

# BERRIGAN SHIRE COUNCIL



## CORPORATE AND COMMUNITY SERVICES

# ASSET MANAGEMENT PLAN



Version 1

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## ABBREVIATIONS

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

## GLOSSARY

### **Annual service cost (ASC)**

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

### **Asset class**

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

### **Asset condition assessment**

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

### **Asset management**

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

### **Assets**

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

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

### **Average annual asset consumption (AAAC)\***

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

### **Brownfield asset values\*\***

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

### **Capital expansion expenditure**

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

### **Capital expenditure**

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

### **Capital funding**

Funding to pay for capital expenditure.

### **Capital grants**

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

### **Capital investment expenditure**

See capital expenditure definition

### **Capital new expenditure**

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

### **Capital renewal expenditure**

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

### **Capital upgrade expenditure**

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

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

#### **Carrying amount**

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

#### **Class of assets**

See asset class definition

#### **Component**

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

#### **Cost of an asset**

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

#### **Current replacement cost (CRC)**

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

#### **Current replacement cost "As New" (CRC)**

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

#### **Cyclic Maintenance\*\***

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

#### **Depreciable amount**

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

#### **Depreciated replacement cost (DRC)**

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

#### **Depreciation / amortisation**

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

#### **Economic life**

See useful life definition.

#### **Expenditure**

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

#### **Fair value**

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

#### **Greenfield asset values \*\***

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

#### **Heritage asset**

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

#### **Impairment Loss**

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

#### **Infrastructure assets**

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

#### **Investment property**

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

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

#### **Level of service**

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

### **Life Cycle Cost \*\***

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

### **Life Cycle Expenditure \*\***

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

### **Loans / borrowings**

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

### **Maintenance and renewal gap**

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

### **Maintenance and renewal sustainability index**

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

### **Maintenance expenditure**

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

### **Materiality**

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

### **Modern equivalent asset.**

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

### **Non-revenue generating investments**

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

### **Operating expenditure**

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

### **Pavement management system**

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

### **Planned Maintenance\*\***

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

### **PMS Score**

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

### **Rate of annual asset consumption\***

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

### **Rate of annual asset renewal\***

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

### **Rate of annual asset upgrade\***

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

### **Reactive maintenance**

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

### **Recoverable amount**

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

**Recurrent expenditure**

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

**Recurrent funding**

Funding to pay for recurrent expenditure.

**Rehabilitation**

See capital renewal expenditure definition above.

**Remaining life**

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

**Renewal**

See capital renewal expenditure definition above.

**Residual value**

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

**Revenue generating investments**

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

**Risk management**

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

**Section or segment**

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

**Service potential**

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

**Service potential remaining\***

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

**Strategic Management Plan (SA)\*\***

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

**Sub-component**

Smaller individual parts that make up a component part.

**Useful life**

Either:

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

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

**Value in Use**

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

Source: DVC 2006, Glossary

Note: Items shown \* modified to use DA instead of CRC  
Additional glossary items shown \*\*

# 1. EXECUTIVE SUMMARY

## What Council Provides

Council provides a wide range of assets to support its corporate operations and provide facilities and amenity for its community. Many of these assets are provided and managed in partnership with community groups that have direct interest in the use of the assets.

This asset management plan covers the following infrastructure assets:

### ***Assets covered by this Plan***

Asset category	Dimension	Replacement Value (\$M)
Recreation Reserves and Sporting Grounds	Barooga Recreation Reserve, Berrigan Recreation Reserve, Finley Recreation Reserve, Finely Showgrounds Reserve and Tocumwal Recreation Reserve	15.099
Public Parks and Gardens	29 separate recreation sites within the townships of Barooga, Berrigan, Finley and Tocumwal	4.289
Council Chambers and Offices	Council Chambers and Office in Berrigan	1.496
Public Halls	7 public halls	9.545
Public Swimming Pools	3 Public Swimming Pools at Berrigan, Finley and Tocumwal	2.704
Public Libraries	Public Libraries at Barooga, Berrigan, Finley and Tocumwal	2.980
Finley Saleyards	Saleyards facilities at Finley	4.491
Aerodromes	Tocumwal Aerodrome and Berrigan Airstrip	4.427
Council Depots	Depot facilities in Barooga, Berrigan, Finley and Tocumwal	0.868
Emergency Services	Rural Fire Service sheds at Barooga, Berrigan, Finely and Tocumwal and SES and VRA facilities in Tocumwal.	0.665
Waste Disposal Facilities	Berrigan Landfill, Finley Recycle Centre and Tocumwal Landfill	0.215
Quarries	Pine Lodge Quarry	0.038
Residences	3 Residences in Berrigan and 1 in Tocumwal	0.879
Cemeteries	Cemeteries in Barooga, Berrigan, Finley and Tocumwal	0.285

Transport Facilities	4 Bus Shelters	0.027
<b>TOTAL</b>		<b>47.967</b>

## What does it Cost?

There are two key indicators of cost to provide the Corporate and Community Services assets.

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

The life cycle cost to provide the Corporate and Community Services assets is estimated at **\$1,922,000** per annum. Council's planned life cycle expenditure for year 1 of the asset management plan is **\$1,440,500** which gives a life cycle sustainability index of **0.75**.

The total maintenance and capital renewal expenditure required to provide the Corporate and Community Services assets the in the next 10 years is estimated at **\$16.4m**. This is an average of **\$1.64m** per annum.

Council's maintenance and capital renewal expenditure for year 1 of the asset management plan of **\$1.44m** giving a 10 year sustainability index of **0.88**.

The figures for asset renewal are based on the projected expenditure for 2010/11 which is higher than the projected annual expenditures going forward. This paints a fairly bleak picture in terms of sustainability but should be moderated somewhat by the fact that the majority of renewal and upgrade works for assets in this plan will be funded by either community groups or grant funds and these are accessed on an adhoc basis and therefore cannot be reasonably included in the plan.

## Plans for the Future

Council plans to operate and maintain the Corporate and Community Services assets to achieve the following strategic objectives.

1. Ensure the Corporate and Community Services assets are maintained at a safe and functional standard as set out in this asset management plan.
2. Continue to improve the Corporate and Community Services assets to meet the adopted levels of service Proposals identified and sponsored by our community or Council Officers for new or additional assets, upgrade or re-development of assets and or asset disposal will be guided by the following:
  - Infrastructure provision based upon population demographics, fit for purpose, benchmarked cost and usage thresholds
  - Co-location of essential community infrastructure occurs, including emergency services and law enforcement; child care, preschool, primary and secondary education; skills training facilities and enterprise; community health and social services; community facilities and entertainment.
  - Clusters and/ or hubs of community infrastructure and resources strengthen synergies between management, service providers, volunteers, the community and users.
  - Facilities are planned and developed to ensure they can evolve with user population demand and or decline

## Measuring our Performance

### Quality

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

### Function

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

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

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

- Maintain the existing buildings and facilities in a safe and functional state.
- Improve the buildings and facilities where possible to achieve adopted levels of service and meet changing community needs.

The main functional consequence of ensuring the corporate and community assets are maintained at a safe and functional standard as set out in this asset management plan is the continued provision of adequate corporate services and community amenities to the residents of the Berrigan Shire and visitors at a level acceptable to the community and other stakeholders.

### **Safety**

We inspect all Corporate and Community Services assets regularly and prioritise and repair defects in accordance with our inspection schedule to ensure they are safe.

## The Next Steps

This actions resulting from this asset management plan are:

- Complete the Improvement Plan as set out in Table 8.2
- Make provision for the completion of the Capital Works Program attached as Appendix B
- Carry out community consultation

• **Table 8.2** *Improvement Plan*

<b>Task No</b>	<b>Task</b>	<b>Responsibility</b>	<b>Resources Required</b>	<b>Timeline</b>
1.	Detailed inventory of assets	DCS, DTS	Staff	March 2012
2.	Condition Rating of assets	DCS, DTS	Staff/External	June 2013
3.	Review of remaining life of assets following condition ratings	DCS, DTS	Staff	June 2013
4.	Document methodology and procedures for asset useful lives, asset unit costs, condition rating and depreciation calculations	DTS, DCS	Staff	June 2011
5.	Prepare a cost/benefit analysis regarding development and maintenance of a chart of accounts to allow separation of operation costs and maintenance costs and to split the maintenance costs into reactive, planned and cyclic and to separate capital expenditure into renewal, new and upgrade works. Implement areas considered to be effective	FM	Staff	June 2011
6.	Investigate options for inclusion of corporate and community services assets into the BizeAsset system and subsequent integration with the Accounting/Financial System	FM, EXE	Staff	March 2012
7.	Carry out community consultation to allow the development of Desired Levels of Service when this plan is reviewed in 2015	DCS	Staff/External	March 2014

## 2. INTRODUCTION

### 2.1 Background

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

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

Berrigan Shire Council Management Plan

Berrigan Shire Council – State of Environment Report, 2008

Berrigan Shire Council – Local Environmental Plan, 1992

This asset management plan covers the following infrastructure assets:

All Corporate and Community Services Assets owned by Berrigan Shire Council that are not included in specific Asset Management Plans

**Table 2.1. Assets covered by this Plan**

Asset category	Dimension	Replacement Value (\$M)
Recreation Reserves and Sporting Grounds	Barooga Recreation Reserve, Berrigan Recreation Reserve, Finley Recreation Reserve, Finley Showgrounds Reserve and Tocumwal Recreation Reserve	15.099
Public Parks and Gardens	29 separate recreation sites within the townships of Barooga, Berrigan, Finley and Tocumwal	4.289
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Transport Facilities	4 Bus Shelters	0.027
<b>TOTAL</b>		<b>47.967</b>

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

State local members	Represent community interest
Berrigan Shire Council	Meet expectations of the customers with respect to levels of service.
The General Public	Recreation and public facilities that are fit for purpose and meet the majority of needs of residents.
Berrigan Shire Council Employees	Workplace facilities that provide a reasonable level of amenity and safety.
Volunteer Committees of Council	Represent interests of users of specific facilities.
Tocumwal Aerodrome Advisory Committee	Represent interests of users of aerodrome
Finley Saleyards Lessee	Operation of Saleyards
Tocumwal Caravan Park Lessee	Operation of Caravan Park
State and Federal Government Departments	Funding and Regulation

## 2.2 Goals and Objectives of Asset Management

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

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

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.<sup>1</sup>

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

Council's vision is:

**The vision of the Berrigan Shire Council is to create a sustainable, healthy and vibrant community that takes advantage of economic opportunities, promotes innovation and diversification, realises the potential of existing businesses and welcomes compatible strategic investment into the Shire.**

In expanding the Council's vision to the 30 year planning horizon for the provision of corporate and community services, the following expectations have been identified:

- Government policy provides regional and local leadership.
- Council will shape Government policy to better serve the community.
- A sense of belonging and pride will come from a partnership between Council and the community.
- Quality of life means a clean, safe environment with high social and community values
- Infrastructure will be properly planned and maintained.
- Economic development.
- Quality and value for money demonstrated by market testing and benchmarking.

Council's vision has implications for the provision of the corporate and community services to provide excellence in service to the community to enable enhanced quality of life. This will be achieved through:

Integrity  
Leadership  
Selflessness  
Objectivity

---

<sup>1</sup> IIMM 2006 Sec 1.1.3, p 1.3

Accountability  
Openness  
Honesty  
Respect  
Trust and teamwork  
Advocacy  
Partners

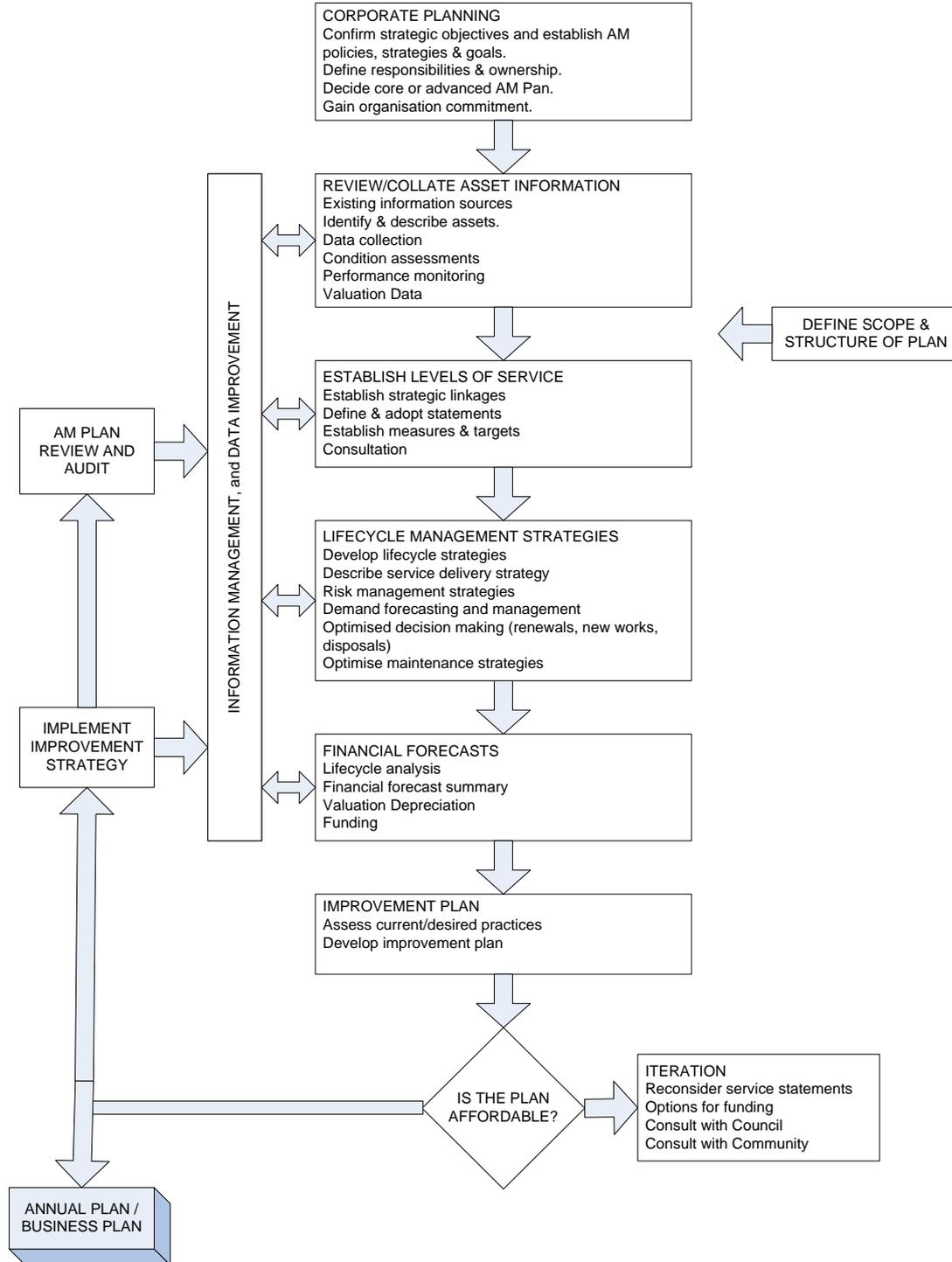
## 2.3 Plan Framework

Key elements of the plan are

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

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

**Road Map for preparing an Asset Management Plan**  
 Source: IIMM Fig 1.5.1, p 1.11



## 2.4 Core and Advanced Asset Management

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

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

## 3. LEVELS OF SERVICE

### 3.1 Customer Research and Expectations

Council has embedded in its operations mechanisms that assist the Shire with the identification and monitoring of customer expectations. These mechanisms include:

1. A formal system of complaints/requests with proforma sheets distributed to all property owners with their annual rates notice.
2. The appointment of Section 355 committees which, are representative of the local community or interest group for assets in the following categories
  - Recreation Reserves and Sporting Grounds
  - Public Parks and Gardens
  - Public Halls
  - Public Swimming Pools
  - Cemeteries

This system has not identified any obvious short falls in the current levels of service. As part of the Shire's transition to 'advanced' asset management planning, consideration will be given to a formal research program to determine customer expectations for inclusion in future updates of the asset management plan.

### 3.2 Legislative Requirements

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

**Table 3.2. Legislative Requirements**

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.

Environmental Planning and Assessment Act 1979  &  Environmental Planning and Assessment Amendment Act 2008	<ul style="list-style-type: none"> <li>• Requirement for Local Environmental Plans and Development Control Plans.</li> </ul> <p>Provides for Council control of development of towns and approval of infrastructure expansion.</p>
Catchment Management Authorities Act 2003	<ul style="list-style-type: none"> <li>• Requirement for ongoing management plan.</li> <li>• Promotes the coordination of activities within catchment areas.</li> <li>• Under the provision of this Act, Local Catchment Management Authorities oversee this process in the region.</li> </ul>
Soil Conservation Act 1938	<ul style="list-style-type: none"> <li>• Preservation of water course environment.</li> </ul>
Occupational Health and Safety Act 2000 &  Occupational Health and Safety Regulations 2001	<ul style="list-style-type: none"> <li>• Impacts all operations in relation to safety of workers and the public.</li> <li>• Council's responsibility to ensure health, safety and welfare of employees and others at places of work.</li> </ul>
Workers Compensation Act 1987	Safety of Employees
Roads Act 1993	Requirements for access arrangements from public roads
Civil Liability Act 2002	Safety of Public
Food Act 2003	Standard of Food Preparation Areas
Building Code of Australia Volume 1	Requirements for building construction and safety
Building Code of Australia Volume 2	Requirements for building construction and safety
Disability Discrimination Act 1992	Provision of facilities for the disabled
Public Health Act 1991 and 2010	Air conditioning management standards, Standards for public swimming pools
Companion Animals Act 1998	Pound operations
Protection of the Environment Operations Act 1997	Pollution control
Prevention of Cruelty to Animals Act 1979	Saleyards operations
Meat Industry Act 1978	Saleyards operations
Civil Aviation Act 1988	Requirements for construction standards, markings and maintenance of aerodromes
Civil Aviation Safety Regulations 1998	Requirements for construction standards, markings and maintenance of aerodromes

### 3.3 Current Levels of Service

Council has defined service levels in two terms.

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

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

<p><b>Service Criteria</b></p> <ul style="list-style-type: none"> <li>Quality</li> <li>Quantity</li> <li>Availability</li> <li>Safety</li> </ul>	<p><b>Technical measures may relate to</b></p> <ul style="list-style-type: none"> <li>Smoothness of roads</li> <li>Area of parks per resident</li> <li>Distance from a dwelling to a sealed road</li> <li>Number of injury accidents</li> </ul>
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Council's current service levels are detailed in Table 3.3.

**Table 3.3. Current Service Levels**

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
<b>COMMUNITY LEVELS OF SERVICE</b>				
Quality	to service the needs of the Council and Community to an appropriate standard	Customer Action Request System	Maintain Current appropriate Standards	Maintain Current appropriate Standards
Function	Ensure that building and other facilities meet user requirements	Usage of Facilities	<b>Buildings and Structures</b> meet current requirements	<b>Buildings and Structures</b> meet current requirements
Safety	to provide safe and suitable facilities free from hazards	Number of injuries	Identified through Customer action request system, Immediate Isolation of Hazard, and repair within 2 days, depending on budget restrictions	Identified through Customer action request system, Immediate Isolation of Hazard, and repair within 2 days, depending on budget restrictions
<b>TECHNICAL LEVELS OF SERVICE</b>				
Condition	Provide appropriate building and other facilities to meet user requirements	Service & Maintenance request responses	Maintain existing facilities	Maintain existing facilities
Availability	To meet the criteria of council and community demand	Record of closure of facilities	Provide existing facilities	Review for rationalization if appropriate
Cost Effectiveness	provide appropriate building and other facilities in a cost effective manner	Compare maintenance costs with similar buildings and Structures	Fees reflecting current economic status of users	Fees to reflect ongoing maintenance of buildings and Structures

### 3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including the 2010 Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and

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

## 4. FUTURE DEMAND

### 4.1 Demand Forecast

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

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

**Table 4.1. Demand Factors, Projections and Impact on Services**

Demand factor	Present position	Projection	Impact on services
Population	8317 (2006)	10104 (2031)	It is not expected that the increase in population will have a detrimental impact on facilities but will result in better utilisation of them.
Demographics	Average age of population greater than State average	The gap between Berrigan and the State Average will continue to increase	Aging population will increase pressure to improve accessibility to facilities and may require some modification to cater for this demographic.

### 4.2 Changes in Technology

Technology changes are forecast to have little effect on the delivery of services covered by this plan.

### 4.3 Demand Management Plan

#### **Community Infrastructure Principles**

The development and wellbeing of Berrigan Shire communities is supported through the provision of community facilities and services.

Demand management practices include: managing existing assets, upgrading existing assets, consideration of non asset solutions, insuring against risks and managing failures.

Proposals identified and sponsored by our community or Council Officers for new or additional assets, upgrade or re-development of assets and or asset disposal will be guided by the following:

- Infrastructure provision based upon population demographics, fit for purpose, benchmarked cost and usage thresholds
- Co-location of essential community infrastructure occurs, including emergency services and law enforcement; child care, preschool, primary and secondary education; skills training facilities and enterprise; community health and social services; community facilities and entertainment.
- Clusters and/ or hubs of community infrastructure and resources strengthen synergies between management, service providers, volunteers, the community and users.
- Facilities are planned and developed to ensure they can evolve with user population demand and or decline

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

**Table 4.3. Demand Management Plan Summary**

Service Activity	Demand Management Plan
Recreation Reserves and Sporting Grounds	All recreation reserves and sporting grounds within the shire have capacity to cater for far greater population than currently exists. Demand for additional facilities or upgraded facilities will be experienced as new recreational pursuits develop or the functionality of facilities is considered inadequate. Proposals for such additional assets will be identified by community consultative processes and will need to have broad based community support and sound business cases before being adopted.
Public Parks and Gardens	While all four towns within the shire are adequately served with a number of parks and gardens, they have been established to varying standards and there will be demand from communities to improve the amenity, functionality and safety of these areas in the future. Proposals for such additional assets will be identified by community consultative processes and will need to have broad based community support and sound business cases before being adopted.
Council Chambers and Offices	The Council Chambers and Offices will adequately meet the service needs of the Council for the next 20 years. While space for additional staff may become an issue, there is the opportunity to expand into the existing filing room if needed. A plan for this work is being developed. Additional storage room for files is available in the external archive room at the rear of the Berrigan Library. Purchase of a second compactus has been scheduled for 2011/12.
Public Halls	<p>While all of the Council's major public halls share some deficiencies as a result of their age, all retain sufficient capacity to meet any expected future demand. There may be some scope to look at a rationalisation of some of the minor public halls to reduce some of the maintenance burden on the community. This would follow a process of community consultation.</p> <p>There may be pressure from the community to improve the amenity and functionality of these buildings especially with regard to kitchen and toilet facilities. Proposals for such additional assets or improvements will be identified by community consultative processes and will need to have broad</p>

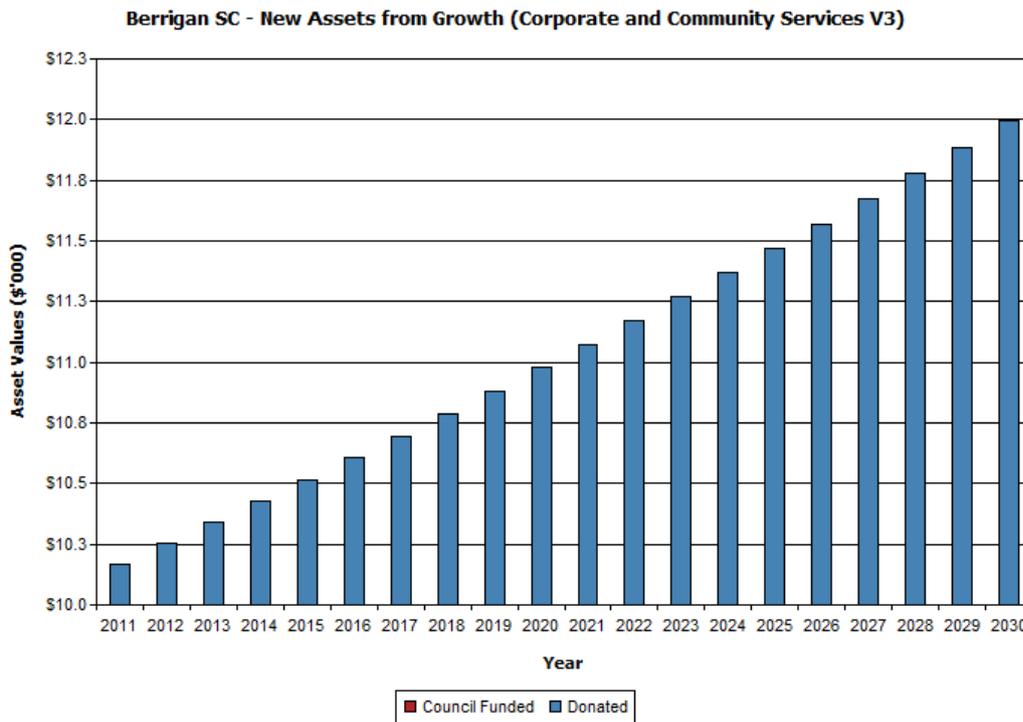
	based community support and sound business cases before being adopted.
Public Swimming Pools	The Council's three public swimming pools all have the capacity to cater for far greater patronization than currently exists. While Barooga does not have a public swimming pool, the Council plans to continue its arrangement with Barooga Sports Club regarding use of the Sports Club pool. For various reasons, the use of public swimming pools in the Shire has declined over time. This pattern needs to be considered, along with the level of community support and the existence of a strong business case before undertaking large scale replacement or renovation works when each pool reaches the end of its useful life.
Public Libraries	The Council will complete the end of a 12 year library construction program in July 2011. All four public libraries will then be housed in modern, attractive facilities with sufficient capacity and amenity to cater for community needs for the foreseeable future. The library at Tocumwal – the oldest and most popular facility – may require some renovation or expansion towards the end of the life of this plan, should there be public demand. Proposals for such additional assets or improvements will be identified by community consultative processes and will need to have broad based community support and sound business cases before being adopted.
Finley Saleyards	<p>The Finley Saleyards are currently leased to a private operator on a long term lease. When constructed the saleyards were capable of handling yardings much larger than recently seen. While some of the reduction in stock throughput is cyclical, there have also been some structural changes to the livestock industry that make it unlikely that future yardings will stretch the capacity of the yards.</p> <p>There has been a trend towards consolidation and regionalization of the saleyard industry and this poses some opportunities and as well as some threats for the Finley operations. Future changes to legislation and quality standards may also require the Council to consider the upgrading or closure of the yards. Proposals for improvements will be identified by community and stakeholder consultative processes and will need to have broad based community support and sound business cases before being adopted.</p>
Aerodromes	The Tocumwal Aerodrome is an aging facility that was built as a training facility during World War 2 and is currently an underutilised asset that has significant capital and maintenance requirements. Demand for the facility needs to increased in order to provide an income stream to make the facility more self sufficient. If this cannot be achieved it may be necessary to downgrade the facility to reduce recurrent capital and maintenance costs.
Council Depots	Council depot facilities are currently adequate for servicing the needs of the shire workforce. Future needs are not perceived to require any major changes to these facilities in life of this plan.
Emergency Services	Emergency services facilities are considered adequate for current needs and it is anticipate that if any major additions are required in future they will be funded from grant funds.
Waste Disposal Facilities	It is envisaged that there will be requirement for capital expenditure for waste transfer facilities to be constructed within the life of this plan as the Tocumwal landfill is expected to be full within five years. An amount of \$200,000 has been allowed within the future capital budget for this purpose, however, this amount may require adjustment when a waste management plan for the shire is prepared in 2011.

Quarries	Council owns one operating quarry at Pine Lodge and there is no anticipated large capital requirements for this operation for the period of this plan. There will some requirement for restoration of mined areas, however, this will be completed as part of normal operations.
Residences	<p>Council currently owns four residences with all being leased to Council employees. It is not anticipated that there will need for any additional residences within the life of this plan, however, it is proposed to replace two of the residences with more modern facilities.</p> <p>The residences situated at the Berrigan Pound and Tocumwal Aerodrome are most likely to be demolished when they are no longer viable to maintain or there is a need for the land for another use.</p>
Cemeteries	Cemeteries in Berrigan, Finley and Barooga have sufficient room for anticipated demand for the life of this plan. Tocumwal will require additional land to be purchased and arrangements have commenced to purchase additional land from the Crown for this purpose. All cemeteries will have an ongoing need for additional capital to provide plinths and watering systems for the lawn sections.
Transport Facilities	Transport facilities include only bus shelters at this stage and it is not envisaged that there will be major requirements to expand these facilities within the life of this plan. Any expansion of these facilities will be funded from external sources.

#### 4.4 New Assets from Growth

The new assets required to meet growth will be constructed by Council. The new asset values are summarised in Fig 1.

**Fig 1. New Assets from Growth**



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

## 5. LIFECYCLE MANAGEMENT PLAN

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

### 5.1 Background Data

#### 5.1.1 Physical parameters

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

Recreation Reserves and Sporting Grounds	Barooga Recreation Reserve, Berrigan Recreation Reserve, Finley Recreation Reserve, Finley Showgrounds Reserve and Tocumwal Recreation Reserve
Public Parks and Gardens	29 separate recreation sites within the townships of Barooga, Berrigan, Finley and Tocumwal
Council Chambers and Offices	Council Chambers and Office in Berrigan
Public Halls	7 public halls
Public Swimming Pools	3 Public Swimming Pools at Berrigan, Finley and Tocumwal
Public Libraries	Public Libraries at Barooga, Berrigan, Finley and Tocumwal
Finley Saleyards	Saleyards facilities at Finley
Aerodromes	Tocumwal Aerodrome and Berrigan Airstrip
Council Depots	Depot facilities in Barooga, Berrigan, Finley and Tocumwal
Emergency Services	Rural Fire Service sheds at Barooga, Berrigan, Finley and Tocumwal and SES and VRA facilities in Tocumwal.
Waste Disposal Facilities	Berrigan Landfill, Finley Recycle Centre and Tocumwal Landfill
Quarries	Pine Lodge Quarry
Residences	3 Residences in Berrigan and 1 in Tocumwal
Cemeteries	Cemeteries in Barooga, Berrigan, Finley and Tocumwal
Transport Facilities	4 Bus Shelters

This asset management plan covers a large range of assets that are not included in other asset management plans for specific services and contains the majority of Council's building assets.

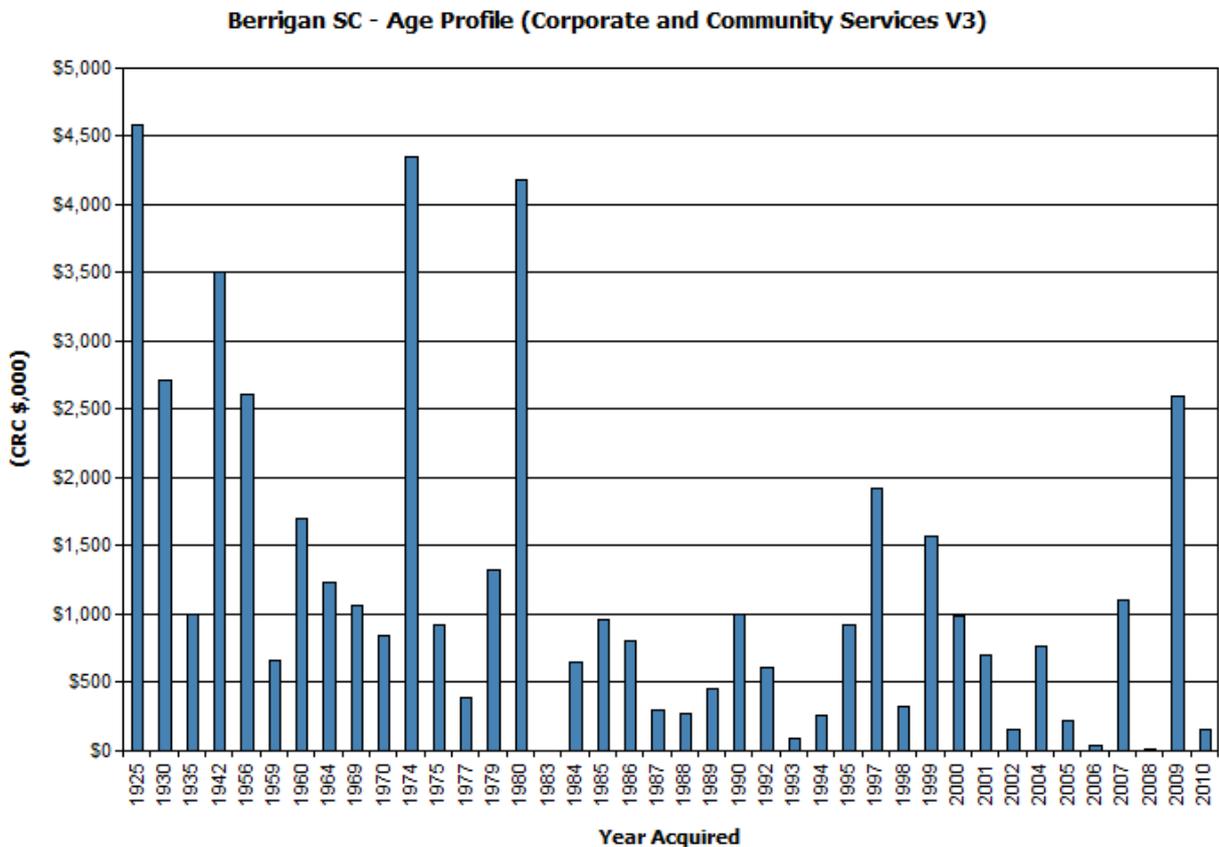
There are many assets included in this plan that are not currently included in Council's asset register as they were established by community groups or other means and have not been recognised as assets to this point. These assets will need to be recorded on the asset register and the financial details recognised in future financial statements.

The Corporate and Community assets have not been incorporated into the BizeAsset inventory system that serves the major asset categories such as roads, water supply and sewerage at this stage, but, are included in a basic inventory in the asset management component of Council’s corporate financial system Civica PCS. Some of these assets should be migrated to the BizeAsset system inventory as resources permit.

As there are four relatively small towns within the Shire of Berrigan it is necessary to provide and maintain four sets of facilities for many services provided to the community. As a result the majority of assets covered by this plan have the capability of serving a greater population than currently exists or is projected for the life of this plan, however, there are issues with aging population and changing community needs that mean some of the assets may no longer be ideal for the purpose that they are being used.

The age profile of the Corporate and Community assets is shown in the graph below. Graphs of each sub category are shown in Appendix D.

**Fig 2. Asset Age Profile**



5.1.2 Asset capacity and performance

Council’s services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

**Table 5.1.2. Known Service Performance Deficiencies**

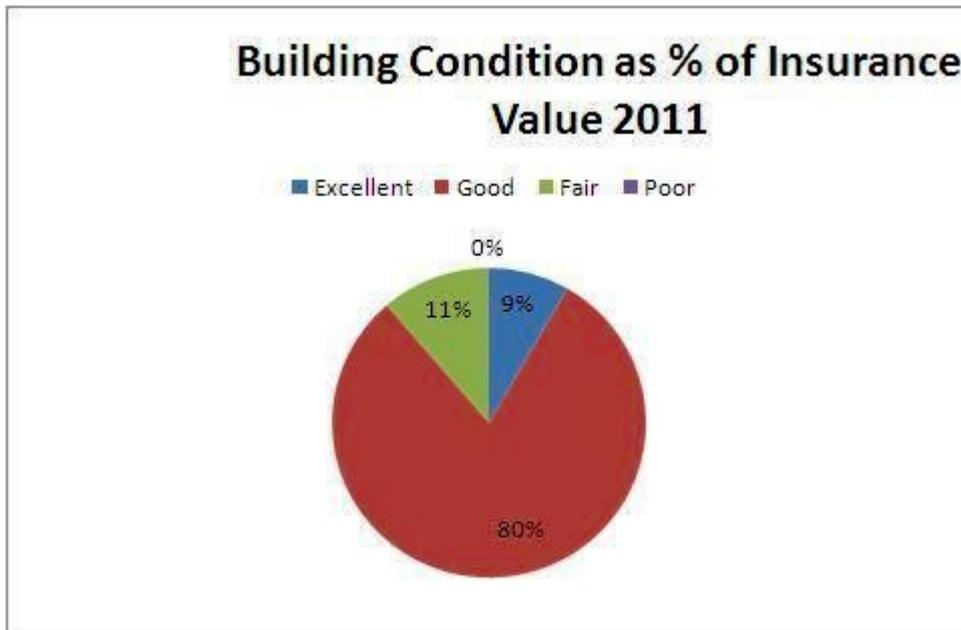
Location	Service Deficiency
Buildings	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Asbestos components require treatment/removal.</li> </ul>
Sporting facilities	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Park Infrastructure	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Saleyards	<ul style="list-style-type: none"> <li>• OHS compliance</li> </ul>
Pools	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Toc VRA/SES building	<ul style="list-style-type: none"> <li>• Roof leaks and requires replacement</li> </ul>

The above service deficiencies were identified from the knowledge of council officers associated with management of the facilities.

5.1.3 Asset condition

Condition assessments have not been carried out for all assets included in this plan. Building assets on all sites have been assessed and these make up around 40% of the total asset value. The graph below indicates that the majority of Council's building assets are in good condition.

**Fig 3. Building Asset Condition Profile**



In this instance condition was measured using a 1 – 4 rating system.

Rating	Description of Condition
1	Excellent condition: Only planned maintenance required.
2	Good: Some maintenance required plus planned maintenance.
3	Fair: Significant renewal/upgrade required.
4	Poor: Unserviceable.

All assets included in this plan should be assessed for condition during the life of the plan to enable better assessment of maintenance and replacement requirements at the time of the first review of the plan.

#### 5.1.4 Asset valuations

The book value of assets as at 2010 covered by this asset management plan is summarised below. Assets were last revalued at June, 2009. There are some \$16m of found assets that are not currently included in the book value as they were established by community groups or other means and have not been recognised as assets to this point. The depreciation figures below show both the current book values and an estimate including the found assets. Assets are valued at greenfield rates

The useful lives of many assets have also been reviewed on the basis that the assets had already passed the useful life used for book value depreciation calculations but were still in service and functioning satisfactorily.

	Book Values	Current Estimates
Current Replacement Cost	\$31,819,000	\$47,967,000
Depreciable Amount	\$31,819,000	\$47,967,000
Depreciated Replacement Cost	\$15,176,000	\$24,277,000
Annual Depreciation Expense	\$585,000	\$692,000

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion. For these calculations the current estimate figures have been used.

Asset Consumption	1.44%
Asset renewal	0.44%
Annual Upgrade/expansion	0.78%

The figures for asset renewal and upgrade expansion are based on the projected expenditure for 2010/11 which is higher than the projected annual expenditures going forward. This paints a fairly bleak picture in terms of sustainability but should be moderated somewhat by the fact that the majority of renewal and upgrade works for assets in this plan will be funded by either community groups or grant funds and these are accessed on an adhoc basis and therefore cannot be reasonably included in the plan.

## 5.2 Risk Management Plan

An assessment of risks<sup>2</sup> associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.2.

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<sup>2</sup> Berrigan Shire Council, 'Core' Infrastructure Risk Management Plan, Corporate and Community Services, January, 2011

**Table 5.2. Critical Risks and Treatment Plans**

Buildings	Total or partial loss of building due to fire	H	<ol style="list-style-type: none"> <li>1. Review and assess all buildings in relation to building compliance codes;</li> <li>2. Implement works program in accordance with assessment.</li> </ol>
Buildings	Deterioration of, and/or damage to buildings due to insufficient maintenance, structural failure, storm damage, or internal damage.	H	<ol style="list-style-type: none"> <li>1. Review and assess maintenance works and develop program;</li> <li>2. Implement programmed works.</li> </ol>
Sporting facilities	Deterioration of, and/or damage to the facility due to loss of volunteer labour to maintain facilities, water restrictions, structural failure, or storm damage.	H	<ol style="list-style-type: none"> <li>1. Review and assess maintenance works and develop program;</li> <li>2. Implement programmed works;</li> <li>3. Involve CPO in volunteer recruitment.</li> </ol>
Access Roads and Carparks	Vehicle/pedestrian collision due to inadequate shared roadways, or speeding vehicles	H	<ol style="list-style-type: none"> <li>1. Conduct risk assessment on all access areas and carparks.</li> <li>2. Implement a works program in accordance with assessment.</li> </ol>
Saleyards	Forced closure due to non-compliance with legislated requirements.	H	<ol style="list-style-type: none"> <li>1. Review report;</li> <li>2. Identify high priority areas;</li> <li>3. Implement works program in accordance with prioritised plan.</li> </ol>
Saleyards	Forced closure due to poor stock quantities.	H	<ol style="list-style-type: none"> <li>1. Develop Asset Management Plan;</li> <li>2. Participate in community consultation as part of Integrated Planning and Reporting.</li> </ol>
Pools	Forced closure due to insufficient use.	H	<ol style="list-style-type: none"> <li>1. Develop Asset Management Plan;</li> <li>2. Participate in community consultation as part of Integrated Planning and Reporting.</li> </ol>
Pools	Deterioration of facility due to loss of volunteer labour to maintain facilities, structural failure, or poor maintenance.	H	<ol style="list-style-type: none"> <li>1. Review and assess maintenance works and develop program;</li> <li>2. Implement programmed works;</li> <li>3. Involve CSO in volunteer recruitment.</li> </ol>
Aerodromes	Forced closure due to non-compliance with legislated requirements	H	<ol style="list-style-type: none"> <li>1. Review and assess aerodrome and runways in relation to regulations;</li> <li>2. Implement works program in accordance with assessment.</li> </ol>
Aerodromes	Forced closure due to insufficient use, or unsuitability of facility and location.	H	<ol style="list-style-type: none"> <li>1. Develop Asset Management Plan;</li> <li>2. Participate in community consultation as part of Integrated Planning and Reporting.</li> </ol>

### 5.3 Routine Maintenance Plan

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

### 5.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

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

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

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

Maintenance expenditure trends are shown in Table 5.3.1

**Table 5.3.1. Maintenance Expenditure Trends**

Year	Maintenance Expenditure		
	Reactive	Planned	Cyclic
2007/08	\$359,000	\$300,000	\$300,000
2008/09	\$363,000	\$330,000	\$330,000
2009/10	\$415,000	\$400,000	\$400,000

Planned and cyclic maintenance work make up 60% of total maintenance expenditure.

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

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

### 5.3.2 Standards and specifications

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

Local Government Act 1993

Environmental Planning and Assessment Act 1979

Catchment Management Authorities Act 2003

Soil Conservation Act 1938

Occupational health and Safety Act 2000 &

Occupational Health and Safety Regulations 2001

Workers Compensation Act 1987

Roads Act 1993

Civil Liability Act 2002

Food Act 2003

Building Code of Australia Volume 1

Building Code of Australia Volume 2

Disability Discrimination Act 1992

Public Health Act 1991 and 2010

Companion Animals Act 1998

Protection of the Environment Operations Act 1997

Prevention of Cruelty to Animals Act 1979

Meat Industry Act 1978

Civil Aviation Act 1988

Civil Aviation Safety Regulations 1998

Manual of Standards Part 139 - Aerodromes

AS/NZS ISO 31000: 2009 Risk Management – Principles and guidelines

AS4685: Playground Equipment:

2004 Part 1 : General safety requirements and test methods

2004 Part 2 : Particular safety requirements and test methods for Swings

2004 Part 3 : Particular safety requirements and test methods for Slides

2004 Part 5 : Particular safety requirements and test methods for Rocking Equipment

AS/NZS 4422 : 1996 Playground surfacing – specifications, requirements and test method.

AS/NZS 4486 : 1997 Playgrounds and Playground equipment Part 1 – Development, installation, inspection, maintenance and operation (Superseded, however still referenced retrospectively in terms of maintenance).

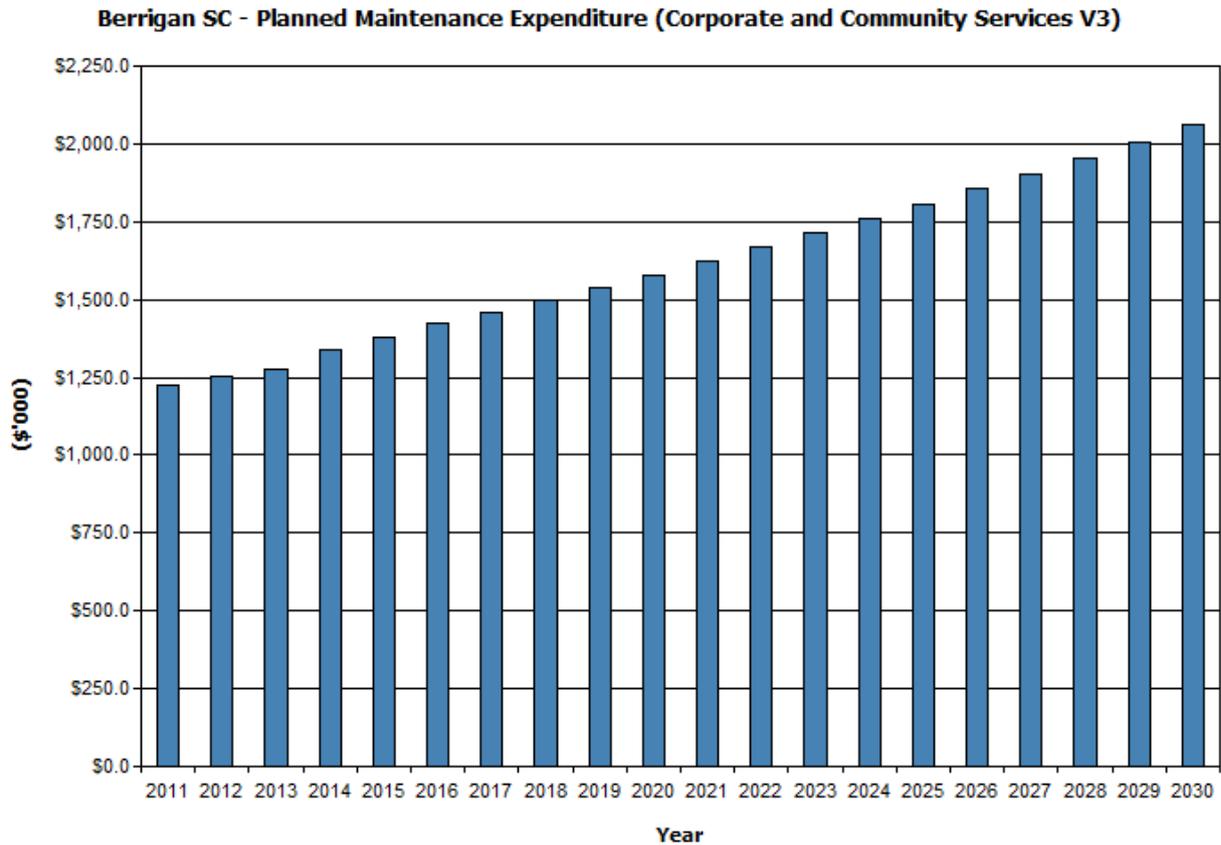
Practice Note 15 (Pools)

RLSSA Guidelines for Safe Pool Operation

### 5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 4. Note that all costs are shown in current 2010 dollar values.

**Fig 4. Planned Maintenance Expenditure**



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

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

### 5.4 Renewal/Replacement Plan

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

#### 5.4.1 Renewal plan

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register worksheets on the 'Planned Expenditure template'. Candidate proposals are inspected to verify accuracy of remaining life estimate and to develop a preliminary renewal estimate. Verified proposals are ranked

by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.4.1.

**Table 5.4.1 Renewal Priority Ranking Criteria**

<b>Criteria</b>	<b>Weighting</b>
Funding Sources	No current weighting
Legislative requirements	No current weighting
Visitation rates	No current weighting
Community needs	No current weighting

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

Examples of low cost renewal include replacement of a community hall with a smaller building that is more suited to current and predicted community needs.

#### 5.4.2 Renewal standards

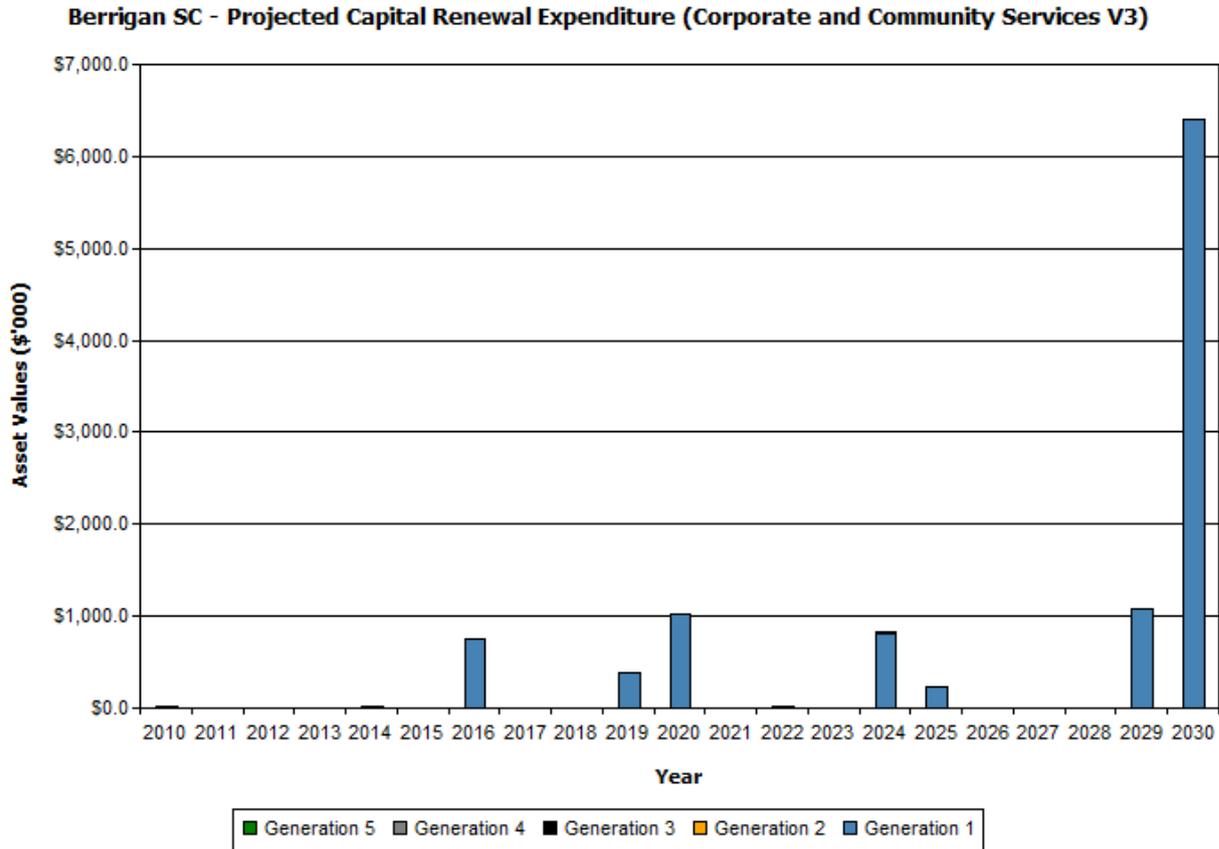
Renewal work is carried out in accordance with the Standards and Specifications as set out in Section 5.3.2.

#### 5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 5. Note that all costs are shown in current 2010 dollar values. The costs for each subcategory are shown in Appendix E

The projected capital renewal program is shown in Appendix C.

**Fig 5. Projected Capital Renewal Expenditure**



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

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

### 5.5 Creation/Acquisition/Upgrade Plan

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

#### 5.5.1 Selection criteria

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

**Table 5.5.1 New Assets Priority Ranking Criteria**

Criteria	Weighting
Funding Sources	No current weighting
Legislative requirements	No current weighting
Visitation rates	No current weighting
Community needs	No current weighting

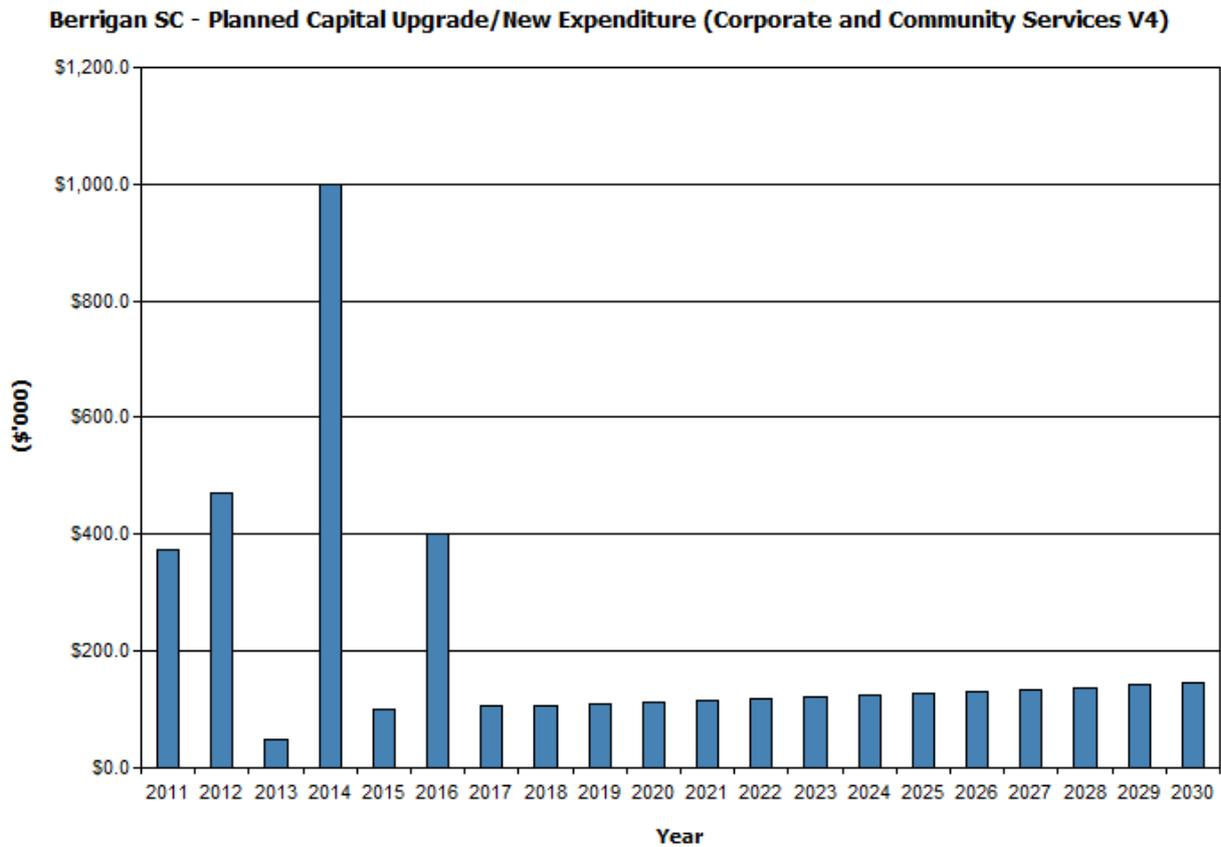
5.5.2 Standards and specifications

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

5.5.3 Summary of future upgrade/new assets expenditure

Planned upgrade/new asset expenditures are summarised in Fig 6. The planned upgrade/new capital works program is shown in Appendix B. All costs are shown in current 2010 dollar values.

**Fig 6. Planned Capital Upgrade/New Asset Expenditure**



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

## 5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

**Table 5.6 Assets identified for Disposal**

Asset	Reason for Disposal	Timing	Cashflow from disposal
Finley Recreation Reserve Change Rooms	Demolished & replaced	2013	Nil
Finley HACC Hall	Surplus to requirements	2014	Nil
Finley Library	Surplus to requirements	2012	\$150,000
Finley Toy Library	Surplus to requirements	2012	Nil
Tocumwal Foreshore Toilets	Demolished & replaced	2019	Nil
Residence 22 Davis Street, Berrigan	Surplus to requirements	2012	\$200,000
Residence 27 Davis Street, Berrigan	Surplus to requirements	2014	\$200,000
Residence Flight Place, Tocumwal	Surplus to requirements	2017	Nil
Residence Greens Lane, Berrigan	Surplus to requirements	2025	Nil

Where cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

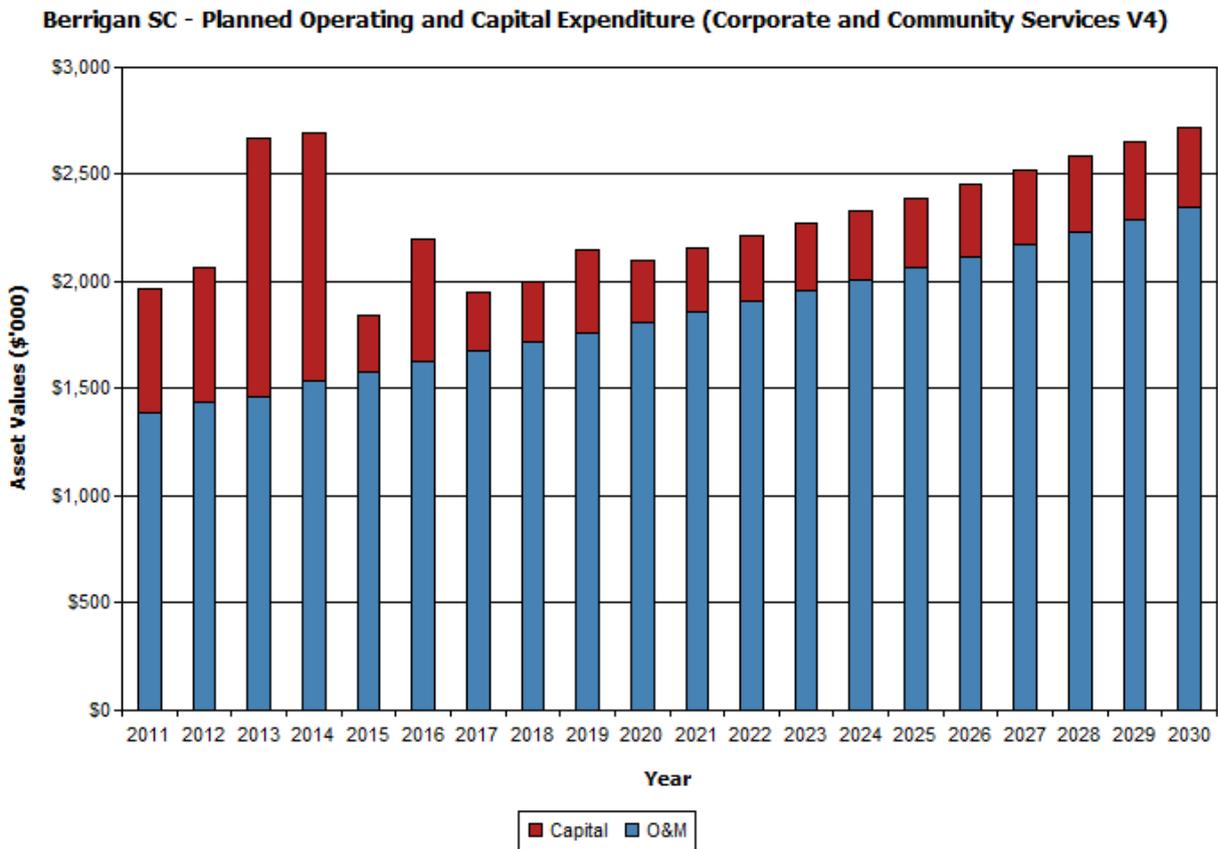
## 6. FINANCIAL SUMMARY

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

### 6.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

**Fig 7. Planned Operating and Capital Expenditure**



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

#### 6.1.1 Sustainability of service delivery

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

##### Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan is \$1,922,000.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is \$1,440,500.

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

The life cycle gap for services covered by this asset management plan is \$481,500 per annum. The life cycle sustainability index is 0.75

Medium term – 10 year financial planning period

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

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

Fig 8 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 8. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

**Fig 8. Projected and Planned Renewals and Current Renewal Expenditure**

**Berrigan SC - Projected & Planned Renewals and Current Renewal Expenditure (Corporate and Community Services V4)**

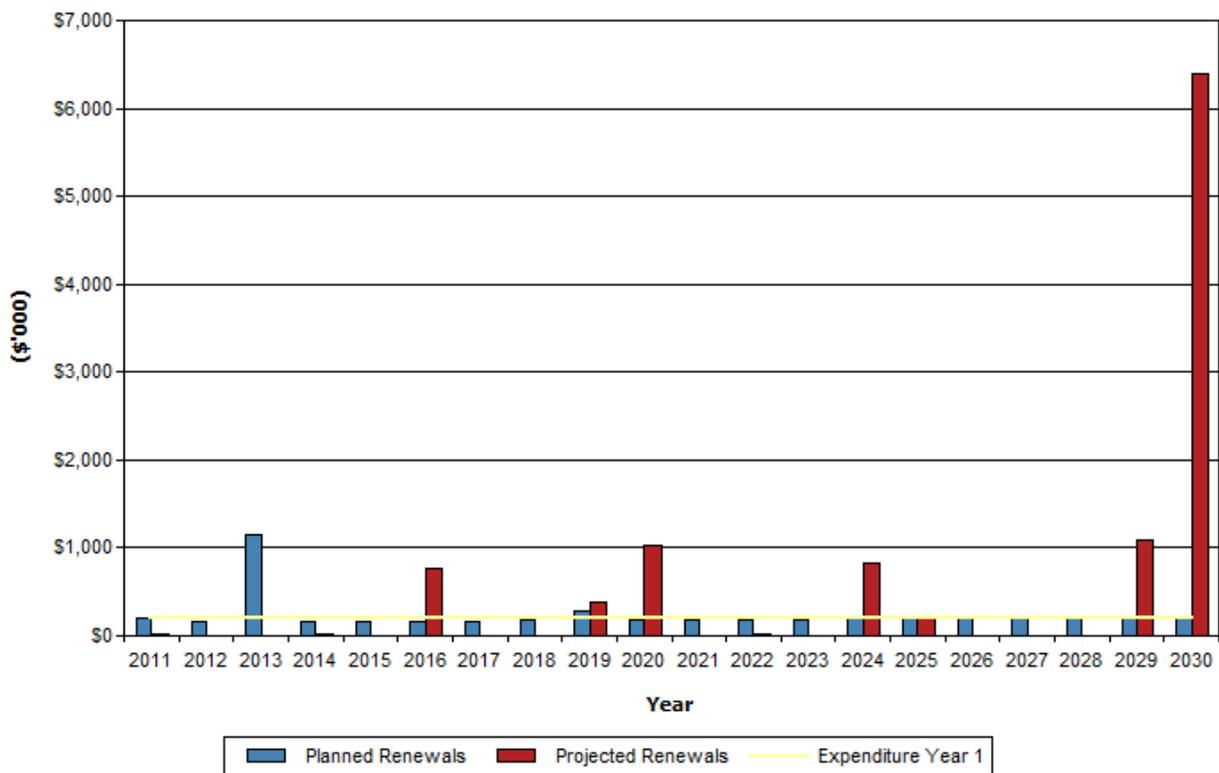


Table 6.1.1 shows the gap between projected and planned renewals.

**Table 6.1.1 Projected and Planned Renewals and Expenditure Gap**

Year	Projected Renewals	Planned Renewals	Renewal Funding Gap	Cumulative Gap
2011	\$20.10	\$210.50	-\$190.40	-\$190.40
2012	\$0.00	\$214.00	-\$214.00	-\$404.40
2013	\$0.00	\$1,155.00	-\$1,155.00	-\$1,559.40
2014	\$24.00	\$160.00	-\$136.00	-\$1,695.40
2015	\$0.00	\$162.80	-\$162.80	-\$1,858.20
2016	\$761.00	\$165.60	\$595.40	-\$1,262.80
2017	\$0.00	\$168.50	-\$168.50	-\$1,431.30
2018	\$0.00	\$171.50	-\$171.50	-\$1,602.80
2019	\$385.00	\$274.50	\$110.50	-\$1,492.30
2020	\$1,023.00	\$177.00	\$846.00	-\$646.30
2021	\$0.00	\$181.43	-\$181.43	-\$827.73
2022	\$28.00	\$185.96	-\$157.96	-\$985.69
2023	\$0.00	\$190.61	-\$190.61	-\$1,176.30
2024	\$822.00	\$195.37	\$626.63	-\$549.67
2025	\$222.50	\$200.26	\$22.24	-\$527.43
2026	\$0.00	\$205.27	-\$205.27	-\$732.70
2027	\$0.00	\$210.40	-\$210.40	-\$943.09
2028	\$0.00	\$215.66	-\$215.66	-\$1,158.75
2029	\$1,080.00	\$221.05	\$858.95	-\$299.80
2030	\$6,393.05	\$226.58	\$6,166.48	\$5,866.68

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

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

Council will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and while the projected funding gap of \$5.9m over the next 20 years paints a fairly bleak picture for the assets included in this plan it is not as bad as it looks. As indicated in Section 5 it should be moderated somewhat by the fact that the majority

of renewal and upgrade works for assets in this plan will be funded by either community groups or grant funds and these are accessed on an adhoc basis and therefore cannot be reasonably included in the plan. The plan does however provide for some specific assets to be included in the plan, such as the replacement of clubroom/changerooms at the Finley recreation reserve, where there has been a need identified. In these instances allowance has been made for funding from external sources and the works would only proceed on the basis of funding being secured. The gap is also extenuated by some \$6.3m in the 20<sup>th</sup> year that relates mainly to miscellaneous assets at the different sites such as lighting, signage, fencing, seating etc that has been parcelled together for this basic plan and given a nominal useful life. In reality these assets will be replaced as required by the community committees or Council and will not involve lumpy capital inputs, but will be smoothed over a period before and after the nominal life end.

Council's long term financial plan is attached as Appendix A and covers the first 10 years of the 20 year planning period. The total maintenance and capital renewal expenditure required over the 10 years is \$16.4m.

This is an average expenditure of \$1.64m. Estimated maintenance and capital renewal expenditure in year 1 is \$1.44m. The 10 year sustainability index is 0.88.

## 6.2 Funding Strategy

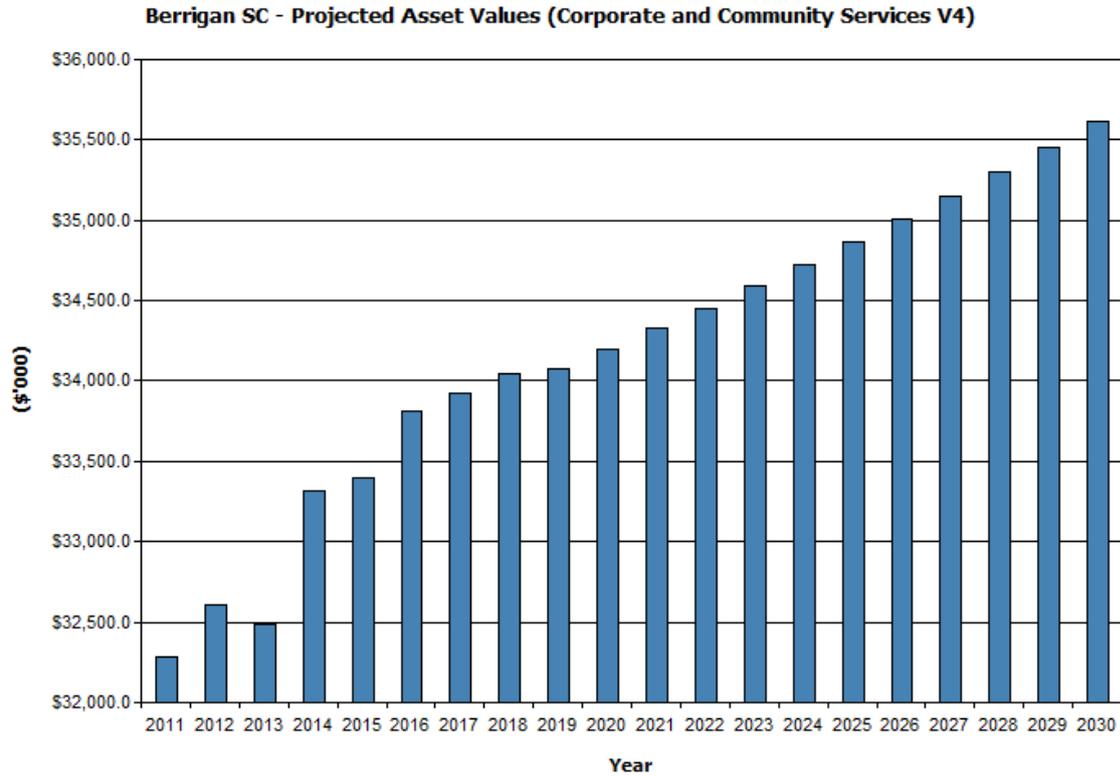
Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan but is deficient in that it cannot and does not recognise funding that may be provided from the community groups or grants other than for a few projects that have been identified as needed and there is some expectation that the funding will be forthcoming.

Achieving the financial strategy will require Council to continue to provide funding at the levels indicated in the long term financial plan and to actively seek input from the relevant community groups to determine required works and supplementary funding avenues. Council will also need to actively seek grant funds as opportunities unveil to address renewal and upgrade works identified for these assets.

## 6.3 Valuation Forecasts

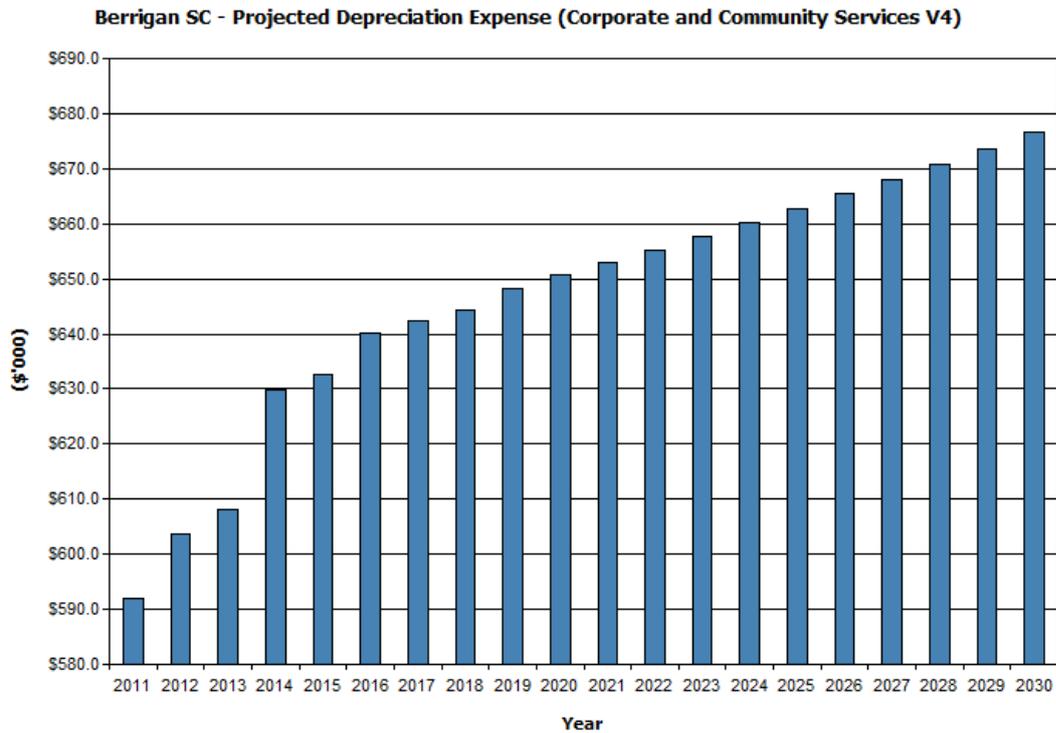
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Fig 9 shows the projected replacement cost asset values over the planning period in current 2010 dollar values.

**Fig 9. Projected Asset Values**



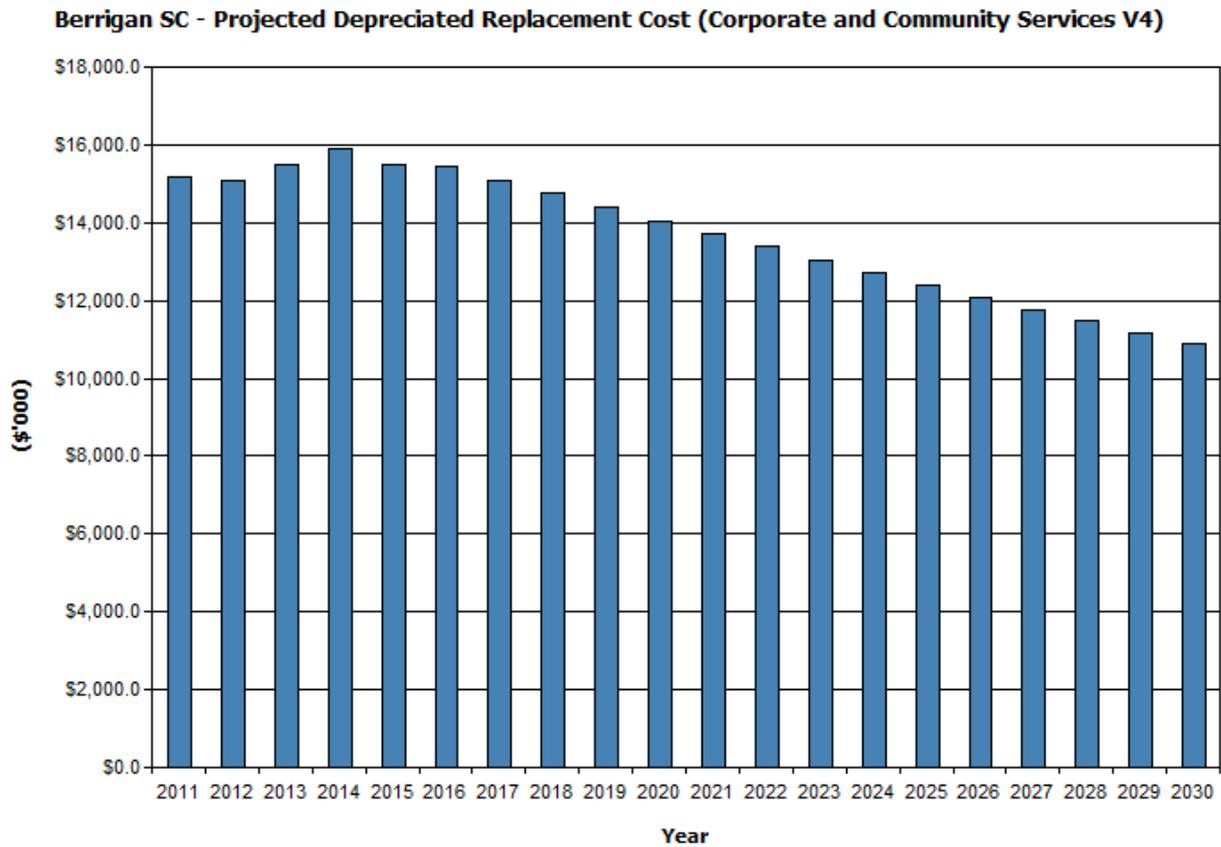
Depreciation expense values are forecast in line with asset values as shown in Fig 10.

**Fig 10. Projected Depreciation Expense**



The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Fig 11.

**Fig 11. Projected Depreciated Replacement Cost**



#### 6.4 Key Assumptions made in Financial Forecasts

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

Key assumptions made in this asset management plan are:

- The useful lives of assets have been determined using the best available information from the history of performance, some basic condition surveys and experience of Council staff these will be required to be reassessed with more detailed condition surveys and updated prior to the next review of the plan.
- External funding will be able to be secured for those assets proposed to be renewed/constructed from external sources

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

- Refining of condition inspections to assess the remaining life of assets.

- Condition assessments to be carried out for all assets to estimate remaining life and subsequently reassess the useful life values.
- Construction costs need to be monitored to ensure the replacement costs being used in the plan are realistic.

## • 7. ASSET MANAGEMENT PRACTICES

### 7.1 Accounting/Financial Systems

The accounting/financial system used by Berrigan Shire is Civica PCS and the costing accounts for assets are basically broken into maintenance and capital. It would be desirable for the chart of accounts to be further developed to enable the clear separation of operation costs and maintenance costs and to split the maintenance costs into reactive, planned and cyclic. It would also be desirable to clearly separate capital expenditure into renewal, new and upgrade works. The achievement of these goals will come at a cost of increased administration and the desirability/benefit needs to be balanced against these costs to determine if it is in fact a worthwhile exercise.

The financial system is controlled by the Finance Manager with assistance from the Finance Officer. The Finance Manager is accountable for configuration and maintenance of the system. Area managers are responsible for the timely provision of data to be input into the system and various officers subordinate to the Finance Manager are responsible for the accurate and timely input of data to the system.

The following accounting standards/regulations/guidelines shall be complied with:

Applicable Australian equivalents to International Financial Reporting Standards (AIFRSs)

Other authoritative pronouncements for the Australian Accounting Standards Board,

Urgent Issues Group Interpretations,

The Local Government Act (1993) and Regulations and

The Local Government Code of Accounting Practice and Financial Reporting.

Where work is carried out on an asset that will increase its useful life and is greater than \$5,000 in value it will be considered a capital improvement.

The chart of accounts may be further developed to enable the clear separation of operation costs and maintenance costs and to split the maintenance costs into reactive, planned and cyclic. It may also be developed to clearly separate capital expenditure into renewal, new and upgrade works.

### 7.2 Asset Management Systems

Corporate and Community Services assets are managed using inventory situated in Civica PCS and XL spreadsheets. They have not been incorporated into the BizeAsset system to this point, however, some of the assets will be incorporated into the system as suitable modules become available and staff resources permit. The BizeAsset system is map based using MapInfo/Microsoft Access for inventory and spacial records. The Corporate and Community Services asset inventory as recorded in Civica PCS is not complete at this stage as there is some \$16m of assets not included in the inventory. This situation needs to be remedied by a detailed assessment of assets at each site and preparation of a complete inventory in BizeAsset and/or Civica PCS.

Once a complete inventory is prepared an asset management system can be better implemented.

### 7.3 Information Flow Requirements and Processes

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

- The asset register data on physical attributes, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;

- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by council.

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

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

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

The financial reports generated by BizeAsset including valuations, depreciation calculations etc. are provided to the Finance Manager for input into Civica PCS financial system. Actual construction costs for capital works are provided by financial services staff to the Technical Officer – Assets for input into BizeAsset.

New assets constructed by Council are captured by the Technical Officer – Assets from the adopted works program with confirmation of construction from the Executive Engineer or Works Engineer. Actual construction costs for capital works are provided by financial services staff to the Technical Officer – Assets for input into BizeAsset.

New assets gifted to Council by developers are captured by the Technical Officer – Assets from 'As Constructed' drawings and cost estimates submitted by developers. These plans and estimates are checked and signed off by the Executive Engineer as correct.

#### 7.4 Standards and Guidelines

AAS27, Financial Reporting by Local Governments, Australian Accounting Standards, June 1996.

AASB1031, Materiality, Australian Accounting Standards Board, July 2004.

AASB116, Property, Plant and Equipment, Australian Accounting Standards Board, July 2007.

2009/2010 Management Plan, Berrigan Shire Council

International Infrastructure Management Manual, Institute of Public Works Engineering Australia, 2006

Local Government Asset Accounting Manual, Department of Local Government, New South Wales, Update No. 4, 1999

## 8. PLAN IMPROVEMENT AND MONITORING

### 8.1 Performance Measures

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

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

### 8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.2.

**Table 8.2 Improvement Plan**

<b>Task No</b>	<b>Task</b>	<b>Responsibility</b>	<b>Resources Required</b>	<b>Timeline</b>
1.	Detailed inventory of assets	DCS, DTS	Staff	March 2012
2.	Condition Rating of assets	DCS, DTS	Staff/External	June 2013
3.	Review of remaining life of assets following condition ratings	DCS, DTS	Staff	June 2013
4.	Document methodology and procedures for asset useful lives, asset unit costs, condition rating and depreciation calculations	DTS, DCS	Staff	June 2011
5.	Prepare a cost/benefit analysis regarding development and maintenance of a chart of accounts to allow separation of operation costs and maintenance costs and to split the maintenance costs into reactive, planned and cyclic and to separate capital expenditure into renewal, new and upgrade works. Implement areas considered to be effective	FM	Staff	June 2011
6.	Investigate options for inclusion of corporate and community services assets into the BizeAsset system and subsequent integration with the Accounting/Financial System	FM, EXE	Staff	March 2012
7.	Carry out community consultation to allow the development of Desired Levels of Service when this plan is reviewed in 2015	DCS	Staff/External	March 2014

### 8.3 Monitoring and Review Procedures

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

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

## REFERENCES

Sample Council, 'Strategic Management Plan 20XX – 20XX,

Sample Council, 'Annual Plan and Budget.

DVC, 2006, 'Asset Investment Guidelines', 'Glossary', Department for Victorian Communities, Local Government Victoria, Melbourne,  
<http://www.dvc.vic.gov.au/web20/dvclgv.nsf/allDocs/RWP1C79EC4A7225CD2FCA257170003259F6?OpenDocument>

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org.au](http://www.ipwea.org.au)

## APPENDICES

**APPENDIX 'A'**  
**10 YEAR LONG TERM FINANCIAL PLAN**

Cashflow	Units	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20	Totals
Inflation Factor		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
<b>Receipts:</b>												
Community/Committee Contributions-Maint	\$ 506.00	506.0	518.7	531.7	545.0	558.6	572.6	586.9	601.6	616.6	632.0	5,669.7
Community/Grant Contributions-Capital		488.5	504.9	1,062.8	984.4	188.6	192.8	197.2	201.6	306.2	210.9	4,337.9
Waste Fund		5.0	6.0				300.0					311.0
Council from untied - Maint	\$709	709.0	726.7	744.9	763.5	782.6	802.2	822.3	842.9	864.0	885.6	
Council from untied - Capital		245.5	332.0	305.0	342.5	245.3	250.6	256.1	261.7	267.4	272.7	2,778.8
<b>Total Receipts</b>		<b>1,954.0</b>	<b>2,088.3</b>	<b>2,644.4</b>	<b>2,635.4</b>	<b>1,775.1</b>	<b>2,118.2</b>	<b>1,862.5</b>	<b>1,907.8</b>	<b>2,054.2</b>	<b>2,001.2</b>	<b>21,041.1</b>
<b>Payments:</b>												
Management	155	155.0	158.9	162.9	167.0	171.2	175.5	179.9	184.4	189.0	193.7	1,737.5
Maintenance	1215	1,215.0	1,245.4	1,276.5	1,308.4	1,341.1	1,374.6	1,409.0	1,444.2	1,480.3	1,517.3	13,611.8
Capital Works-Renewal		210.5	214.0	1,155.0	160.0	162.8	165.6	168.5	171.5	274.5	177.0	2,859.4
Capital Works-Upgrade/New		373.5	470	50	1000	100	402.5	105.1	107.7	110.4	113.2	2,832.4
<b>Total Payments</b>		<b>1,954.0</b>	<b>2,088.3</b>	<b>2,644.4</b>	<b>2,635.4</b>	<b>1,775.1</b>	<b>2,118.2</b>	<b>1,862.5</b>	<b>1,907.8</b>	<b>2,054.2</b>	<b>2,001.2</b>	<b>21,041.1</b>

**APPENDIX 'B'**  
**10 YEAR CAPITAL WORKS PROGRAM**

<b>Capital Works - Renewal</b>	<b>Council Contribution</b>	<b>Jun-11</b>	<b>Jun-12</b>	<b>Jun-13</b>	<b>Jun-14</b>	<b>Jun-15</b>	<b>Jun-16</b>	<b>Jun-17</b>	<b>Jun-18</b>	<b>Jun-19</b>	<b>Jun-20</b>
Project											
Aerodrome Resealing	65%	20			50	50	50	50	50	50	50
Aerodrome Drainage	25		25								
Finley Rec Res	200			1100							
Toc Foreshore Toilets	50									150	
Berrigan Hall Toilets	20		100								
Berrigan Rec Change Rooms	0	160.5									
Tips	6		6								
Tips	5	5									
Pools	58	25	33								
Toc VRA/SES replace roof	50		50								
Miscellaneous	100%			55	110	112.8	115.6	118.5	121.5	74.5	127.0
<b>Total</b>		<b>210.5</b>	<b>214</b>	<b>1155</b>	<b>160</b>	<b>162.8</b>	<b>165.6</b>	<b>168.5</b>	<b>171.5</b>	<b>274.5</b>	<b>177</b>
<b>Capital Works - Upgrade</b>											
Project											
Barooga Rec Kitchen	7.5	22.5									
Depot Fuel	200	200									
Toc Visitor Info Centre	200				1000						
Office Compactus	50		50								
Aerodrome Entry	5			5							
Parks	20		20								
Waste Transfer Stations	300						300				
Toc Foreshore Development	184	68	300								
RLCIP	0	83	100								
Miscellaneous	100%			45		100	102.5	105.1	107.7	110.4	113.2
<b>Total</b>		<b>373.5</b>	<b>470</b>	<b>50</b>	<b>1000</b>	<b>100</b>	<b>402.5</b>	<b>105.1</b>	<b>107.7</b>	<b>110.4</b>	<b>113.2</b>

### APPENDIX 'C'

Berrigan SC >> Renewal Program (Corporate and Community Services V4)

UID	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
13902796	B1051	Public Parks and Gardens	Berrigan Hayes Park Playground			0	2011	\$9,900.00	30
13902811	B1063	Public Parks and Gardens	Finley M.L. Wayside Rest Playground Finley			0	2011	\$10,200.00	30
								<b>Subtotal</b>	<b>\$20,100.00</b>
13902890	B0009	Council Depots	Old Amenities Building - BGN Depot			3	2014	\$18,000.00	50
13902855	B0073	Public Swimming Pools	Shade Covers & Other Structures - BGN Pool			3	2014	\$1,000.00	10
13902861	B0077	Public Swimming Pools	Shade Covers & Other Structures - FIN Pool			3	2014	\$5,000.00	10
								<b>Subtotal</b>	<b>\$24,000.00</b>
13902704	B0094	Recreation Reserves and Sporting Grounds	BGN Rec. Res. Rooms, Amen & Time K. Box			5	2016	\$761,000.00	60
								<b>Subtotal</b>	<b>\$761,000.00</b>
13902709	B0099	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Pavilion (Produce)			8	2019	\$223,000.00	60
13902712	B0178	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Pump Shed			8	2019	\$7,000.00	60
13902728	B0111	Recreation Reserves and Sporting Grounds	Finley Rec. Reserve Old Change Rooms			8	2019	\$155,000.00	60
								<b>Subtotal</b>	<b>\$385,000.00</b>
13902852	B0030	Public Halls	HACC Hall - Finley			9	2020	\$253,000.00	60
13902702	B0092	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Bar			9	2020	\$41,000.00	60
13902700	B0089	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Toilet Block -East Side			9	2020	\$51,000.00	60
13902740	B0115	Recreation Reserves and Sporting Grounds	Finley Show Ground Old Bar			9	2020	\$53,000.00	60
13902738	B0113	Recreation Reserves and Sporting Grounds	Finley Show Ground Pavilion (Mickle)			9	2020	\$201,000.00	60

13902746	B0123	Recreation Reserves and Sporting Grounds	Finley Show Ground Pavilion (Poultry)	9	2020	\$63,000.00	60
13902745	B0121	Recreation Reserves and Sporting Grounds	Finley Show Ground Pavilion 2 (Cattle)	9	2020	\$143,000.00	60
13902747	B0124	Recreation Reserves and Sporting Grounds	Finley Show Ground Toilets (West)	9	2020	\$117,000.00	60
13902780	B0141	Recreation Reserves and Sporting Grounds	Toc Pony Club Toilets	9	2020	\$55,000.00	60
13902768	B0139	Recreation Reserves and Sporting Grounds	Toc Rec. Reserve Time Keeper's Box	9	2020	\$36,000.00	60
13902761	B0130	Recreation Reserves and Sporting Grounds	Toc Rec. Reserve Toilet Block - Female	9	2020	\$5,000.00	60
13902760	B0129	Recreation Reserves and Sporting Grounds	Toc Rec. Reserve Toilet Block - Male	9	2020	\$5,000.00	60
						<b>Subtotal</b>	<b>\$1,023,000.00</b>
13902829	B1079	Public Parks and Gardens	Tocumwal CWA Park Playground	11	2022	\$28,000.00	30
						<b>Subtotal</b>	<b>\$28,000.00</b>
13902856	B0074	Public Swimming Pools	Berrigan Pool	13	2024	\$600,000.00	60
13902853	B0071	Public Swimming Pools	Kiosk & Change Rooms - BGN Pool	13	2024	\$206,000.00	60
13902855	B0073	Public Swimming Pools	Shade Covers & Other Structures - BGN Pool	13	2024	\$1,000.00	10
13902861	B0077	Public Swimming Pools	Shade Covers & Other Structures - FIN Pool	13	2024	\$5,000.00	10
13902716	B1011	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Cricket Nets	13	2024	\$10,000.00	40
						<b>Subtotal</b>	<b>\$822,000.00</b>
13902818	B1068	Public Parks and Gardens	Finley Rotary Park - Playground	14	2025	\$12,500.00	30
13902697	B1006	Recreation Reserves and Sporting Grounds	Barooga Rec Reserve - Tennis Courts/fencing	14	2025	\$210,000.00	40
						<b>Subtotal</b>	<b>\$222,500.00</b>
13902909	B1105	Council Depots	Old Storage Shed & Container - BAR	18	2029	\$10,000.00	50
13902906	B0180	Council Depots	Storage Shed - FIN	18	2029	\$23,000.00	60
13902807	B1061	Public Parks and Gardens	Berrigan Caravan Park Access Road	18	2029	\$55,000.00	60
13902806	B0154	Public Parks and Gardens	Berrigan Caravan Park Amenities Building	18	2029	\$130,000.00	60
13902810	B1062	Public Parks and Gardens	Finley M.L. Wayside Rest Access Road	18	2029	\$40,000.00	60
13902809	B0050	Public Parks and Gardens	Finley M.L. Wayside Rest Public Toilets	18	2029	\$46,000.00	60
Finley							

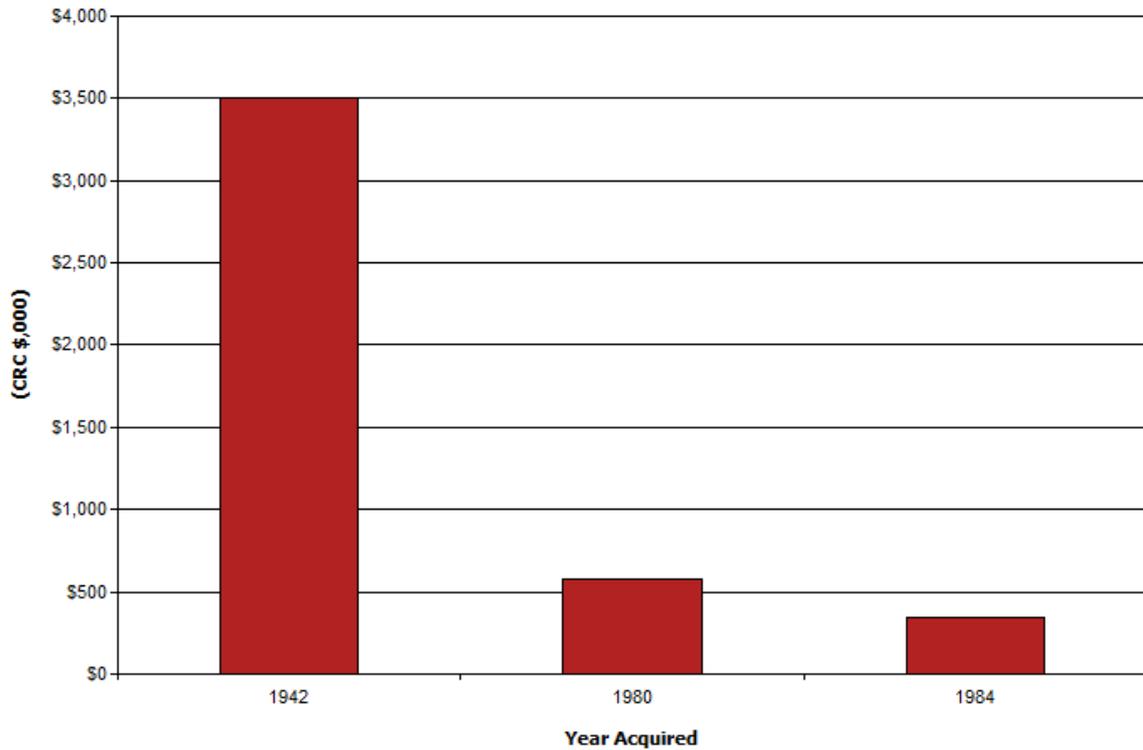
13902814	B0015	Public Parks and Gardens	Finley Memorial Park - Toy Library	18	2029	\$37,000.00	60
13902724	B0105	Recreation Reserves and Sporting Grounds	Finley Rec. Reserve New Change Rooms	18	2029	\$678,000.00	60
13902749	B0126	Recreation Reserves and Sporting Grounds	Finley Show Ground Toilets (East)	18	2029	\$48,000.00	60
13902945	B0151	Transport Facilities	Banker St Bus Shelter - Barooga	18	2029	\$6,000.00	60
13902944	B0150	Transport Facilities	Nangunia St Bus Shelter - Barooga	18	2029	\$7,000.00	60
						<b>Subtotal</b>	<b>\$1,080,000.00</b>
13902888	B1100	Aerodromes	Berrigan Airstrip - Miscellaneous fittings	19	2030	\$1,500.00	50
13902884	B1096	Aerodromes	Tocumwal Aerodrome - Miscellaneous fittings	19	2030	\$110,000.00	50
13902886	B1098	Aerodromes	Transportable Office Buiding	19	2030	\$100,000.00	50
13902939	B1118	Cemeteries	Barooga Cemetery Miscellaneous fittings	19	2030	\$28,450.00	50
13902941	B1120	Cemeteries	Berrigan Cemetery Miscellaneous fittings	19	2030	\$48,250.00	50
13902937	B1116	Cemeteries	Finley Cemetery Miscellaneous fittings	19	2030	\$58,500.00	50
13902943	B1122	Cemeteries	Tocumwal Cemetery Miscellaneous fittings	19	2030	\$53,300.00	50
13902850	B0063	Public Halls	Retreat Public Hall - Finley	19	2030	\$443,000.00	100
13902848	B0062	Public Halls	School of Arts - Finley	19	2030	\$2,277,000.00	100
13902788	B1040	Public Parks and Gardens	Barooga Foreshore - Misc. Fittings	19	2030	\$56,200.00	50
13902787	B1039	Public Parks and Gardens	Barooga Foreshore - Playground	19	2030	\$46,300.00	30
13902792	B1047	Public Parks and Gardens	Berrigan Apex Park - Misc. Fittings	19	2030	\$34,250.00	50
13902797	B1052	Public Parks and Gardens	Berrigan Hayes Park Misc. Fittings	19	2030	\$83,600.00	50
13902799	B1055	Public Parks and Gardens	Berrigan Tennis Courts - Misc. Fittings	19	2030	\$85,600.00	50
13902786	B1038	Public Parks and Gardens	Botanical Gardens Misc. Fittings - Barooga	19	2030	\$351,850.00	50
13902785	B1037	Public Parks and Gardens	Botanical Gardens Playground - Barooga	19	2030	\$74,800.00	30
13902812	B1064	Public Parks and Gardens	Finley M.L. Wayside Rest Miscellaneous fittings	19	2030	\$62,700.00	50
13902816	B1066	Public Parks and Gardens	Finley Memorial Park - Miscellaneous fittings	19	2030	\$130,850.00	50
13902819	B1069	Public Parks and Gardens	Finley Rotary Park - Miscellaneous fittings	19	2030	\$83,400.00	50
13902842	B0197	Public Parks and Gardens	Tocumwal Caravan Park - Twin Caravan	19	2030	\$20,000.00	40
13902834	B1082	Public Parks and Gardens	Tocumwal Foreshore - Miscellaneous fittings	19	2030	\$267,450.00	50

13902858	B1089	Public Swimming Pools	Berrigan Pool - Miscellaneous fittings	19	2030	\$79,400.00	50
13902862	B0078	Public Swimming Pools	Finley Pool	19	2030	\$800,000.00	60
13902863	B1090	Public Swimming Pools	Finley Pool Miscellaneous fittings	19	2030	\$133,400.00	50
13902695	B1004	Recreation Reserves and Sporting Grounds	Barooga Rec Reserve - Cricket Nets	19	2030	\$25,000.00	40
13902696	B1005	Recreation Reserves and Sporting Grounds	Barooga Rec Reserve - Playground	19	2030	\$39,000.00	30
13902720	B1015	Recreation Reserves and Sporting Grounds	BGN Rec. Reserve Misc. Fittings	19	2030	\$121,600.00	50
13902758	B1027	Recreation Reserves and Sporting Grounds	Finley Show Ground Miscellaneous fittings	19	2030	\$217,950.00	50
13902755	B1024	Recreation Reserves and Sporting Grounds	Finley Show Ground Tennis Courts/fencing	19	2030	\$90,000.00	40
13902767	B0136	Recreation Reserves and Sporting Grounds	Toc Rec. Reserve Storage Shed (Old Bar)	19	2030	\$2,000.00	60
13902779	B1035	Recreation Reserves and Sporting Grounds	Toc. Rec. Reserve Miscellaneous fittings	19	2030	\$292,700.00	50
13902774	B1030	Recreation Reserves and Sporting Grounds	Toc. Rec. Reserve Tennis Courts	19	2030	\$175,000.00	40
						<b>Subtotal</b>	<b>\$6,393,050.00</b>
						<b>Program Total</b>	<b>\$10,758,650.00</b>

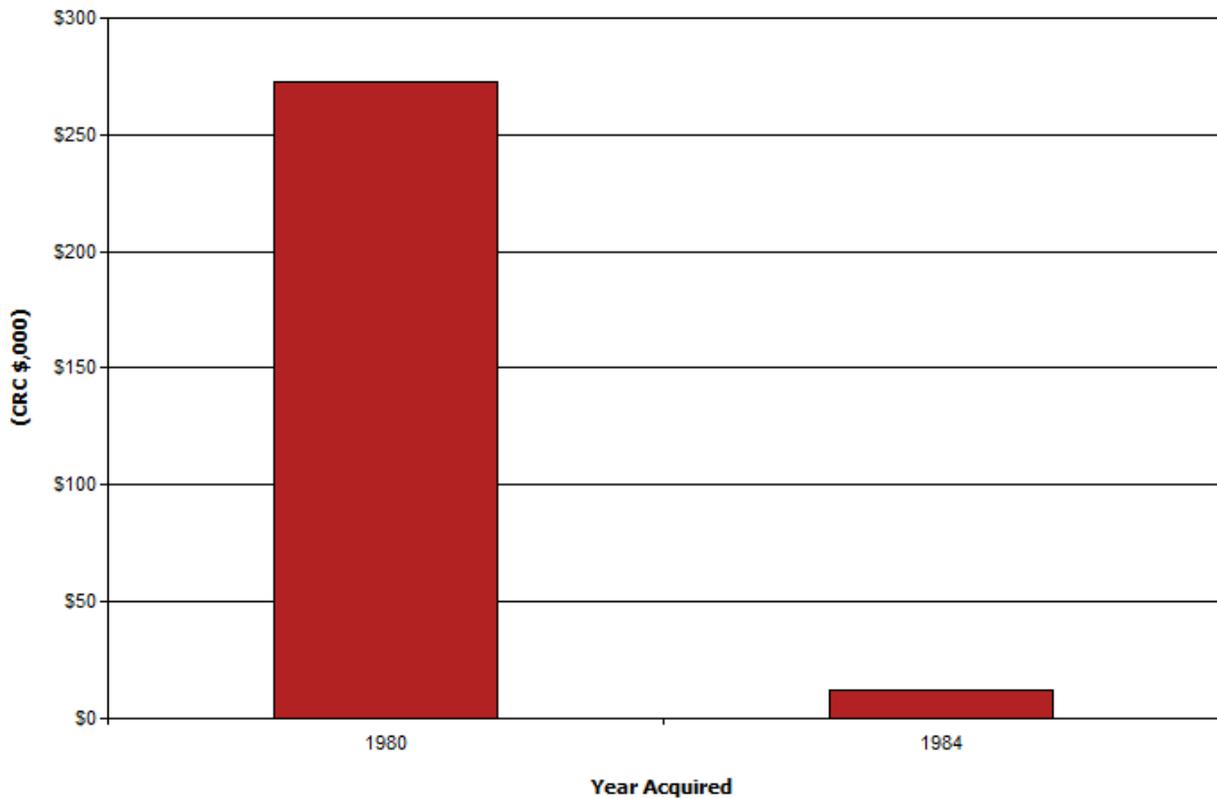
## Appendix D

### Age Profile Graphs for Asset Sub categories

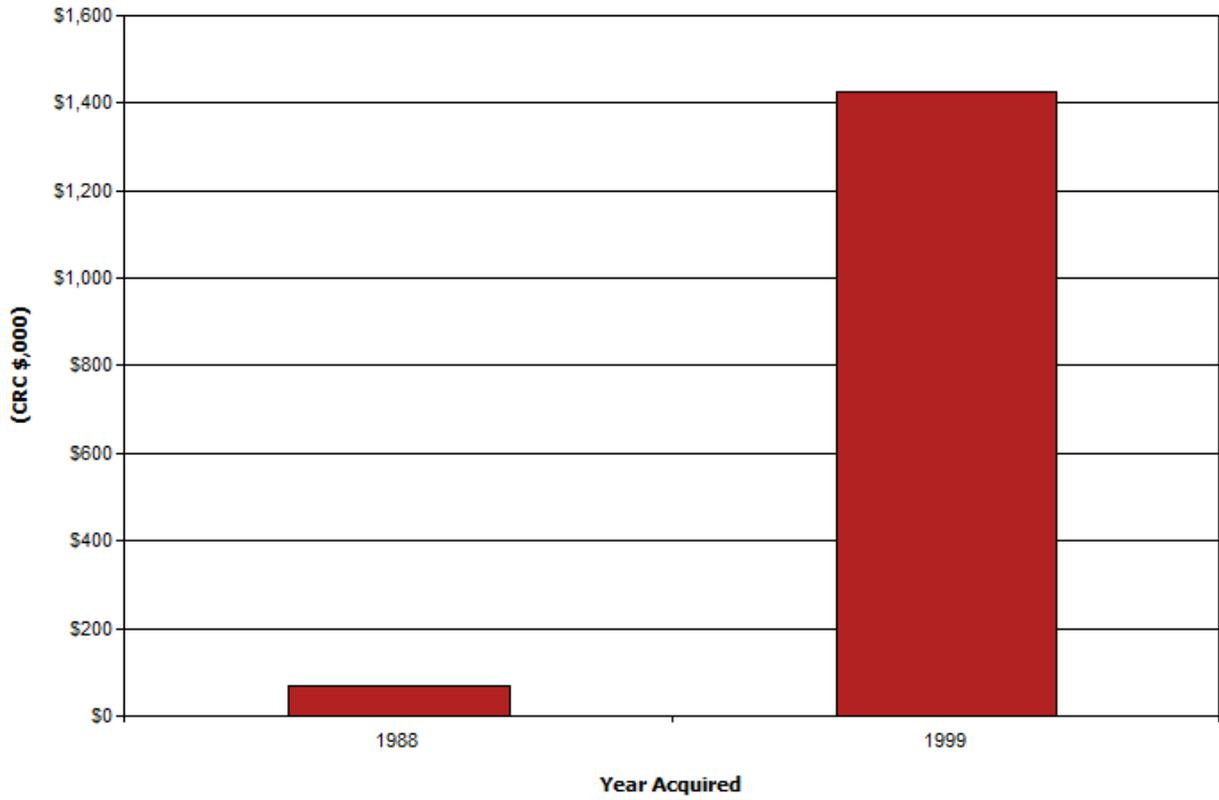
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Aerodromes)**



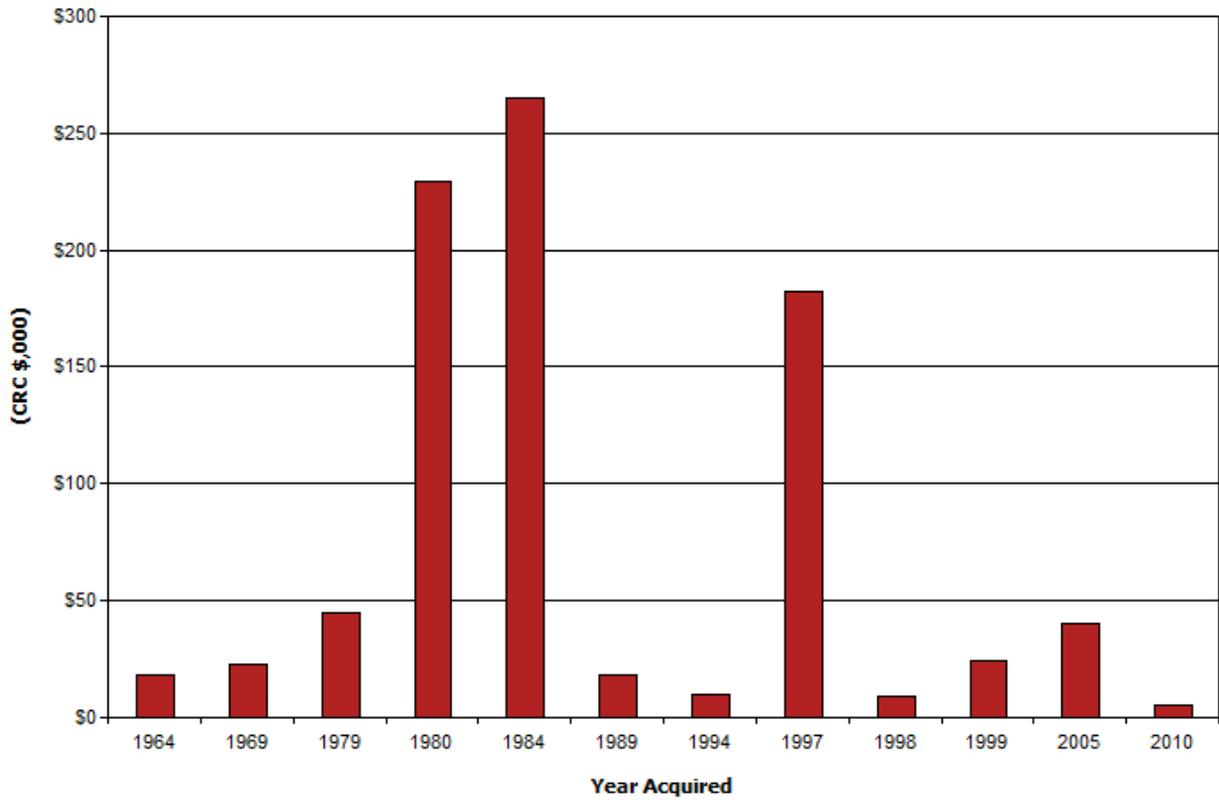
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Cemeteries)**



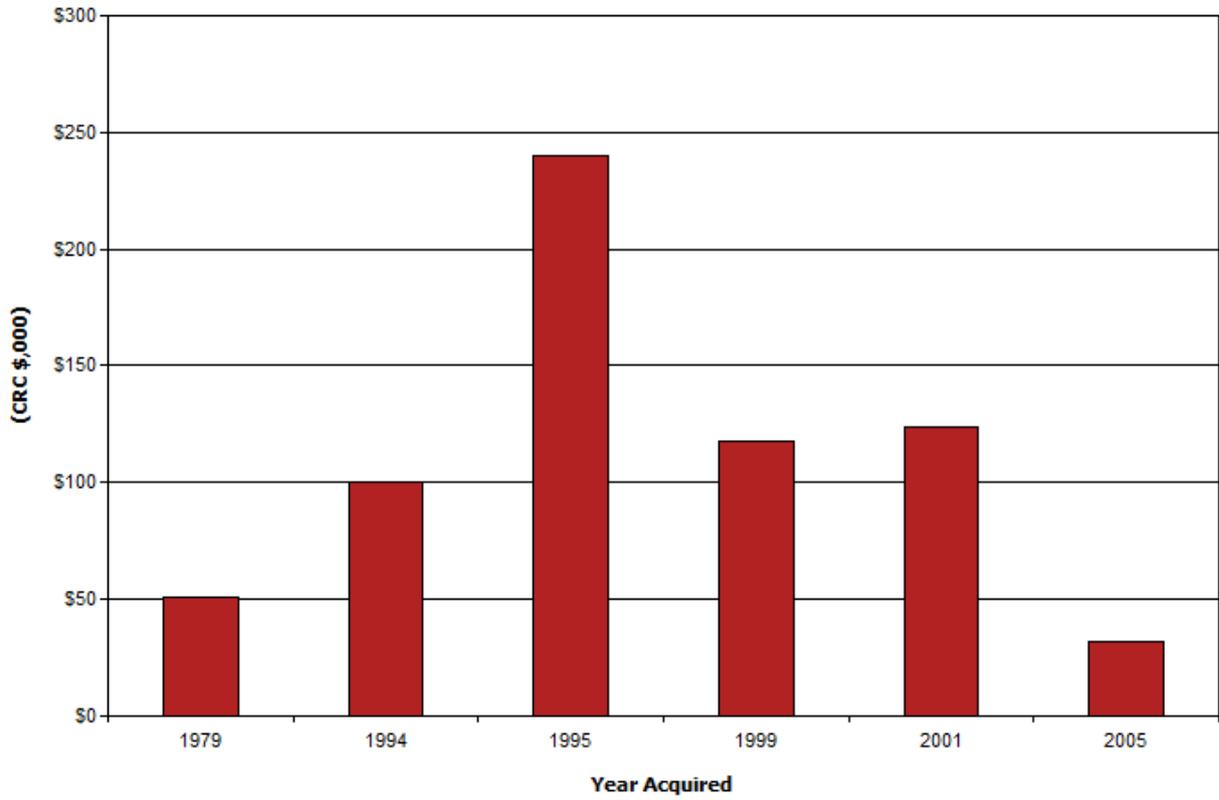
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Council Chambers and Offices)**



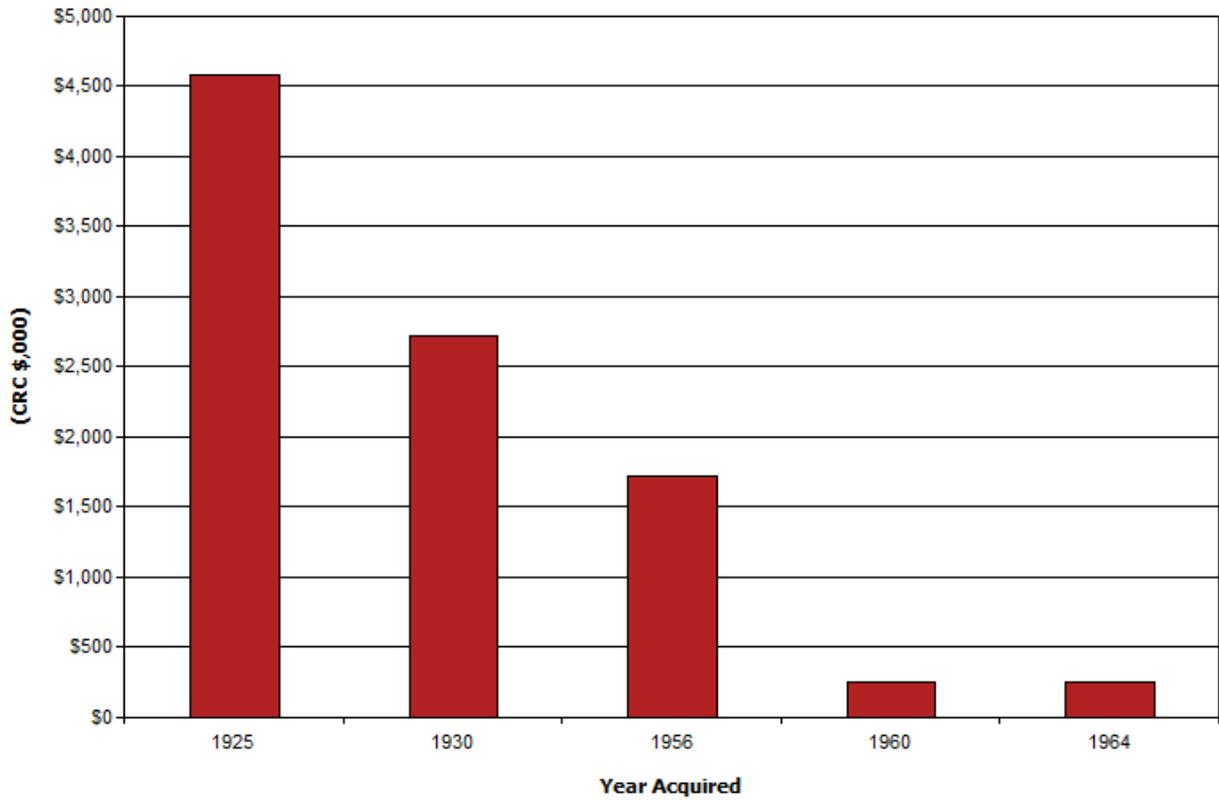
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Council Depots)**



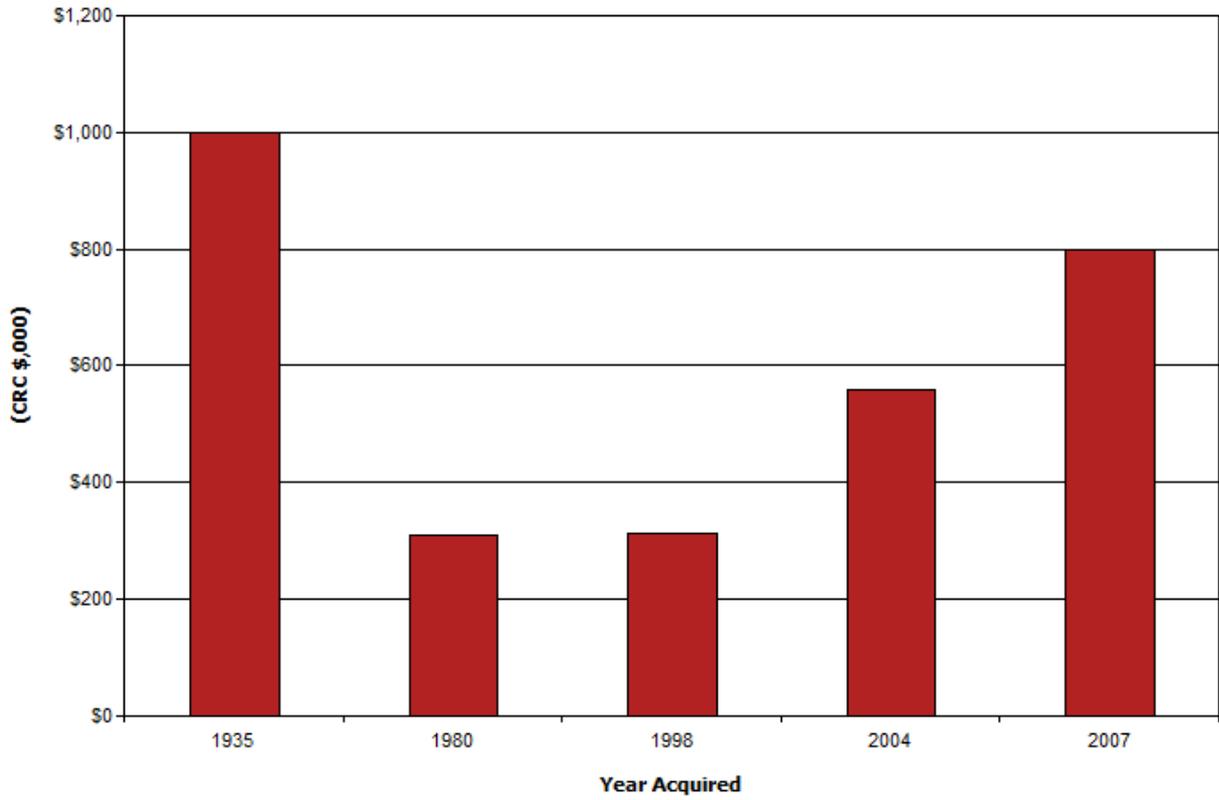
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Emergency Services)**



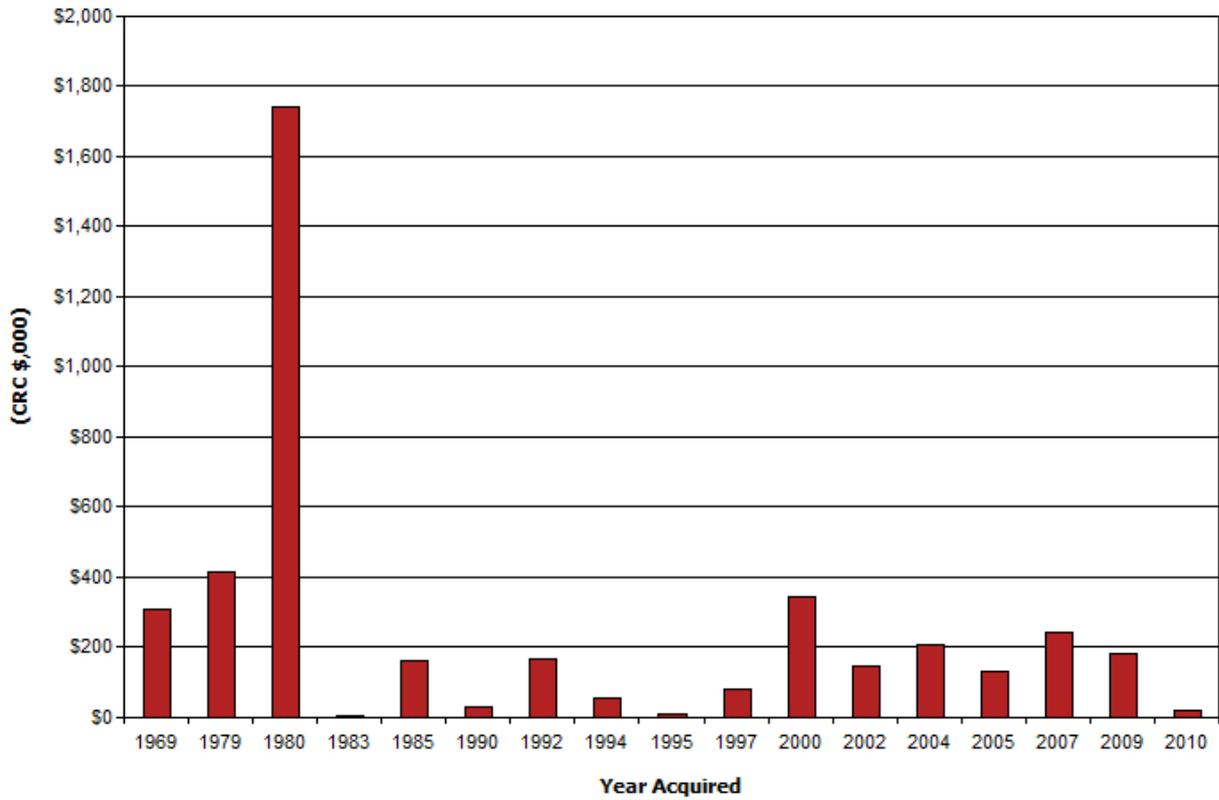
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Public Halls)**



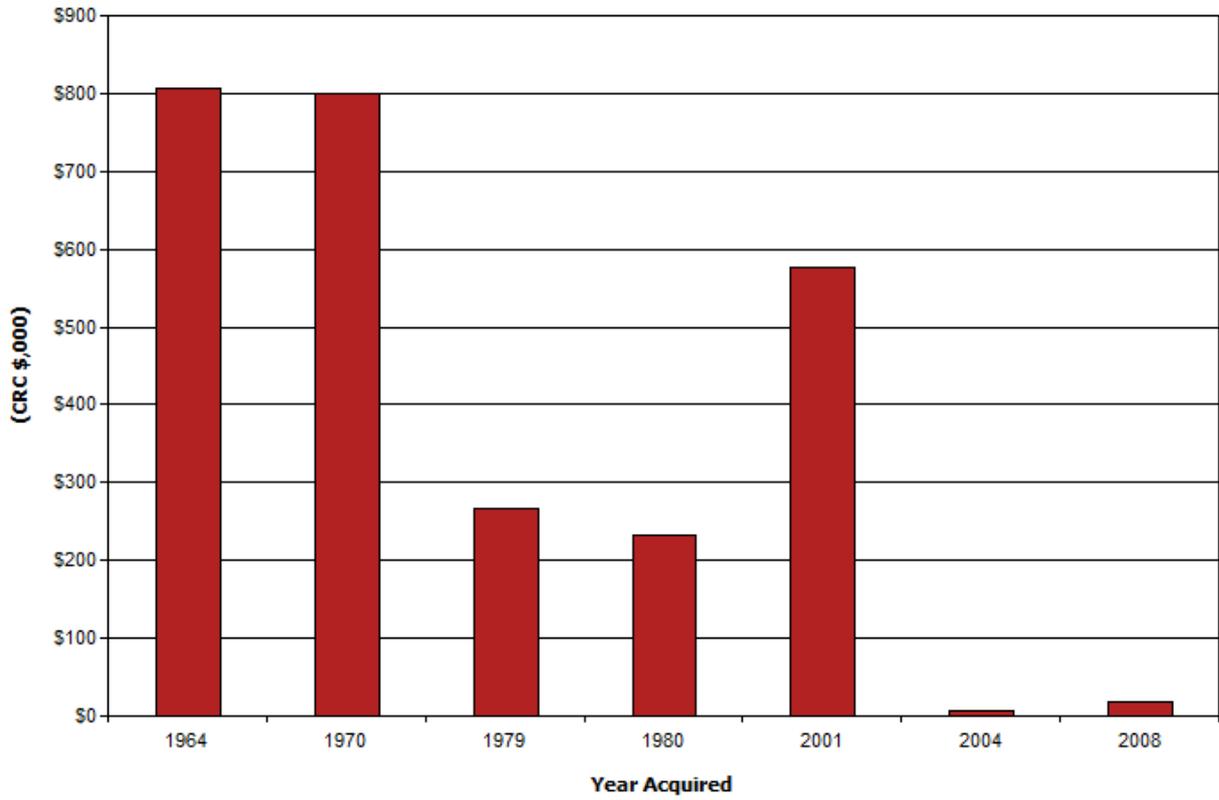
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Public Libraries)**



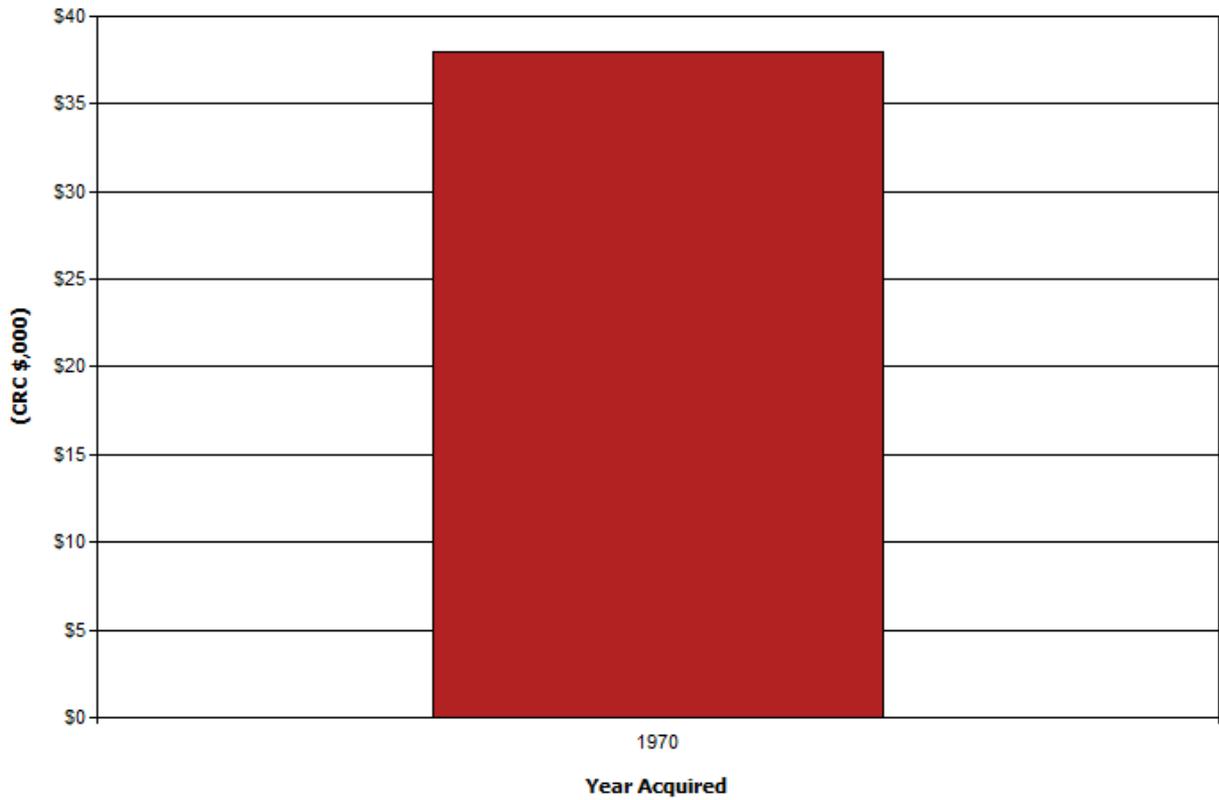
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Public Parks and Gardens)**



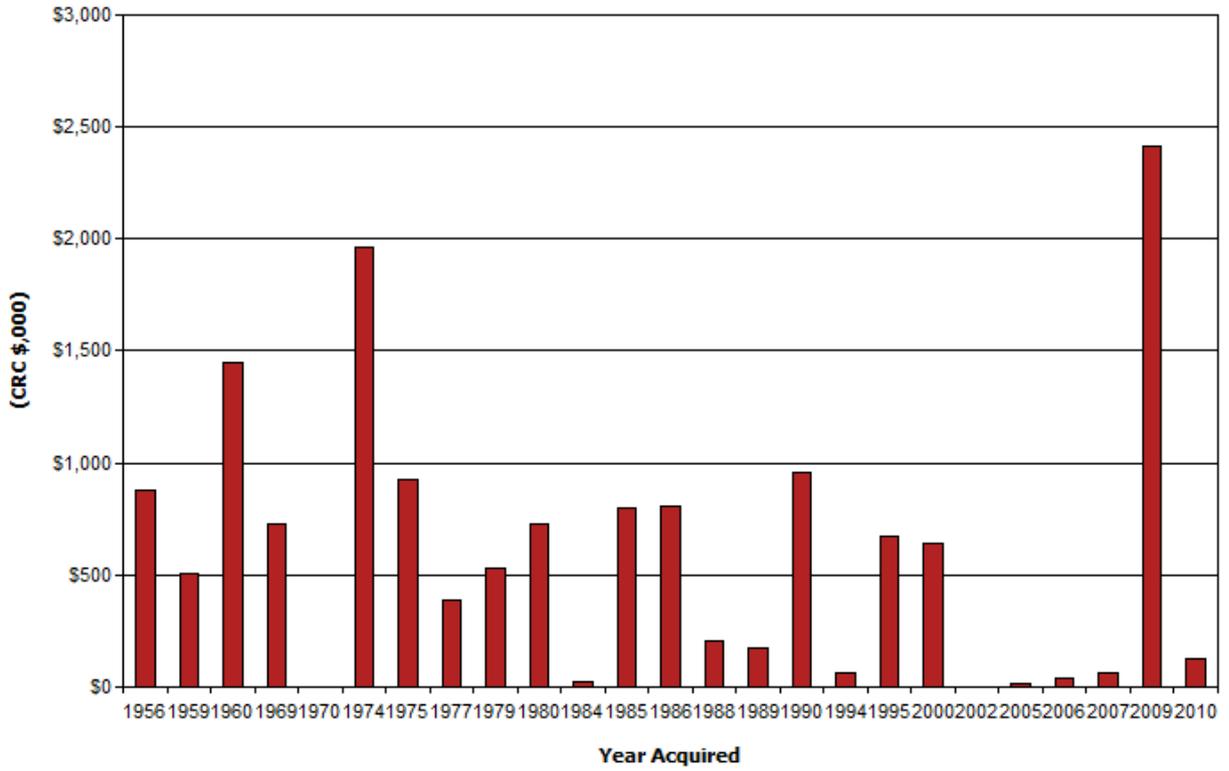
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Public Swimming Pools)**



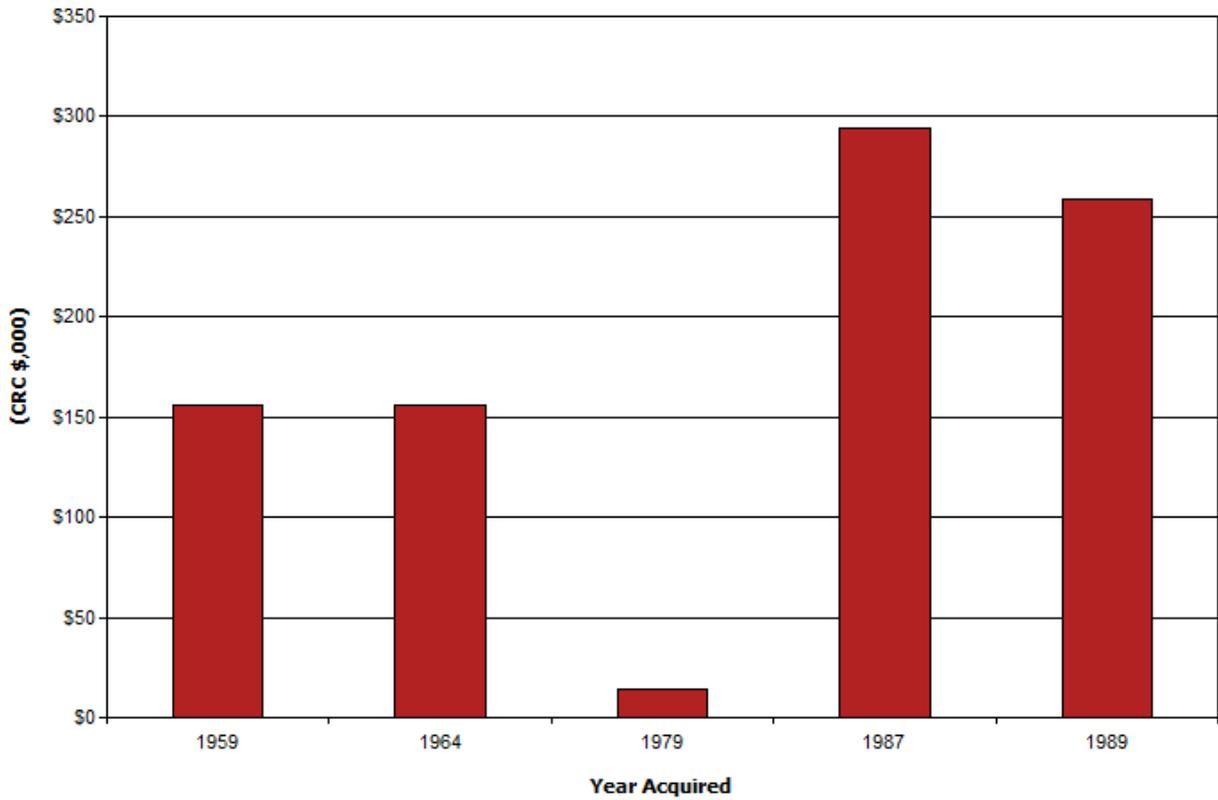
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Quarries)**



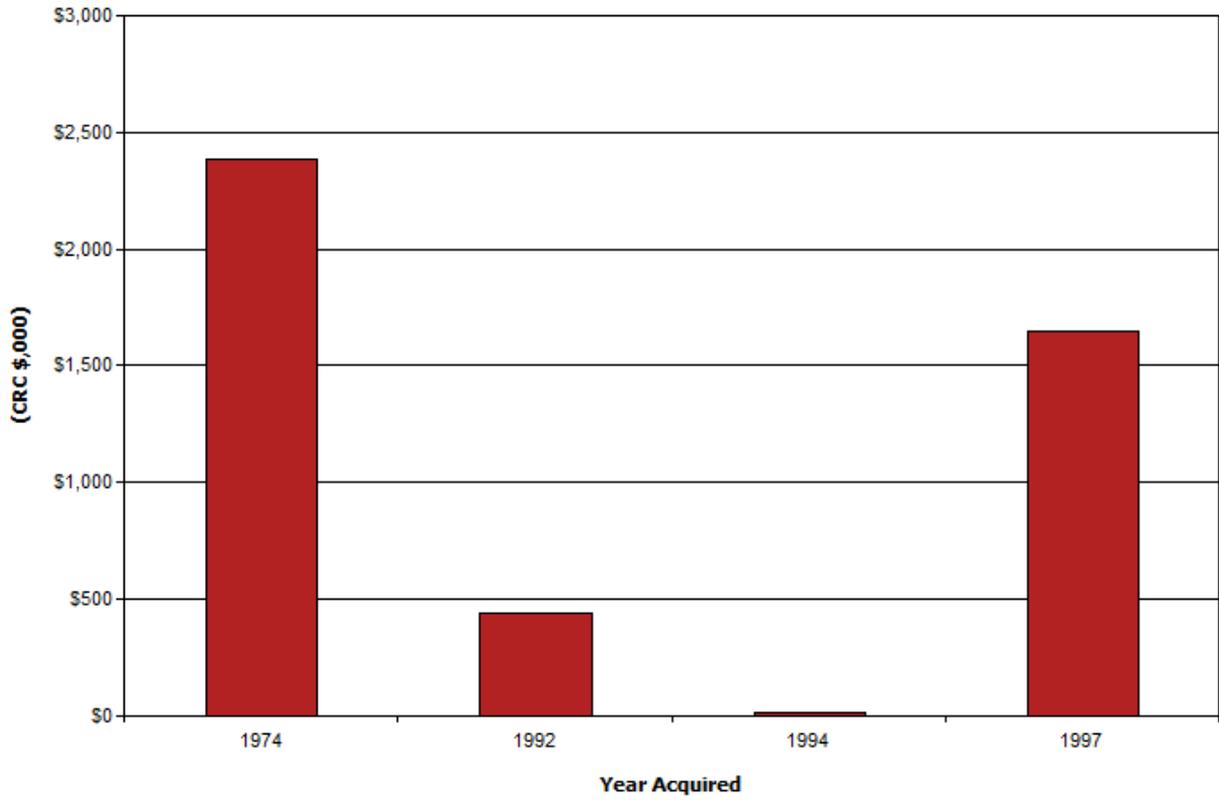
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Recreation Reserves and Sporting Grounds)**



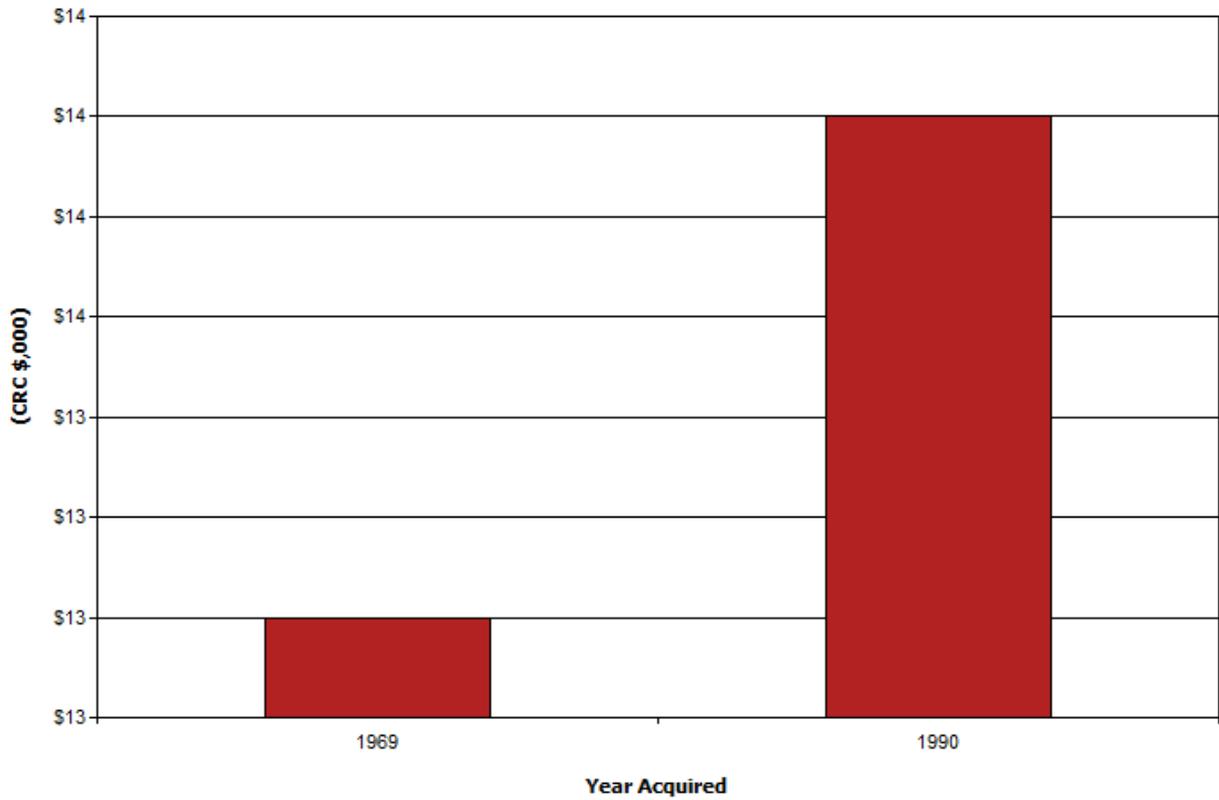
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Residences)**



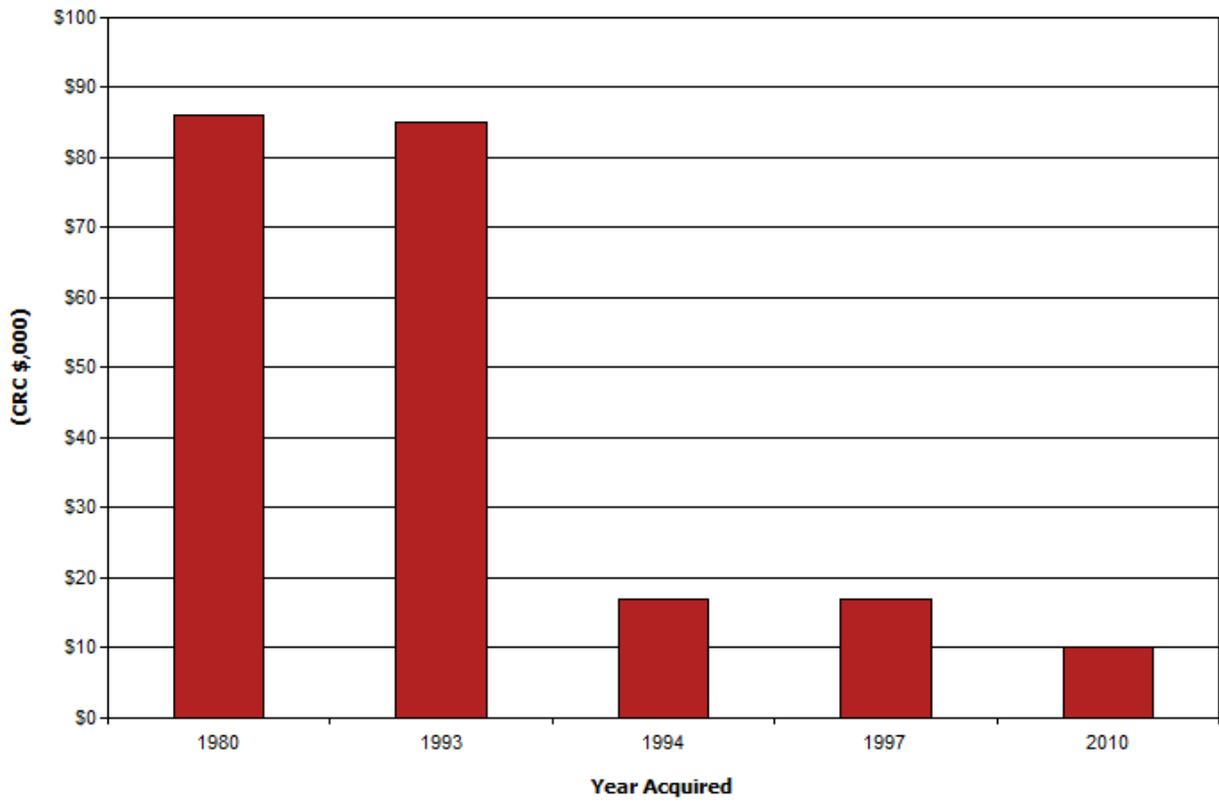
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Finley Saleyards)**



**Berrigan SC - Age Profile (Corporate and Community Services V4 - Transport Facilities)**



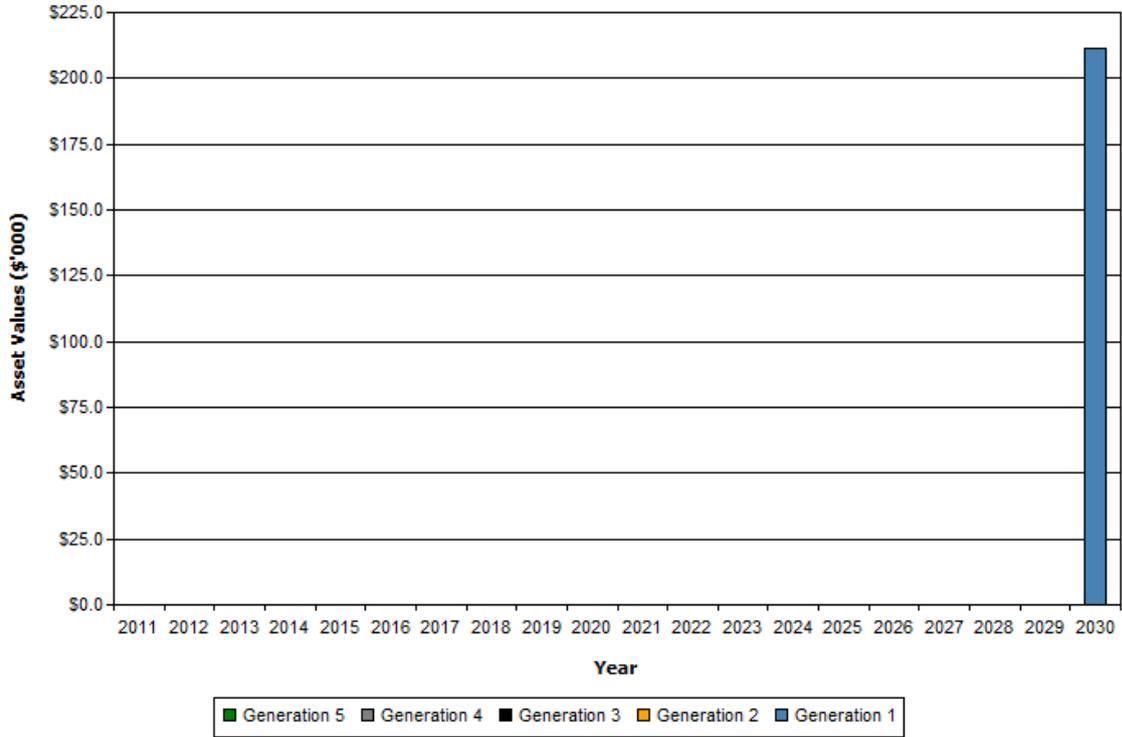
**Berrigan SC - Age Profile (Corporate and Community Services V4 - Waste Disposal Facilities)**



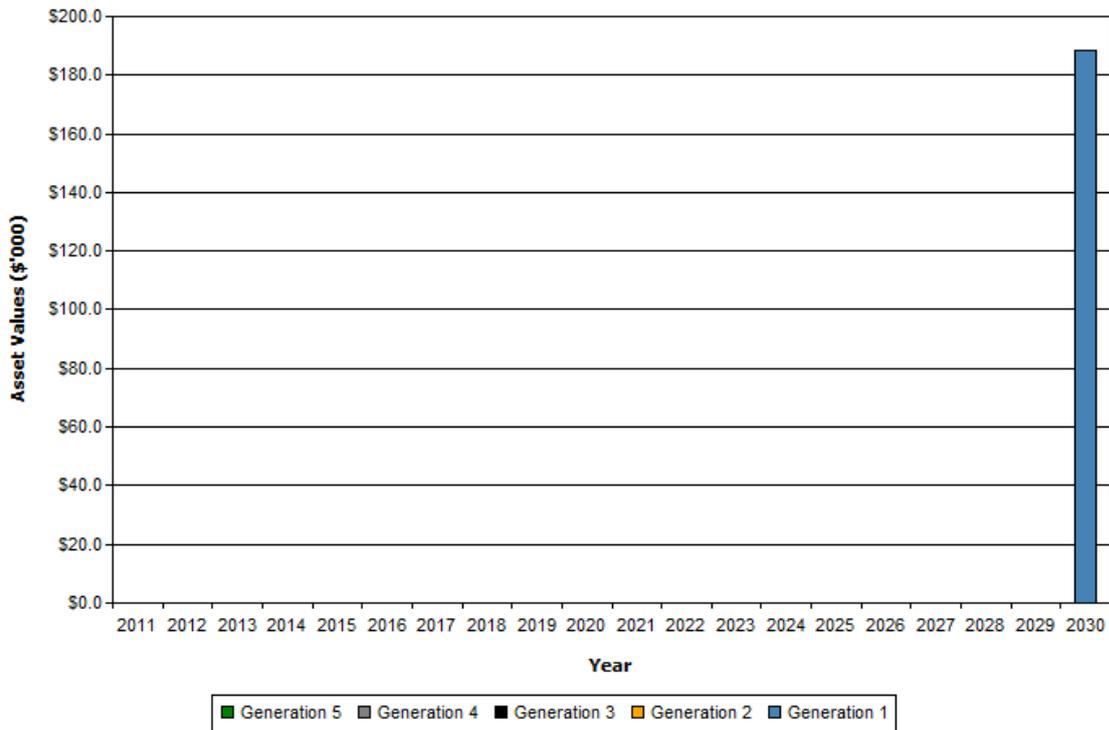
## Appendix 'E'

### Projected Capital Renewal Graphs for Asset Sub categories

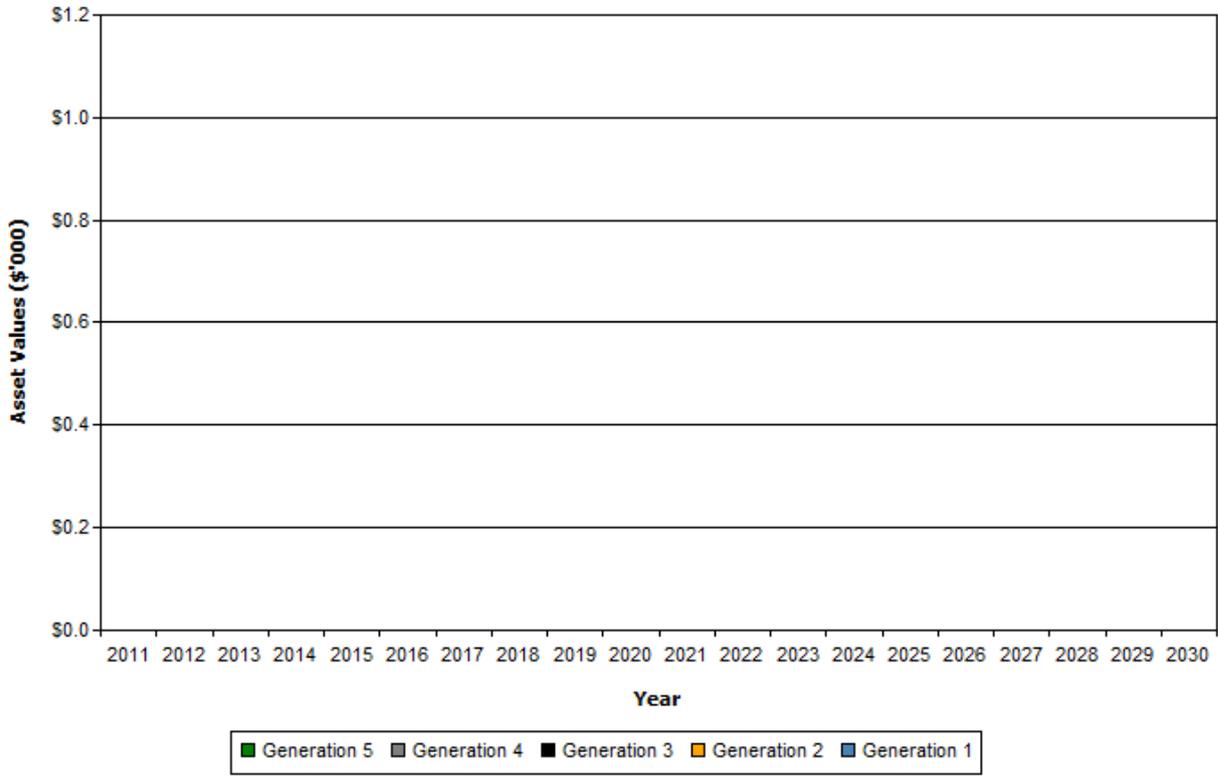
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Aerodromes)**



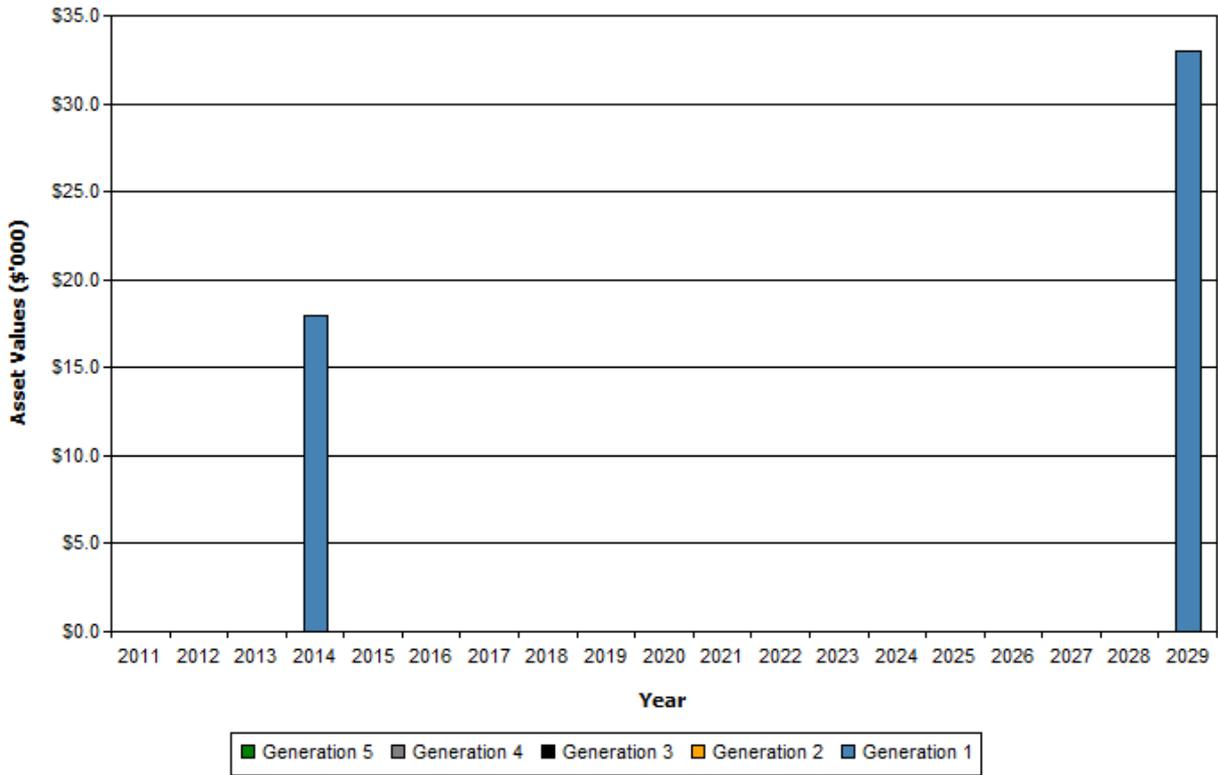
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Cemeteries)**



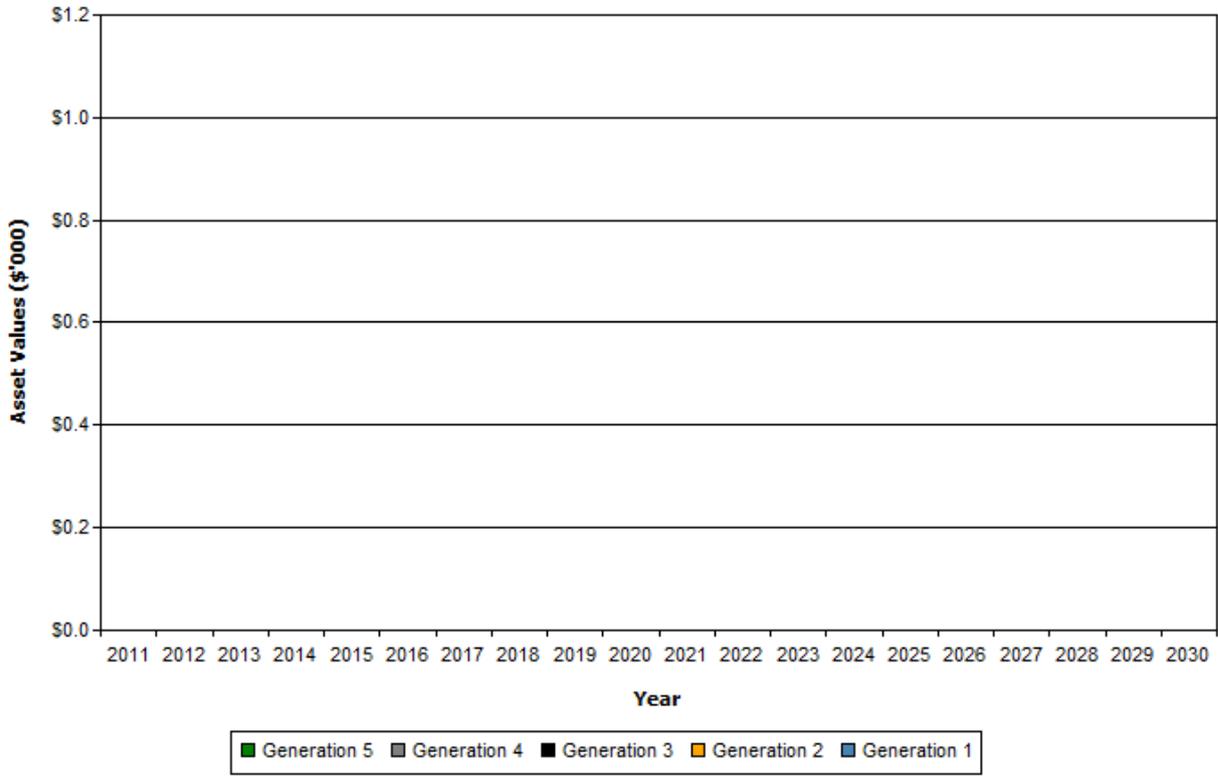
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Council Chambers and Offices)**



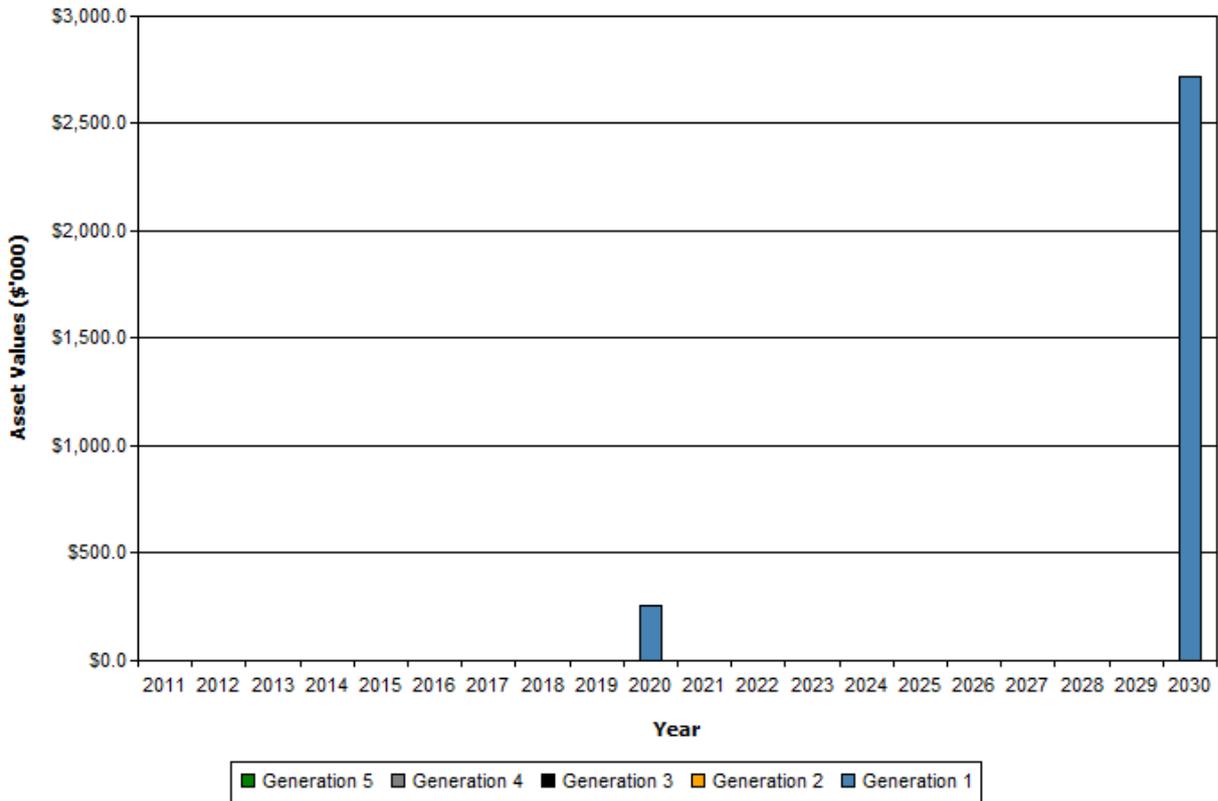
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Council Depots)**



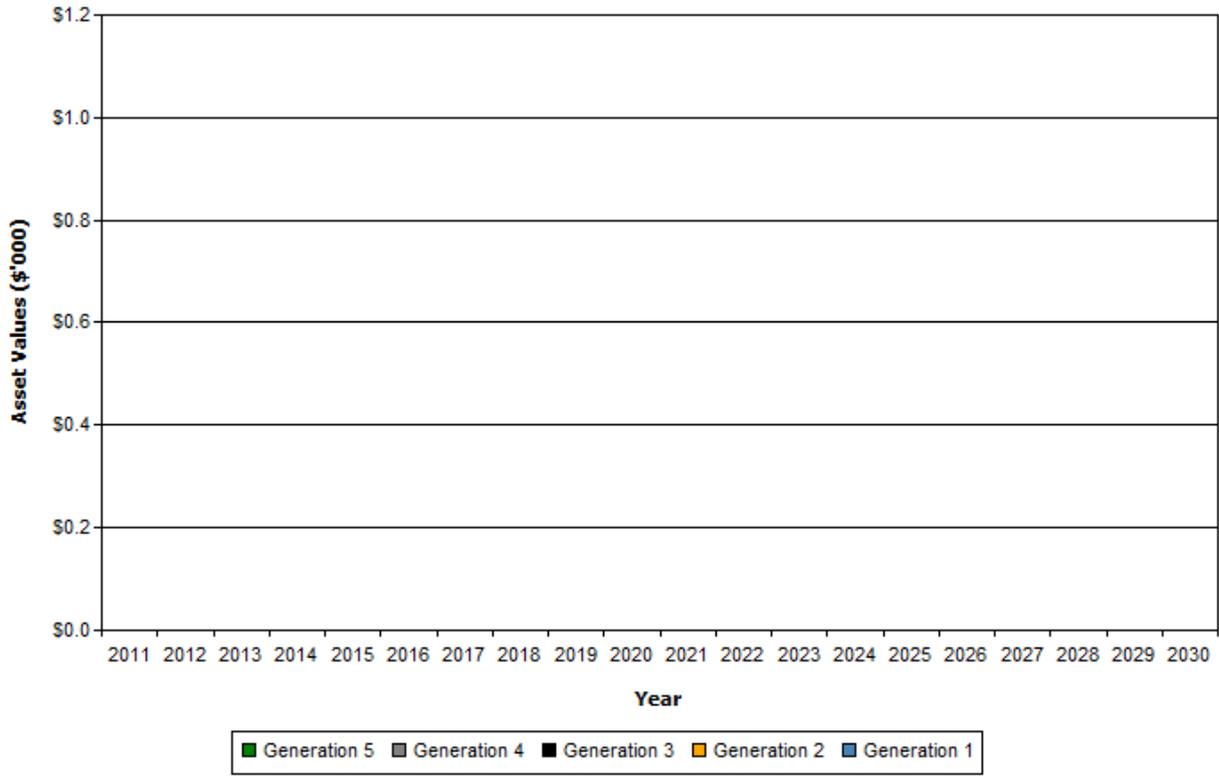
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Emergency Services)**



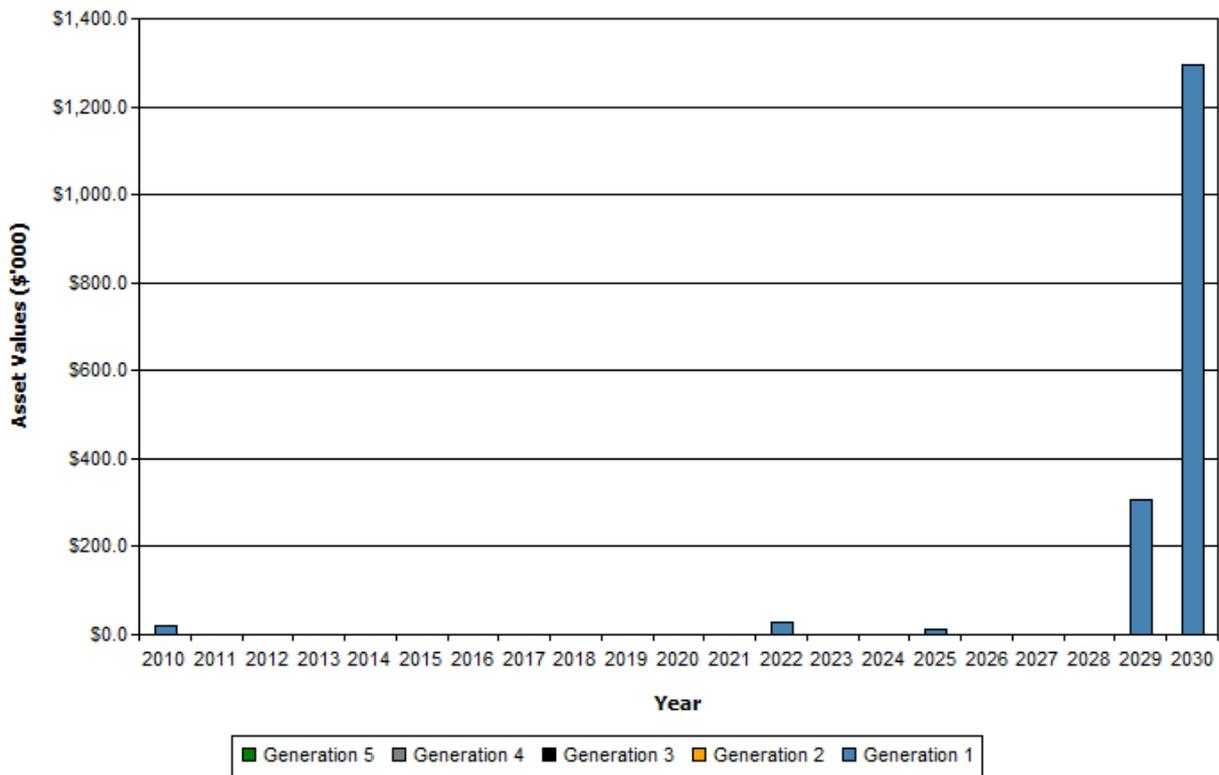
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Public Halls)**



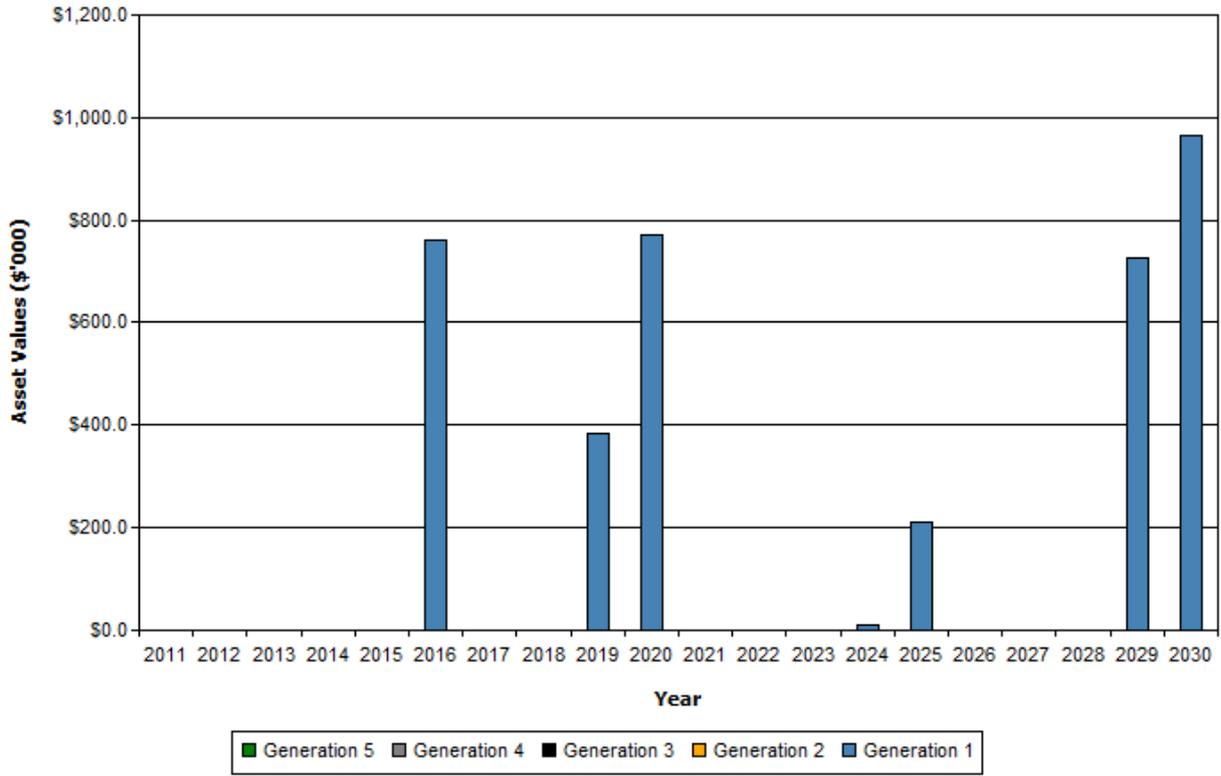
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Public Libraries)**



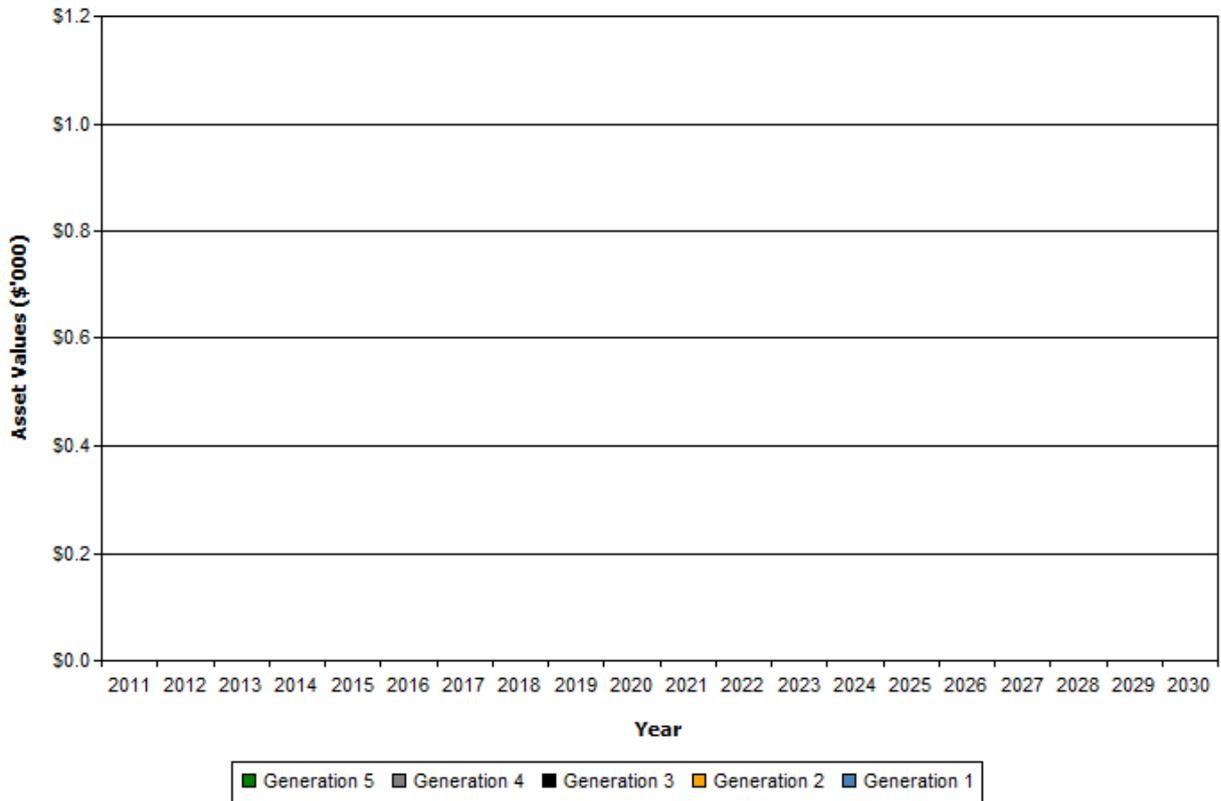
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Public Parks and Gardens)**



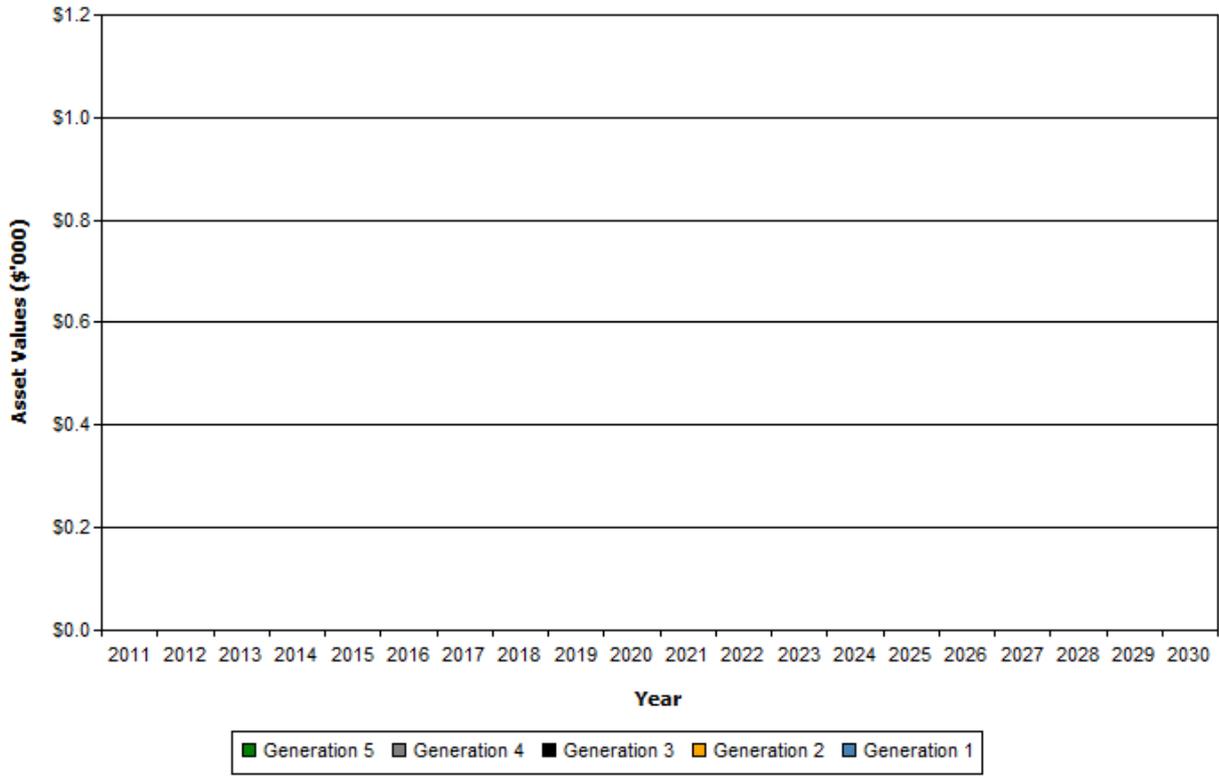
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Recreation Reserves and Sporting Grounds)**



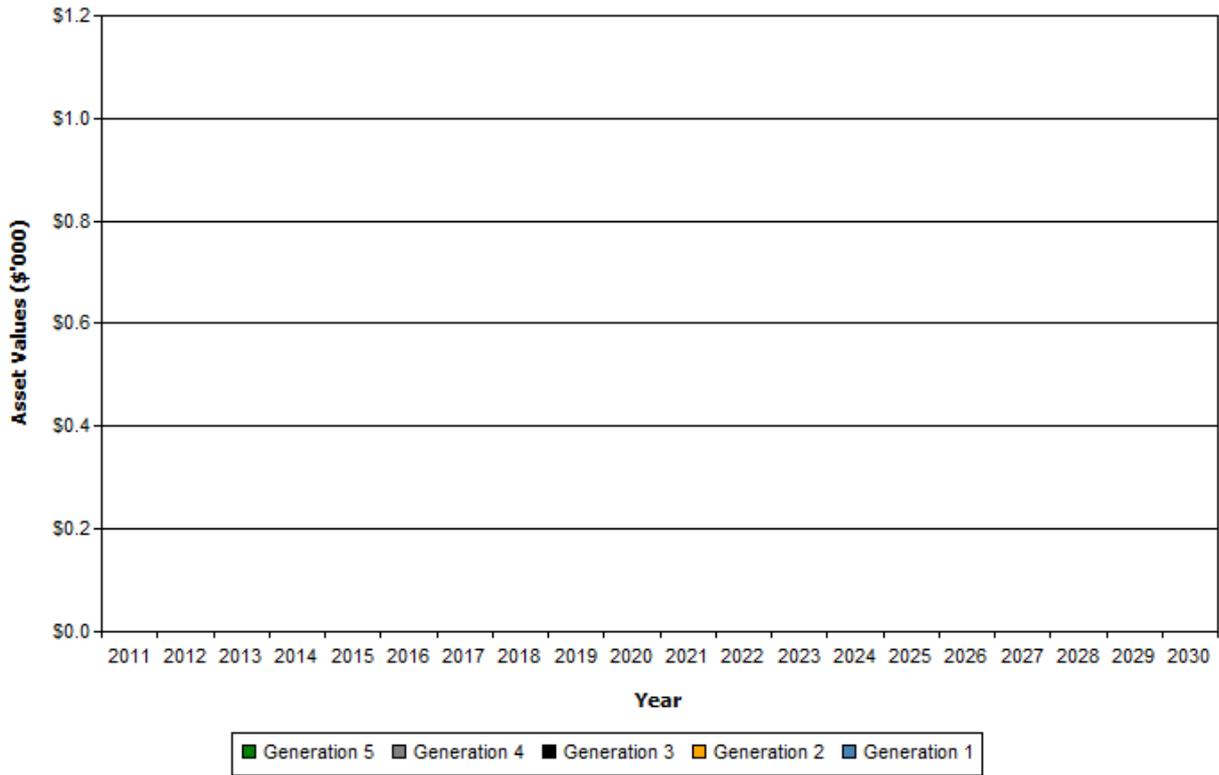
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Residences)**



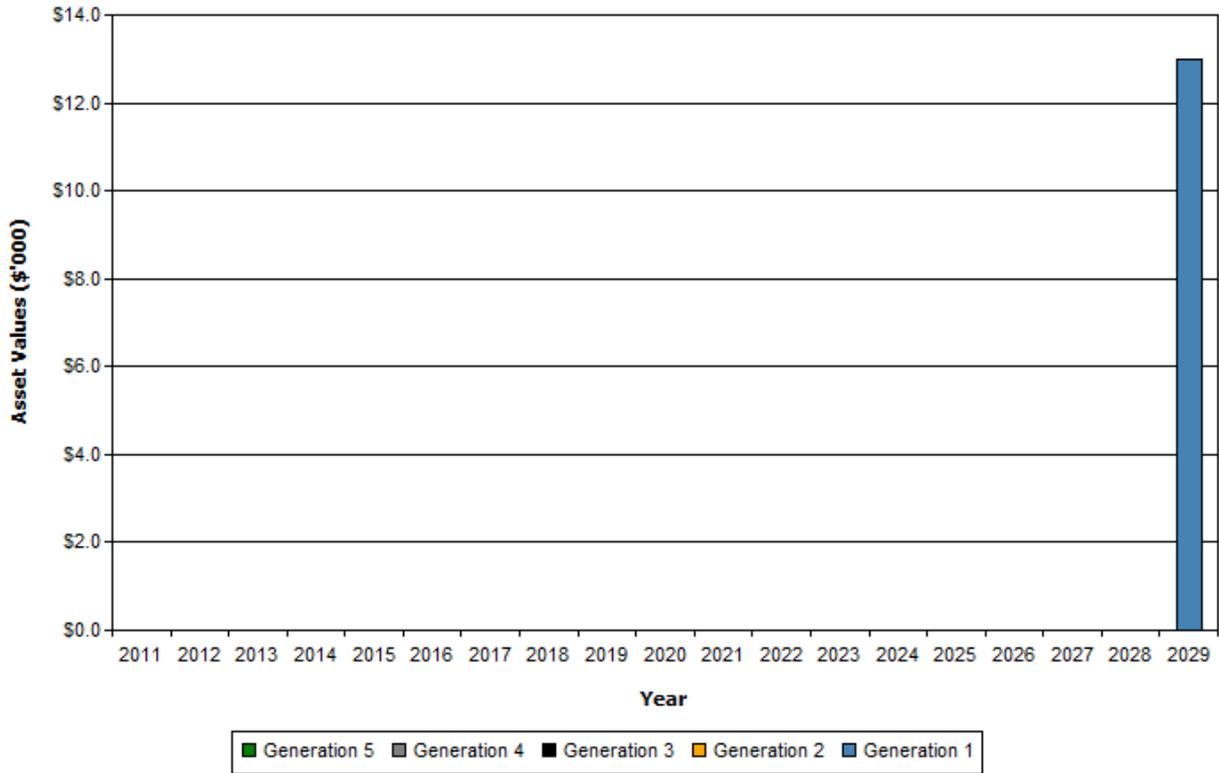
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Finley Saleyards)**



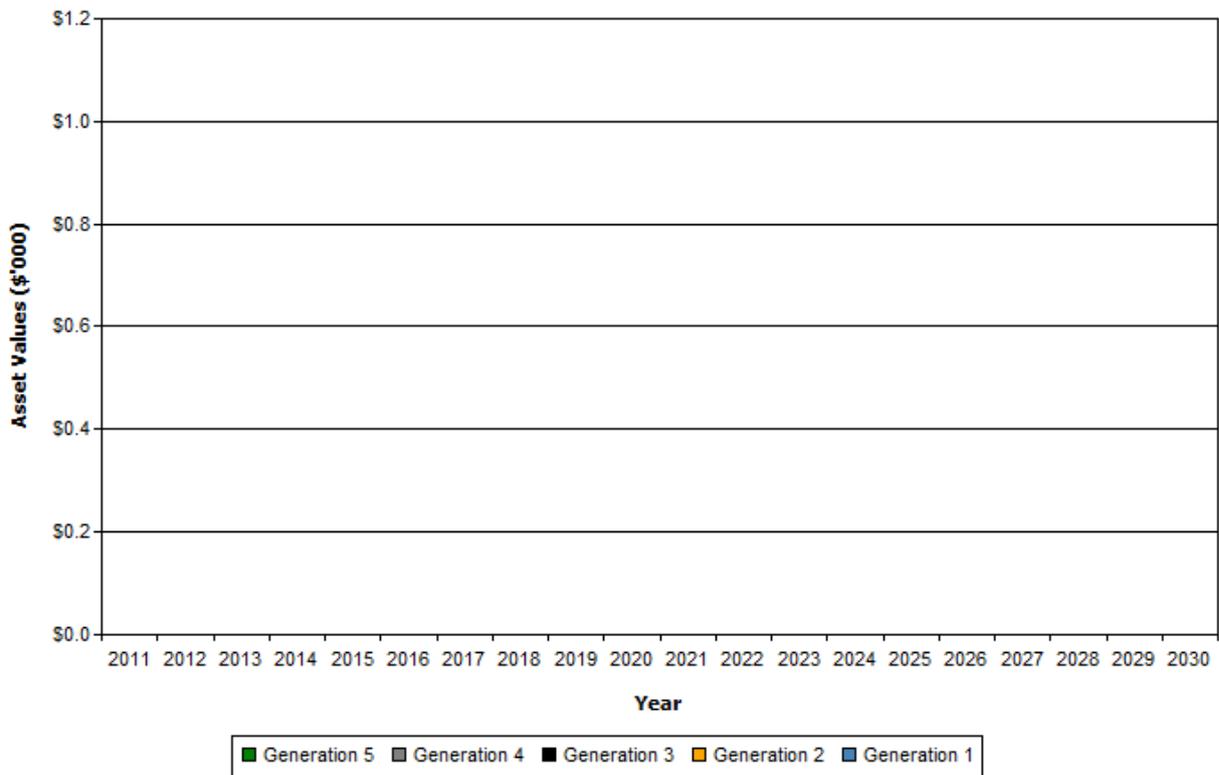
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Emergency Services)**



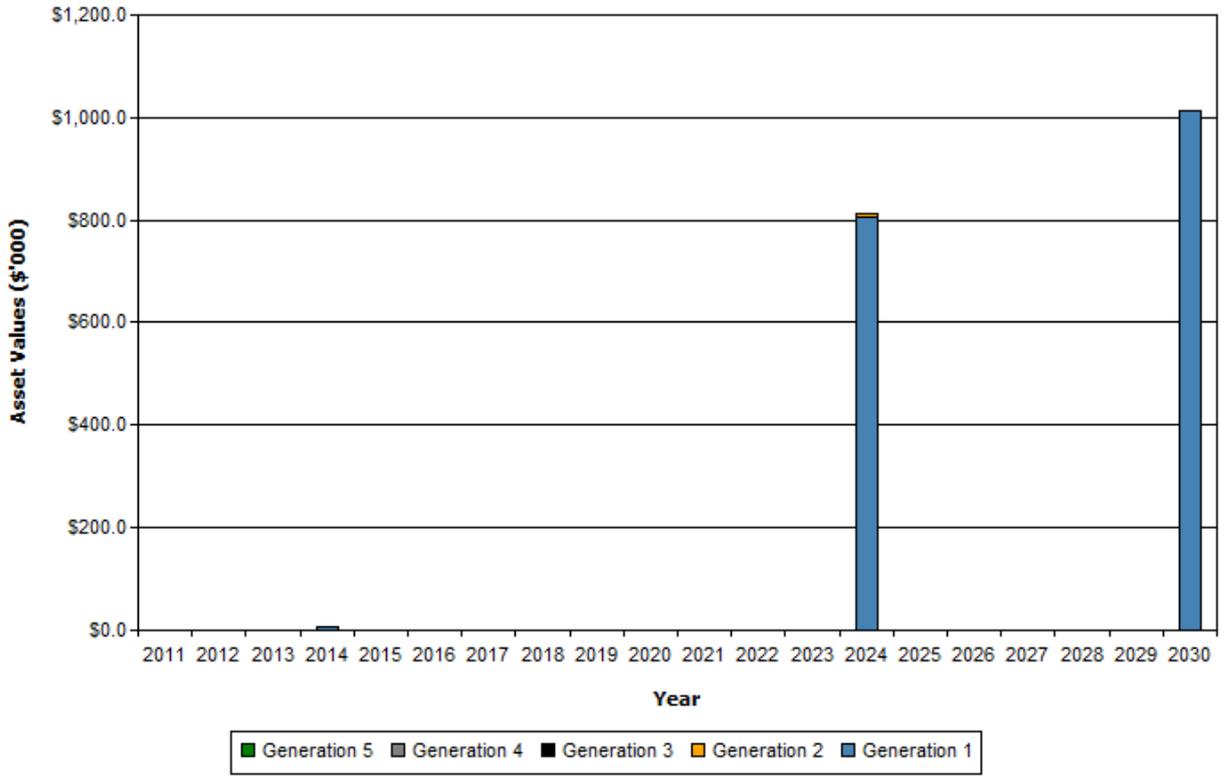
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Transport Facilities)**



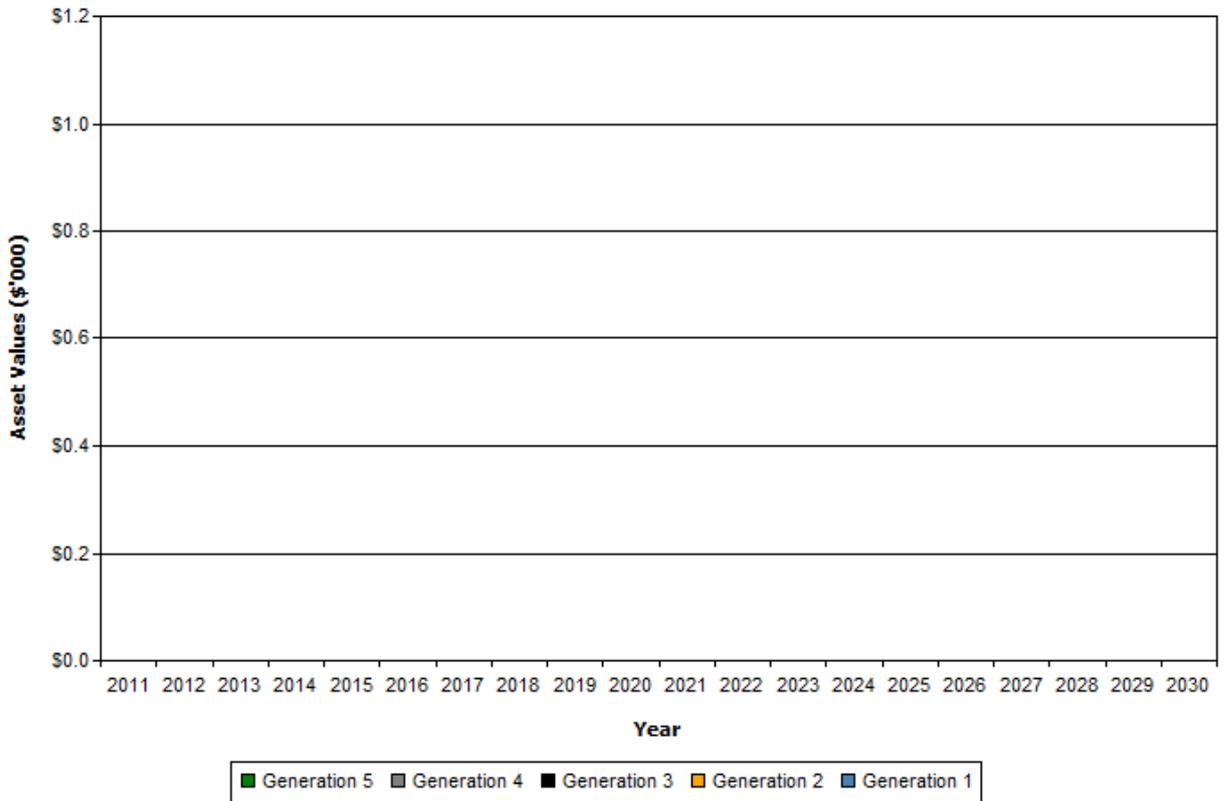
**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Waste Disposal Facilities)**



**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Public Swimming Pools)**



**Berrigan SC - Projected Capital Renewal Expenditure (Corporate and Community Services V4 - Quarries)**



Berrigan Shire Council



# 'Core' Infrastructure Risk Management Plan

Infrastructure



Version 1  
Adopted by Council 18<sup>th</sup> May, 2011

<b>Document Control</b>		 			
Document ID: 59_07_070909 nams.plus core irmp template v6					
Rev No	Date	Revision Details	Author	Reviewer	Approver

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## 1. INTRODUCTION

### 1.1 Aim

The purpose of this core infrastructure risk management plan is document the results and recommendations resulting from periodic identification, assessment and treatment of risks associated with providing services to the community from infrastructure, using the fundamentals of Australian Standard for Risk Management, AS/NZS 4360; 2004.

Risk Management is defined in AS/NZS 4360; 2004 as: “the culture, processes and structures that are directed towards realising potential opportunities whilst managing adverse effects”<sup>1</sup>.

### 1.2 Objectives

The objectives of the plan are:

- to identify risks to the Berrigan Shire Council that may impact of the delivery of services from infrastructure
- to select credible risks for detailed analysis,
- to analyse and evaluate risks in accordance with AS/NZS 4360:2004,
- to prioritise risks,
- to identify risks requiring treatment by management action,
- to develop risk treatment plans identifying the tasks required to manage the risks, the person responsible for each task, the resources required and the due completion date.

### 1.3 Core and Advanced Risk Management

This core risk management plan has been designed to be read as a supporting document to the infrastructure and asset management plan. It has been prepared using the fundamentals of Australian Standard for Risk Management, AS/NZS 4360:2004.

Future revisions of this risk management plan will move toward more comprehensive documentation in accordance with Australian Standard for Risk Management, AS/NZS 4360:2004.

### 1.4 Scope

This plan considers risks associated with delivery of services from infrastructure.

### 1.5 The Risk Management Context

Council has implemented many management practices and procedures to identify and manage risks associated with providing services from infrastructure assets. These include:

- operating a reactive maintenance service for all assets and services;
- operating a planned maintenance system for key assets;
- monitoring condition and remaining service life of assets nearing the end of their service life;
- renewing and upgrading assets to maintain service delivery;
- closing and disposing of assets not providing the required service level; and
- acquiring or constructing new assets to provide new and improved services.

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<sup>1</sup> p4

Council has assigned responsibilities for managing risks associated with assets and service delivery to the following departments:

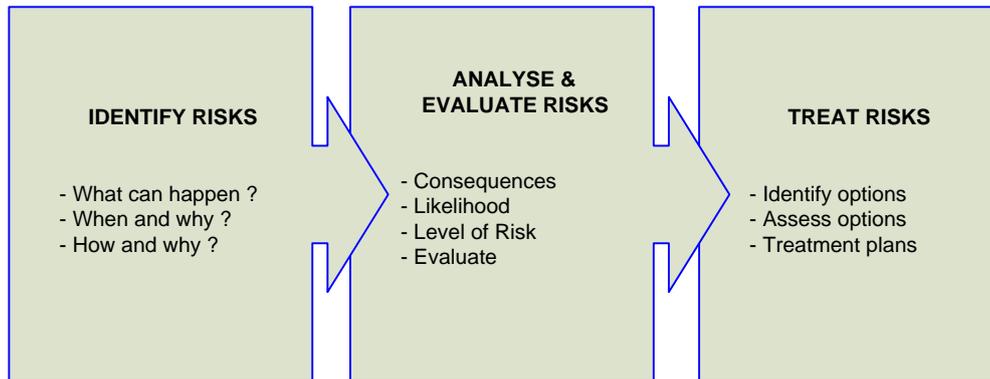
- |                    |  |
|--------------------|--|
| Technical Services | - Director Technical Services<br>- Development Manager |
| Corporate Services | - Directory Corporate Services                         |
| Risk Management    | - Enterprise Risk Manager                              |

### 1.6 Risk Management Model

The risk management process used in this project is shown in Fig 1.6 below.

It is an analysis and problem solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of Australian Standard AS/NZS 4360:2004, Risk Management.



**Fig 1.6. Risk Management Process – Abridged**  
Source: Adapted from AS/NZS 4360:2004, Fig 3.1 p 13

## 2. COMMUNICATION AND CONSULTATION

Risk communication is 'the interactive process of exchange of information and opinion involving multiple messages about the nature of risk and risk management'.<sup>2</sup>

'Appropriate communication and consultation seeks to:

- Improve people's understanding of risks and the risk management processes;
- Ensure that the varied views of stakeholders are considered; and
- Ensure that all participants are aware of their roles and responsibilities.'

The development of this infrastructure risk management plan was undertaken using a consultative team approach to:-

- Identify stakeholders and specialist advisors who need to be involved in the risk management process;
- Discuss and take into account the views of stakeholder and specialist advisors; and
- Communicate the results of the risk management process to ensure that all stakeholders are aware of and understand their and roles and responsibilities in risk treatment plans.

Members of the team responsible for preparation of this risk management plan are:

- Fred Exton – Director Technical Services
- Matthew Hansen – Director Corporate Services
- Wayne Chisholm – Development Manager
- Michelle Koopman – Enterprise Risk Manager

## 3. RISK IDENTIFICATION

### 3.1 General

Potential risks associated with providing services from infrastructure were identified at meetings of the council's infrastructure risk management team.

Team members were asked to identify "What can happen, where and when" to the various council services and then to identify possible "Why and how can it happen" as causes for each potential event.

Each risk was then tested for credibility to ensure that available resources were applied to those risks that the team considered were necessary to proceed with detailed risk analysis

The assets at risk, what can happen, when, possible cause(s), existing controls and credibility are shown in Appendix A – Risk Register.

Credible risks are subjected to risk analysis in Section 4.4.5. Risks assessed as non-credible were not considered further and will be managed by routine procedures.

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<sup>2</sup> HB 436:2004, Sec 3.1, p 20

## 4. RISK ANALYSIS

### 4.1 General

Credible risks which have been identified during the risk identification stage were analysed. This process takes into account the 'likelihood' and the 'consequences' of the event. The objective of the analysis is to separate the minor acceptable risks from the major risks and to provide data to assist in the assessment and management of risks.

The risk analysis process is applied to all credible risks to determine levels of risk. The process acts as a filter by applying a reasoned and consistent process. Minor risks can be eliminated from further consideration and dealt with within standard operating procedures.

The remaining risks will therefore be of such significance as to consider the development of risk treatment options and plans.

### 4.2 Likelihood

Likelihood is a qualitative description of probability of an event occurring. The process of determining likelihood involves combining information about estimated or calculated probability, history or experience. Where possible it is based on past records, relevant experience, industry practice and experience, published literature or expert judgement.

### 4.3 Consequences

Consequences are a qualitative description of the effect of the event. The process of determining consequences involved combining information about estimated or calculated effects, history and experience.

### 4.4 Method

The risk analysis method uses the risk rating chart shown in Section 4.4.3. This process uses a qualitative assessment of likelihood/probability and history/experience compared against a qualitative assessment of severity of consequences to derive a risk rating.

The qualitative descriptors for each assessment are shown below.

#### 4.4.1 Likelihood

Likelihood	Descriptor	Probability of occurrence
Rare	May occur only in exceptional circumstances	More than 20 years
Unlikely	Could occur at some time	Within 10-20 years
Possible	Might occur at some time	Within 3-5 years
Likely	Will probably occur in most circumstances	Within 2 years
Almost certain	Expected to occur in most circumstances	Within 1 year

#### 4.4.2 Consequences

Consequences	Description
Insignificant	No injuries, low financial loss (less than \$10,000)
Minor	First aid treatment, on-site release immediately contained, medium financial loss (\$10,000 - \$50,000)
Moderate	Medical treatment required, on-site release contained with outside assistance, high financial loss (\$50,000 - \$200,000)
Major	Extensive injuries, loss of production capacity, off-site release with no detrimental effects, major financial loss (\$200,000 - \$1,000,000)
Catastrophic	Deaths, toxic release off-site with detrimental effect, huge financial loss (more than \$1M)

#### 4.4.3 Risk Assessment

The risk assessment process compares the likelihood of a risk event occurring against the consequences of the event occurring. In the risk rating table below, a risk event with a likelihood of 'Possible' and a consequence of 'Major' has a risk rating of 'High'. This rating is used to develop a typical risk treatment in Section 5.3.

Risk Rating					
Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	L	L	M	M	H
Unlikely	L	L	M	M	H
Possible	L	M	H	H	H
Likely	M	M	H	H	VH
Almost Certain	M	H	H	VH	VH

Ref: HB 436:2004, Risk Management Guidelines, Table. 6.6 p 55.

#### 4.4.4 Indicator of Risk Treatment

The risk rating is used to determine risk treatments. Risk treatments can range from immediate corrective action (such as stop work or prevent use of the asset) for 'Very High' risks to manage by routine procedures for 'Low' risks.

An event with a 'High Risk' rating will require 'Prioritised action'. This may include actions such as reducing the likelihood of the event occurring by physical methods (limiting usage to within the asset's capacity, increasing monitoring and maintenance practices, etc), reducing consequences (limiting speed of use, preparing response plans, etc) and/or sharing the risk with others (insuring the organisation against the risk).

Risk Rating	Action Required
VH	Very High Risk Immediate corrective action
H	High Risk Prioritised action required
M	Medium Risk Planned action required
L	Low Risk Manage by routine procedures

#### 4.4.5 Analysis of Risk

The team conducted an analysis of credible risks identified in section 3.1 using the method described above to determine a risk rating for each credible risk.

The credible risks and risk ratings are shown in Appendix A – Risk Register

#### 4.5 Risk Evaluation

The risk management team evaluated the need for risk treatment plans using an overall assessment of the following evaluation criteria to answer the question “is the risk acceptable?”

Criterion	Risk Evaluation Notes
Operational	Risks that have the potential to reduce services for a period of time unacceptable to the community and/or adversely affect the council's public image.
Technical	Risks that cannot be treated by council's existing and/or readily available technical resources.
Financial	Risks that cannot be treated within council's normal maintenance budgets or by reallocation of an annual capital works program.
Legal	Risks that have the potential to generate unacceptable exposure to litigation.
Social	Risks that have the potential to: - cause personal injury or death and/or - cause significant social/political disruption in the community.
Environmental	Risks that have the potential to cause environmental harm.

The evaluation criteria are to provide guidance to evaluate whether the risks are acceptable to the council and its stakeholders in providing services to the community. Risks that do not meet the evaluation criteria above are deemed to be unacceptable and risk treatment plans are required to be developed and documented in this Infrastructure Risk Management Plan.

## **5. RISK TREATMENT PLANS**

### **5.1 General**

The treatment of risk involves identifying the range of options for treating risk, evaluating those options, preparing risk treatment plans and implementing those plans. This includes reviewing existing guides for treating that particular risk, such as Australian and State legislation and regulations, Australian Standards and Best Practice Guides.

Developing risk treatment options starts with understanding how risks arise, understanding the immediate causes and the underlying factors that influence whether the proposed treatment will be effective.

One treatment option is to remove the risk completely by discontinuing the provision of the service.

Other options include risk reduction by reducing the likelihood and/or the consequences of the risk.

### **5.2 Risk Treatment Process**

The risk treatment process comprises 5 steps.

#### **Step 1. Review causes and controls**

The risk identification process documented in Section 3 included identifying possible causes and documenting existing controls.

#### **Step 2. Develop treatment options**

Treatment options include those that eliminate risk, reduce the likelihood or the risk event occurring, reducing the consequences should the risk event occur, sharing of the risk with others and accepting the risk.

#### **Step 3. Assess risk treatment options against costs and residual risk**

The method of assessment of risk treatment options can range from an assessment by a local group of stakeholders and practitioners experienced in operation and management of the assets/service to detailed risk cost and risk reduction cost/benefit analysis.

#### **Step 4. Select optimum risk treatment**

#### **Step 5. Develop risk treatment plans**

### **5.3 Risk Treatments**

The risk treatments identified for non-acceptable risks are detailed in Appendix A – Risk Register.

### **5.4 Risk Treatment Plans**

From each of the risk treatments identified in Appendix A – Risk Register, risk treatment plans were developed.

The risk treatment plans identify for each non-acceptable risk:-

1. Proposed action
2. Responsibility
3. Resource requirement/budget
4. Timing
5. Reporting and monitoring required

The risk treatment plan is shown in Appendix A – Risk Register.

## 6. MONITORING AND REVIEW

The plan will be monitored and reviewed as follows.

Activity	Review Process
Review of new risks and changes to existing risks	Annual review by team with stakeholders and report to council
Review of Risk Management Plan	3 yearly review and re-write by team and report to council
Performance review of Risk Treatment Plan	Action plan tasks incorporated in council staff performance criteria with 6 monthly performance review.  Action plan tasks for other organisations reviewed at annual team review meeting

## 7. REFERENCES

AS/NZS 4360:2004, Australian/New Zealand Standard, Risk Management, Standards Australia, Sydney.

HB 436:2004, Risk Management Guidelines, Companion to AS/NZS 4360:2004, Standards Australia, Sydney.

International Infrastructure Management Manual, 2006, Institute of Public Works Engineering Australia, Sydney, 2006 [www.ipwea.org.au](http://www.ipwea.org.au)

## APPENDIX A RISK REGISTER