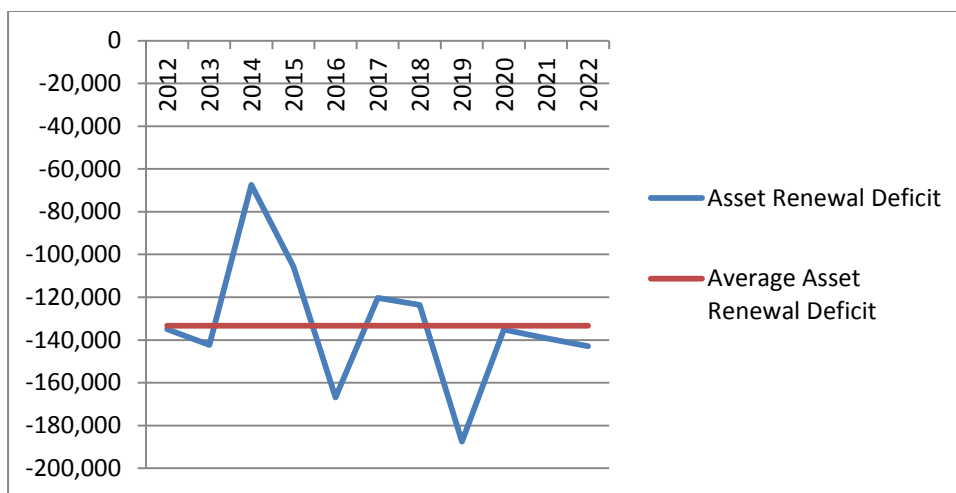
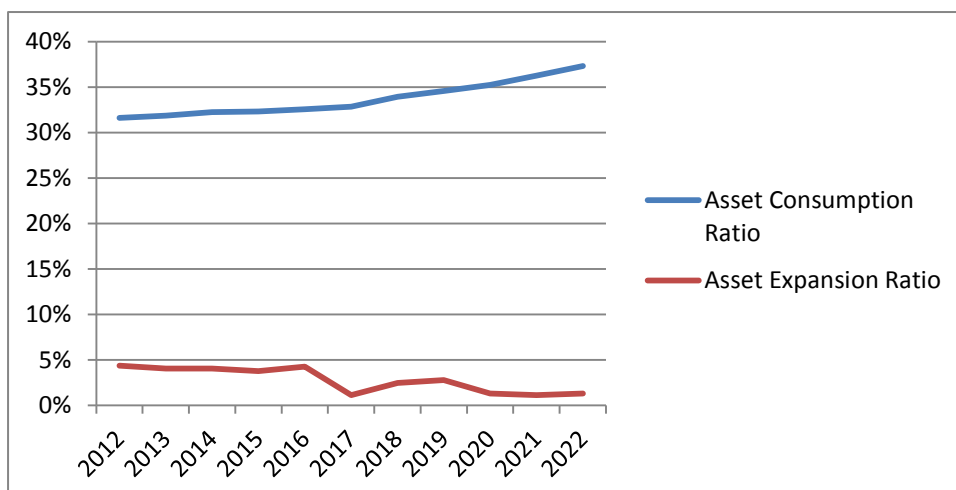


Chart 5.7.5 – Asset Consumption and Expansion Ratios



## 5.8 Aerodromes

Council currently controls and maintains 3 aerodromes, including the Coonabarabran Aerodrome, Coolah Aerodrome and Baradine Aerodrome. The Coonabarabran Aerodrome has a sealed runway that is currently used for aeroclub, RFDS, mail runs and general public usage while the Coolah and Baradine aerodromes both have unsealed runways and are used only for RFDS and public landings. As at 30 June 2011 the value of the three aerodromes was \$1.804m (\$1.889m post proposed accounting adjustments):

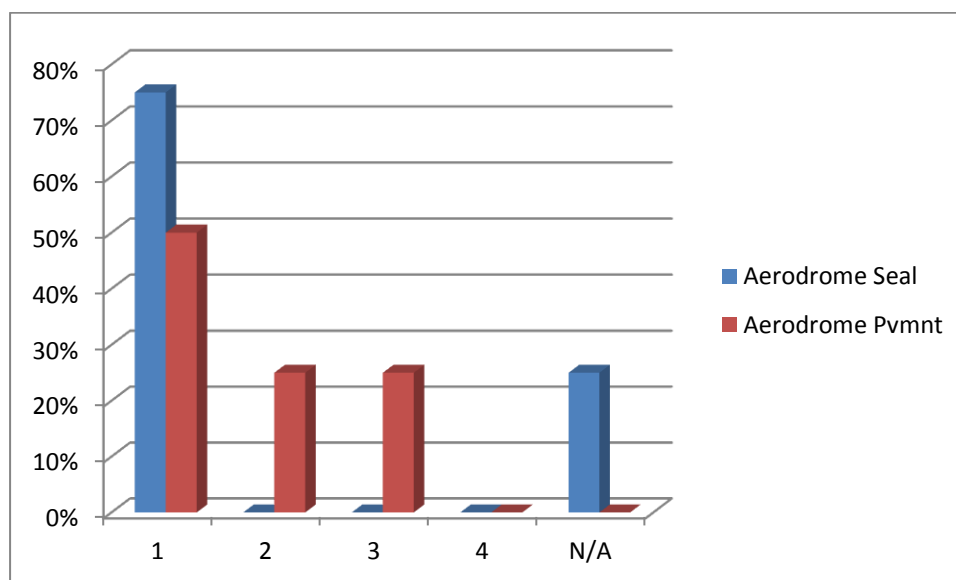
Aerodrome	Runway Strip Value	Buildings Value
Baradine	269,100	40,410
Coolah	194,218	62,013
Coonabarabran	1,425,989	266,852
<b>Total:</b>	<b>1,889,307</b>	<b>369,275</b>

Note: This section deals specifically with Council’s aerodrome runway assets. The buildings associated with the Council’s aerodrome assets are dealt with separately in the buildings section of this plan.

### Condition Rating

An external consultant has recently condition rated all of Council’s aerodromes, and the results of this condition testing is detailed in the graph below:

Chart 5.8.1 – Condition Rating Aerodrome Runways



The seal assets of all sealed aerodrome runways were rated as being in good condition. The pavement asset for the Coolah aerodrome (which is an unsealed aerodrome) was rated as being in poor condition, and the pavement for one of the Coonabarabran aerodrome roads was rated as average condition with the other two rated as good condition. The Baradine aerodrome is an unformed unsealed runway and does not have either a pavement or seal component.

## Valuation

Council’s aerodromes are valued at depreciated replacement cost based on the following assumptions:

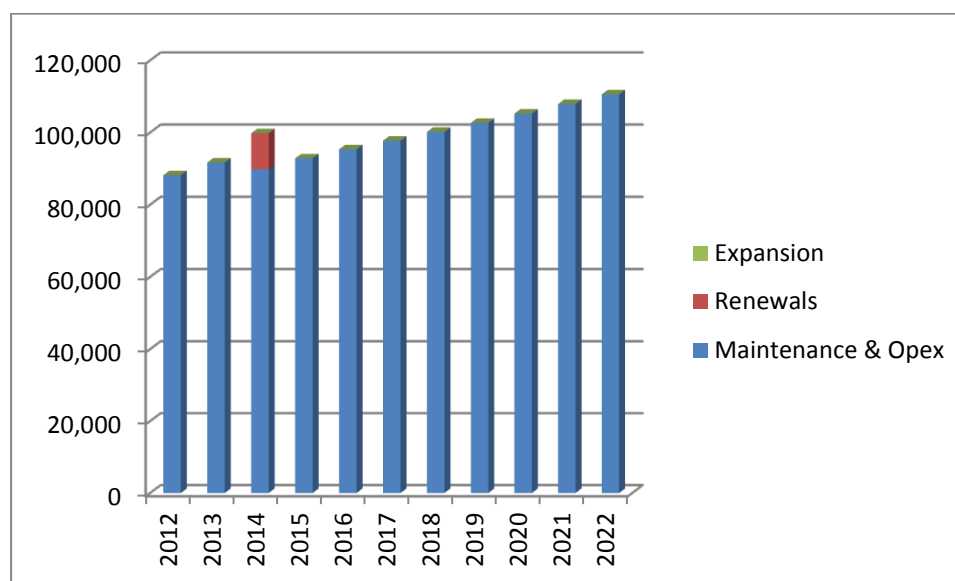
Assumption	Value
<b>Aerodromes</b>	
Aerodrome pavement useful life (12 yrs for unsealed)	60
Aerodrome surfacing useful life	12
Aerodrome earthworks useful life	Unlimited
Aerodrome pavement residual value (0% for unsealed)	40%
Aerodrome surfacing residual value	40%
Pavement replacement cost sealed (2010 dollars)	\$18.00 / \$15.00 per m2
Pavement replacement cost unsealed (2010 dollars)	\$3.20 per m2
Surfacing replacement cost (2010 dollars)	\$6.50 per m2
Earthworks replacement cost (2010 dollars)	\$40 per m3

Council is currently forecast to spend roughly \$98k per year on the annual maintenance and operations of its aerodromes. The only capital expenditure forecast for aerodromes is \$10k relating to re-sealing in the 2013/14 financial year. The future projected expenditure for aerodromes is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	88,175	-	-	88,175
2013	91,710	-	-	91,710
2014	89,809	10,000	-	99,809
2015	92,842	-	-	92,842
2016	95,346	-	-	95,346
2017	97,730	-	-	97,730
2018	100,173	-	-	100,173
2019	102,677	-	-	102,677
2020	105,244	-	-	105,244
2021	107,875	-	-	107,875
2022	110,572	-	-	110,572
<b>Total:</b>	<b>1,082,153</b>	<b>10,000</b>	<b>-</b>	<b>1,092,153</b>

These figures are represented graphically below:

Chart 5.8.2 – Projected Expenditure Aerodromes



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of aerodrome runways over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	2,238,160	(366,270)	1,871,890	(36,000)
2013	2,260,542	(406,293)	1,854,249	(36,360)
2014	2,293,147	(447,079)	1,846,068	(36,724)
2015	2,316,078	(488,803)	1,827,275	(37,253)
2016	2,339,239	(531,317)	1,807,922	(37,626)
2017	2,362,632	(574,632)	1,787,999	(38,002)
2018	2,386,258	(618,761)	1,767,497	(38,382)
2019	2,410,121	(663,714)	1,746,406	(38,766)
2020	2,434,222	(709,505)	1,724,717	(39,154)
2021	2,458,564	(756,145)	1,702,419	(39,545)
2022	2,483,150	(803,647)	1,679,502	(39,941)

### Ratios

The information in the table above has been used to benchmark Council’s performance for this asset class against four asset management KPIs. As Council will only be spending \$10k over the life of the plan for this asset class, the final asset renewal ratio over the ten year period is 2.48%. Council’s asset renewal deficit for this asset class is \$37k per annum, and Council’s asset expansion ratio is zero. The asset consumption ratio for aerodromes increases from 15% in 2012 to roughly 31% in 2022 indicating a considerable deterioration in the future benefits available to Council from this asset class.

## 5.9 Carparks

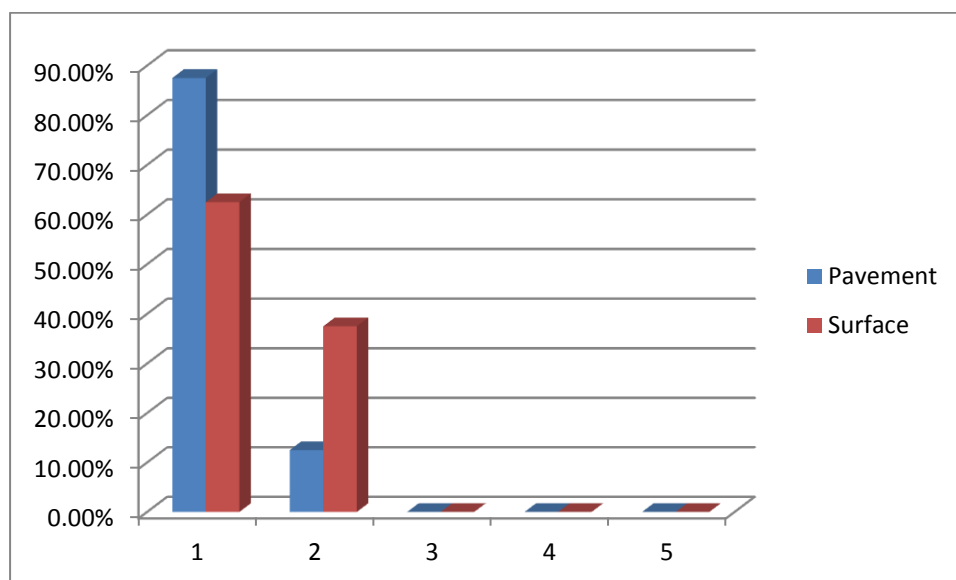
Council currently controls and maintains the following sealed carpark assets:

- Coolah Office Carpark;
- Coonabarabran Cemetery Carpark;
- Timor St. Carpark Coonabarabran;
- Showground Carpark Coonabarabran;
- Airport Carpark Coonabarabran;
- Visitors Information Centre Carpark Coonabarabran.

### Condition Rating

An external consultant has recently condition rated all of Council’s carparks, and the results of this condition testing is detailed in the graph below:

Chart 5.9.1 – Condition Rating Carparks



As can be seen from the chart above, the majority of Council’s carpark seals are in good condition (greater than 85%) and roughly 60% of carpark pavements are also in good condition, with the remaining pavement and seal assets rated average.

### Valuation

Council’s carparks are valued at depreciated replacement cost based on the following assumptions:

Assumption	Value
Carpark pavement useful life	60
Carpark surfacing useful life	25
Carpark earthworks useful life	Unlimited
Carpark pavement residual value	40%
Carpark surfacing residual value	10%

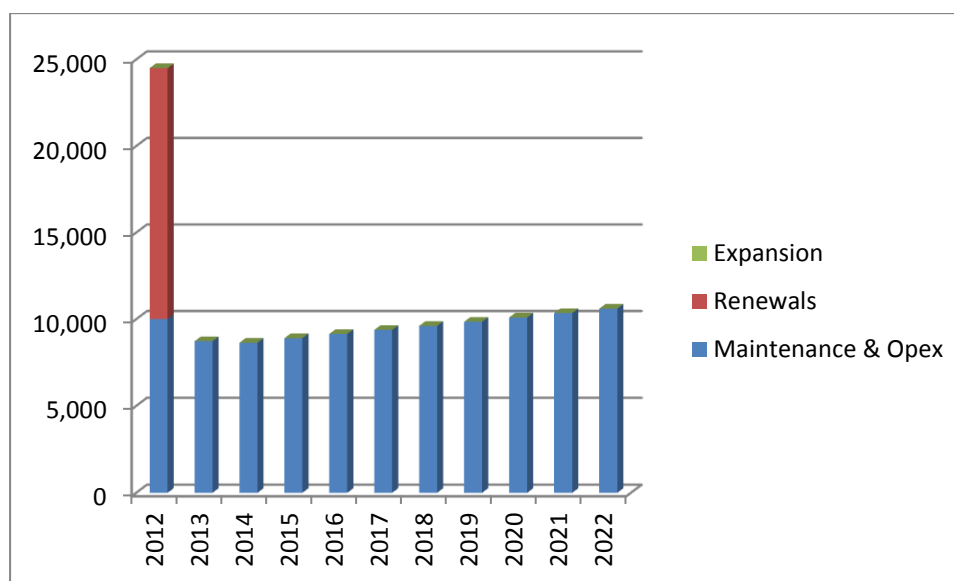
Assumption	Value
Pavement replacement cost (2010 dollars)	\$15.00 per m2
Surfacing replacement cost (2010 dollars)	\$3.00 per m2
Earthworks replacement cost (2010 dollars)	\$40.00 per m3

As at 30 June 2011 Council’s 6 carparks were valued at a written down replacement cost of \$172k (\$175k post proposed accounting adjustments). Council is currently forecast to spend roughly \$9.6k per year on the annual maintenance and operations of its carparks. The only capital expenditure forecast for carparks is \$14.5k relating to re-sealing the Coolah office carpark in the 2011/12 financial year. The future projected expenditure for carparks is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	10,000	14,500	-	24,500
2013	8,724	-	-	8,724
2014	8,638	-	-	8,638
2015	8,899	-	-	8,899
2016	9,145	-	-	9,145
2017	9,374	-	-	9,374
2018	9,608	-	-	9,608
2019	9,848	-	-	9,848
2020	10,094	-	-	10,094
2021	10,347	-	-	10,347
2022	10,605	-	-	10,605
<b>Total:</b>	<b>105,282</b>	<b>14,500</b>	<b>-</b>	<b>119,782</b>

These figures are represented graphically below:

Chart 5.9.2 – Projected Expenditure Carparks



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of carparks over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	242,760	(52,510)	190,250	(1,000)
2013	245,188	(54,109)	191,078	(1,074)
2014	247,639	(55,735)	191,904	(1,085)
2015	250,116	(57,388)	192,728	(1,096)
2016	252,617	(59,069)	193,548	(1,107)
2017	255,143	(60,777)	194,366	(1,118)
2018	257,695	(62,514)	195,180	(1,129)
2019	260,272	(64,280)	195,992	(1,140)
2020	262,874	(66,074)	196,800	(1,152)
2021	265,503	(67,898)	197,605	(1,163)
2022	268,158	(69,752)	198,406	(1,175)

### Ratios

The information in the table above has been used to benchmark Council’s performance for this asset class against four asset management KPIs. Council will be spending \$14.5k over the life of the plan for this asset class, resulting in a final asset renewal ratio over the ten year period of 131%. This high percentage is due to a reseal project that has just fallen due (note: carpark seal lives are 25 years) and a ten year timeframe may not be suitable for accurately measuring asset renewal performance for such an asset class when there are only six assets.

Council recorded an asset renewal surplus for this asset class over the ten years of \$2.2k. The asset consumption ratio for carparks increases from 23% in 2012 to 26% in 2022, and as there is no planned expenditure on asset expansion the asset expansion ratio is zero.



## 5.10 Water Supply and Sewerage Network

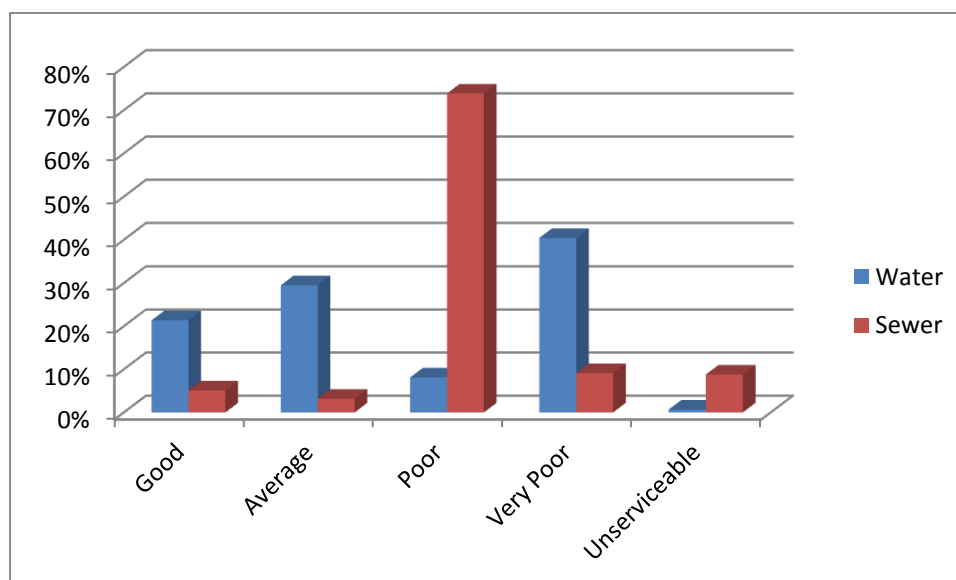
Council is responsible for the provision of water services to all the towns in the Shire and currently provides sewerage services to the towns of Coonabarabran, Coolah, Dunedoo and Baradine. In order to provide these services Council utilises a vast network of water and sewer assets, including reticulation systems, pumping stations, treatment works, and reservoirs and dams.

As at 30 June 2011, Council’s water network was valued at a written down replacement cost of \$20.8m and its sewerage network at \$15.43m. Council is currently in the process of revaluing its water and sewerage networks per its rolling revaluation program and DLG requirements. It is expected that the revaluation will be completed by 30 June. The completion date for the revaluation is post the due date for this asset management plan, and thus the information below is based on pre-revaluation asset values. Council’s water and sewer network values were not affected by the recent review of Council’s asset accounting assumptions.

### Condition Rating

Council currently does not have detailed condition rating by asset for its water and sewer networks, although a condition rating has been assumed based on revised remaining life of the water and sewerage networks from the 2007 revaluation report. Although this information is dated and based on assumptions and the work of a different consultant than the assets above, it should provide a broad indication of the state of Council’s water and sewerage networks:

Chart 5.10.1 – Condition Rating Water Supply and Sewerage Network



The condition ratings above were determined with reference to the consumption ratio (i.e. accumulated depreciation as a percentage of asset value) at the time of the 2007 revaluation. The assumptions are detailed in the following table:

Consumption Ratio	Assumed Condition Rating
< 31%	1
< 61%	2
< 81%	3
< 98%	4
> 98%	5

Council will have access to more accurate condition ratings post the completion of this year's water and sewerage network revaluation.

## Valuation

Council's water and sewerage networks are valued at depreciated replacement cost based on differing useful life, residual value and unit cost assumptions. Assumptions are too numerous to be listed and vary by both asset type and individual asset features. For example different pipe sizes will have differing unit costs. Council's projected expenditure on its water and sewerage network over the life of this plan is detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
<b>Water Supply Network</b>				
2012	1,648,089	423,274	877,527	2,948,890
2013	1,691,095	101,000	150,000	1,942,095
2014	1,626,764	439,200	359,600	2,425,564
2015	1,678,356	362,600	257,100	2,298,056
2016	1,720,778	392,800	317,500	2,431,078
2017	1,763,797	441,000	259,300	2,464,097
2018	1,807,892	406,700	215,100	2,429,692
2019	1,853,090	302,500	220,400	2,375,990
2020	1,899,417	322,000	297,000	2,518,417
2021	1,946,902	296,200	304,500	2,547,602
2022	1,995,575	228,600	312,100	2,536,275
<b>Total:</b>	<b>19,631,756</b>	<b>3,715,874</b>	<b>3,570,127</b>	<b>26,917,757</b>
<b>Sewerage Network</b>				
2012	790,185	173,000	163,000	1,126,185
2013	835,527	13,000	52,500	901,027
2014	822,844	348,000	60,000	1,230,844
2015	849,972	306,600	-	1,156,572
2016	871,964	261,600	-	1,133,564
2017	893,763	290,300	-	1,184,063
2018	916,107	297,500	-	1,213,607
2019	939,010	270,300	-	1,209,310
2020	962,485	253,200	-	1,215,685
2021	986,547	259,500	-	1,246,047
2022	1,011,211	265,900	-	1,277,111
<b>Total:</b>	<b>9,879,615</b>	<b>2,738,900</b>	<b>275,500</b>	<b>12,894,015</b>

These figures are represented graphically below:

Chart 5.10.2 – Projected Expenditure Water Supply Network

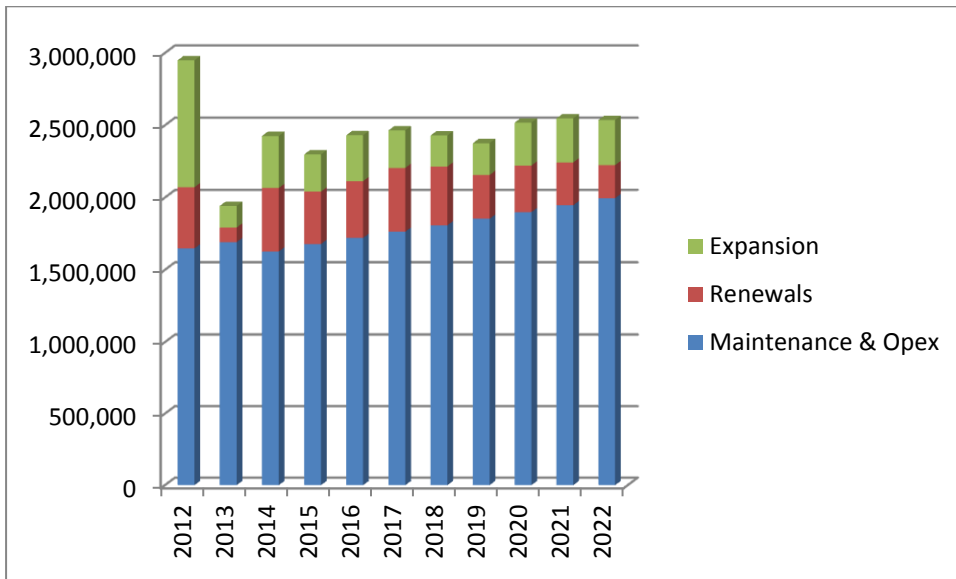
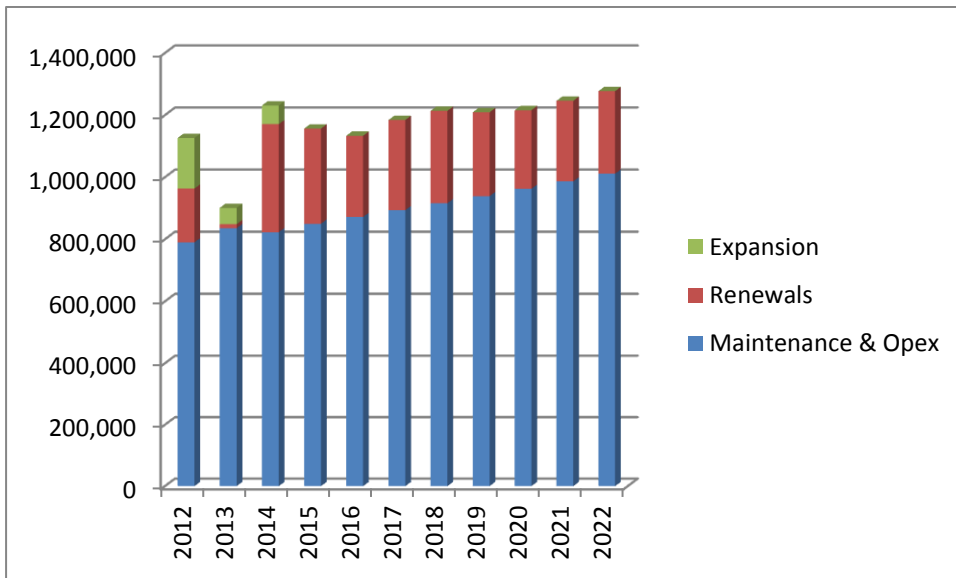


Chart 5.10.3 – Projected Expenditure Sewerage Network



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of Council’s water and sewerage network over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
<b>Water Supply Network</b>				
2012	54,471,241	(32,883,660)	21,587,581	(800,000)
2013	55,266,953	(34,040,264)	21,226,689	(827,768)
2014	56,618,423	(35,220,526)	21,397,897	(839,859)
2015	57,804,307	(36,433,128)	21,371,179	(860,397)
2016	59,092,650	(37,675,878)	21,416,772	(878,418)
2017	60,383,877	(38,950,633)	21,433,244	(897,996)
2018	61,609,516	(40,257,758)	21,351,758	(917,618)
2019	62,748,511	(41,596,579)	21,151,932	(936,244)
2020	63,994,996	(42,966,097)	21,028,899	(953,552)
2021	65,235,646	(44,368,253)	20,867,393	(972,494)
2022	66,428,702	(45,803,283)	20,625,419	(991,348)
<b>Sewerage Network</b>				
2012	29,975,460	(14,343,160)	15,632,300	(288,000)
2013	30,340,715	(14,780,769)	15,559,946	(294,177)
2014	31,052,122	(15,226,339)	15,825,783	(297,762)
2015	31,669,243	(15,683,346)	15,985,897	(304,744)
2016	32,247,535	(16,150,980)	16,096,556	(310,800)
2017	32,860,311	(16,628,965)	16,231,346	(316,476)
2018	33,486,414	(17,117,744)	16,368,670	(322,489)
2019	34,091,578	(17,617,555)	16,474,023	(328,634)
2020	34,685,694	(18,128,303)	16,557,390	(334,573)
2021	35,292,051	(18,649,990)	16,642,061	(340,403)
2022	35,910,871	(19,182,844)	16,728,027	(346,354)

## Ratios

The information in the tables above has been used to benchmark Council’s performance for this asset class against four asset management KPIs.

Chart 5.10.4 – Asset Renewal Ratio

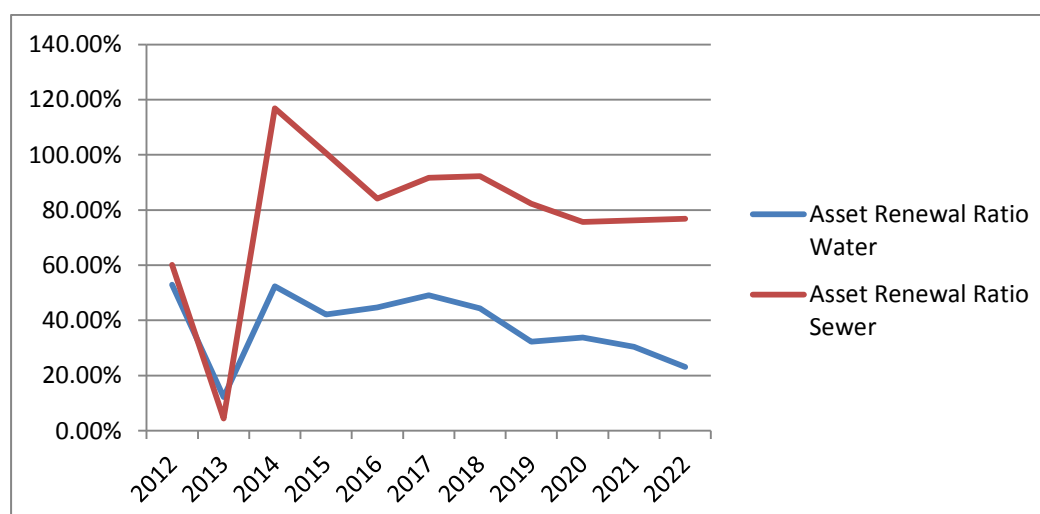
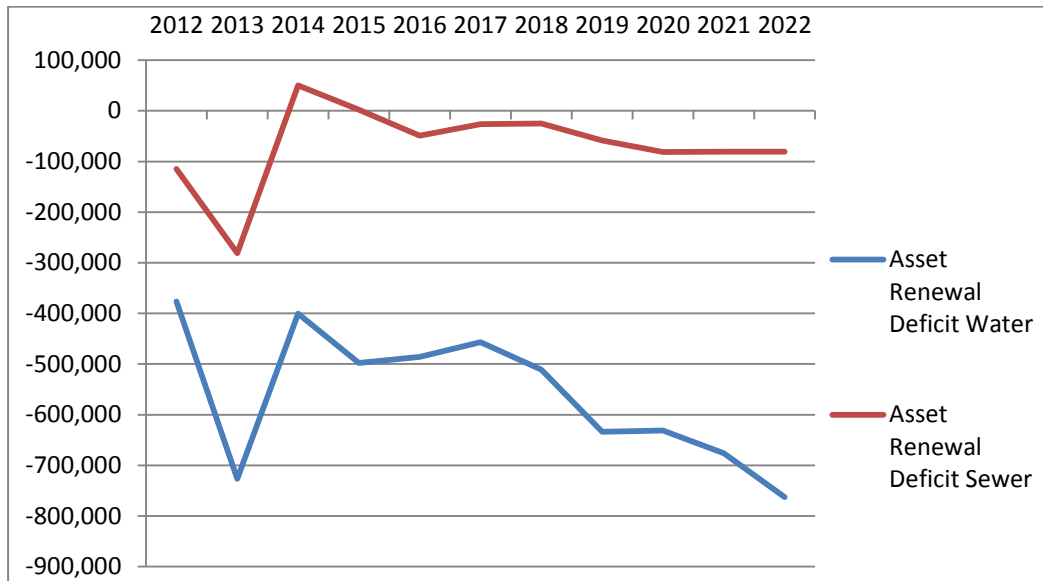


Chart 5.10.5 – Asset Renewal Deficit



The above charts indicate that Council’s current forecast renewal expenditure for its water supply network results in an average asset renewal ratio of 40% (sewer 80%), and a total asset renewal deficit of \$6.1m (sewer \$750k) over the life of the plan. Although most water and sewer assets have long useful lives, judging by the age profile used to arrive at Council’s condition ratings above, many of Council’s water and sewer assets are now coming towards the end of their useful lives. Given the ageing of these assets and the renewal ratios above, the current level of asset renewal expenditure appears to be unsustainable, although Council will be able to get a more detailed picture of the sustainability of the network once this year’s revaluation is complete.

Chart 5.10.6 – Asset Consumption Ratio

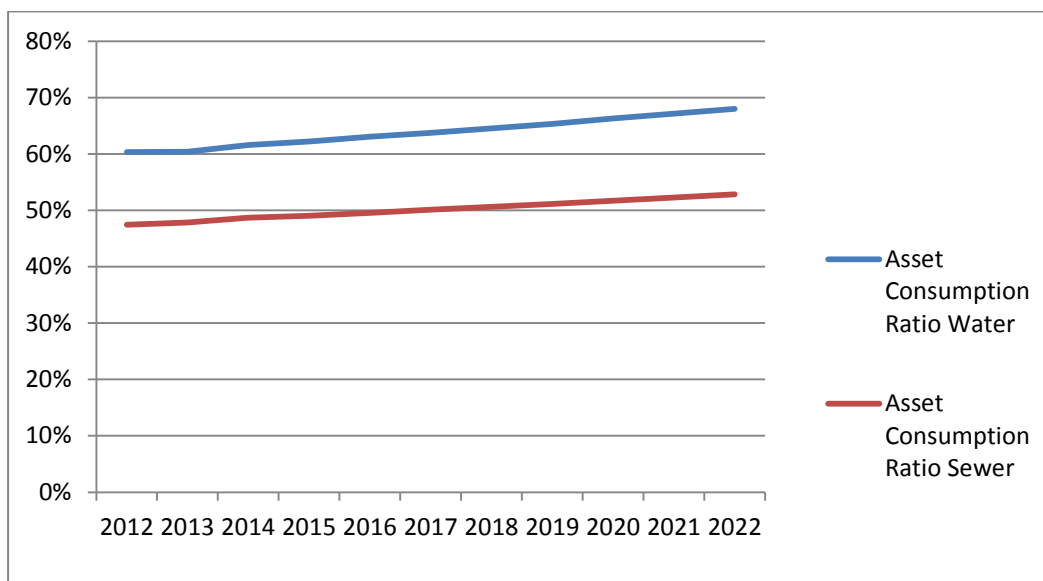
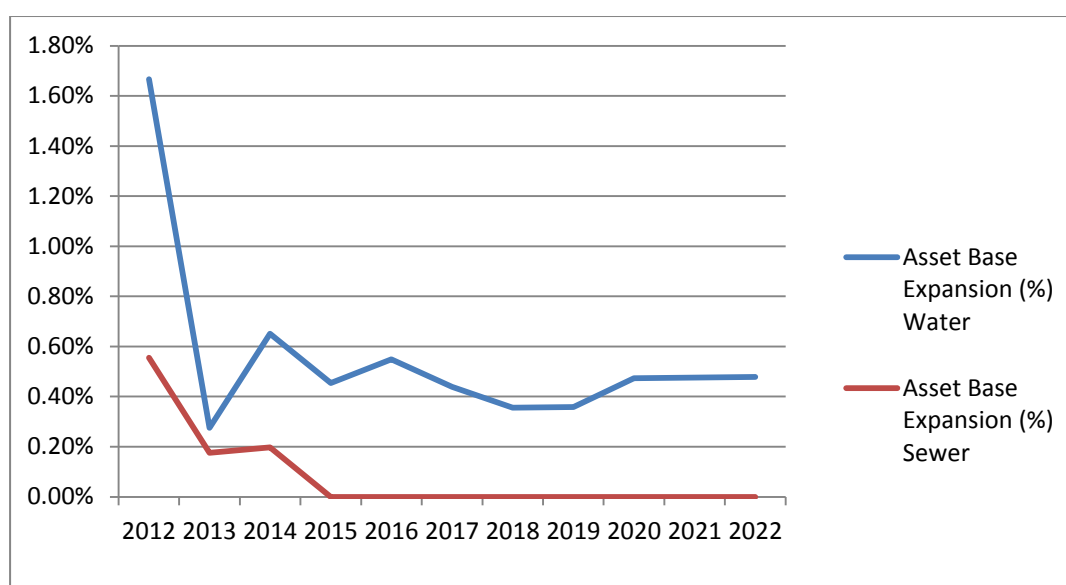


Chart 5.10.6 above indicates that Council’s current level of capital expenditure is insufficient to maintain the current level of service potential from its water and sewer assets. Over the life of the plan the consumption ratio for water increases from 60% to 68% while the ratio for the sewerage network increases from 47% to 53%. These figures indicate that Council has already consumed more than 50% of the network’s future service potential.

Chart 5.10.7 – Asset Expansion Ratio



The chart above indicates that Council is expending approximately 0.56% per annum on expanding the water network and only 0.08% on expanding the sewer network. This level of expansion is expected for an area with low population growth/population decline such as Warrumbungle Shire.

It should be noted that the expansion ratio above captures only capital expenditure within the 10 year capital plan and excludes wishlist items, one of which relates to the provision of sewerage services to Binnaway and Mendooran. If these wishlist items were to be incorporated into future capital programs the sewerage expansion ratio above would change significantly.

## 5.11 Land

As at 30 June 2011, Council controlled operational land valued at \$5.2m, community land valued at \$1.4m and land improvements valued at a written down replacement cost of \$660k. Council's operational land includes land associated with depots, swimming pools, aerodromes and other Council owned buildings; Council's community land generally includes parks and reserves; and land improvements include cemetery extensions, the Castreagh CMA project and irrigation and other park improvements. Council currently does not recognise land under roads in its balance sheet, and Council's land values were not affected by the recent review of Council's asset accounting assumptions.

All of Council's land assets excluding land improvements are deemed to have an unlimited useful life and are non-depreciable, and as a result, Council has not condition rated these assets. Council also only carries out recurrent maintenance expenditure on its non-depreciable land assets, for example, slashing parks, or maintaining trees and shrubs. Although land improvements are depreciable, Council has to date not condition rated these assets.

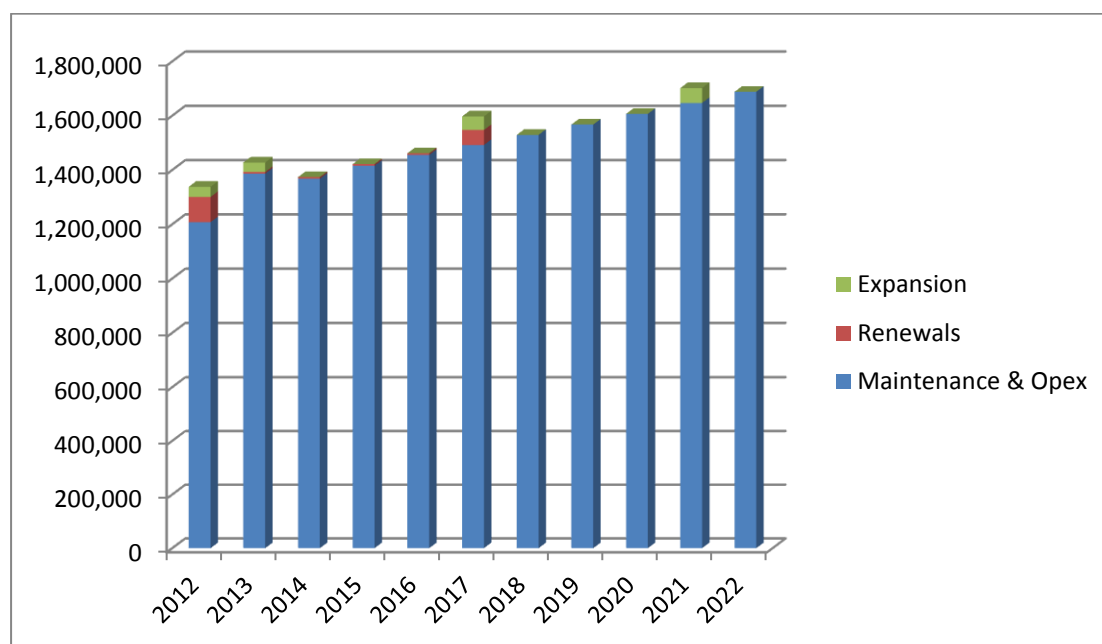
Council's projected expenditure on its land assets (including land improvements) over the next ten years are detailed in the following table:

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	1,207,551	93,000	37,147	1,337,698
2013	1,386,533	6,000	35,000	1,427,533
2014	1,367,609	6,000	-	1,373,609
2015	1,415,587	6,000	-	1,421,587
2016	1,455,540	6,000	-	1,461,540
2017	1,491,929	55,200	50,000	1,597,129
2018	1,529,227	-	-	1,529,227
2019	1,567,458	-	-	1,567,458
2020	1,606,644	-	-	1,606,644
2021	1,646,810	-	55,000	1,701,810
2022	1,687,980	-	-	1,687,980
<b>Total:</b>	<b>16,362,868</b>	<b>172,200</b>	<b>177,147</b>	<b>16,712,215</b>

The asset renewals expenditure above includes tree replacement, erosion control work and implementation of the creek rehabilitation strategy. The capital expansion expenditure above relates predominantly to cemetery expansion.

The figures in the table above are represented graphically below:

Chart 5.11.1 – Projected Expenditure Land



Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of Council’s land assets over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	7,617,277	(143,060)	7,474,217	(36,000)
2013	7,734,450	(181,483)	7,552,967	(36,992)
2014	7,817,794	(220,859)	7,596,936	(37,561)
2015	7,901,972	(261,033)	7,640,939	(37,966)
2016	7,986,992	(302,018)	7,684,974	(38,375)
2017	8,172,062	(343,826)	7,828,236	(38,787)
2018	8,253,782	(386,950)	7,866,832	(39,686)
2019	8,336,320	(430,903)	7,905,418	(40,083)
2020	8,419,683	(475,696)	7,943,988	(40,484)
2021	8,558,880	(521,341)	8,037,539	(40,889)
2022	8,644,469	(568,120)	8,076,350	(41,565)

Most of Council’s land assets are non-depreciable (excluding land improvements), and renewals expenditure relates mostly to tree replacement and erosion control. It should also be noted that depreciation estimates for land improvements have a lower level of confidence than those for road seal where there is sufficient data to arrive at a reasonable estimate of useful lives. Due to these factors analysis of asset renewal ratios and renewal deficits is less meaningful for this asset class.

Based on Council’s capital program and depreciation assumptions above, Council’s land improvements will have an average asset renewal ratio of 42% and a total renewal deficit of \$256k over the life of this plan. Council’s asset consumption ratio over the life of this plan



increases from 1% to 6% which indicates that Council is consuming a large part of the future service potential of its land improvements. Council's main asset expansion activity for land relates to the expansion of cemeteries, and Council's average asset expansion ratio over the plan is 0.2%.

## 5.12 Buildings (excluding structures)

As at 30 June 2011, Council controlled buildings valued at \$43.37m (\$38.11m post proposed accounting changes), including:

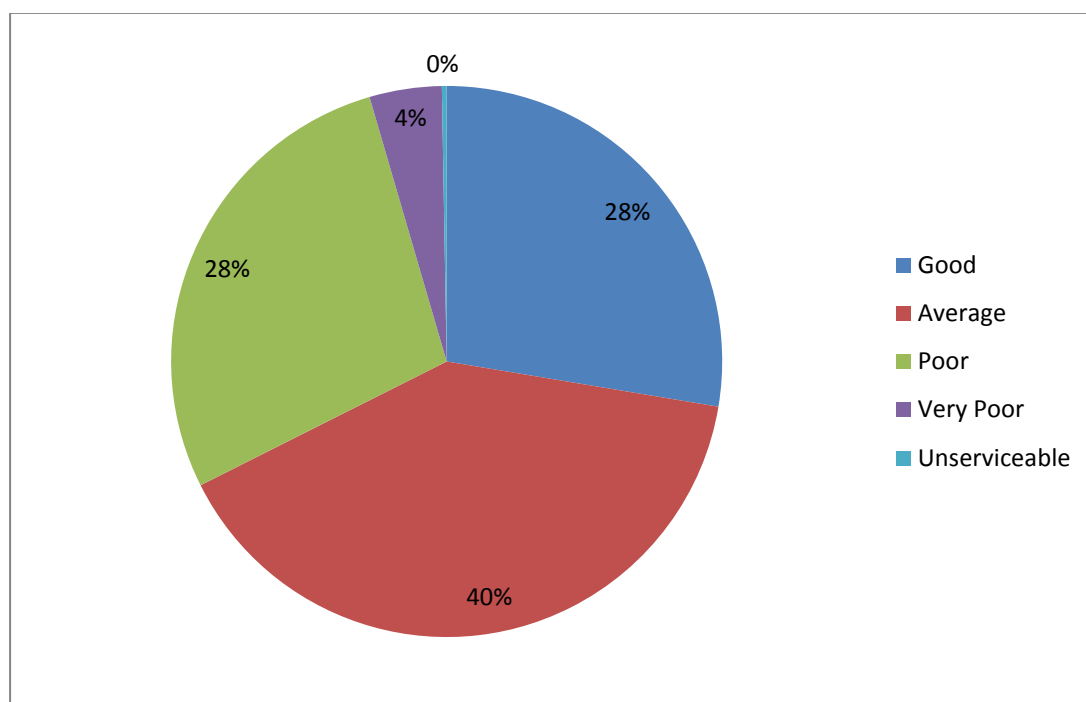
- Halls
- Council Office Buildings
- Council Residences
- Sheds
- Shade Structures
- Aerodrome Terminals
- Toilets
- Sporting facilities
- Medical Centres
- Child Care Buildings
- Horse Stalls
- Canteens

Buildings are used to provide many of the services mentioned in Part 1.2 of this plan, including recreation and community care services, and all other services provided from council offices. Council's buildings are Council's second most valuable asset class after roads.

### Condition Rating

An external consultant has recently condition rated all of Council's buildings. Condition rating has been on a component basis with components differing significantly in both value and condition rating. In order to arrive at a high level measure of the condition of Council's buildings, a weighted average (by asset value as opposed to count of components) approach has been taken for the purpose of this plan. This approach best reflects the future liability to Council if Council were to choose to expend funds to improve the current condition rating of its buildings. The results of Council's condition testing are detailed in the following table:

Chart 5.12.1 – Condition Rating – Buildings



## Valuation

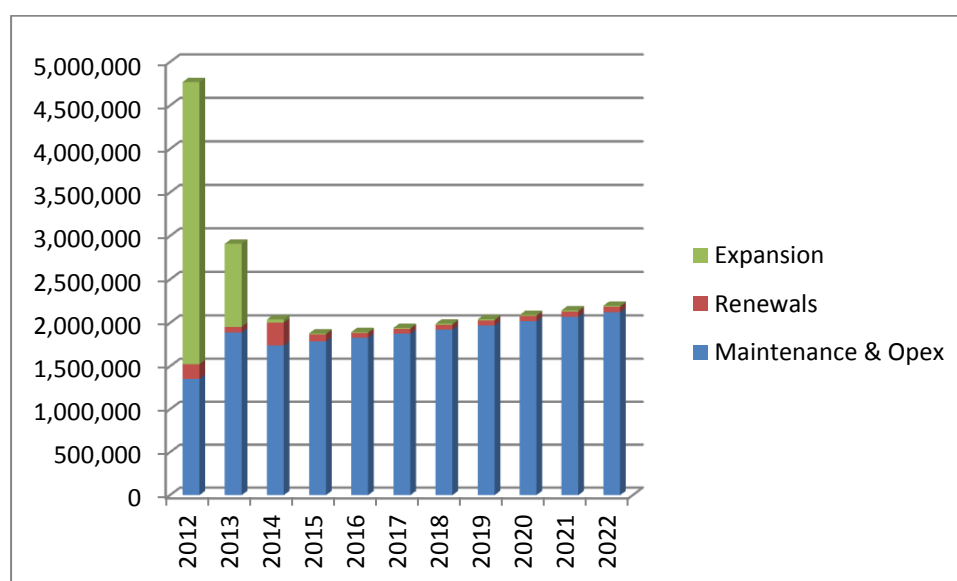
Council’s buildings are valued at depreciated replacement cost based on an external valuation by a qualified valuer.

Council is forecast to spend roughly \$1.872m per annum on the maintenance and operations of its buildings, and \$90k per annum on renewing its building assets over the life of this plan. Council is also forecast to spend \$4.3m on new buildings (capital expansion), including the Crane building (\$2.9m), and the Yuluwirri Kids building extension (\$870k), with the remainder consisting of expenditure on Council’s halls and depots. The future projected expenditure for buildings is detailed in the following table.

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	1,354,686	170,587	3,244,864	4,770,137
2013	1,891,132	64,600	955,000	2,910,732
2014	1,741,340	263,250	35,200	2,039,790
2015	1,787,815	82,531	10,600	1,880,946
2016	1,831,488	53,845	10,800	1,896,133
2017	1,877,275	55,191	11,000	1,943,466
2018	1,924,207	56,570	11,400	1,992,178
2019	1,972,312	57,985	11,600	2,041,897
2020	2,021,620	59,434	11,800	2,092,854
2021	2,072,161	60,920	12,200	2,145,281
2022	2,123,965	62,443	12,400	2,198,808
<b>Total:</b>	<b>20,598,001</b>	<b>987,356</b>	<b>4,326,864</b>	<b>25,912,221</b>

These figures are represented graphically below:

Chart 5.12.2 – Projected Expenditure – Buildings



It should be noted that the maintenance and operational expenditure figures above include all costs associated with running Council’s buildings including staffing costs, maintenance costs and electricity costs.

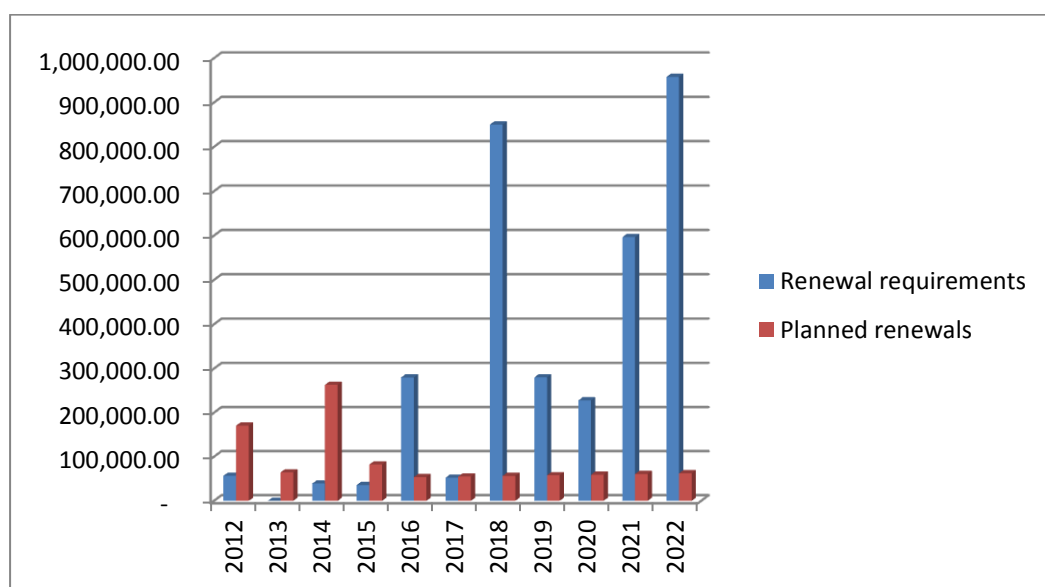
Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of Council’s buildings over the life of this plan are detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value (book value)	Annual Depreciation Expense
2012	55,572,861	(14,248,330)	41,324,531	(580,000)
2013	57,148,190	(15,014,336)	42,133,854	(623,523)
2014	58,018,122	(15,805,695)	42,212,426	(641,216)
2015	58,691,434	(16,614,298)	42,077,136	(650,546)
2016	59,342,993	(17,438,146)	41,904,847	(657,705)
2017	60,002,613	(18,274,407)	41,728,206	(661,880)
2018	60,670,610	(19,125,851)	41,544,759	(668,700)
2019	61,346,901	(19,983,761)	41,363,140	(666,652)
2020	62,031,604	(20,854,700)	41,176,904	(671,101)
2021	62,725,040	(21,739,476)	40,985,564	(676,230)
2022	63,427,134	(22,634,187)	40,792,946	(677,316)

### Ratios

As buildings have a long useful life, the use of annual depreciation as a proxy for renewal requirements may not be suitable over a ten year timeframe. Unlike other asset classes, Council has relatively detailed information on assumed remaining life for its building assets (as well as its swimming pools and other structures) from the 2010/11 buildings revaluation, and can roughly forecast its building renewal requirements over the following ten years.

Chart 5.12.3 – Renewal Requirements vs Planned Renewals

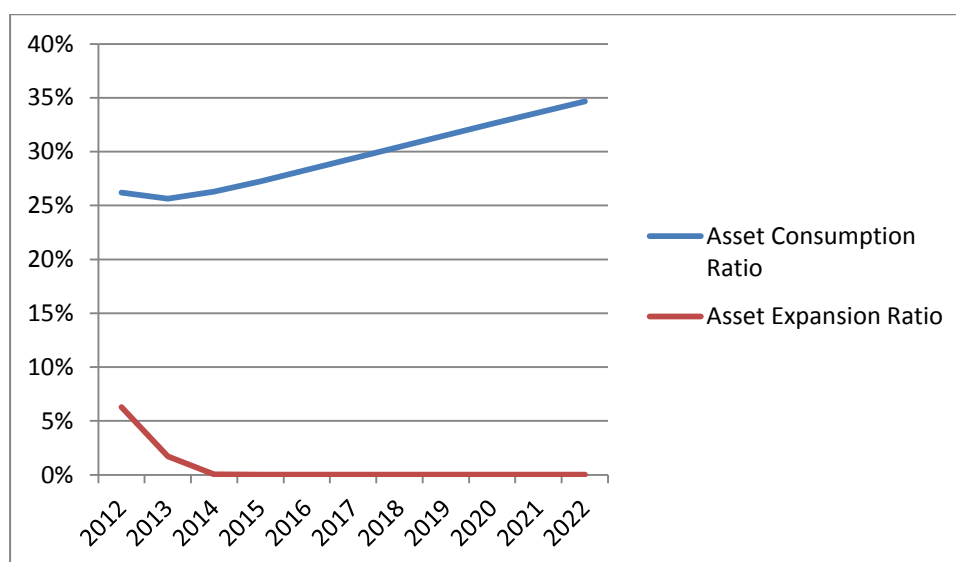


The chart above shows the expected renewal requirements versus planned renewal expenditure for Council's building assets over the life of the AMP. The chart shows total required renewals for Council's building assets of \$3.37m versus planned renewals of only \$837k which results in an asset renewal ratio of 25% and an asset renewal deficit of \$2.5m.

If Council used depreciation expense as a proxy to measure Council's renewal requirements (a better indicator of long term renewal requirements) Council's asset renewal ratio would be only 14% per annum. Council would also record a total asset renewal deficit over the timeframe of the AMP of \$6.18m (an average of \$562k per annum).

Based on the information above, Council's asset consumption ratio is forecast to increase from 26% in 2012 to 35% in 2022, although it does decrease slightly in the 2012 and 2013 financial years due to high capital expansion expenditure on the new Council building and Yuluwirri Kids building extensions (see chart below for details):

Chart 5.12.4 – Asset Consumption Ratio and Asset Expansion Ratio



## 5.13 Structures – Swimming Pools

Warrumbungle Shire Council is responsible for six public pools within the six towns of the Shire. Pools are complex assets that include a variety of components including the actual in-ground pool structure (the pool shell), fencing/gates, lighting, play equipment, tables and benches, seating areas, and paving. All these subcomponents are classified as structures and recorded as part of Council’s structures asset.

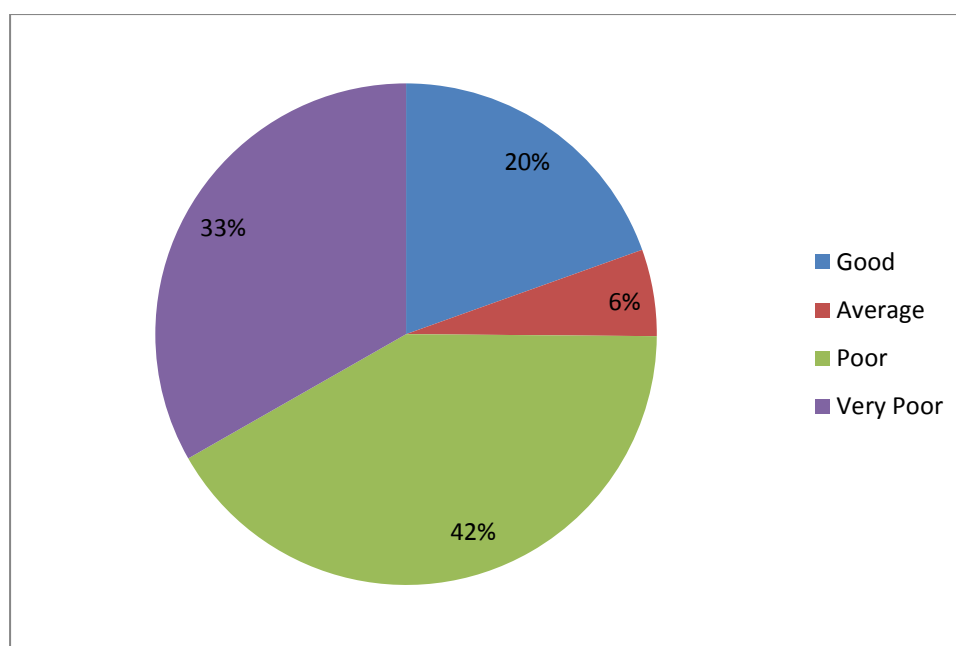
The total value of Council’s swimming pools (including all the components mentioned above) was \$2.815m as at 30 June 2011 (\$1.735m post proposed accounting adjustments). The major component of each of Council’s pools is the pool shell which comprises approximately 88% of the total replacement value of the Shire’s pools.

Although swimming pools represent only a small portion of the total value of Council’s assets they provide a valuable service to the community and have an importance to the community much higher than their book value would suggest.

### Condition Rating

An external consultant has recently condition rated all of Council’s swimming pools. Condition rating has been on a component basis with components differing significantly in both value and condition rating. In order to arrive at a high level measure of the condition of Council’s six pools, a weighted average (by asset value as opposed to count of components) approach has been taken for the purpose of this plan. This approach best reflects the future liability to Council if Council were to choose to expend funds to improve the current condition rating of its pools. The results of Council’s condition testing are detailed in the following table:

Chart 5.13.1 – Condition Rating – Swimming Pools



The diagram above indicates that 33% of Council’s pool assets are currently in very poor condition, with 75% of pool components (by value) rated as poor or worse. The major components listed as very poor are the pool structures in Binnaway and Baradine.

### Valuation

Council’s pools are valued at depreciated replacement cost based on the following assumptions (note assumptions vary by component):

Assumption	Value
Fencing, Lighting etc. Useful Life	15-20 yrs
Paving and Laneways Useful Life	70 yrs
Pool Structures and Play Equipment Useful Life	35 yrs
Fencing, Lighting Residual Value - Lighting 30% other 0%	0-30%
Paving and Laneways Residual Value	30%
Pool Structures and Play Equipment Residual Value	10%
Replacement Cost Varies by Component and Individual Asset	Various

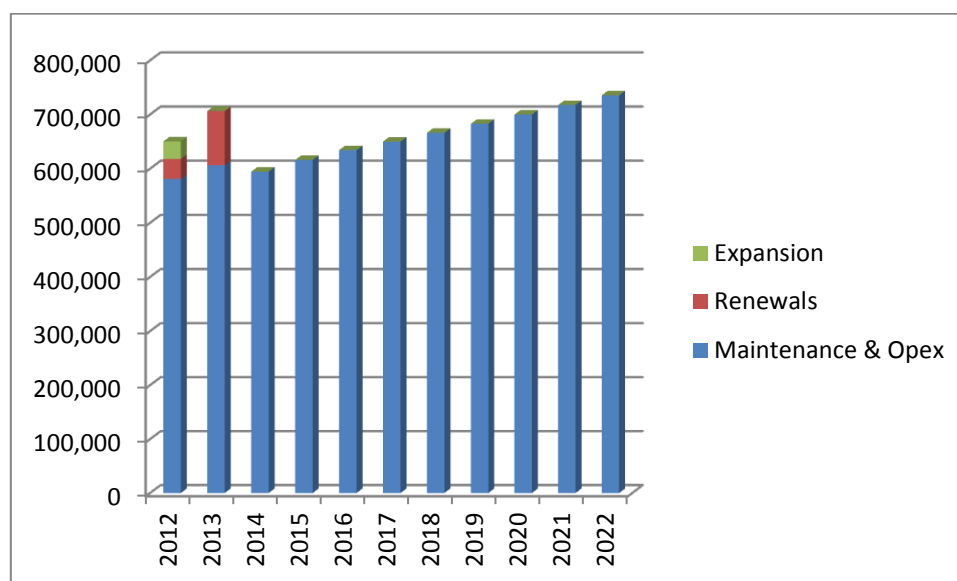
Council’s swimming pools were recently revalued along with Council’s buildings and other structures) by a qualified valuer as part of the 2010/11 buildings revaluation.

Council is forecast to spend an average of \$652k per annum on the maintenance and operations of its pools. Council also plans to spend \$169k on capital expenditure on pools over the period of this Asset Management Plan. The majority of this capital expenditure (\$100k) will be on replacing underground pipes and the concrete walkway around the Baradine pool. The future projected expenditure for pools is detailed in the following table.

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	580,842	37,000	32,240	650,082
2013	606,345	100,000	-	706,345
2014	594,448	-	-	594,448
2015	615,943	-	-	615,943
2016	634,014	-	-	634,014
2017	649,865	-	-	649,865
2018	666,111	-	-	666,111
2019	682,764	-	-	682,764
2020	699,833	-	-	699,833
2021	717,329	-	-	717,329
2022	735,262	-	-	735,262
<b>Total:</b>	<b>7,182,756</b>	<b>137,000</b>	<b>32,240</b>	<b>7,351,996</b>

These figures are represented graphically below:

Chart 5.13.2 – Projected Expenditure – Swimming Pools



It should be noted that maintenance and operational expenditure includes all costs associated with running Council’s pools including staffing costs to run the facilities, water costs etc. Council’s pools are forecast to earn Council revenue of \$66.6k in the 2012/13 financial year, which means even before capital expenditure Council is subsidising the provision of pools to the community by roughly \$600k per annum.

Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of pools over the life of this plan is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	4,644,540	(2,961,950)	1,682,590	(139,000)
2013	4,790,985	(3,134,084)	1,656,901	(142,515)
2014	4,838,895	(3,312,433)	1,526,462	(147,008)
2015	4,887,284	(3,493,581)	1,393,703	(148,024)
2016	4,936,157	(3,678,026)	1,258,131	(149,509)
2017	4,985,519	(3,865,815)	1,119,704	(151,008)
2018	5,035,374	(4,014,847)	1,020,527	(110,375)
2019	5,085,728	(4,166,900)	918,827	(111,904)
2020	5,136,585	(4,322,019)	814,566	(113,449)
2021	5,187,951	(4,424,927)	763,024	(59,688)
2022	5,239,830	(4,530,440)	709,390	(61,264)

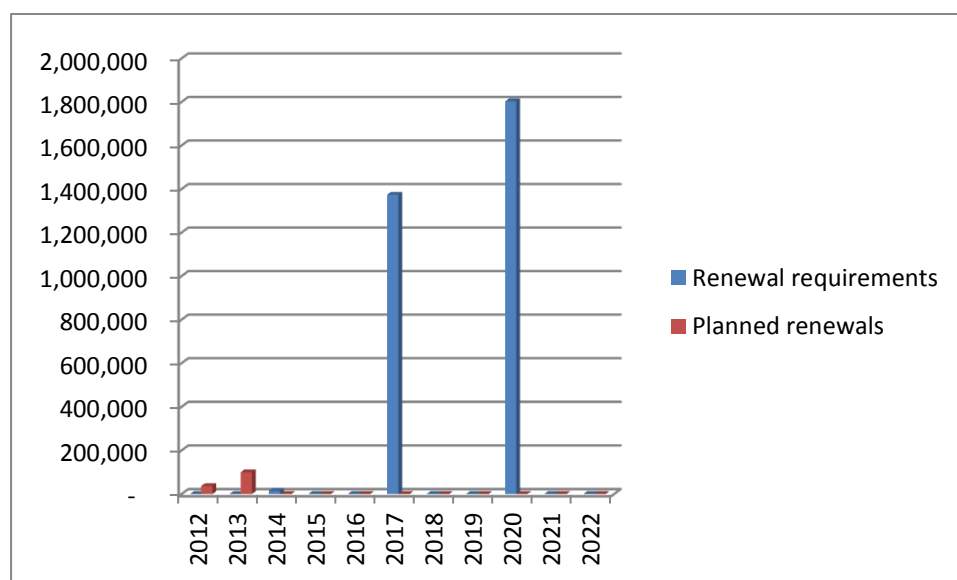
## Ratios

Unlike other asset classes, Council has relatively detailed information on assumed remaining life for its buildings, pools and structures assets from the 2010/11 buildings revaluation, and can roughly forecast its pools renewal requirements over the following ten years. The



following chart shows the expected renewal requirements versus planned renewal expenditure for Council’s swimming pools over the life time of the AMP:

Chart 5.13.3 – Renewal Requirements vs Planned Renewals



The chart above shows total required renewals for Council’s swimming pools of \$3.19m versus planned renewals of only \$137k which results in an asset renewal ratio of 4% and an asset renewal deficit of \$3.054m.

The assets requiring renewal over the following ten years include the following major pool components as well as an additional \$339k worth of minor components:

Pool Component	Year Requiring Renewal	Estimated Replacement Cost per Asset Register
Main Pool Structure Baradine	2017	\$525,842
Main Pool Structure Binnaway	2017	\$402,114
Diving Pool Structure Binnaway	2017	\$189,028
Toddlers Pool Structure Baradine	2017	\$66,813
Wading Pool Structure Coolah	2017	\$63,556
Main Pool Structure Coonabarabran	2020	\$663,179
Main Pool Structure Dunedoo	2020	\$625,511
Main Pool Structure Mendooran	2020	\$316,193

If Council were to use depreciation expense as a proxy to measure Council’s renewal requirements (a better indicator of long term renewal requirements) Council’s asset renewal ratio for its pools would be less than 8.8% per annum. Council would also record a total asset renewal deficit over the timeframe of the AMP of \$1.2m (an average of \$108k per annum).

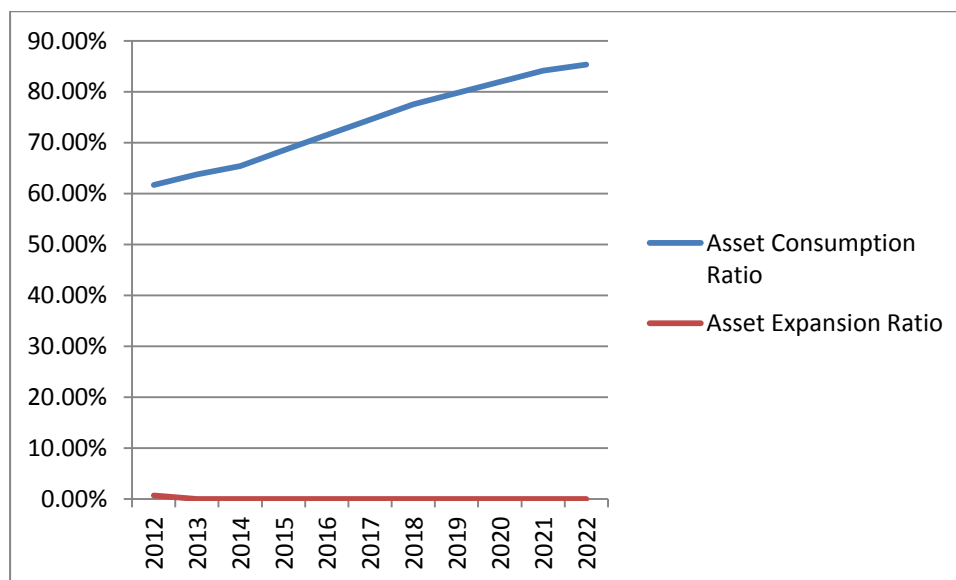
As most of Council’s pools are now reaching the end of their useful life, the first measure of an asset renewal deficit of \$3.19m is the more accurate figure, although even this figure which is based on a professional valuation may not capture the full cost to Council to renew these assets.

Council is currently exploring funding options to renew Council’s pools and has increased maintenance funding in future year budgets, and will also be reviewing its pools related capital budget in the 2012/13 financial year.

The final chart below shows the asset consumption ratio of Council’s pools increasing from under 62% to roughly 85% as a result of Council under spending on asset renewals. The asset consumption ratio in the chart below shows that if Council does not spend on the renewal of its pools five out of six of Council’s pools will most likely reach the end of their useful life over the following ten years and may need to be closed.

During the life of this plan Council is forecast to only spend \$32k on asset expansion across its network of pools, resulting in an asset base expansion ratio close to zero. It should be noted that a low asset expansion figure is not an issue for LGAs like Warrumbungle Shire with projected low/negative population growth.

Chart 5.13.4 – Asset Consumption Ratio and Asset Expansion Ratio



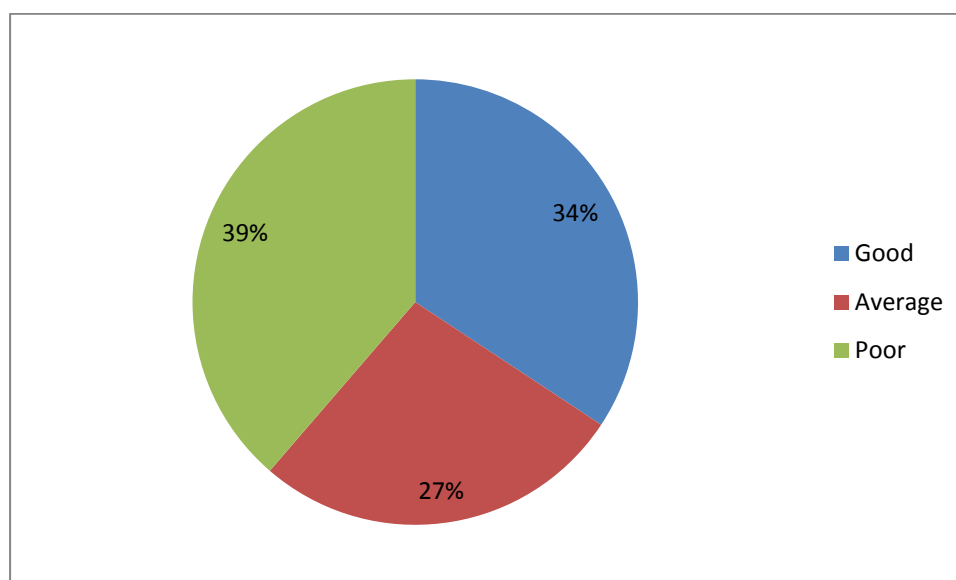
## 5.14 Structures – Other

In addition to swimming pools, Council also controls and maintains various other structures such as fencing around parks, play equipment and benches, tanks and tank stands, lighting structures and sporting facilities. As at 30 June 2011 the total value of Council’s other structures excluding pools was \$5.393m (\$3.981m post proposed accounting adjustments).

### Condition Rating

An external consultant has recently condition rated all of Council’s structures. As Council controls a wide range of structures all with vastly differing replacement costs, condition rating percentages below are based on a weighted average (by asset value). This approach best reflects the future liability to Council if Council were to choose to expend funds to improve the current condition rating of the various structures under its control. The results of Council’s condition testing are detailed in the following table:

Chart 5.14.1 – Condition Rating – Structures



As can be seen from the chart above, roughly 40% of Council’s structures are currently in poor condition, and many of Council’s structures are now coming to the end of their useful life.

### Valuation

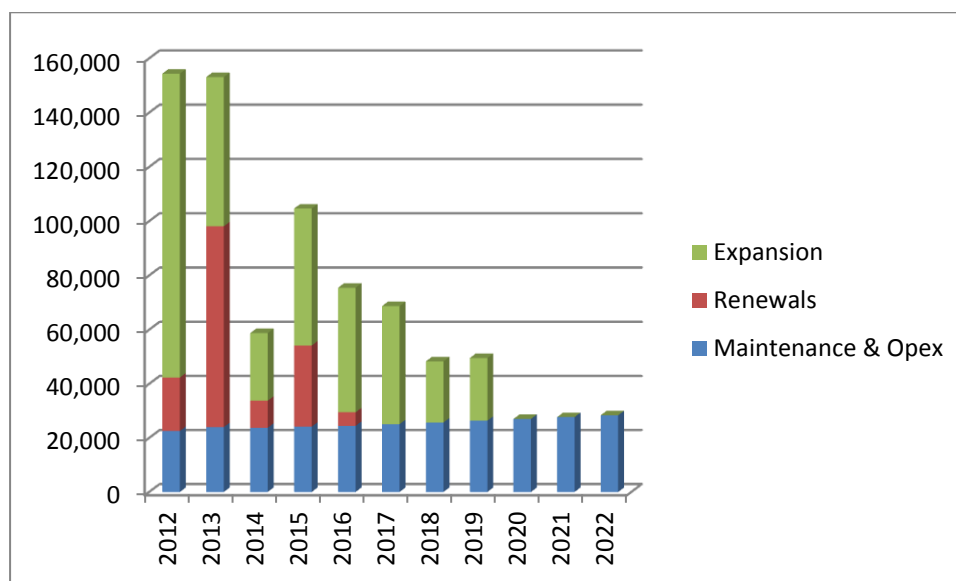
As with buildings and swimming pools, Council’s structures are valued at depreciated replacement cost based on an external valuation by a qualified valuer.

Council is forecast to spend roughly \$25k per annum on the maintenance and operations of its structures, and \$12.6k per annum on renewing these assets. Council is also forecast to spend \$377k on new structures including town and village signs and other new structures within parks. The future projected expenditure for structures is detailed in the following table.

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	22,550	19,800	112,000	154,350
2013	24,011	74,100	55,000	153,111
2014	23,756	10,000	25,000	58,756
2015	24,150	30,000	50,500	104,650
2016	24,476	5,000	46,000	75,476
2017	25,088	-	43,600	68,688
2018	25,716	-	22,600	48,316
2019	26,358	-	23,200	49,558
2020	27,017	-	-	27,017
2021	27,693	-	-	27,693
2022	28,385	-	-	28,385
<b>Total:</b>	<b>279,202</b>	<b>138,900</b>	<b>377,900</b>	<b>796,002</b>

These figures are represented graphically below:

Chart 5.14.2 – Projected Expenditure – Structures



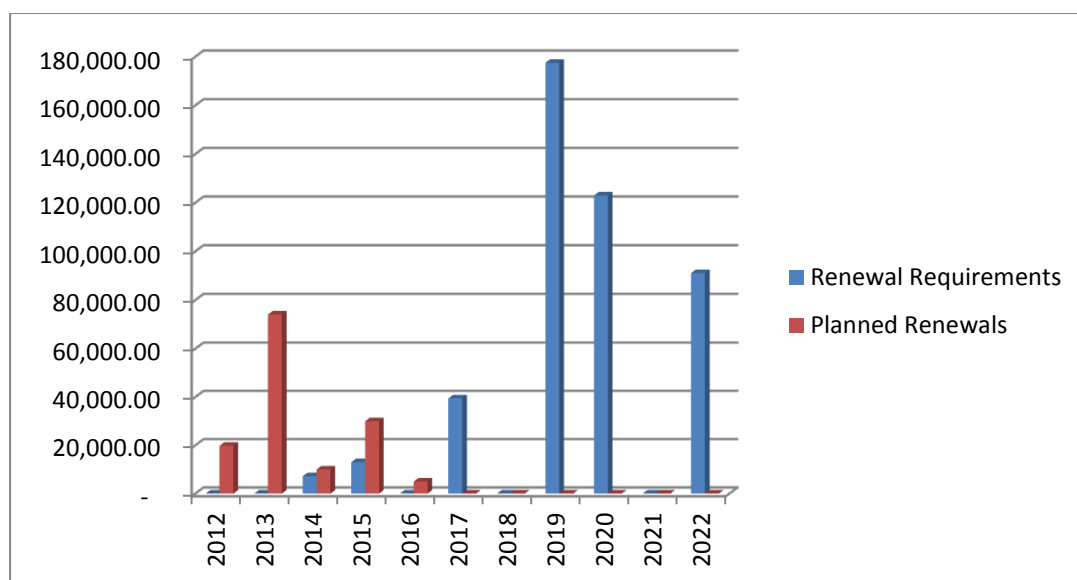
Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of Council’s buildings over the life of this plan are detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	7,014,950	(3,115,340)	3,899,610	(253,000)
2013	7,214,200	(3,406,916)	3,807,283	(260,423)
2014	7,321,341	(3,708,805)	3,612,536	(267,820)
2015	7,475,055	(4,017,423)	3,457,632	(271,529)
2016	7,600,805	(4,334,349)	3,266,457	(276,752)
2017	7,720,414	(4,659,112)	3,061,301	(281,420)
2018	7,820,218	(4,990,098)	2,830,120	(284,395)
2019	7,921,620	(5,328,099)	2,593,521	(288,100)
2020	8,000,836	(5,666,653)	2,334,183	(285,273)
2021	8,080,844	(6,006,967)	2,073,877	(283,647)
2022	8,161,653	(6,353,654)	1,807,998	(286,618)

### Ratios

Unlike other asset classes, Council has relatively detailed information on assumed remaining life for its buildings, pools and structures assets from the 2010/11 buildings revaluation, and can roughly forecast its structures renewal requirements over the following ten years. The following chart shows the expected renewal requirements versus planned renewal expenditure for Council’s structures over the life of the AMP:

Chart 5.14.3 – Renewal Requirements vs Planned Renewals

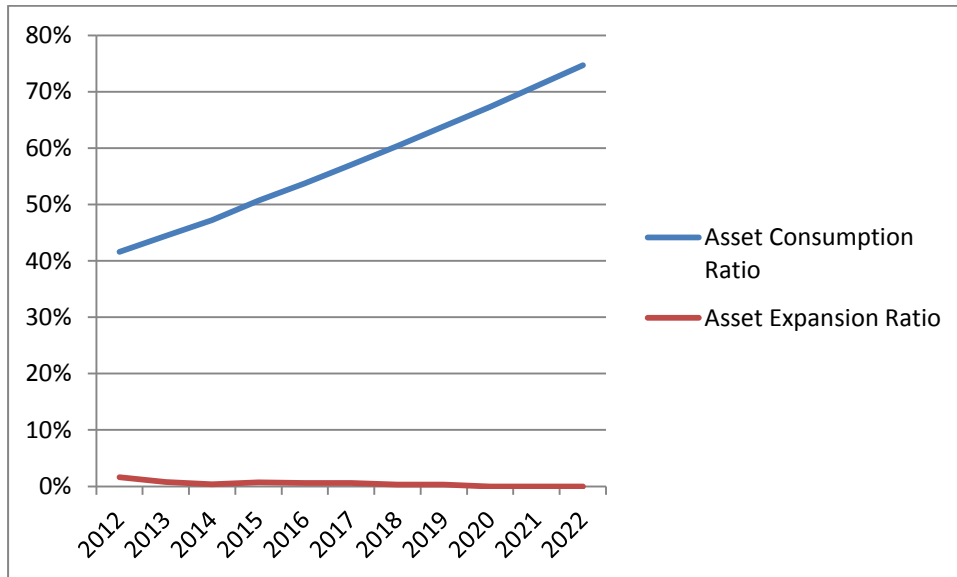


The chart above shows total renewal requirements over the timeframe of the AMP of \$451k. During this period Council has only planned for \$139k of capital renewals which results in an asset renewal ratio of 31% and an asset renewal deficit of \$312k.

If Council were to use depreciation expense as a proxy for Council’s renewal requirements Council’s asset renewal ratio would be 4.8% per annum. This would result in a total asset renewal deficit over the timeframe of the AMP of \$2.9m (an average of \$263k per annum).

Council’s asset consumption ratio for structures is forecast to increase from 42% in 2012 to 73% in 2022, and Council’s asset expansion ratio is forecast to average 0.48% over the life of the plan (see chart below for details):

Chart 5.14.4 – Asset Consumption Ratio and Asset Expansion Ratio



## 5.15 Operating Assets

Operating assets are the often unseen assets that council uses to maintain/expand its infrastructure base, and to conduct its day to day operations. Operating assets include plant and equipment such as backhoes and utes, office equipment (e.g. photocopiers etc), and furniture, fixtures and fittings.

Operating assets are the least valuable of Council’s assets but are still critical to Council’s operations, in that they are used by Council to both construct/maintain Council’s infrastructure assets and in the provision of the many services Council provides to the residents of the shire. As at 30 June 2011, the various subcategories of operating assets were valued at:

Asset Type	Replacement Cost	Accumulated Depreciation	Depreciation Expense	WDV
Plant and Equipment	22,719	12,193	2,072	10,526
Office Equipment	1,644	1,506	58	138
Furniture and Fittings	536	419	28	117
WIP	1,381	-	-	1,381
<b>Total Operating Assets:</b>	<b>26,280</b>	<b>14,118</b>	<b>2,158</b>	<b>12,162</b>

Operating asset values have not been affected by Council’s recent review of its asset assumptions.

Due to the low value, high number and high turnover of operating assets, Council has not deemed it necessary to condition test its various operating assets.

### Valuation

The estimated asset renewal, capital expansion and maintenance expenditure going forward for operating assets is detailed in the following table.

Fin Year	Maintenance & Operations Expenditure	Asset Renewal	Capital Expansion	Total Expenditure
2012	80,500	3,015,266	35,000	3,130,766
2013	329,417	2,091,585	3,000	2,424,002
2014	323,014	2,584,248	-	2,907,261
2015	329,844	2,653,813	-	2,983,657
2016	336,820	2,723,635	-	3,060,455
2017	345,241	2,156,306	-	2,501,547
2018	353,872	2,801,941	-	3,155,813
2019	362,719	3,350,147	-	3,712,865
2020	371,786	2,765,941	-	3,137,728
2021	381,081	2,648,901	-	3,029,983
2022	390,608	3,199,818	-	3,590,426
<b>Total:</b>	<b>3,604,902</b>	<b>29,991,601</b>	<b>38,000</b>	<b>33,634,503</b>

It should be noted that asset renewals generally relate to the replacement of vehicles by Council, and the two capital items in the table above relate to projectors, cabling and other new IT equipment. Asset renewal figures for vehicles are net trade in, which means the true cost Council pays for the asset from a financial accounting perspective is roughly \$1.5m higher. Council’s internal capital plan uses the net trade in figure. Adjustments have been made in Part 7.4 of this plan to capture the true CAPEX figure from a financial accounting perspective for Council’s LTFP and financial reporting purposes.

The maintenance and operations expenditure figures above relate only to repair of minor equipment and repair of RFS brigade vehicles. All repair costs associated with Council’s fleet business are charged out to the various sections of the business and these plant associated maintenance costs have already been picked up in road maintenance, road capital works etc. To avoid double counting of Council’s asset related maintenance/capital expenditure, the cost associated with maintaining Council’s vehicles has therefore been excluded.

As opposed to infrastructure assets all operating assets are valued at historical cost (i.e. the cost Council paid to purchase the asset). Projections of the estimated replacement cost, accumulated depreciation, depreciation expense and book value of plant and equipment over the next 10 years is detailed in the following table:

Fin Year	Estimated Replacement Cost	Accumulated Depreciation	Written Down Value	Annual Depreciation Expense
2012	28,716,066	(15,232,180)	13,483,886	(2,158,000)
2013	30,350,812	(16,733,541)	13,617,271	(2,358,039)
2014	32,273,567	(18,086,154)	14,187,413	(2,492,277)
2015	34,386,115	(19,749,181)	14,636,934	(2,650,166)
2016	36,472,612	(21,441,312)	15,031,299	(2,823,639)
2017	38,155,644	(23,515,699)	14,639,946	(2,994,973)
2018	40,153,142	(25,278,032)	14,875,109	(3,133,177)
2019	42,915,820	(27,491,015)	15,424,805	(3,297,202)
2020	45,080,919	(29,895,987)	15,184,933	(3,524,062)
2021	47,198,630	(32,567,797)	14,630,833	(3,701,850)
2022	49,767,434	(35,278,222)	14,489,212	(3,875,747)

In order to calculate whether current renewals expenditure for Council’s operating assets is sufficient, Council must use the financial accounting capital expenditure figure for vehicles when comparing renewals against depreciation expenditure. Details of Council’s asset renewals figure for operating assets excluding trade in amounts is detailed in the table below (note: figures are in \$’000):

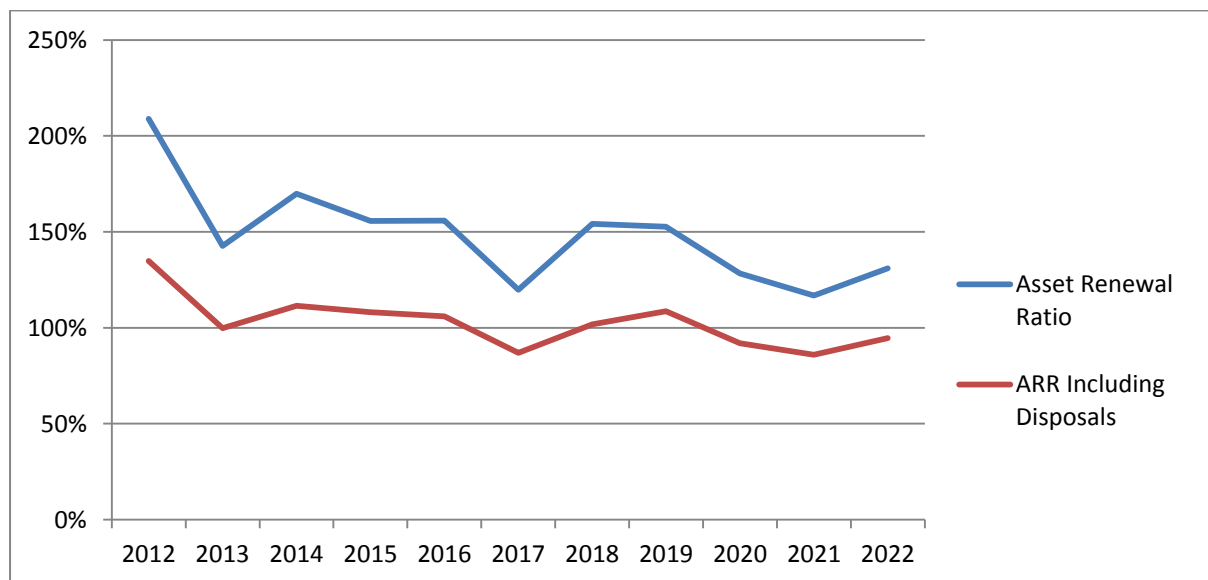
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Renewals	4,508	3,363	4,233	4,126	4,401	3,588	4,828	5,035	4,524	4,325	5,079
Depreciation	2,158	2,358	2,492	2,650	2,824	2,995	3,133	3,297	3,524	3,702	3,876



### Ratios

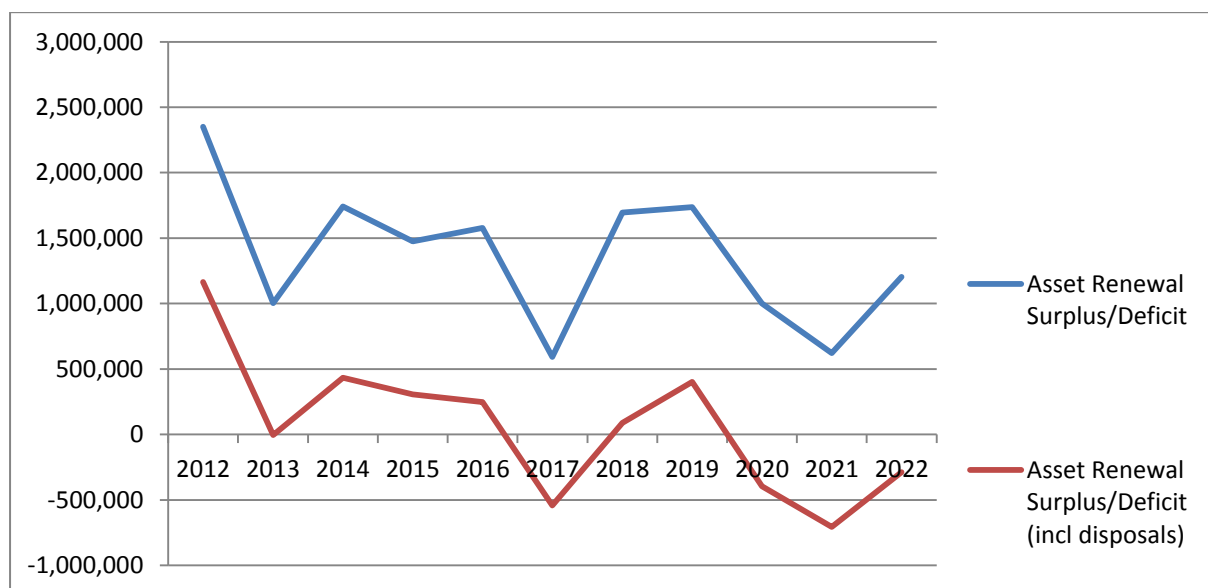
The information in the tables above has been used to benchmark Council’s performance for this asset class against three asset management KPIs. The results of this benchmarking exercise are detailed in the following charts:

Chart 5.15.1 – Asset Renewal Ratio



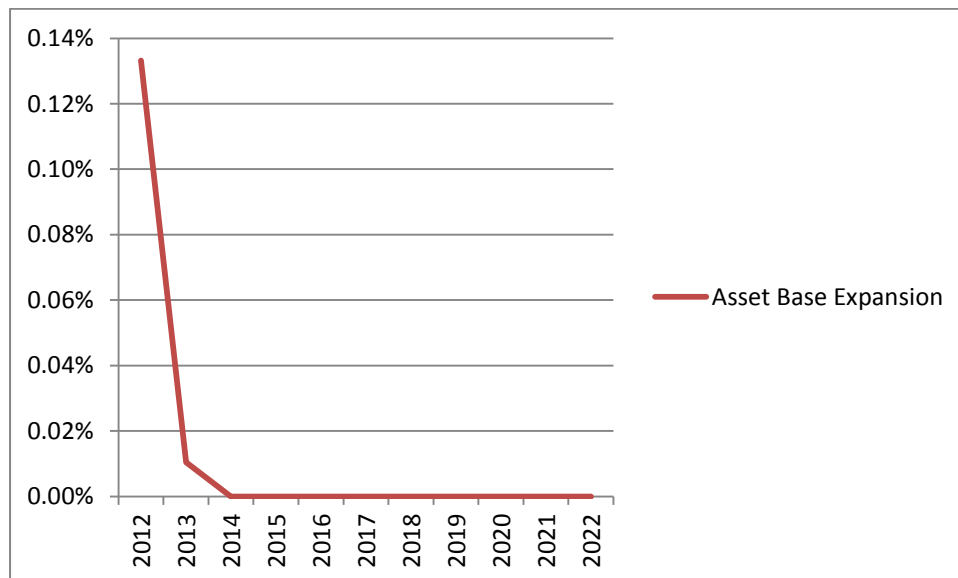
The chart above indicates that Council is currently achieving a greater than 100% level of asset renewals, even when disposals are included with depreciation expenditure in the base of the calculations.

Chart 5.15.2 – Asset Renewal Deficit



Council’s current asset renewals expenditure is more than sufficient to offset depreciation over the next ten years (assuming depreciation calculations are correct) and results in a surplus of roughly \$712k over the life of the plan even when disposals are included.

Chart 5.15.3 – Asset Base Expansion



Council’s level of asset base expansion for its property plant and equipment assets is very low according to the above chart, however, capital expansion may be understated due to the classification of all vehicle/plant purchases being treated as renewals even though some purchases may actually be capital expansion, for example the purchase of additional vehicles for managers in new positions.

## 5.16 Quarry Assets

Quarry assets are reinstatement, restoration and rehabilitation assets relating to quarries that Council uses to obtain gravel for road works (generally on private properties) and is required to restore to their original condition at the end of the quarry's useful life. As per the requirements of the accounting standards, as Council is required to restore/rehabilitate these quarries, Council must recognise a liability in its books (a restoration provision) for the future cost to Council to restore each quarry. Council must also recognise the net present value of this future restoration cost as an asset.

Council's quarry assets were valued at a written down value of \$712k as at 30 June 2011. The value of Council's quarry assets is calculated by first estimating the cost to rehabilitate a quarry (per hectare). The cost to rehabilitate a quarry includes:

- The cost of benching of walls and disturbed areas including the use of heavy machinery and employee costs for excavation and earthmoving;
- The cost of topsoil supply and distribution/shaping;
- Costs related to revegetation of the site and fencing.

The inputs used for these activities include one grader, one loader, three trucks, one excavator and one taxi. The daily rate for this work as at 2010 was \$4,398 per Council's engineering estimates, and it is estimated that Council can rehabilitate one hectare of quarry in two days.

The value of Council's quarry assets has not been affected by Council's recent review of its asset assumptions. Council currently captures adequate information on its quarry assets, and the presence of a remediation liability in its books fairly measures the future outgoings required by Council to restore the quarries it currently uses. It should be noted that Council does not currently hold restricted cash in relation to its quarry restoration liabilities. Council should investigate whether the use of a restricted asset to hold funds for future restoration works is appropriate although it should be noted that the value of these liabilities is quite low.

## Part 6: Asset Risk Management and Critical Assets

The International Infrastructure Management Manual defines critical assets as assets that have a high consequence of failure, but not necessarily a high probability of failure. Critical assets are also defined in this manual as those assets that are most important for the delivery of required service and/or have the highest consequence of failure. By identifying critical assets and critical failure modes, Council can target and refine investigative activities, maintenance plans and capital expenditure plans at the critical areas.

The simple approach to assessing Council’s critical assets is to provide broad assumptions regarding the implication of failure. Council has conducted a high level analysis of its critical assets classes via this methodology, and has identified the following critical asset classes under Council’s control: the regional road network, several specific local roads, bridges and causeways, and the water and sewerage networks. Details of each critical asset class can be found in the table below:

Critical Asset	Reason Asset is Critical	Risk Management Processes Associated with Asset
Regional Road Network	The regional road network provides transport to major centres within and outside the Shire, and any breakdown in service on the network would cause loss of income to local businesses (including the inability of farmers to get products to market), and severe inconvenience to the residents of the Shire.	Constant maintenance, capital renewals and assessment of the condition of the network.
Critical Local Roads	As per the regional road network, except through traffic on only some local roads would result in a similar impact as similar issues on the regional road network.	As per the regional road network.
Bridges and Causeways	The failure of bridges and causeways (say due to flooding) can stop through traffic on the road network and cause loss of income to local businesses (including the inability of farmers to get products to market), and severe inconvenience to the residents of the Shire.	Constant maintenance of bridges/causeways to ensure structural integrity and gradual replacement of causeways with bridges.
Water and Sewerage Network	There are significant health and sanitation impacts from the failure of Council’s water and sewerage network, for example the recent boiled water alert for Mendooran.	Constant monitoring and testing of water quality and maintenance of the water and sewerage network.  Timely repairs of problems identified within the network.

Going forward Council will need to conduct a more in-depth analysis of its asset base and identify individual assets within asset classes that meet the definition of a critical asset. The buildings asset class for example, has not been identified as a critical asset to Council, however, there are individual buildings that are critical to both the community and Council’s operations such as Council’s office buildings.

Certain bridges within the bridge asset class may also not meet the definition of a critical asset due to low traffic volumes, and there may be crucial culverts and drainage assets within the network which would not be captured as critical assets in the current analysis due to their asset class, but are nonetheless critical to Council and the community.

Certain assets (and asset classes) not mentioned above can also fall into the definition of a critical asset due to the consequence of their failure. Council’s public pools for instance, which although not critical to Council’s service provision could become critical due to the consequences of failure of part of the asset. An example of this would be a pool fence that was broken and resulted in the death of a child from drowning.

In managing risks associated with Council’s assets Council must identify risks, evaluate these risks and apply a risk management matrix that assesses both the probability and consequence of failure. A simple example of such a matrix can be found below:

Chart 6.1 – Example of a simple risk matrix model

**Simple Risk Matrix**

	Consequences		
Likelihood	Minor	Moderate	Major
Likely			
Possible			
Unlikely			

**Risk Treatment Key**

Intolerable Risk Level. Immediate action required
Tolerable Risk Level. Risks must be reduced so far as is practicable.
Broadly Acceptable Risk Level. Monitor and further reduce where practicable.

Risk management is critical to Council’s business and will need to be dealt with in detail in a separate plan. Going forward Council must improve its identification of critical assets through the use of a more scientific approach that both identifies the impact to Council and the community of the failure of a particular asset, and identifies risks associated with these assets and mitigation strategies to be put into place by Council. Strategies to deal with critical assets will need to be tied into Council’s risk management plan.

## Part 7: Financial Summary

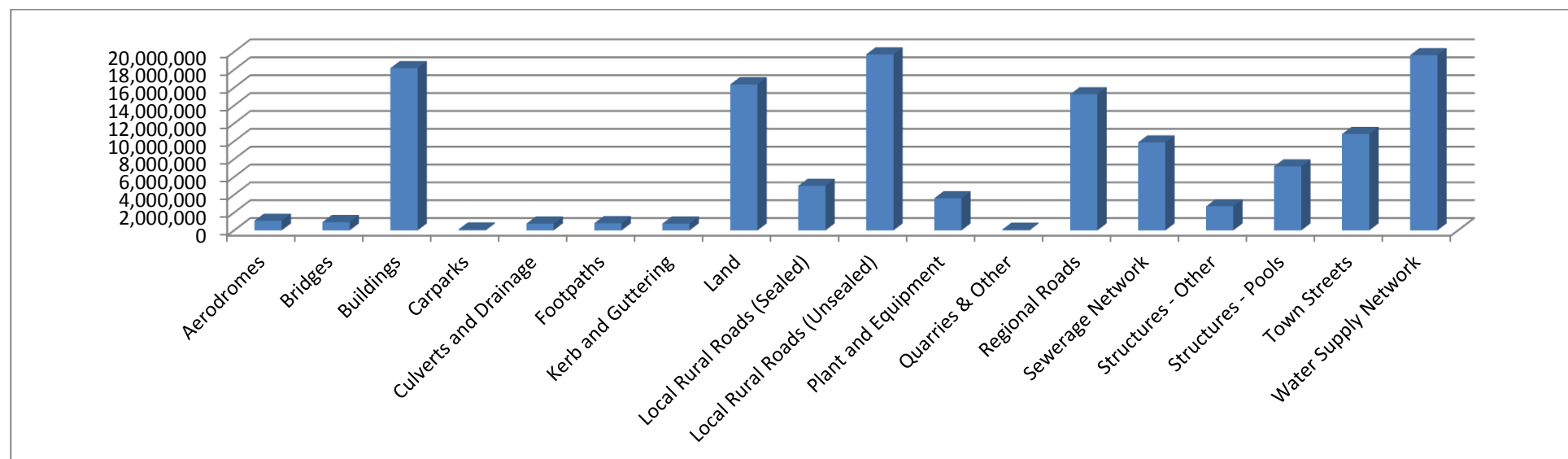
Council’s routine operations and maintenance, asset renewals, and asset expansion figures found in part 5 of this plan by asset class are summarised in the following tables. Also included in this section of the plan is a copy of Council’s ten year capital program, and an asset movement schedule which details asset movements (for all of Council’s asset classes) over the life of this plan.

### 7.1 Routine Operations and Maintenance Plan

Asset Type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aerodromes	88,175	91,710	89,809	92,842	95,346	97,730	100,173	102,677	105,244	107,875	110,572
Bridges	76,980	79,127	77,390	79,932	82,089	84,142	86,245	88,401	90,611	92,877	95,199
Buildings	1,354,686	1,891,132	1,741,340	1,787,815	1,831,488	1,877,275	1,924,207	1,972,312	2,021,620	2,072,160	2,123,965
Carparks	10,000	8,724	8,638	8,899	9,145	9,374	9,608	9,848	10,094	10,347	10,605
Culverts and Drainage	62,500	64,252	62,884	65,124	66,927	68,600	70,315	72,073	73,875	75,722	77,615
Footpaths	67,000	68,960	67,515	70,012	71,974	73,774	75,618	77,509	79,446	81,432	83,468
Kerb and Guttering	62,500	64,252	62,884	65,124	66,927	68,600	70,315	72,073	73,875	75,722	77,615
Land	1,207,551	1,386,533	1,367,609	1,415,587	1,455,540	1,491,929	1,529,227	1,567,458	1,606,644	1,646,810	1,687,980
Local Rural Roads Sealed)	417,434	421,978	413,031	427,891	439,772	450,767	462,036	473,587	485,427	497,562	510,001
Local Rural Roads Unsealed	1,250,000	1,709,135	1,671,154	1,724,110	1,770,133	1,814,386	1,859,746	1,906,240	1,953,896	2,002,743	2,052,812
Plant and Equipment	80,500	329,417	323,014	329,844	336,820	345,241	353,872	362,719	371,786	381,081	390,608
Regional Roads	1,247,000	1,292,707	1,264,719	1,307,832	1,343,532	1,377,120	1,411,548	1,446,837	1,483,007	1,520,083	1,558,085
Structures - Other	22,550	24,011	23,756	24,150	24,476	25,088	25,716	26,358	27,017	27,693	28,385
Town Streets	813,565	915,283	898,732	932,788	961,827	985,872	1,010,519	1,035,782	1,061,677	1,088,219	1,115,424
Quarries & Other	7,000	7,700	7,524	7,741	7,943	8,141	8,345	8,553	8,767	8,986	9,211
Structures - Pools	580,842	606,345	594,448	615,943	634,014	649,865	666,111	682,764	699,833	717,329	735,262
Water Supply Network	1,648,089	1,691,095	1,626,764	1,678,356	1,720,778	1,763,797	1,807,892	1,853,090	1,899,417	1,946,902	1,995,575
Sewerage Network	790,185	835,527	822,844	849,972	871,964	893,763	916,107	939,010	962,485	986,547	1,011,211
<b>Total</b>	<b>9,786,557</b>	<b>11,487,888</b>	<b>11,124,055</b>	<b>11,483,962</b>	<b>11,790,695</b>	<b>12,085,464</b>	<b>12,387,600</b>	<b>12,697,291</b>	<b>13,014,721</b>	<b>13,340,090</b>	<b>13,673,593</b>

Council’s total forecast maintenance and operations expenditure has been split by asset class in the following chart:

Chart 7.1.1 Breakdown of maintenance expenditure by asset class (over the total life of the plan)



As can be seen by the table above, Council’s recurrent maintenance expense relates predominantly to eight asset classes, buildings, land, local and regional rural roads, town streets, pools and the water and sewer network. It should be noted that the land category includes all maintenance work on cemeteries, trees, ovals, parks and tips, while the building class includes all costs associated with libraries (including operational costs) and all of Council’s properties. The water supply and sewerage network costs include all recurrent costs associated with these services. Expenditure items that could not be directly attributed to one of the asset classes above have not been included.

## 7.2 Asset Renewal/Replacement Plan

Asset Type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aerodromes	-	-	10,000	-	-	-	-	-	-	-	-
Bridges	565,000	1,150,000	820,100	840,500	1,055,300	1,457,200	260,200	-	-	-	-
Buildings	170,587	64,600	263,250	82,531	53,845	55,191	56,570	57,985	59,434	60,920	62,443
Carparks	14,500	-	-	-	-	-	-	-	-	-	-
Culverts and Drainage	-	-	82,000	52,500	-	55,200	56,600	-	59,400	60,900	62,400
Footpaths	91,384	40,000	71,600	63,000	53,900	66,100	33,900	58,000	35,700	61,000	37,500
Kerb and Guttering	138,000	-	121,500	63,000	64,600	66,200	-	-	-	-	-
Land	93,000	6,000	6,000	6,000	6,000	55,200	-	-	-	-	-
Local Rural Roads (Sealed)	410,000	510,000	522,800	535,900	549,200	563,000	577,000	591,500	606,300	621,300	636,900
Local Rural Roads (Unsltd)	765,000	765,000	784,100	803,700	823,800	844,400	865,500	887,200	909,300	932,100	955,400
Plant and Equipment	3,015,266	2,091,585	2,584,248	2,653,813	2,723,635	2,156,306	2,801,941	3,350,147	2,765,941	2,648,901	3,199,818
Regional Roads	1,160,000	420,000	1,045,500	1,281,800	1,313,800	1,346,700	1,380,300	1,414,900	1,450,100	1,486,400	1,523,600
Structures – Other	19,800	74,100	10,000	30,000	5,000	-	-	-	-	-	-
Town Streets	186,300	174,300	194,100	214,800	230,900	236,600	197,300	202,200	207,100	212,500	217,600
Quarries	-	-	-	-	-	-	-	-	-	-	-
Pools	37,000	100,000	-	-	-	-	-	-	-	-	-
Water Supply Network	423,274	101,000	439,200	362,600	392,800	441,000	406,700	302,500	322,000	296,200	228,600
Sewerage Network	173,000	13,000	348,000	306,600	261,600	290,300	297,500	270,300	253,200	259,500	265,900
<b>Total</b>	<b>7,262,111</b>	<b>5,509,585</b>	<b>7,302,398</b>	<b>7,296,744</b>	<b>7,534,380</b>	<b>7,633,397</b>	<b>6,933,511</b>	<b>7,134,732</b>	<b>6,668,475</b>	<b>6,639,721</b>	<b>7,190,161</b>

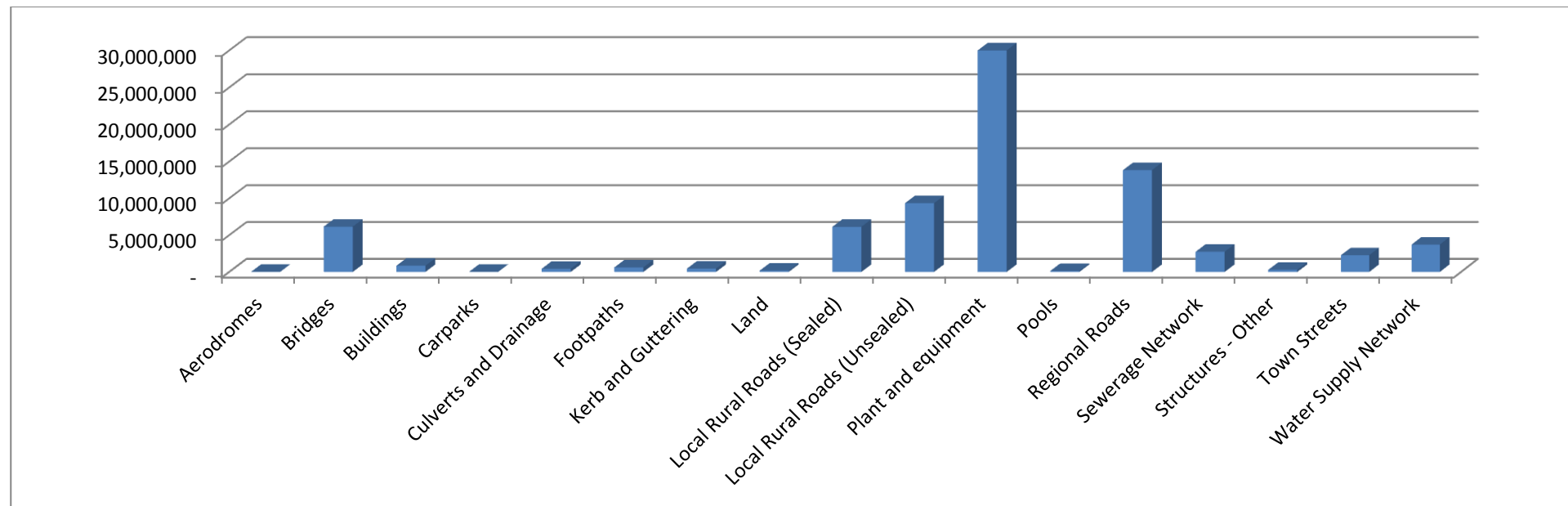
Council’s asset renewals program relates predominantly to:

- Replacement of plant and equipment - \$26.7m
- Resealing of road seals on the regional, and local road network – \$12.19m
- Resheeting of unsealed roads - \$9.335m
- Council’s timber bridge replacement program - \$6.148m
- Road pavement rehabilitation – \$10.024m
- Sewerage and water supply network rehabilitation (predominantly mains replacement) - \$5.960m
- Other - \$6.657m



The distribution of projected capital renewal expenditure by asset class over the life of this plan is detailed graphically in the table below:

Chart 7.2.1 Breakdown of asset renewal expenditure by asset class (over the total life of the plan)



The high figure for regional roads renewal relative to local roads in the chart above is due to Council’s planned pavement rehabilitation of main road 55. Council has currently budgeted \$8.757m for pavement rehabilitation of MR55 over the next ten years (87% of Council’s total pavement rehab budget).

It should be noted that the plant replacement figure above is actually net of trade in, and the true value of the replacement asset for plant and equipment (from a financial accounting perspective) should actually be roughly 30% higher. Council’s LTFP and asset movement schedules use the correct financial accounting plant and equipment number. See part 7.4 for more details.

### 7.3 Asset Acquisition (Capital Expansion) Plan

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aerodromes	-	-	-	-	-	-	-	-	-	-	-
Bridges	270,181	800,000	705,000	-	-	-	-	289,900	297,200	121,800	124,900
Buildings	3,244,864	955,000	35,200	10,600	10,800	11,000	11,400	11,600	11,800	12,200	12,400
Carparks	-	-	-	-	-	-	-	-	-	-	-
Culverts and Drainage	353,000	345,000	360,900	357,700	425,400	118,900	266,700	310,500	152,200	134,000	159,900
Footpaths	63,000	95,000	95,100	5,300	5,400	5,500	5,700	5,800	5,900	6,100	6,200
Kerb and Guttering	325,581	104,000	517,300	383,500	323,000	320,100	328,100	336,400	344,700	292,300	299,700
Land	37,147	35,000	-	-	-	50,000	-	-	-	55,000	-
Local Rural Roads (Sealed)	-	45,000	46,100	47,300	-	-	50,900	52,200	53,500	54,800	56,200
Local Rural Roads (Unsltd)	1,786,770	900,000	792,600	682,900	700,000	767,200	735,400	811,800	832,000	853,000	874,200
Plant and Equipment	35,000	3,000	-	-	-	-	-	-	-	-	-
Regional Roads	169,000	169,000	173,200	177,600	182,000	186,500	191,200	196,000	200,900	205,900	211,100
Structures - Other	112,000	55,000	25,000	50,500	46,000	43,600	22,600	23,200	-	-	-
Town Streets	269,000	8,000	194,200	335,700	202,400	216,300	156,100	160,100	164,100	229,000	234,800
Quarries	-	-	-	-	-	-	-	-	-	-	-
Pools	32,240	-	-	-	-	-	-	-	-	-	-
Water Supply Network	877,527	150,000	359,600	257,100	317,500	259,300	215,100	220,400	297,000	304,500	312,100
Sewerage Network	163,000	52,500	60,000	-	-	-	-	-	-	-	-
<b>Total</b>	<b>7,738,310</b>	<b>3,716,500</b>	<b>3,364,200</b>	<b>2,308,200</b>	<b>2,212,500</b>	<b>1,978,400</b>	<b>1,983,200</b>	<b>2,417,900</b>	<b>2,359,300</b>	<b>2,268,600</b>	<b>2,291,500</b>

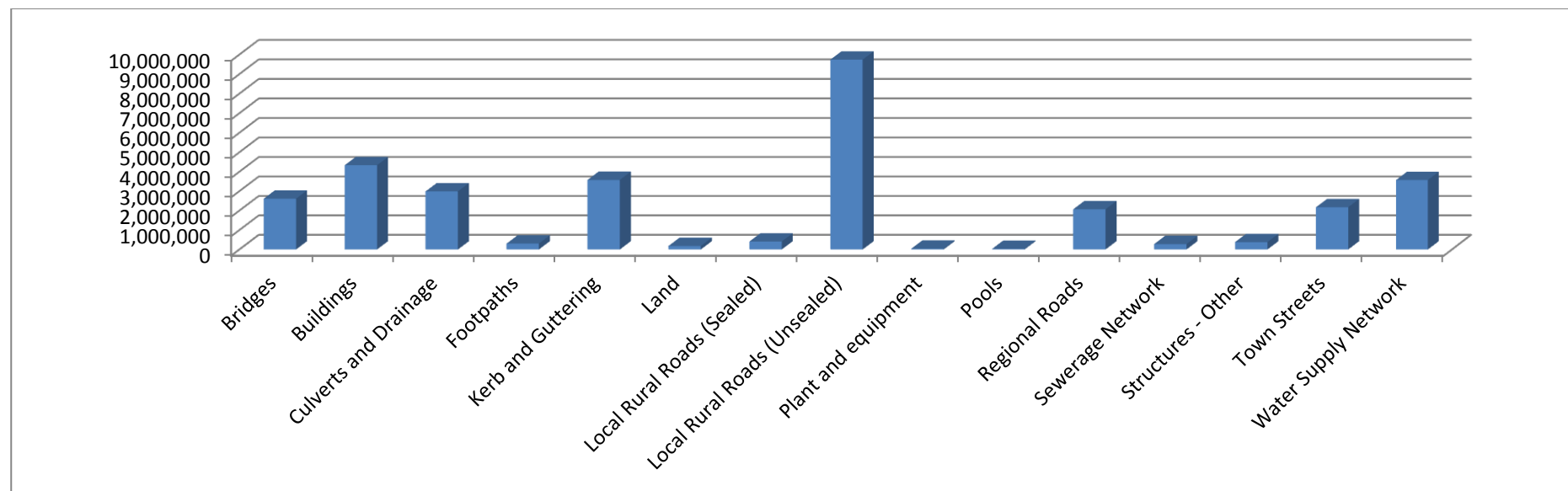
Major Capital Expansion projects in Council’s capital expansion plan above include:

- Construction of the Coonabarabran Council Chambers (Crane Building) - \$2.97m;
- Sealing of unsealed local rural roads (including: Mount Nombi Rd, Piambra Rd, Cobborah Rd, Gentle Annie Rd, Coolah Neilrex Rd, Napier Lane and Merryula Rd to name a few) - \$9.735m;
- Expansion of Council’s network of kerb and gutters, drainage and footpaths - \$6.86m
- Construction of bridges including bridges at Yuggel Crk, Salt Water Crk, Mow crk, Orana Rd Coolaburagundy river crossing and Merrygoen crk on Diggilah rd (note: replacement of timber bridges is treated as asset renewal) – \$2.6m;
- Pavement widening and road realignment on MR129, MR396 and 7419 as well as on the Mount Hope rd and the Coolah Neilrex rd - \$2.47m;

- Expansion of town street road pavement and road seal assets including pavement widening and sealing of unsealed town streets - \$2.17m
- Expansion of the Shire’s water and sewerage network (predominantly mains extension) - \$3.8m.
- Yuluwirri Kids building extension - \$0.87m

The distribution of projected capital expansion expenditure by asset class over the life of this plan is detailed graphically in the table below:

Chart 7.3.1 Breakdown of asset expansion expenditure by asset class (over the total life of the plan)



As can be seen from the table above, the bulk of capital expansion expenditure in the Shire relates to the sealing of unsealed local rural roads, with expenditure on buildings expansion coming in a distant second. Buildings expansion relates to the new Coonabarabran office building and Yuluwirri Kids building extension. Other major capital items include kerb and guttering and culverts and drainage extension in the Shire’s towns, construction of new bridges and extensions to Council’s water and sewer mains. A copy of Council’s ten year capital program is provided in part 7.4 below.

## 7.4 Council’s Ten Year Capital Program

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>CORPORATE SERVICES</b>											
<b>RFS</b>											
RFS Enhancements	50,000	50,000	51,250	52,531	53,845	55,191	56,570	57,985	59,434	60,920	62,443
RFS Vehicles	601,508	284,270	461,250	472,781	484,601	496,716	509,134	521,862	534,909	548,281	561,988
<b>RFS Total</b>	<b>651,508</b>	<b>334,270</b>	<b>512,500</b>	<b>525,313</b>	<b>538,445</b>	<b>551,906</b>	<b>565,704</b>	<b>579,847</b>	<b>594,343</b>	<b>609,201</b>	<b>624,431</b>
<b>Cemetery Services</b>											
Coona Native grove cemetery	19,000	-	-	-	-	-	-	-	-	-	-
To continue the expansion of the new area for more plots.	-	35,000	-	-	-	50,000	-	-	-	55,000	-
<b>Cemetery Services Total</b>	<b>19,000</b>	<b>35,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>55,000</b>	<b>-</b>
<b>Communications &amp; IT</b>											
Comms/IT – Mobile Screen/Data Projector/ Microphone	-	3,000	-	-	-	-	-	-	-	-	-
Cabling	110,000										
Computer Systems	70,000	-	-	-	-	-	-	-	-	-	-
<b>Communications &amp; IT Total</b>	<b>180,000</b>	<b>3,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Depots</b>											
Coonabarabran Old Depot	20,000	35,000	-	-	-	-	-	-	-	-	-
Coolah Depot Capital	68,057	-	-	-	-	-	-	-	-	-	-
Baradine Depot Capital	3,000	-	-	-	-	-	-	-	-	-	-
Dunedoo Depot Capital	17,805	35,000	-	-	-	-	-	-	-	-	-
<b>Depots Total</b>	<b>108,862</b>	<b>70,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Offices</b>											
Coonabarabran Council Chambers (Crane Building)	2,937,443	-	-	-	-	-	-	-	-	-	-
Coolah Office Aircon /Heating	-	-	50,000	-	-	-	-	-	-	-	-
Records Room – Replacement of Airconditioning Unit	-	4,000	-	-	-	-	-	-	-	-	-
<b>Offices Total</b>	<b>2,937,443</b>	<b>4,000</b>	<b>50,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Medical Centres</b>											
Dunedoo Medical Centre	3,900	-	-	-	-	-	-	-	-	-	-
<b>Medical Centres</b>	<b>3,900</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Public Halls</b>											
Binnaway Hall Capital Project	12,298	-	-	-	-	-	-	-	-	-	-
Coonabarabran Hall – Replacement Chairs and Table	-	-	-	-	100,000	-	-	-	-	-	-
Dunedoo Hall – Refurbishment of Toilets and Kitchen	-	-	-	150,000	-	-	-	-	-	-	-
Family Support – Irrigation	10,000	-	-	-	-	-	-	-	-	-	-
Hall Baradine – Refurbishment of Toilets	-	-	150,000	-	-	-	-	-	-	-	-
Mendooran Hall Capital Project	50,000	-	-	-	-	-	-	-	-	-	-
Mendooran Hall - \$25,000 Stage Ceiling	-	-	-	25,000	-	-	-	-	-	-	-
Power house museum (arts funding)	-	-	25,000	-	-	-	-	-	-	-	-
<b>Public Halls Total</b>	<b>72,298</b>	<b>-</b>	<b>175,000</b>	<b>175,000</b>	<b>100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Corporate Services Mngmnt</b>											
New carpet Coona store	-	8,600									
Other Capital	12,000	-	-	-	-	-	-	-	-	-	-
<b>CS Management Total</b>	<b>12,000</b>	<b>8,600</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Development &amp; Tourism</b>											
Capital – Industrial Land	5,616	-	-	-	-	-	-	-	-	-	-
<b>Development &amp; Tourism Total</b>	<b>5,616</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Corporate Services Total</b>	<b>3,990,627</b>	<b>454,870</b>	<b>737,500</b>	<b>700,313</b>	<b>638,445</b>	<b>601,906</b>	<b>565,704</b>	<b>579,847</b>	<b>594,343</b>	<b>664,201</b>	<b>624,431</b>
<b>ENVIRONMENT &amp; COMMUNITY SERVICES</b>											
<b>Libraries</b>											
Replacement of shelves due to OH&S requirements	-	34,315	-	-	-	-	-	-	-	-	-
<b>Libraries Total</b>		<b>34,315</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Community Transport</b>											
Community Transport Capital	125,000	50,000	51,250	52,531	53,845	55,191	56,570	57,985	59,434	60,920	62,443
<b>Community Transport Total</b>	<b>125,000</b>	<b>50,000</b>	<b>51,250</b>	<b>52,531</b>	<b>53,845</b>	<b>55,191</b>	<b>56,570</b>	<b>57,985</b>	<b>59,434</b>	<b>60,920</b>	<b>62,443</b>
<b>Multiservice Outlet</b>											
MSO Capital Replacements	76,000	-	79,848	-	83,890	-	88,137	-	92,599	-	97,286
<b>Multiservice Outlet Total</b>	<b>76,000</b>	<b>-</b>	<b>79,848</b>	<b>-</b>	<b>83,890</b>	<b>-</b>	<b>88,137</b>	<b>-</b>	<b>92,599</b>	<b>-</b>	<b>97,286</b>
<b>Materials Handling Centre</b>											
Cbn Waste Mgt - Capital Projects	92,000	35,000	-	-	-	-	-	-	-	-	-
<b>Materials Handling Cntr Total</b>	<b>92,000</b>	<b>35,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Coonabarabran LDC/Preschool</b>											
Yuluwirri Kids Building Extension	20,066	870,000	-	-	-	-	-	-	-	-	-
<b>Coona LDC/Preschool Total</b>	<b>20,066</b>	<b>870,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>E&amp;C Services Total</b>	<b>313,066</b>	<b>989,315</b>	<b>131,098</b>	<b>52,531</b>	<b>137,735</b>	<b>55,191</b>	<b>144,707</b>	<b>57,985</b>	<b>152,033</b>	<b>60,920</b>	<b>159,729</b>
<b>Executive</b>											
<b>General Manager</b>											
RLCIP - Ddo Toddler Pool Shade	20,000	-	-	-	-	-	-	-	-	-	-
RLCIP - Coona Town Hall Refurbishment	37,882	-	-	-	-	-	-	-	-	-	-
RLCIP - Riparian Walk	7,131	-	-	-	-	-	-	-	-	-	-
RLCIP - Coona Pool Playground Shade	12,240	-	-	-	-	-	-	-	-	-	-
<b>General Manager Total</b>	<b>77,253</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Human Resources</b>											
HR Civica Software	65,000	-	-	-	-	-	-	-	-	-	-
<b>Human Resources Total</b>	<b>65,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Executive Total</b>	<b>142,253</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TECHNICAL SERVICES</b>											
<b>Design Projects Management</b>											
GIS Software / Updates	16,000	18,000	18,500	18,900	19,400	19,900	20,400	20,900	21,400	21,900	22,500
Scanning Plans	10,000	-	-	-	-	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Surveying Equipment	-	10,000	10,300	10,500	10,800	11,000	11,300	11,600	11,900	12,200	12,500
<b>Design Projects Mngmnt Total</b>	<b>26,000</b>	<b>28,000</b>	<b>28,800</b>	<b>29,400</b>	<b>30,200</b>	<b>30,900</b>	<b>31,700</b>	<b>32,500</b>	<b>33,300</b>	<b>34,100</b>	<b>35,000</b>
<b>Design Projects Total</b>	<b>26,000</b>	<b>28,000</b>	<b>28,800</b>	<b>29,400</b>	<b>30,200</b>	<b>30,900</b>	<b>31,700</b>	<b>32,500</b>	<b>33,300</b>	<b>34,100</b>	<b>35,000</b>
<b>Plant And Equipment</b>											
Minor Plant Purchases	34,079	30,000	30,800	31,500	32,300	33,100	33,900	34,800	35,700	36,600	37,500
Plant & Equipment Purchases	2,017,436	1,660,000	1,927,000	1,912,100	1,933,000	1,534,300	2,076,100	2,696,300	2,002,900	1,961,600	2,397,800
Data Dot Software	3,243	-	-	-	-	-	-	-	-	-	-
Radio Network Capital	20,000	5,000	5,300	5,500	5,800	6,100	6,400	6,700	7,100	7,400	7,800
<b>Plant And Equipment Total</b>	<b>2,074,758</b>	<b>1,695,000</b>	<b>1,963,100</b>	<b>1,949,100</b>	<b>1,971,100</b>	<b>1,573,500</b>	<b>2,116,400</b>	<b>2,737,800</b>	<b>2,045,700</b>	<b>2,005,600</b>	<b>2,443,100</b>
<b>Workshops</b>											
Coolah Workshop Capital	9,500	10,000	5,100	5,300	5,400	5,500	5,700	5,800	5,900	6,100	6,200
Coonabarabran Workshop Capital	2,500	5,000	5,100	5,300	5,400	5,500	5,700	5,800	5,900	6,100	6,200
<b>Workshops Total</b>	<b>12,000</b>	<b>15,000</b>	<b>10,200</b>	<b>10,600</b>	<b>10,800</b>	<b>11,000</b>	<b>11,400</b>	<b>11,600</b>	<b>11,800</b>	<b>12,200</b>	<b>12,400</b>
<b>Fleet Services Total</b>	<b>2,086,758</b>	<b>1,710,000</b>	<b>1,973,300</b>	<b>1,959,700</b>	<b>1,981,900</b>	<b>1,584,500</b>	<b>2,127,800</b>	<b>2,749,400</b>	<b>2,057,500</b>	<b>2,017,800</b>	<b>2,455,500</b>
<b>Aerodromes</b>											
Coonabarabran Aerodrome Capital	10,000	-	10,000	-	-	-	-	-	-	-	-
<b>Aerodromes Total</b>	<b>10,000</b>	<b>-</b>	<b>10,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Reseals</b>											
Reseals - Local Roads	410,000	410,000	420,300	430,800	441,500	452,600	463,900	475,500	487,400	499,500	512,000
Reseals Regional Roads	360,000	420,000	430,500	441,300	452,300	463,600	475,200	487,100	499,200	511,700	524,500
Reseals Town Streets - Baradine	16,800	16,800	17,200	17,700	18,100	18,500	19,000	19,500	20,000	20,500	21,000
Reseals Town Streets - Binnaway	15,000	15,000	15,400	15,800	16,200	16,600	17,000	17,400	17,800	18,300	18,700
Reseals Town Streets - Coonabarabran	80,000	80,000	82,000	84,100	86,200	88,300	90,500	92,800	95,100	97,500	99,900
Reseals Town Streets - Coolah	25,000	25,000	25,600	26,300	26,900	27,600	28,300	29,000	29,700	30,500	31,200
Reseals Town Streets - Dunedoo	22,500	22,500	23,100	23,600	24,200	24,800	25,500	26,100	26,700	27,400	28,100
Reseals Town Streets - Mendooran	15,000	15,000	15,400	15,800	16,200	16,600	17,000	17,400	17,800	18,300	18,700
<b>Reseals Total</b>	<b>944,300</b>	<b>1,004,300</b>	<b>1,029,500</b>	<b>1,055,400</b>	<b>1,081,600</b>	<b>1,108,600</b>	<b>1,136,400</b>	<b>1,164,800</b>	<b>1,193,700</b>	<b>1,223,700</b>	<b>1,254,100</b>
<b>Local Rural Roads</b>											
Aerodrome Baradine	-	-	-	210,100	-	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Angus Road	-	-	-	-	-	-	-	-	59,400	-	-
Avonside Rd				157,600							
Baby Creek Bridge	-	350,000	-	-	-	-	-	-	-	-	-
Baradine Creek Bridge	-	-	-	-	786,100	827,900	-	-	-	-	-
Bingie Grumble Road	-	-	-	-	-	-	-	-	-	-	-
Black Gully Bridge	-	-	-	210,100	-	-	-	-	-	-	-
Boomley Road	-	-	-	-	-	-	-	-	-	243,700	249,800
Box Ridge Road	-	-	-	52,500	-	-	-	-	-	-	-
Bridges (not allocated)	565,000	-	-	-	-	-	-	-	-	-	-
Bugaldie Creek Bridge	-	350,000	358,800	-	-	-	-	-	-	-	-
Cobborah Road	-	-	-	-	-	220,800	226,300	174,000	-	243,700	249,800
Coolah Creek Rd Rehabilitation	-	-	102,500	105,100	-	-	-	-	-	-	-
Coolah Neilrex Rd.	-	-	-	47,300	-	-	-	-	-	-	-
Coolah Neilrex Road	-	-	205,000	157,600	215,400	-	169,700	231,900	178,300	182,800	-
Coolah Neilrex Road Rehabilitation	-	-	-	-	107,700	110,400	113,100	116,000	-	-	-
Coolah Tops Road	-	-	-	-	-	220,800	169,700	-	-	-	-
Coonagoony Bridge	-	-	-	-	-	220,800	-	-	-	-	-
Dandry Road	75,000	-	153,800	157,600	53,800	-	-	58,000	-	-	-
Digilah Rd.	199,595	-	-	-	-	-	-	174,000	-	-	-
Flags Rockedgial Road	-	-	-	-	-	55,200	-	-	-	60,900	-
Gentle Annie Road	200,000	200,000	-	-	107,700	275,900	169,700	-	237,700	182,800	187,300
Goolhi Rd	-	-	205,000	-	-	-	-	-	-	-	-
Granchester Bridge	-	100,000	102,500	-	-	-	-	-	-	-	-
Intersection of Lockerbie Rd & Digilah Rd, Digilah Rd	-	45,000	-	-	-	-	-	-	-	-	-
Karrajong Rd - seal 3km	-	200,000									
Kenebri Bridge	-	-	-	-	269,200	276,000	-	-	-	-	-
Laweson Park Rd	-	150,000	-	-	-	-	-	-	-	-	-
Merryula Road	-	-	-	210,100	161,500	-	-	-	-	-	187,300
Mitchell Springs Road - Erosion	-	-	82,000	-	-	-	-	-	-	-	-
Montague Bridge	-	-	-	-	-	-	260,200	-	-	-	-



## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Morriseys Rd	-	-	75,000								
Mount Hope Road (realignment)	-	45,000	46,100	-	-	-	-	-	-	-	-
Mount Nombi Road	192,474	-	-	-	215,400	-	-	-	237,700	-	-
Munns Road	-	-	-	-	-	-	-	231,900	178,300	-	-
Mow Creek	-	-	500,000	-	-	-	-	-	-	-	-
Napier Lane	-	150,000	153,800	-	-	-	56,600	-	-	-	-
New Bridge and approaches over Merrygoen Ck at Digilah Station	-	-	-	-	-	-	-	-	-	121,800	124,900
Orana Rd Culvert	15,000	-	-	-	-	-	-	-	-	-	-
Orana Road - Coolaburragundy River crossing	-	-	-	-	-	-	-	289,900	297,200	-	-
Piambra Road	373,732	200,000	-	-	-	-	-	-	-	-	-
Premer Estate Causeway	38,300	-	-	-	-	-	-	-	-	-	-
Quia Road (Lake Edna)	-	-	-	-	-	-	-	-	-	-	62,400
Resheeting Local Unsealed Roads (Table 1.2)	765,000	765,000	784,100	803,700	823,800	844,400	865,500	887,200	909,300	932,100	955,400
Road safety black spots	157,500	-	-	-	-	-	50,900	52,200	53,500	54,800	56,200
Roads to Recovery other unallocated	270,000	-	-	-	-	-	-	-	-	-	-
Ross Crossing	-	-	-	420,300	-	-	-	-	-	-	-
Shire Entrance Signs	-	-	20,000	20,500	21,000	21,500	-	-	-	-	-
Sullivans rd Capital	25,000										
Terridgerie Ck	293,469										
Tongay Bridge	-	350,000	358,800	-	-	-	-	-	-	-	-
Village Entrance Signs	-	-	-	-	-	22,100	22,600	23,200	-	-	-
Warkton Bridge	-	-	-	-	-	132,500	-	-	-	-	-
Wool Rd Rehabilitation	-	100,000	-	-	-	-	-	-	118,900	121,800	124,900
Wyuna Road	-	-	-	-	-	49,700	-	-	-	-	-
<b>Local rural roads Total</b>	<b>3,170,070</b>	<b>3,005,000</b>	<b>3,147,400</b>	<b>2,552,500</b>	<b>2,761,600</b>	<b>3,278,000</b>	<b>2,104,300</b>	<b>2,238,300</b>	<b>2,270,300</b>	<b>2,144,400</b>	<b>2,198,000</b>
<b>Regional Roads</b>											
Pavement rehabilitation & widening on MR7519 (Forest Rd)	-	169,000	-	-	182,000	-	-	-	200,900	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Pavement widening and rehabilitation MR55 (Black Stump Way)	-	-	615,000	840,500	861,500	883,100	905,100	927,800	950,900	974,700	999,100
MR55 Capital Works (deadman's gully)	800,000	-	-	-	-	-	-	-	-	-	-
Saltwater Creek No 2 on Purlewaugh Rd (MR129)	-	800,000	205,000	-	-	-	-	-	-	-	-
Shoulder widening MR129 - Baradine Road (Coonamble)	-	-	-	-	-	-	-	196,000	-	205,900	-
MR129 Bridge Construction Yuggel Ck	231,881	-	-	-	-	-	-	-	-	-	-
Shoulder widening MR129 - Purlewaugh Road	169,000	-	173,200	-	-	186,500	-	-	-	-	-
Shoulder widening MR396	-	-	-	177,600	-	-	191,200	-	-	-	211,100
<b>Regional Roads Total</b>	<b>1,200,881</b>	<b>969,000</b>	<b>993,200</b>	<b>1,018,100</b>	<b>1,043,500</b>	<b>1,069,600</b>	<b>1,096,300</b>	<b>1,123,800</b>	<b>1,151,800</b>	<b>1,180,600</b>	<b>1,210,200</b>
<b>Road Operations Total</b>	<b>5,325,251</b>	<b>4,978,300</b>	<b>5,180,100</b>	<b>4,626,000</b>	<b>4,886,700</b>	<b>5,456,200</b>	<b>4,337,000</b>	<b>4,526,900</b>	<b>4,615,800</b>	<b>4,548,700</b>	<b>4,662,300</b>
<b>SEWERAGE</b>											
<b>Sewerage Baradine</b>											
Replace Vacuum pumps	-	-	-	-	-	33,100	33,900	34,800	-	-	-
Strategic Business Plan – Sewer	11,000	-	-	-	-	-	-	-	-	-	-
Sewage Treatment Plant Renewals	10,000	10,000	10,300	10,500	10,800	-	-	-	11,900	12,200	12,500
<b>Sewerage Baradine Total</b>	<b>21,000</b>	<b>10,000</b>	<b>10,300</b>	<b>10,500</b>	<b>10,800</b>	<b>33,100</b>	<b>33,900</b>	<b>34,800</b>	<b>11,900</b>	<b>12,200</b>	<b>12,500</b>
<b>Sewerage Binnaway</b>											
Investigation – Binnaway Sewerage	-	50,000	-	-	-	-	-	-	-	-	-
<b>Sewerage Binnaway Total</b>	<b>-</b>	<b>50,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Sewerage Coolah</b>											
Main replacement rehabilitation	-	-	-	52,500	53,800	-	-	-	-	-	-
Strategic Business Plan – Sewer	11,000	-	-	-	-	-	-	-	-	-	-
Effluent reuse system	50,000	-	-	-	-	-	-	-	-	-	-
STP Rehabilitation	-	-	50,000	51,300	-	55,200	56,600	58,000	59,400	60,900	62,400
<b>Sewerage Coolah Total</b>	<b>61,000</b>	<b>-</b>	<b>50,000</b>	<b>103,800</b>	<b>53,800</b>	<b>55,200</b>	<b>56,600</b>	<b>58,000</b>	<b>59,400</b>	<b>60,900</b>	<b>62,400</b>

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Sewerage Coonabarabran</b>											
Installation of Flow Meters on Storm bypass return line.	-	-	10,000	-	-	-	-	-	-	-	-
Mains Extension – Doves Lane	30,000	-	-	-	-	-	-	-	-	-	-
Smoke Test & Inspection	60,000	-	-	-	-	-	-	-	-	-	-
Strategic Business Plan – Sewer	11,000	-	-	-	-	-	-	-	-	-	-
Pump station renewal	-	-	30,800	31,500	32,300	33,100	33,900	-	-	-	-
Sewerage access dump points (all towns)	-	2,500	-	-	-	-	-	-	-	-	-
Relining various sections	100,000	-	202,500	105,100	107,700	110,400	113,100	116,000	118,900	121,800	124,900
Replace steel sewer rods	3,000	3,000	3,100	3,200	3,200	3,300	3,400	3,500	3,600	3,700	3,700
<b>Sewerage Coonabarabran Total</b>	<b>204,000</b>	<b>5,500</b>	<b>246,400</b>	<b>139,800</b>	<b>143,200</b>	<b>146,800</b>	<b>150,400</b>	<b>119,500</b>	<b>122,500</b>	<b>125,500</b>	<b>128,600</b>
<b>Sewerage Dunedoo</b>											
Effluent reuse system	50,000	-	50,000	-	-	-	-	-	-	-	-
Pump station renewal	-	-	-	-	-	55,200	56,600	-	-	-	-
Relining program	-	-	-	-	-	-	-	58,000	59,400	60,900	62,400
STP Rehabilitation	-	-	51,300	52,500	53,800	-	-	-	-	-	-
<b>Sewerage Dunedoo Total</b>	<b>50,000</b>	<b>-</b>	<b>101,300</b>	<b>52,500</b>	<b>53,800</b>	<b>55,200</b>	<b>56,600</b>	<b>58,000</b>	<b>59,400</b>	<b>60,900</b>	<b>62,400</b>
<b>Sewerage Total</b>	<b>336,000</b>	<b>65,500</b>	<b>408,000</b>	<b>306,600</b>	<b>261,600</b>	<b>290,300</b>	<b>297,500</b>	<b>270,300</b>	<b>253,200</b>	<b>259,500</b>	<b>265,900</b>
<b>URBAN SERVICES</b>											
<b>Town Streets Baradine</b>											
Floodplain Management Plan	75,000	150,000	150,000	150,000	150,000	-	-	-	-	-	-
Kerb and Gutter Narren Street, north of Macquarie Street.	-	-	-	52,500	-	-	-	-	-	-	-
Kerb and Guttering	72,000	-	-	-	-	-	-	58,000	59,400	60,900	62,400
Kerb and Guttering Bligh Street between Narren and Liverpool	-	-	-	-	-	55,200	-	-	-	-	-
Kerb and guttering Castlereagh Street, between Darling and Macquarie	-	34,000	51,300	-	-	-	-	-	-	-	-
Kerb and guttering in Narren Street south of Macquarie Street	-	-	-	-	53,800	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Kerb and Guttering Lachlan Street, between Narren and Liverpool (north and south side)	-	-	-	-	-	55,200	56,600	-	-	-	-
Kerb and guttering Belar St	8,000	-	-	-	-	-	-	-	-	-	-
Kerb and guttering – Baradine Bowling Club	-	-	20,000	-	-	-	-	-	-	-	-
Town Streets Capital Other	12,000	-	-	-	-	-	-	-	-	-	-
Liverpool Street Seal	-	-	25,000	25,600	-	-	-	-	-	-	-
Rehabilitation of footpath sections	-	10,000	10,300	-	10,800	11,000	-	11,600	-	12,200	-
Streetlight	23,000	8,000	-	-	-	-	9,100	-	-	-	-
<b>Town Streets Baradine Total</b>	<b>190,000</b>	<b>202,000</b>	<b>256,600</b>	<b>228,100</b>	<b>214,600</b>	<b>121,400</b>	<b>65,700</b>	<b>69,600</b>	<b>59,400</b>	<b>73,100</b>	<b>62,400</b>
<b>Town Streets Binnaway</b>											
Binnaway Progress Association	3,000	5,000	5,100	5,300	5,400	5,500	5,700	5,800	5,900	6,100	6,200
Bullinda Street K&G		-	-	-	-	38,600	39,600	40,600	41,600	42,600	43,700
Castlereagh Av - 42m (link)		-	15,000	-	-	-	-	-	-	-	-
Corry Bridge Western Approach		-	15,400	31,500	43,100	44,200	-	-	-	-	-
David Street East - 130m		-	41,000	-	-	-	-	-	-	-	-
David Street West - 22m (link)		-	8,000	-	-	-	-	-	-	-	-
Drainage – Renshaw St.	20,000	-	-	-	-	-	-	-	-	-	-
Intersection Renshaw Street and Bullinda Street - "Dip" Traffic Calming		-	15,000	15,400	-	-	-	-	-	-	-
Binnaway Streets K&G	40,000	-	-	-	-	-	-	-	-	-	-
Railway Street (Napier St to Renshaw St - 240m) - link		-	-	36,800	37,700	-	-	-	-	-	-
Streetlight		-	8,200	-	-	-	-	9,300	-	-	-
<b>Town Streets Binnaway Total</b>	<b>63,000</b>	<b>5,000</b>	<b>107,700</b>	<b>89,000</b>	<b>86,200</b>	<b>88,300</b>	<b>45,300</b>	<b>55,700</b>	<b>47,500</b>	<b>48,700</b>	<b>49,900</b>
<b>Town Streets Coolah</b>											
Binnia Street upgrade - kerb blisters Martin Street corner - (continuing project subject to design and public consultation)	165,581	-	50,000	-	-	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Booyamurra St. east of Binnia St	-	-	102,500	105,100	-	-	-	-	-	-	-
Campbell Street between Binnia & Cunningham	55,000	30,000	-	-	-	-	-	-	-	-	-
Cycleway Project	-	60,000	60,000	-	-	-	-	-	-	-	-
Footpath Rehabilitation	-	-	20,500	21,000	10,800	11,000	-	-	-	-	-
Coolah Office Carpark	14,500	-	-	-	-	-	-	-	-	-	-
Skate Park	-	-	-	25,000	25,000	-	-	-	-	-	-
Streetlight	-	-	-	-	-	8,800	-	-	-	-	10,000
Urban Drainage Project - Booyamurra Street, K&G	35,000	30,000	25,600	26,300	107,700	110,400	113,100	116,000	118,900	121,800	124,900
<b>Town Streets Coolah Total</b>	<b>270,081</b>	<b>120,000</b>	<b>258,600</b>	<b>177,400</b>	<b>143,500</b>	<b>130,200</b>	<b>113,100</b>	<b>116,000</b>	<b>118,900</b>	<b>121,800</b>	<b>134,900</b>
<b>Town Streets Coonabarabran</b>											
Cassilis (John - Charles) rehabilitation	-	20,000	-	-	-	-	-	-	-	-	-
Construct new footpath in Cassilis Street, Robertson St to Namoi St	-	-	30,000	-	-	-	-	-	-	-	-
Culvert Extension in Dalgarno Street adjacent Morrisseys	-	50,000	-	-	-	-	-	-	-	-	-
Dalgarno Street (John - Charles) rehabilitation	-	-	20,500	21,000	21,500	22,100	-	-	-	-	-
Dows Lane - 650m	-	-	41,000	42,000	-	-	-	-	-	-	-
East St, between Edward St and Cassilis St.	-	-	-	105,100	107,700	-	-	-	-	-	-
Edward St, between Ulamambri St & East Street	-	-	75,000	76,900	-	-	-	-	-	-	-
Coona Streets Survey Old Common	30,000	-	-	-	-	-	-	-	-	-	-
Coona Streets Drainage	123,000	-	-	-	-	-	-	-	-	-	-
Extension of concrete channel at rear of Cowper Street	-	-	51,300	52,500	-	-	-	-	-	-	-
Extension of K&G - Barker Street - 40m	15,000	-	-	-	-	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Extension of K&G and shoulder construction - Belar Street	-	15,000	-	-	-	-	-	-	-	-	-
Extension of Pipe Drainage in easement at the rear of No 8 Cowper Street	120,000	-	-	-	-	-	124,500	127,600	130,800	134,000	137,400
Footpath Rehabilitation	91,384	-	-	-	-	-	22,600	23,200	23,800	24,400	25,000
Implementation of Creek Rehabilitation Strategy	-	-	-	-	-	55,200	-	-	-	-	-
CBD Street seats	-	15,000	-	-	-	-	-	-	-	-	-
K&G Rehab. - John Street( Edwards St. to Cassilis St), west side	-	-	61,500	-	-	-	-	-	-	-	-
K&G Rehab. Dalgarno Street	-	-	-	63,000	64,600	66,200	-	-	-	-	-
K&G Rehab. John Street (Edwards St to Cassilis St), east side	-	-	60,000	-	-	-	-	-	-	-	-
Namoi Street K&G	-	-	-	-	64,600	-	-	-	-	-	-
New Road - eastern side of High School	-	-	-	-	-	110,400	113,100	116,000	118,900	-	-
Widening Cassilis st Racecourse	70,000	-	-	-	-	-	-	-	-	-	-
Roundabout - intersection Cassilis Street and John Street	-	-	-	-	-	-	-	-	-	121,800	124,900
Street light program	-	-	-	-	-	8,800	-	-	-	-	-
<b>Town Streets Coona Total</b>	<b>449,384</b>	<b>100,000</b>	<b>339,300</b>	<b>360,500</b>	<b>258,400</b>	<b>262,700</b>	<b>260,200</b>	<b>266,800</b>	<b>273,500</b>	<b>280,200</b>	<b>287,300</b>
<b>Town streets Dunedoo</b>											
Bullinda St (Wallaroo St - Wargundy St) north - Drainage	-	-	50,000	-	-	-	-	-	-	-	-
Bullinda St at Bandulla, North side - Drainage	-	-	-	-	-	-	-	-	-	-	22,500
Bullinda St at Caigan, East side - Drainage	-	-	-	-	-	-	-	-	21,400	-	-
Caigan Street (Bolaro to Digilah - East side) – Drainage	-	-	-	-	-	60,700	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Caigan Street (Cobborah to Tucklan, east side) – Drainage	-	-	-	-	-	-	62,200	-	-	-	-
Caigan Street (Tucklan to Yarrow, east side) – Drainage	-	-	-	-	-	-	-	63,800	-	-	-
Cobborah St (Wargundy St - Wallaroo St) – Drainage	-	-	-	94,600	-	-	-	-	-	-	-
Digilah St (Wargundy St - Wallaroo St) – Drainage	-	-	82,000	-	-	-	-	-	-	-	-
Footpath rehabilitation - various sections	-	-	10,000	10,500	-	11,000	-	11,600	-	12,200	-
Kerb and Guttering Construction	-	-	-	-	-	-	-	-	65,400	67,000	68,700
Merrygoen St (Yarrow St - Bullinda St),(carriage, 10.4m, trees on footpath)	-	-	-	-	-	-	-	-	35,700	36,600	37,500
Nott Street (carriageway width 10.4m, trees on footpath)	-	-	-	31,500	32,300	-	-	-	-	-	-
Streetlight	-	-	-	8,400	-	-	-	-	9,500	-	-
Talbragar St (Wallaroo St - Tallwang St)(carriage,10.4m, trees on footpath)	-	-	-	-	-	33,100	33,900	34,800	-	-	-
Talbragar Street ( Bandulla to Caigan - north side ) - Drainage	50,000	-	-	-	59,200	-	-	-	-	-	-
Tucklan St at Wallaroo, west side	-	-	18,500	-	-	-	-	-	-	-	-
Tucklan St Wargundy	18,000	-	-	-	-	-	-	-	-	-	-
Wallaroo St (Cobborah St - Tucklan St) - Drainage	-	-	-	-	86,200	-	-	-	-	-	-
Wallaroo Street	-	100,000	110,400	113,100	116,000	118,900	121,800	124,900	-	-	-
Wallaro Street Shoulder Sealing	136,000	-	-	-	-	-	-	-	-	-	-
Wallaroo Street (Bullinda St - Mogimil St) - centre street trees	-	-	30,000	30,800	-	-	-	-	-	-	-
Wargundy St (Bolaro - Digilah)	-	-	-	-	-	-	-	-	-	-	-
Wargundy St (Bullinda St - Yarrow St) west side - Drainage	-	-	-	57,800	-	-	-	-	-	-	-

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Yarrow St Bandulla, north side - Drainage	-	-	-	-	19,400	-	-	-	-	-	-
Yarrow St Bandulla sth Drainage	-	-	-	-	-	-	20,400	-	-	-	-
Yarrow Street (Wallaroo - Wargundy ) north - Drainage	-	-	51,300	-	-	-	-	-	-	-	-
<b>Town streets Dunedoo Total</b>	<b>204,000</b>	<b>100,000</b>	<b>352,200</b>	<b>346,700</b>	<b>313,100</b>	<b>223,700</b>	<b>238,300</b>	<b>235,100</b>	<b>132,000</b>	<b>115,800</b>	<b>128,700</b>
<b>Town Streets Mendooran</b>											
Bandulla Street - traffic calming - shoulder blisters	-	25,000	51,300	52,500	-	-	-	-	-	-	-
Benewa Street – sealing	40,000	-	-	-	-	-	-	-	-	60,900	62,400
DalGLISH St	-	-	-	-	53,800	55,200	-	-	-	-	-
K&G - Cobra Street	-	-	-	-	-	-	56,600	58,000	59,400	-	-
Rehabilitation Bandulla Street	-	10,000	10,300	10,500	10,800	11,000	11,300	11,600	11,900	12,200	12,500
Streetlight	-	-	-	-	8,600	-	-	-	-	9,700	-
<b>Town Streets Mendooran Total</b>	<b>40,000</b>	<b>35,000</b>	<b>61,600</b>	<b>63,000</b>	<b>73,200</b>	<b>66,200</b>	<b>67,900</b>	<b>69,600</b>	<b>71,300</b>	<b>82,800</b>	<b>74,900</b>
<b>Horticulture</b>											
Ddo-Milling Pk Irrigation-Cap	6,000	5,000	5,000	5,000	-	-	-	-	-	-	-
Plant New Trees Baradine Streets	20,000	6,000	6,000	6,000	6,000	-	-	-	-	-	-
Lions Park Upgrade Baradine	90,000	-	-	-	-	-	-	-	-	-	-
Baradine Parks Capital	22,000	-	-	-	-	-	-	-	-	-	-
Street Trees General	33,000										
Castlereagh River CMA Project	3,200										
Len Guy Park Boundary Adj	2,200										
Rubish Bins – Industrial Park	3,000										
Erosion Control Neilson Park	40,000										
Repairs To Amenities	-	15,000	5,000	-	-	-	-	-	-	-	-
Replace Broken Seats	6,800	2,100	-	-	-	-	-	-	-	-	-
Replace Facia on toilets	-	2,000	-	-	-	-	-	-	-	-	-
<b>Horticulture Total</b>	<b>226,200</b>	<b>30,100</b>	<b>16,000</b>	<b>11,000</b>	<b>6,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Ovals</b>											
Bore, Tank, Pump,Pressure unit,Repairs to Pipes - Robertson	-	42,000	-	-	-	-	-	-	-	-	-



## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Fencing – Baradine Oval	-	5,000	5,000	5,000	5,000	-	-	-	-	-	-
Hot Water Repairs Baradine Oval	-	10,000	-	-	-	-	-	-	-	-	-
Mendooran Oval Project	-	-	-	25,000	-	-	-	-	-	-	-
Painting	-	-	12,000	5,000	-	-	-	-	-	-	-
<b>Ovals Total</b>	-	<b>57,000</b>	<b>17,000</b>	<b>35,000</b>	<b>5,000</b>	-	-	-	-	-	-
<b>Public Swimming Pools</b>											
Coona Pool Non Recurrent	25,000	-	-	-	-	-	-	-	-	-	-
Baradine Pool Non Recurrent	12,000	-	-	-	-	-	-	-	-	-	-
Replace underground pipes and concrete walkway Baradine pool	-	100,000	-	-	-	-	-	-	-	-	-
<b>Public Swimming Pools Total</b>	<b>37,000</b>	<b>100,000</b>	-	-	-	-	-	-	-	-	-
<b>Urban Services Total</b>	<b>1,479,665</b>	<b>749,100</b>	<b>1,409,000</b>	<b>1,310,700</b>	<b>1,100,000</b>	<b>892,500</b>	<b>790,500</b>	<b>812,800</b>	<b>702,600</b>	<b>722,400</b>	<b>738,100</b>
<b>WATER</b>											
<b>Mendooran Water</b>											
Dalgish Street between Cobra Street and Benewa Street (200m)	-	-	30,000	-	-	-	-	-	-	-	-
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
Water Fluoridation	32,756	-	-	-	-	-	-	-	-	-	-
Mendooran Water Augmentation	30,000	-	-	-	-	-	-	-	-	-	-
Mains Extension	-	-	30,800	31,500	32,300	-	-	-	-	-	-
Merrygoen Creek main replcmnt	-	-	-	-	-	44,200	45,300	46,400	47,500	48,700	50,000
Reservoir rehabilitation	-	20,000	-	-	-	-	-	-	-	-	-
<b>Mendooran Water Total</b>	<b>73,756</b>	<b>20,000</b>	<b>60,800</b>	<b>31,500</b>	<b>32,300</b>	<b>44,200</b>	<b>45,300</b>	<b>46,400</b>	<b>47,500</b>	<b>48,700</b>	<b>50,000</b>
<b>Water Baradine</b>											
Rehabilitation	-	-	30,800	31,500	32,300	-	-	-	-	-	-
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
Water Main Extension - Removal of Dead Ends	8,910	50,000	-	-	53,800	33,100	56,600	58,000	59,400	60,900	62,400
Water Fluoridation	34,652	-	-	-	-	-	-	-	-	-	-
Water Treatment Plant Improvements	120,000	-	20,000	30,800	31,500	33,100	-	-	-	-	-
<b>Water Baradine Total</b>	<b>174,562</b>	<b>50,000</b>	<b>50,800</b>	<b>62,300</b>	<b>117,600</b>	<b>66,200</b>	<b>56,600</b>	<b>58,000</b>	<b>59,400</b>	<b>60,900</b>	<b>62,400</b>

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Water Binnaway</b>											
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
David & Railway, 570m	-	-	82,000	-	-	-	-	-	-	-	-
Water Fluoridation	33,337	-	-	-	-	-	-	-	-	-	-
George Street, - 420m	-	-	25,000	-	-	-	-	-	-	-	-
Park Street, 440m	-	-	50,000	-	-	-	-	-	-	-	-
Rehabilitation	-	-	-	-	86,200	-	90,500	-	-	-	-
Water Main Rehabilitation	167,056	-	-	84,100	-	88,300	-	92,800	-	97,500	-
Water Treatment Plant Renewals	-	-	20,500	-	21,500	-	22,600	-	23,800	-	25,000
<b>Water Binnaway Total</b>	<b>211,393</b>	<b>-</b>	<b>177,500</b>	<b>84,100</b>	<b>107,700</b>	<b>88,300</b>	<b>113,100</b>	<b>92,800</b>	<b>23,800</b>	<b>97,500</b>	<b>25,000</b>
<b>Water Coolah</b>											
Cunningham Street, between Gilmore Street and Binnia St - 230m	-	-	40,000	-	-	-	-	-	-	-	-
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
Water Fluoridation	31,646	-	-	-	-	-	-	-	-	-	-
Mains Extension - removal of dead ends	91,859	-	41,000	42,000	43,100	44,200	45,300	46,400	47,500	48,700	50,000
Mains Replacement	37,770	-	-	-	32,300	33,100	33,900	34,800	35,700	36,600	37,500
Reservoir rehabilitation	12,785	-	-	-	32,300	33,100	33,900	-	-	-	-
Sodium Hypochlorite pump - standby	5,000	-	5,000	5,100	5,300	5,400	-	-	-	-	-
Telemetry installation	-	40,000	30,800	31,500	-	-	-	-	-	-	-
<b>Water Coolah Total</b>	<b>190,060</b>	<b>40,000</b>	<b>116,800</b>	<b>78,600</b>	<b>113,000</b>	<b>115,800</b>	<b>113,100</b>	<b>81,200</b>	<b>83,200</b>	<b>85,300</b>	<b>87,500</b>
<b>Water Coonabarabran</b>											
Cowper Street, between Dalgarno Street and Timor Street (110m)	-	50,000	-	-	-	-	-	-	-	-	-
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
Water Fluoridation	26,426	-	-	-	-	-	-	-	-	-	-
Jubilee Street between Hwy and Gunnedah Hill.(460m)	-	-	100,000	-	-	-	-	-	-	-	-
New Mains	160,000	-	-	63,000	64,600	66,200	-	-	71,300	73,100	74,900

## Warrumbungle Shire Council – Asset Management Plan

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Rising Main - 200m section	191,941	-	90,000	92,300	94,600	96,900	99,300	101,800	104,400	-	-
Telemetry Software Upgrade	3,000	3,000	3,100	3,200	3,200	33,100	-	-	-	-	-
Tools	-	5,000	3,100	3,200	3,200	3,300	3,400	3,500	3,600	3,700	3,700
Under Highway between Council depot and former Caltex site	-	-	61,500	63,000	64,600	-	-	-	-	-	-
Reservoir Fence	7,326	-	-	-	-	-	-	-	-	-	-
Water Main Extension - Removal of Dead Ends	-	-	-	-	-	55,200	56,600	58,000	59,400	60,900	62,400
Water Main Rehabilitation	-	-	-	-	-	-	-	-	83,200	85,300	87,400
<b>Water Coonabarabran Total</b>	<b>399,693</b>	<b>58,000</b>	<b>257,700</b>	<b>224,700</b>	<b>230,200</b>	<b>254,700</b>	<b>159,300</b>	<b>163,300</b>	<b>321,900</b>	<b>223,000</b>	<b>228,400</b>
<b>Water Dunedoo</b>											
Back Up Bore Development & Implementation	-	50,000	51,300	52,500	-	-	-	-	-	-	-
Evans Street, between Sullivan Street and Nott Street (430m)	-	-	-	-	53,800	-	-	-	-	-	-
Bandukka / Merrygoen Mains	50,000	-	-	-	-	-	-	-	-	-	-
Water Management Project	11,000	-	-	-	-	-	-	-	-	-	-
Mains Extension	-	-	-	-	-	55,200	56,600	58,000	59,400	60,900	62,400
Mains Replacement	187,337	-	50,000	51,300	52,500	53,800	55,200	23,200	23,800	24,400	25,000
Minor Plant & Equipment	3,000	3,000	3,100	3,200	3,200	-	-	-	-	-	-
Reservoir Rehabilitation	-	30,000	30,800	31,500	-	22,100	22,600	-	-	-	-
<b>Water Dunedoo Total</b>	<b>251,337</b>	<b>83,000</b>	<b>135,200</b>	<b>138,500</b>	<b>109,500</b>	<b>131,100</b>	<b>134,400</b>	<b>81,200</b>	<b>83,200</b>	<b>85,300</b>	<b>87,400</b>
<b>Water Total</b>	<b>1,300,801</b>	<b>251,000</b>	<b>798,800</b>	<b>619,700</b>	<b>710,300</b>	<b>700,300</b>	<b>621,800</b>	<b>522,900</b>	<b>619,000</b>	<b>600,700</b>	<b>540,700</b>
<b>Technical Services Total</b>	<b>10,554,475</b>	<b>7,781,900</b>	<b>9,798,000</b>	<b>8,852,100</b>	<b>8,970,700</b>	<b>8,954,700</b>	<b>8,206,300</b>	<b>8,914,800</b>	<b>8,281,400</b>	<b>8,183,200</b>	<b>8,697,500</b>
<b>Total Capital</b>	<b>15,000,421</b>	<b>9,226,085</b>	<b>10,666,598</b>	<b>9,604,944</b>	<b>9,746,880</b>	<b>9,611,797</b>	<b>8,916,711</b>	<b>9,552,632</b>	<b>9,027,776</b>	<b>8,908,321</b>	<b>9,481,660</b>

To arrive at the final CAPEX figure to use in the AMP and LTFP three adjustments need to be made to the total capital figure in the capital program above:

- **Adjust for the impact of revotes** – Council, generally due to natural disasters, is often unable to complete its capital program in the year the expenditure is budgeted for. In such cases Council will generally revoke a significant portion of the capital program into the following year, which in turn delays the following year's capital program. It is expected that roughly \$5.805m of Council's 2011/12 capital program

will be revoted into the 2012/13 financial year. For the purpose of this plan, Council has assumed that this extensive capital backlog from the last few years will be reduced to zero by the 2016/17 financial year by roughly \$1m per year.

- **Add back fleet trade in amount to the capex figure above** – The original capital figure for fleet purchases per Council’s Operational Plan and Delivery Program is net trade in. The trade in amount has been added to the total capex figures to arrive at the correct capital figure for financial reporting purposes. Council’s internal budget still uses the figure in the table above, however, CAPEX figures per this plan use the CAPEX figure ex-trade in (the trade in amount is treated as cash revenue).
- **Reduce CAPEX program above by \$1.2m per year from 2013/14** – Council’s capital program above is unachievable given Council’s expenditure and revenue forecasts in the LTFP. Cuts to this capital program of \$1.2m per annum from the 2013/14 financial year onwards have therefore been factored into the capital program above to arrive at a more reasonable (financially) capital program.

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Total Capital per Capital Program (\$'000)</b>	<b>15,000</b>	<b>9,227</b>	<b>10,666</b>	<b>9,605</b>	<b>9,747</b>	<b>9,611</b>	<b>8,917</b>	<b>9,553</b>	<b>9,027</b>	<b>8,909</b>	<b>9,482</b>
<i>Add:</i>											
Revotes from prior year	-	5,804	4,804	3,804	2,804	1,804	804				
Fleet trade in amount excluded from CAPEX above	1,493	1,271	1,649	1,472	1,677	1,432	2,026	1,685	1,758	1,676	1,879
<i>Less:</i>											
Required reduction in CAPEX			(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)
Capital items not completed (current year)	(5,804)	(4,804)	(3,804)	(2,804)	(1,804)	(804)					
<b>Accounting CAPEX</b>	<b>10,689</b>	<b>11,498</b>	<b>12,115</b>	<b>10,877</b>	<b>11,224</b>	<b>10,843</b>	<b>10,547</b>	<b>10,038</b>	<b>9,585</b>	<b>9,385</b>	<b>10,161</b>
<b>Being:</b>											
Asset Renewals	5,945	7,265	9,435	9,253	9,695	9,549	9,349	8,820	8,426	8,316	9,069
Asset Expansion	4,744	4,233	2,680	1,624	1,529	1,294	1,198	1,218	1,159	1,069	1,092
<b>Total:</b>	<b>10,689</b>	<b>11,498</b>	<b>12,115</b>	<b>10,877</b>	<b>11,224</b>	<b>10,843</b>	<b>10,547</b>	<b>10,038</b>	<b>9,585</b>	<b>9,385</b>	<b>10,161</b>

It should be noted that capital expenditure figures in part 5 of this plan all use the capital expansion and renewal figures per the budgeted capital program, as Council is unable to accurately distribute predicted revotes and capex reductions across the various asset classes.

## 7.5 Asset Movement Schedule

Asset Movement Schedule	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Opening Balance	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Estimated Replacement Cost	520,516	534,041	548,861	563,851	578,031	592,377	606,874	620,278	633,845	646,980	660,177
Accumulated Depreciation	(150,658)	(160,536)	(171,156)	(181,887)	(193,202)	(204,815)	(217,080)	(229,270)	(242,178)	(255,552)	(269,419)
<b>Written Down Value</b>	<b>369,858</b>	<b>373,505</b>	<b>377,705</b>	<b>381,964</b>	<b>384,829</b>	<b>387,562</b>	<b>389,794</b>	<b>391,008</b>	<b>391,667</b>	<b>391,428</b>	<b>390,758</b>
<b>Add/(less):</b>											
Additions											
- Capital Renewal	5,945	7,265	9,435	9,253	9,695	9,549	9,349	8,820	8,426	8,316	9,069
- Capital Improvements	4,744	4,233	2,680	1,624	1,529	1,294	1,198	1,218	1,159	1,069	1,092
<b>Total Capital Expenditure</b>	<b>10,689</b>	<b>11,498</b>	<b>12,115</b>	<b>10,877</b>	<b>11,224</b>	<b>10,843</b>	<b>10,547</b>	<b>10,038</b>	<b>9,585</b>	<b>9,385</b>	<b>10,161</b>
Depreciation	(9,556)	(10,024)	(10,326)	(10,664)	(11,010)	(11,352)	(11,625)	(11,952)	(12,346)	(12,640)	(12,991)
Disposals	(1,185)	(1,009)	(1,307)	(1,168)	(1,329)	(1,135)	(1,606)	(1,337)	(1,394)	(1,329)	(1,491)
Revaluations	3,699	3,735	3,777	3,820	3,848	3,876	3,898	3,910	3,917	3,914	3,907
<b>Closing Balance</b>	<b>373,505</b>	<b>377,705</b>	<b>381,964</b>	<b>384,829</b>	<b>387,562</b>	<b>389,794</b>	<b>391,008</b>	<b>391,667</b>	<b>391,429</b>	<b>390,758</b>	<b>390,345</b>
<b>Key Performance Indicators</b>											
Asset Renewal Ratio	55%	66%	81%	78%	79%	76%	71%	66%	61%	60%	63%
Asset Renewal Deficit	(4,796)	(3,768)	(2,198)	(2,579)	(2,644)	(2,938)	(3,882)	(4,469)	(5,314)	(5,653)	(5,413)
Asset Consumption Ratio	30%	31%	32%	33%	35%	36%	37%	38%	39%	41%	42%
Asset Base Expansion (%)	0.91%	0.79%	0.49%	0.29%	0.26%	0.22%	0.20%	0.20%	0.18%	0.17%	0.17%

**Note:** The CAPEX figures above include adjustments for revotes, the \$1.2m capex reduction per annum commencing from the 13/14 financial year, and the plant and equipment revaluations per part 7.4 above. The total reduction amount is assumed to come predominantly from capital expansion on unsealed roads.

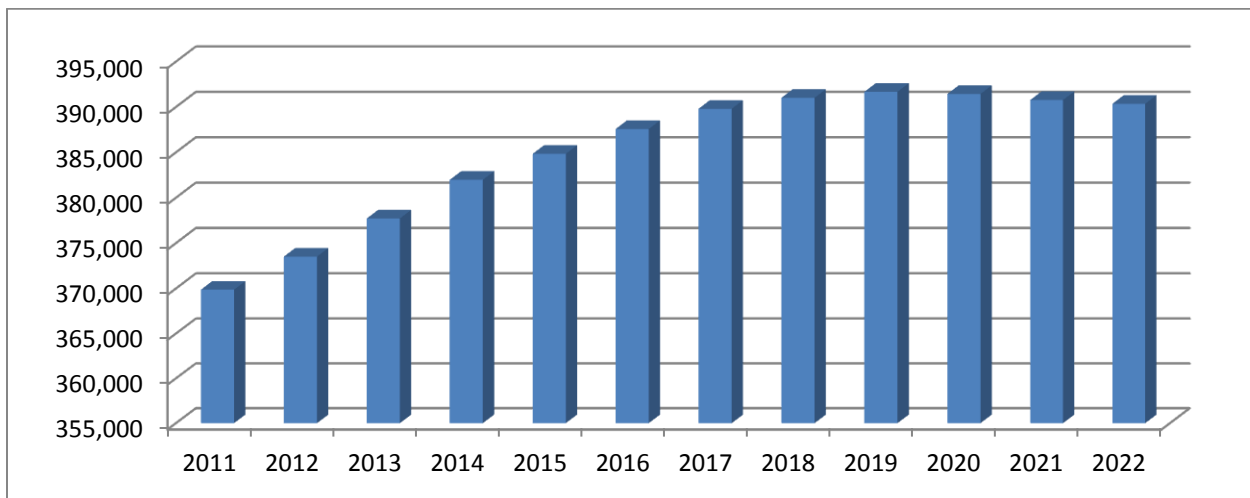
## Part 8: Conclusion

The main purpose of an asset management plan is to assess the long term sustainability of an entity’s assets given current condition levels, the expected level of decay of these assets and the forecast expenditure to renew the assets in question. An asset management plan can assess long term sustainability by addressing the following questions:

### 1. What is the current value of Council’s assets and the forecast value for 2021/22?

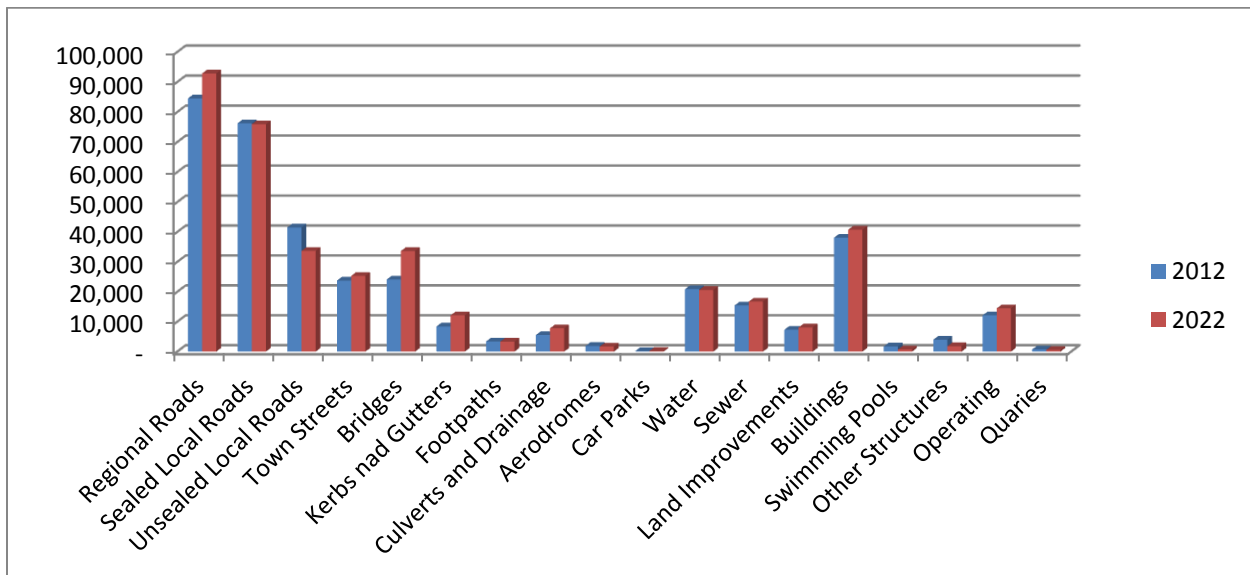
The total value of Council’s assets as at 30 June 2011 was \$377.794m (\$369.858m post projected accounting adjustments). This value is expected to increase to \$390.345m in 2021/22.

Chart 8.1 Book Value of Council’s Assets 2012 vs 2022



The movement in total assets values by asset class is detailed in the following table.

Chart 8.2 Book Value of Council’s Assets 2012 vs 2022 by asset class



## 2. What is the current condition of Council’s assets?

Council has condition rated all of its assets (excluding operating assets and land), and the results of this exercise are detailed in the following chart:

Chart 8.3 Condition rating of Council’s Assets

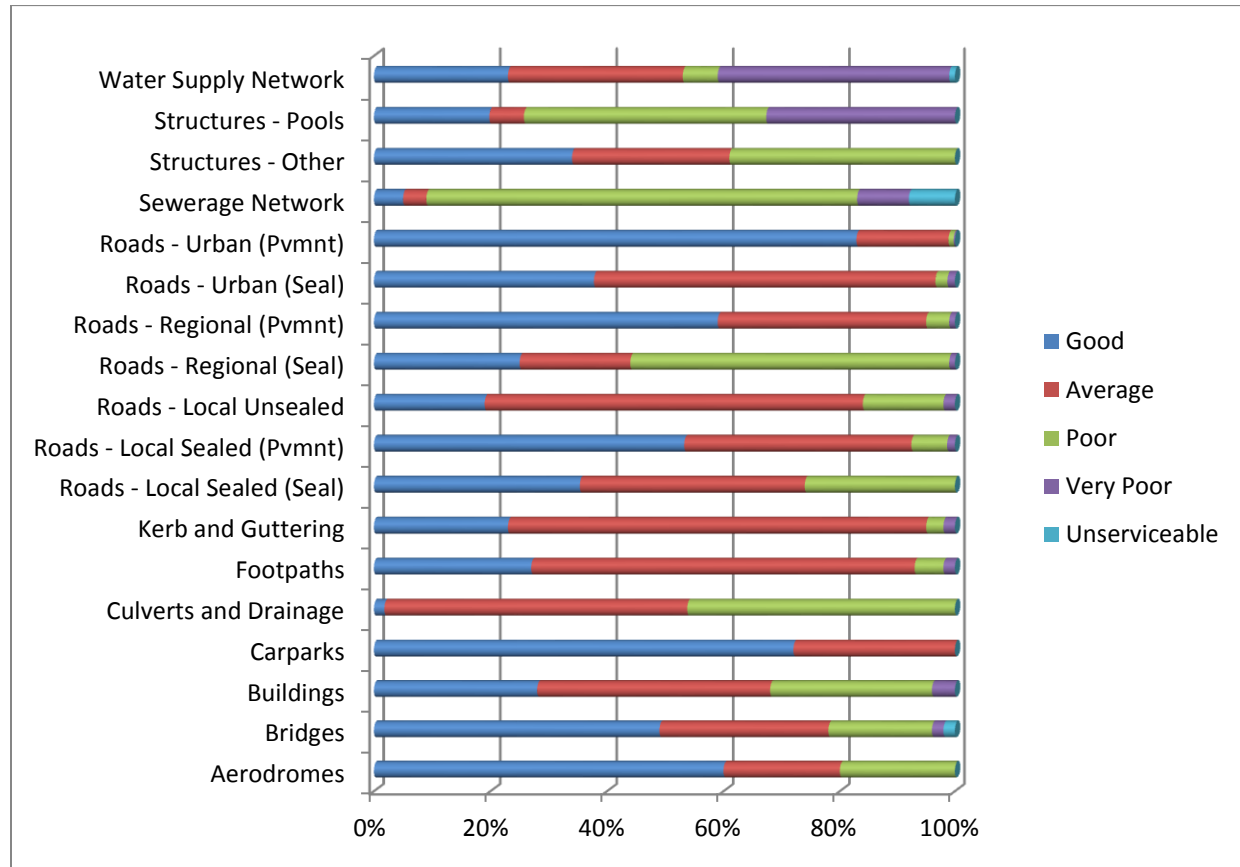


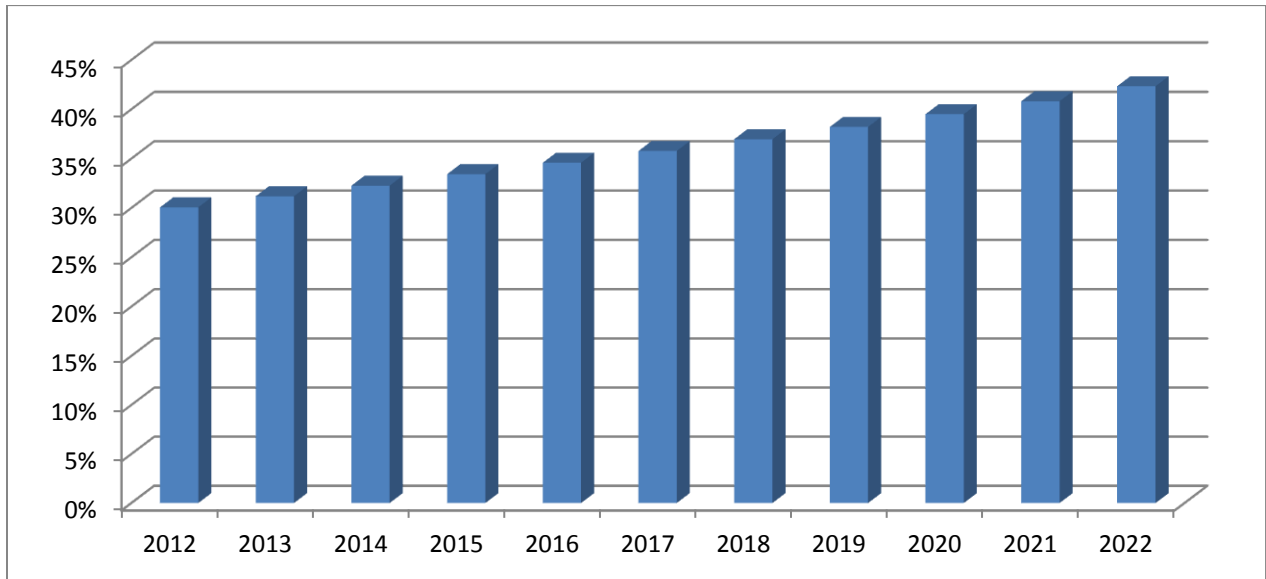
Chart 8.3 indicates that the condition rating of Council’s assets varies significantly by asset class, with Council’s pool structures, water supply and sewerage network having the lowest condition ratings. These assets are also the assets with the highest current asset consumption ratio.

## 3. How much of Council’s asset’s future service potential has been consumed, and how much will be consumed by the end of the life of this plan?

Asset consumption ratios can be used to measure the percentage of an asset’s service potential that has been consumed. Asset consumption ratios will generally equate to the condition level of an asset, as an asset’s condition generally decreases as it is consumed.

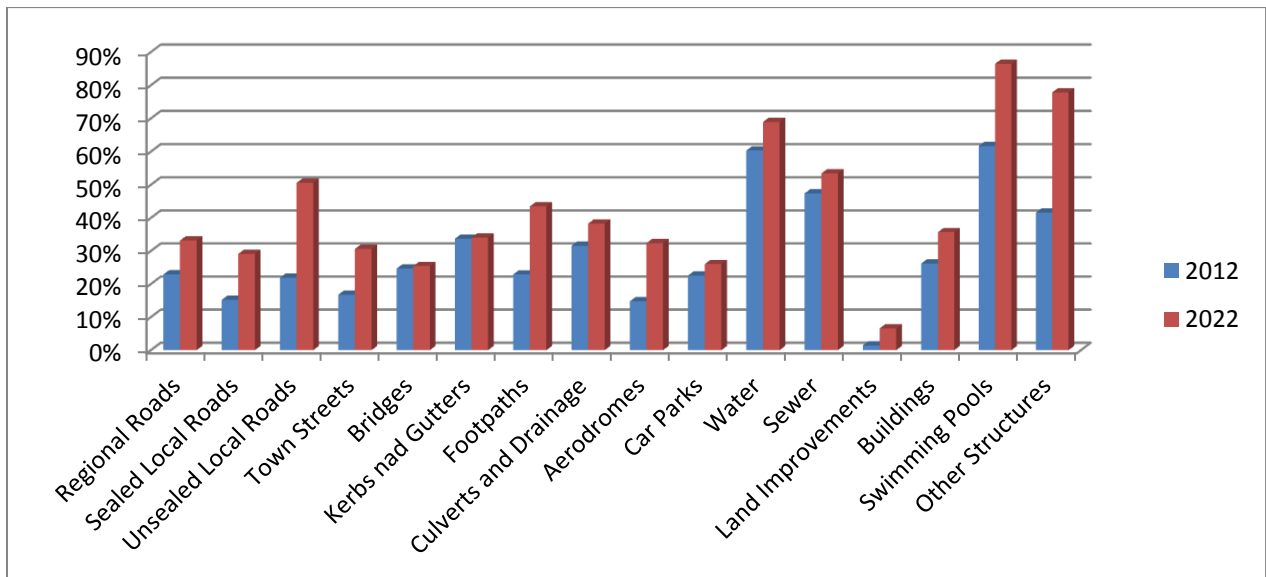
Council’s asset consumption ratio is forecast to be 30% at 30 June 2012, and Council is expected to consume a further 12% of the future service potential of its assets between the 2011/12 and 2021/22 financial years. This will result in an asset consumption ratio of 42% as at 30 June 2022.

Chart 8.4 Asset Consumption Ratio 2012 vs 2022



The change in consumption ratio by asset class is detailed in the following table

Chart 8.5 Asset Consumption Ratio 2012 vs 2022 by asset class



The increase in the consumption ratio for Council’s assets mostly relates to Council’s unsealed local roads, footpaths, swimming pools and other structures, which are generally the asset classes with extremely low asset renewal ratios.

The increase in unsealed roads is due to the graph above factoring all future capital expenditure cuts into expenditure on unsealed roads (the final consumption ratio assuming no cuts for this asset class is 43% in 2022).



#### 4. How effective are Council’s renewal efforts?

Council’s asset renewal ratio is a measure of how well Council is renewing its assets relative to their decline in value as measured by depreciation. An asset renewal ratio of less than 100% indicates that Council is not spending sufficient funds on asset renewals and thus the condition of these assets will decline over time.

Council is forecast to report an average asset renewal ratio of only 69% over the life of this plan, well below the ideal figure of 100%.

Chart 8.6 Asset Renewal Ratio

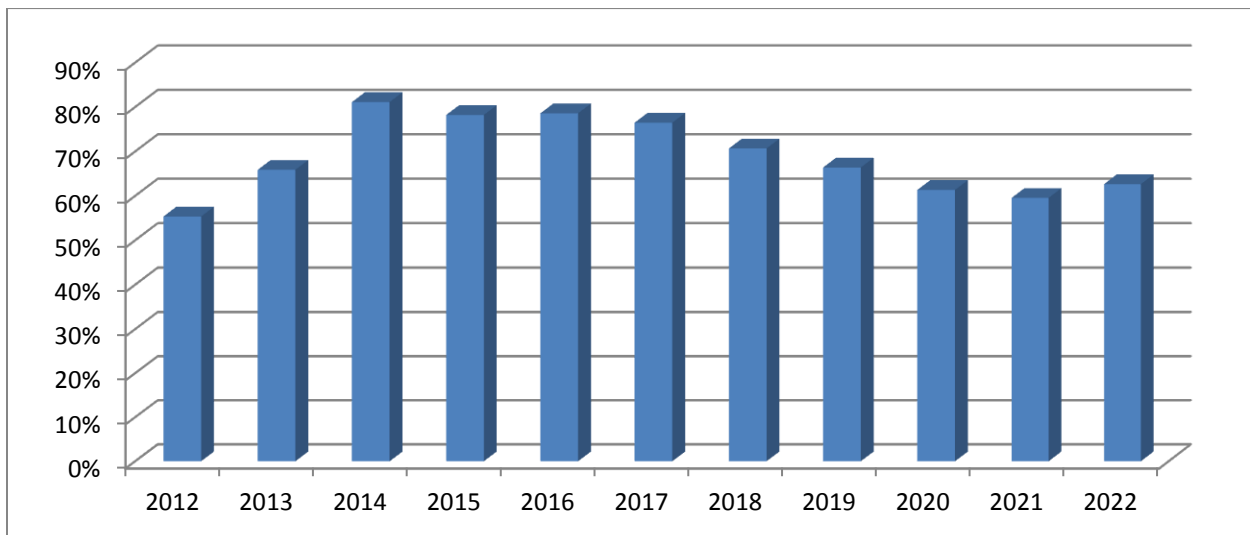


Chart 8.7 Asset Renewal Ratio by Asset Class

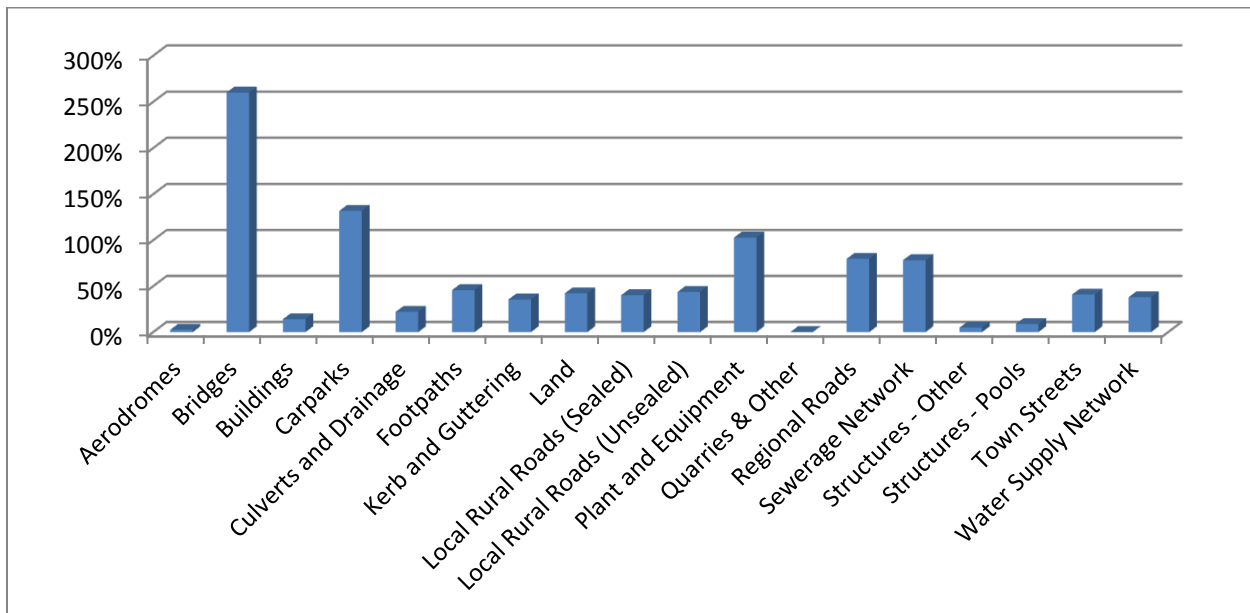


Chart 8.7 indicates that Council’s asset renewal ratio varies significantly by asset class, with bridges recording a renewal ratio of 260% due to the timber bridge replacement program, and structures, pools and aerodromes all recording asset renewal ratios under 10%. It should be noted that the renewal ratio for road seals is roughly 50%, indicating that Council is currently only resealing its roads once every 25 years as opposed to the desirable rate of once every 12 years.

Council’s shortfall in renewals expenditure can also be expressed as a dollar figure through the use of the asset renewal deficit KPI which measures the amount of underspend on renewals. Council is forecast to record an asset renewal deficit over the life of the plan of \$43.65m, even assuming that the \$10.8m worth of capital expenditure reductions come from capital expansion works such as the sealing of unsealed roads.

Chart 8.8 Asset Renewal Deficit

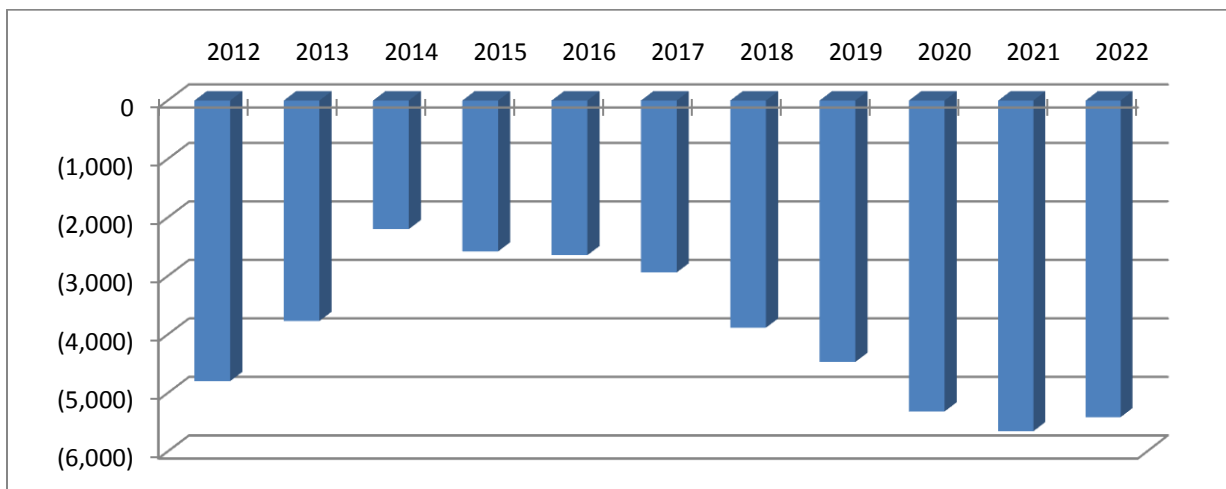
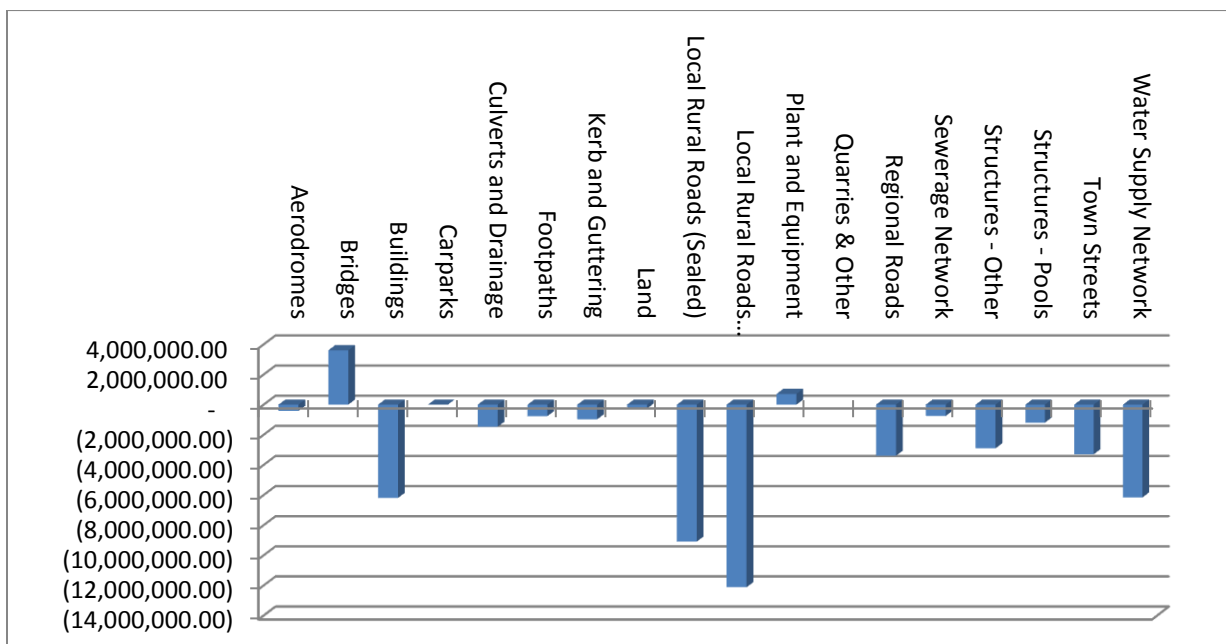


Chart 8.9 Asset Renewal Deficit by Asset Class



## **5. Is Council’s asset network sustainable in the long run?**

All the information in this plan indicates that Council’s asset network is not sustainable in the long run under current budget assumptions.

Council’s asset renewal ratio across the network is forecast to average 69% over the life of this plan, and Council will incur a total asset renewal deficit of \$43.65m in this time period. As a result, Council is expected to consume a further 12% of the future service potential of Council’s assets over the following 11 years, leading to worsening asset conditions across the network.

If asset renewals fail to keep up with the level of asset deterioration (as measured by depreciation), many of Council’s assets will need to be decommissioned as they will reach the end of their useful lives. The degree of unsustainability varies by asset class and many asset classes such as bridges and operating assets are sustainable at current spend levels, while other assets such as pools and road seals are not sustainable.

Given the assumptions in this plan, five of Council’s pools will most likely need to be closed within the next ten years unless funding can be found to replace these assets. Council’s reseal rate for its road surfacing is also roughly double the desired level, and if this trend continues Council will face increased pavement failure across its road network. These are just two high profile examples, however, renewal expenditure on all asset classes except bridges carparks and plant and equipment are forecast to be considerably below desired levels over the life of this plan.

Council is subject to funding limitations, and without assistance from other levels of government or a special rate variation, Council will find it difficult to fund its \$43.65m asset renewal deficit, and both residents and businesses within the Shire will have to bear decreased service levels as a result.

## Part 9: Plan Improvement and Monitoring

As a group 3 Council for the purpose of the IP&R reporting framework, this is the first asset management plan that Warrumbungle Shire Council has prepared. During the process of compiling this plan many shortcomings in Council’s current asset management practices were identified. Council recognises the importance of asset management, and is currently in the process of preparing a project plan to address the shortcomings identified in the preparation of this plan.

In order to identify current weaknesses within Council’s asset management processes a gap analysis has been carried out and the following areas requiring improvement have been identified:

### 1. Asset Data Accuracy and Completeness

#### Issue

Council’s current asset register data is in many cases dated and several cases of data omissions have recently been identified. Council also currently lacks information on asset year of construction, and has no information on minor culverts in rural areas. Segment information for local roads is also poor, and segment information for regional roads does not always use clearly identifiable segment markers.

#### Suggested Solutions

- Council needs to review the accuracy of current asset data for all infrastructure and land and buildings asset classes;
- Council needs to commence a project to capture culvert information in rural areas;
- Council needs to capture asset year of construction data in its asset registers;
- Council must ensure that road segments have clearly identifiable start and end markers (such as culverts, or intersections not “seal joins”);
- Council needs to implement processes that ensure that new assets/asset replacements are captured in Council’s asset registers in an accurate and timely manner.

### 2. Asset Service Levels and Condition Data

#### Issue

Council currently does not have defined asset service levels, and asset condition data is dated. In addition, Council does not have processes in place to capture asset condition data on a yearly basis.

#### Suggested Solutions

- Council to develop and agree with the Community a set of service level benchmarks in line with SMARTER performance measures;

- Council to implement annual reporting against asset service level benchmarks, including conducting customer satisfaction surveys;
- Council to introduce annual condition testing across all major asset classes;

### 3. Asset Accounting

#### Issue

Council's current useful life, residual values and replacement costs are dated and in many cases inconsistent. Council also incorrectly depreciates earthworks, and uses a consumption based depreciation method that creates considerable complexity and does not result in a materially more accurate depreciation figure.

#### Suggested Solutions

- Council to revise its depreciation methodology and revert to the straight line method for depreciating its assets (Complete – Awaiting audit approval);
- Council to review its replacement cost assumptions for all infrastructure assets, particularly roads (Complete – Awaiting audit approval);
- Council to cease the depreciation of earthworks per UIG Interpretation 1055 – *Earthworks*, as road earthworks are analogous to land and have an infinite useful life (Complete – Awaiting audit approval);
- Council to review its residual value and useful life assumptions for all asset classes (Complete – Awaiting audit approval);
- Council to standardise the reporting of activities across road asset classes in its financial information management system.

### 4. Asset Renewals and Expansion Planning and Budgeting

#### Issue

Council's current renewals program is adhoc and unscientific and budgeting for renewals is inadequate and does not allow for effective long term asset management.

#### Suggested Solutions

- Council to develop a renewals program based on asset ageing and condition assessments;
- Council to develop renewals forecasts (for future AMPs) based on asset ageing, with adjustments for condition when assets are within 10-20% of the end of their useful life, or when condition ratings fall below poor;
- Council's budget to reflect annual renewal requirements as much as possible within funding constraints;
- All new capital expansion expenditure to undergo cost benefit analysis and total lifecycle costing analysis to determine whether such expenditure is viable considering Council's considerable asset renewal deficit;
- Council to further explore the possibility of using debt or special rate variations to fund future capital expansion (or even renewals).

## 5. Benchmarking and Asset Management Knowledge

### Issue

Council's staff are unfamiliar with asset management practices and Council does not regularly report its performance against asset management KPIs.

### Suggested Solutions

- Council to better report on and manage its performance against key asset management KPIs and agreed service levels;
- Key Council staff to take training in asset management.

## 6. Identification of critical assets and asset risk management

### Issue

Council lacks detailed analysis of critical assets in its network and needs to improve on its current asset risk management practices.

### Suggested Solutions

- Council to develop a matrix to identify critical assets, and introduce processes to ensure that Council mitigates against risks associated with these assets;
- Council to develop a detailed risk management plan for all Council's assets;
- Council to develop plans to prioritise maintenance and renewal works for critical assets.



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