GWYDIR SHIRE COUNCIL

Buildings

Asset Management Plan

June 2017

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Version 4

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1. EXECUTIVE SUMMARY

Context

Gwydir Shire Council is the result of an amalgamation of Bingara Shire Council, Yallaroi Shire Council and part of Barraba Shire Council on the 17th of March 2004.

The Gwydir Shire encompasses a diverse landscape that is both picturesque and productive.

It is 9,122 square kilometres in size and is situated north of Tamworth Regional Council and continues almost to the Queensland border.

The southern boundary of the shire is the Nandewar Range where the Gwydir and Namoi Valleys meet. The Horton Valley and Cobbadah District are home to some Australia's most highly regarded beef cattle studs. These enterprising farmers use the latest artificial breeding and agronomic technology to produce beef of the highest quality. Meat Sheep and merinos that grow high quality wool are also grazed in this area.

The Gwydir River enters the Gwydir Shire where it spills from the Copeton Dam and meanders in a westerly direction through the towns of Bingara and Gravesend. The Gwydir Valley is well known for irrigated and dry land cropping as well as livestock production. In addition to the traditional crops of wheat, barley, oats and sorghum, there are olive groves, pecan nut plantations and freshwater fish farms in the Gravesend district.

Heading northwest from the timbered surrounds of the town of Warialda and the close-knit community of Coolatai, the countryside opens into an undulating vista of basalt farmland. This area, including the villages of Crooble, Croppa Creek and North Star, is Australia's 'Golden Triangle'. Farmers using advanced farming techniques, such as minimum tillage and satellite guidance systems, produce a variety of high yielding crops such as wheat, barley sorghum, maize, chick peas, canola and cotton to name just a few.

This area also has several cattle feedlots, which supply grain fed beef to the Australian domestic market and export markets throughout the world. Gwydir Shire residents enjoy excellent medical and health services with medical centres in both Warialda and Bingara. The Shire boasts two new hospitals and aged care facilities have been expanded and are of a very high standard.

Shire residents enjoy a quality and plentiful water supply. In fact the new Bingara Water Treatment Plant and Reservoir were officially opened on Friday 13th May 2011. As well, residents are provided with open, beautifully maintained streetscapes, parks and sporting facilities.

Our younger citizens enjoy a great range of services and educational opportunities. The Gwydir shire is a strong and socially minded community with many volunteers. Volunteering has taken on a whole new dimension with many manning the newly opened Warialda and Bingara Visitor Information Centres which has allowed the centres to be open over weekends and public holidays.

Living in Gwydir Shire has purpose and direction. What it means to live and work in our Shire is explained in the following five guiding themes. These themes form the basis of our strategic planning and direction for the next ten years.

The Council's guiding Themes:

1. A Healthy and Cohesive Community (Social)

Gwydir Shire has a staggering statistic: for an area of over 9,000 km² there are less than 6,000 residents- or one resident per 1.5 km².

Rather than being fragile as a consequence of this statistic, the Shire has a strong sense of community. Each of the Shire's communities shares a sense of pride in their place and are positive about their future.

This community pride and confidence is based on a commitment, a spirit of co-operative effort, and a belief that their community can achieve harmony, cohesion and positive results.

2. Building the Business Base (Economy)

Business in Gwydir Shire is predominately independently owned, demonstrating a commitment and attachment to the local community. Business owners do have a strong local clientele base and display a gritty determination to succeed. These characteristics show a confidence in their future that is not always reflected in official statistics and reports.

Current analysis of future trends in the Shire is still difficult due to lack of data. Data from the last Census, undertaken in 2001, does not necessarily reflect changes in the regional and local economy since that time. There is also a wealth of evidence

that small rural communities and townships have diminished in size, activity and economic importance over the last few decades.

This trend is acutely felt in towns such as Warialda and Bingara. Warialda, for example, was a centre for agricultural services and supplies catering for large agricultural enterprises which employed many staff. The business of agriculture has changed, and this has profoundly influenced Warialda's business landscape.

Gwydir Shire's economy is dependent on agriculture but that 'gritty determination' is bringing other newer businesses and opportunities to the Shire. Recent seasons have bought much needed rain which has led to resurgence in wealth and positivity.

There are also strong signs that tourism is bringing a new dimension to the Shire especially with the construction of the new Warialda Tourist Information Centre, and the refurbishment of the Roxy complex in Bingara.

For tourism to strive, however, it needs to be based on the development of a strong brand and marketing strategy. The Shire also has an opportunity to capitalise on the 'tree change' movement, or to target communities who are being affected by 'sea change' impacts.

Business 'infrastructure' is a priority for the future economic sustainability of the Shire. The 'infrastructure' priorities vary from facilitating increased participation by women in the workforce, through to leveraging of regional training opportunities and programs such as the Gwydir Learning Region.

In addition, the impending construction of the Hospitality, Primary Industries and Automotive Trade Training Centres will create new industry, employment and opportunities.

Over the last three years an effective mobile/internet service has been implemented and this has enabled businesses to operate effectively and for Gwydir Shire to project a professional image to the external business community.

The Shire is located at the centre of the North-West/New England Region and this has made Bingara a place to meet and to host conferences. The opportunity to increase the number of meetings and conferences to be held in our Shire will be enhanced when the Roxy complex is fully functional.

3. An Environmentally Responsible Shire (Environment)

Over the history of European settlement in the Gwydir Shire area, some of the past decisions were made without a complete understanding of their impact upon the landscape and the consequences of upsetting natural ecosystems. When the development of the land occurred at rates faster than the rate at which degradation became apparent, these less than desirable practices were repeated.

Extensive land clearing and extraction of water for agriculture are examples of practices that can over time, detrimentally impact the natural environment of this Shire. Possible consequences are species loss; both terrestrial and riverine flora and fauna, and physical and chemical degradation of soils and river systems.

Today there is a lot of activity, by State agencies, non-government organisations, farmers, the rural community, and the Council to enhance the sustainability of Gwydir's natural resources.

Looking into the future, the emphasis is on achieving both environmental sustainability as well as robust agricultural activity. In Gwydir Shire there are significant environmental assets that require special attention and care.

These features are also key attractions for a healthy tourism industry in the Shire. Gwydir River is one such example.

The Council will partner with the Border Rivers-Gwydir Catchment Management Authority to adopt a catchment wide approach to the integrated issues of climate change, soil, water and habitat conservation and establishment in the Shire. The Border Rivers – Gwydir Catchment Management Authority is working towards a potential outcome to operate as an active trader in the 'environment' in the future. Such an economic mechanism will put a value on the environment and enable landowners to be compensated for land areas that become dedicated to conservation.

Council has a key role to play in furthering sustainable behaviour within the Gwydir community.

Education and provision of key information can help residents move towards more sustainable practices, and to help them understand how their

actions can ameliorate a variety of environmental impacts.

Council can lead by example through good management and by demonstration. With limited resources, Council will prioritise water and waste as key environmental issues.

It is argued that human activity has interrupted the global carbon cycle and is beginning to have a profound impact on the Earth's climate. The changes that are required to address climate change can offer an opportunity for innovation and economic development.

The agricultural sector is the second biggest contributor to greenhouse gas emissions through the emission of methane and nitrous oxide by livestock. Being a major contributor to emissions, agriculture will be expected to reduce emissions, a challenge for a sector already confronted by other constraints.

However, with its large land base, climate change is a real opportunity for Gwydir Shire.

One such opportunity is in exploring the development of carbon sequestration opportunities, including commercial plantations, and Landcare plantings to offset greenhouse gas emissions.

These plantings would also provide benefits in addressing salinity impacts, and could be planned to complement biodiversity objectives by creating habitat corridors and links across the landscape.

4. A Proactive Consumer–Orientated Organisation

Council can only achieve the outcomes it seeks for the Shire by continuing to operate as a well managed organisation. The organisation must also have the community's respect and be dedicated to working innovatively and effectively in the Shire's interest.

The organisation will need to continue to adapt to important changes. For example, people affected by Council's decisions are expecting to participate and influence the conduct of those issues. Modern communication technology is facilitating closer involvement with and exposure of Council's processes. These trends will need to be managed with sensitivity and care if that legitimate community request is to be reflected. These processes also need to reflect the requirements of the Department's Integrated Planning and Reporting.

Council's workplace must adapt to these and other changes as they emerge so that it appeals to talented people. Council recognises the quality of the people it can attract and retain in its organisation is vital to its achieving its program. It values its people and appreciates their contribution. It will continue to recognise the obligation for them to be provided with a safe and satisfying workplace; to be treated equitably and with respect; and to be properly rewarded.

The functions and responsibilities of local government continue to increase. That provides Council with the challenges of selecting its activities wisely and of adequately resourcing its programs. Opportunities for new resources and increased effectiveness will be pursued. Council will also place an emphasis on improving alignment between employees and Council's values and goals.

The programs and services the Council selects must be carefully designed and delivered to equitably and cost effectively advance the well being of the Shire's people.

5. Regional and Local Leadership

Council is committed to leading the Shire in addressing the issues identified in this Strategy and moving towards the Vision it has defined for the Shire. This focus on leadership relates to both leadership within the Shire and that external to it.

The Shire has already demonstrated innovative responses through initiatives such as the Gwydir Learning Region.

In addition, the formation and direction of the Australia Rural Road Group is, so far, an effective and highly supported body trying to gain funding to improve the nation's dramatically deteriorating rural road network.

This continued 'can do', innovative approach, and the enthusiasm and energy sets Gwydir Shire apart and allows the Shire to 'punch above its weight' in the region.

As an entity operating in the twenty first century, it is imperative that the Council demonstrate best practice corporate governance behaviour. In time, sustainability and governance will be managed as a single holistic approach to the management of an organisation. Gwydir Shire recognises this trend and is in the process of implementing the Department's Integrated Planning and Reporting requirements.

Transport of agricultural produce and goods to markets and people to work, school and recreation is vital to continued community growth and development. The transport network servicing the community is ageing and services are in decline resulting in loss of all-weather access on many unsealed roads, detours around about 20 bridges with load limits and increasing maintenance costs.

The Buildings Service
The Buildings Asset Portfolio comprises:

- Public Buildings
- Residential Buildings
- Amenities
- Housing
- Other non-classified buildings

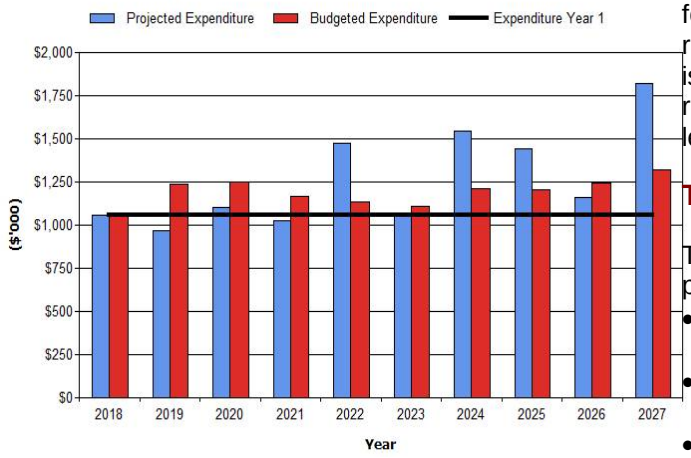
These infrastructure assets have a current value of $49,103,000.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $1,265,900.

Estimated available funding for this period is $1,195,000 on average per year which is 94% of the cost to provide the service. This is a funding shortfall of $7,090 on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

Projected and Budget Expenditure



What we will do

We plan to provide Building services for the following:

- Operation, maintenance, renewal and upgrade of Council Buildings to meet service levels set in annual budgets.

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Fire
- Storm
- Access

We will endeavour to manage these risks within available funding by:

- Fire Safety Audits
- Maintain essential fire hazards
- Consider access with upgrade works

Confidence Levels

The Office of Local Government mandates asset that assets a revalued on a 5 year rolling cycle. In the 2017-2018 financial year, all assets within the building classification will be subject to this revaluation. This process will involve a thorough evaluation of the replacement costs, condition assessments, useful lives and depreciation. It is expected that material changes will be made to forecasted figures as a consequence of this revaluation. As the data contained within this plan is in its final year of its five year life between revaluations, this AM Plan is based on medium level of confidence information.

The Next Steps

The actions resulting from this asset management plan are:

- Improve asset information and knowledge via revaluation.
- Improve integration between AM Plan and LTFP.
- Improve the useful life data and spans for building components and materials
- Engage the community on desired service levels.

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Gwydir Shire Council community's building needs. These assets include administration, amenities, public buildings, aged care, social services, medical services and housing throughout the community area that enable people to access Council staff, utilise public buildings, provide aged care, medical and social service facilities as well as low income and staff housing.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the organisation's building assets were constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that building services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For buildings, the service level reduction may include the sale of buildings, buildings being closed to the public due to insufficient funding to keep them a safe standard for their use.

What can we do?

We can develop options, costs and priorities for future building services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce the building assets mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

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 needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[1].

The asset management plan is to be read with the organisation's Community Strategic Plan, Operational Plan and Delivery Program.

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide administration, medical, aged care, housing, public and social services to its community.

Table 2.1: Assets covered by this Plan

Asset category	Replacement Value
Administration Buildings	$3,288,000
Aged Care Units	$1,538,000
Caravan Parks	$1,695,000
Commercial Buildings	$1,928,000
Community Centres	$ 568,000
Emergency Services Building	$2,104,000
HACC Office	$ 314,000
Hatcheries	$ 127,000
Heritage Centre Complex	$1,185,000
Landfills	$ 29,000
Depots	$2,867,000
Museums	$ 435,000
Naroo Hostel	$5,401,000
Parks and Gardens	$ 105,000
Preschools	$ 573,000
Public Amenities	$ 836,000
Public Halls	$5,480,000
Public Swimming Pools	$ 678,000
Residential Houses	$2,511,000
Rest Areas	$ 40,000
Roxy Theatre	$4,730,000
Rural Fire Service Sheds	$ 541,000
Senior Citizens Centres	$ 184,000
Sewerage Treatment Works	$ 210,000
Showground Buildings	$2,015,000
Sporting Field Buildings	$2,338,000
Tharawonga Mobile Preschool	$ 79,000
Tourist Centres	$ 473,000

[1] IPWEA, 2011, Sec 4.2.6, Example of an Asset Management Plan Structure, pp 4|24 – 27.

Toy Libraries	$ 377,000
Trade Training Centres	$2,514,000
Water Treatment Plants	$2,895,000
Other	$1,044,000
TOTAL	$49,100,000

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors/Board Members	• Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financial sustainable.
CEO/General Manager	Overall management of assets
Environmental Director	Strategic and operational management of building assets
Environmental and Building Manager	Operational and budgetary management of building assets
Corporate Asset Manager	Strategic management and planning of building assets

2.2 Goals and Objectives of Asset Management

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

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meets the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[2]

2.3 Plan Framework

Key elements of the plan are

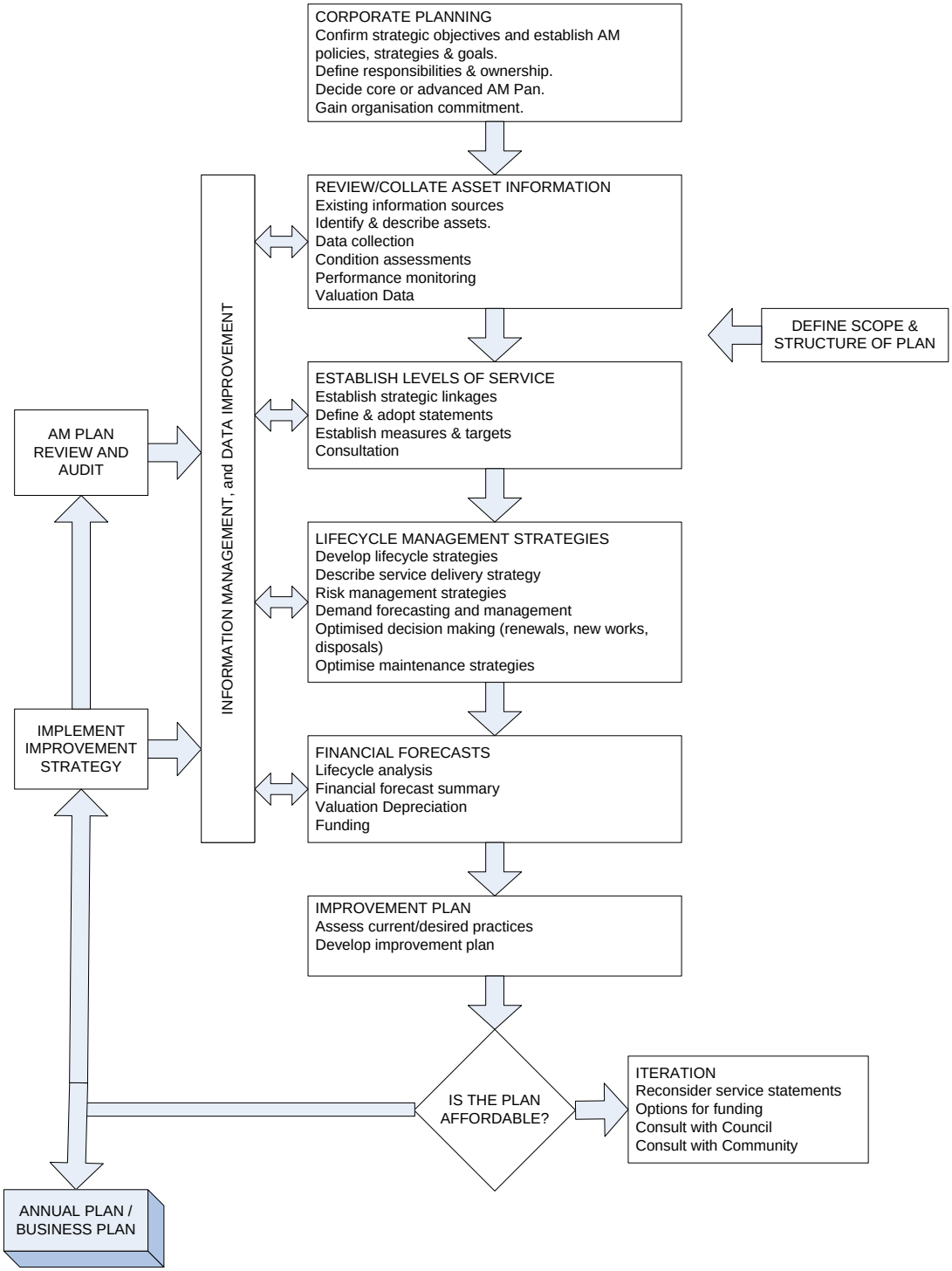
- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how we will manage our existing and future assets to provide defined levels of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

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

[2] Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, 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 over a 20 year planning period in accordance with the International Infrastructure Management Manual[3]. 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.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council/Board. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council/Board and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council has carried research into community satisfaction by way of community meetings, mail survey, customer request management system and also direct access to Council staff. The overall consensus in the community is that the community is fairly satisfied with the sewerage network.

The organisation uses this information in developing its Strategic Plan and in allocation of resources in the budget.

3.2 Strategic and Corporate Goals

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

Our vision is:

"To be a recognised leader in Local Government through continuous learning and sustainability"

Our mission is:

"To ensure that the Council's long term role is viable and sustainable by meeting the needs of our residents in a responsible caring way, attract sustainable development while maintaining the traditional rural values, character and culture of our people"

[3] IPWEA, 2011, IIMM.

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

Table 3.2: Community Strategic Plan Objectives Addressed in this Plan

Outcome 2.1 Our economy is growing and supported
Our business community is prepared for future growth and challenges. We welcome new business development opportunities and work with private enterprise to establish strategic partnerships aligned to the creation of employment and industry in our community. Tourism is embraced by all facets of our community and Gwydir Shire Council is seen as a destination of choice for travellers. Strategies to get there

2.1.1 Plan for and develop the right assets and infrastructure
2.1.2 Support the growth of our business community.
2.1.3 Promote our community as the place to visit, live, work and invest

Council Role
- Promote and support business investment and employment growth
- Provide visitor information services
- Advocate for better internet access
- Partner with business and industry to attract funding and investment
- Develop and promote tourism
- Provide and maintain our road network
- Advocate for funding for major projects
- Provide and maintain public infrastructure

3.3 Legislative Requirements

We have to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act	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.
Building Code of Australia 2012	Provides acceptable standards for construction, fire safety, health and access to buildings.
WHS Act 2011	Council has the responsibility to provide a healthy and safe workplace for employees and the public.
Australian Accounting Standards	Requires assets to be valued and reported including depreciation in the annual accounts.
Environmental Planning and Assessment Act 2008	LEP's and DCP's Service approvals
Australian Standards	Guide for building asset managers in the construction and maintenance of buildings.

3.4 Current Levels of Service

We have defined service levels in two terms.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing frequency, mowing frequency, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (eg road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide an higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new library).

Asset managers plan, implement and control technical service levels to influence the customer service levels.[4]

Our current service levels are detailed in Table 3.4.

Table 3.4: Current and Desired Service Levels

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Optimal Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	Provide clean and accessible facilities	Customer Service requests/complaints, customer surveys	<2 complaints per year	<4 complaints per building per year
Function	Facilities are fit for purpose, meet users requirements & industry standards	Customer Service requests/complaints, customer surveys	<2 complaints per year	<4 complaints per building per year
Safety	Ensure facilities are safe	Reported incidents	Measured by submitted incident reports	Zero reported incidents
TECHNICAL LEVELS OF SERVICE				
Operations	Building functionality is not compromised by condition	Regular building inspections	Each building inspected every 12 months.	Each building inspected every 6 months.
		Budget		Increased resources
Maintenance	Legislative Compliance	Provide access and service for all user groups	80% compliance	100% compliance
		Budget		Funding and resources

[4] IPWEA, 2011, IIMM, p 2.22

3.5 Desired Levels of Service

Indications of desired levels of service are obtained from community consultation/engagement to Councillors and staff. Currently Council is yet to collate and quantify these desired levels of service. This will be undertaken for future revision of the AM Plan

4. FUTURE DEMANDS

4.1 Demand Drivers

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

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Changes in building construction, maintenance and materials used.	Use current up to date methods	Methods and materials will improve	May increase the life of building components, reducing the susceptibility to damage, or by reducing the cost of construction or maintenance and operations (eg energy use)
Management Technology	More condition based than intervention point planning.	Better understanding of useful lives and projected costs.	Knowledge of buildings, component, service lives and costs is continually being improved

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures5. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

[5] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

Service Activity	Demand Management Plan
Building Maintenance and Upgrades.	Upgrades to meet customer and community expectations.
Reduction in number of buildings.	Determine usage rates and encourage multi use of buildings.

5. LIFECYCLE MANAGEMENT PLAN

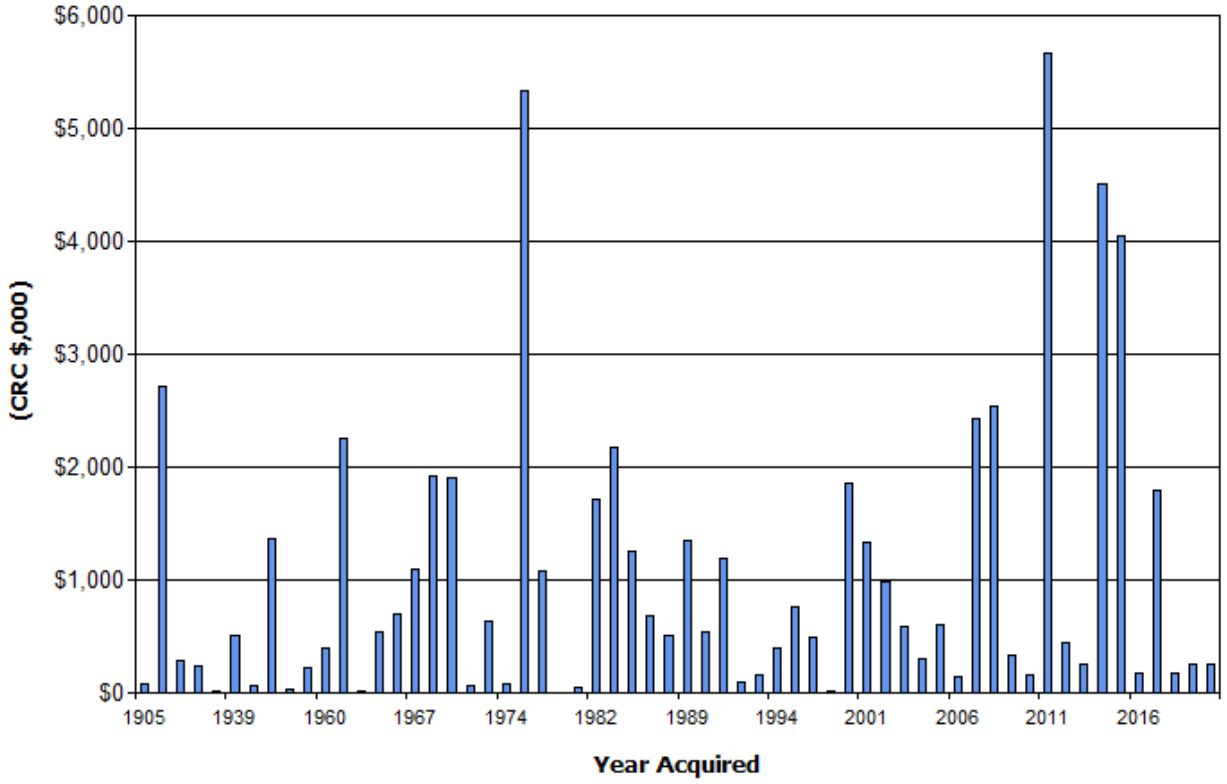
The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The age profile of the assets included in this AM Plan is shown in Figure 2.

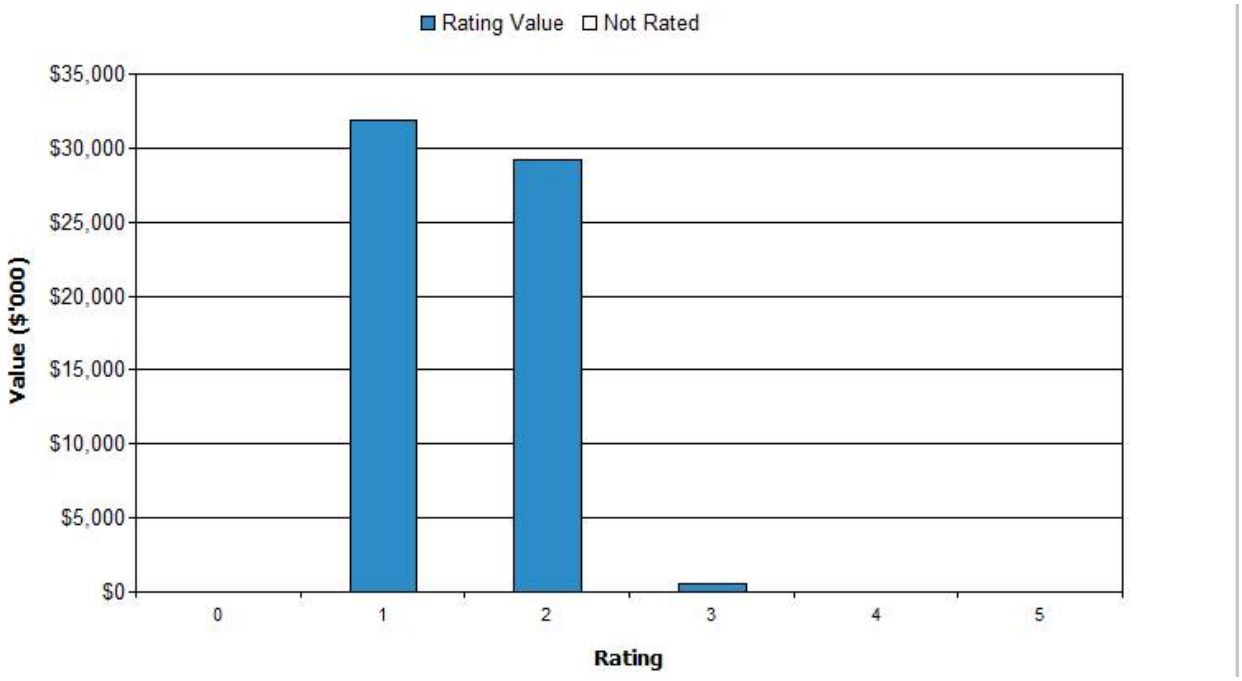
Figure 2: Asset Age Profile



5.1.3 Asset condition

Condition is monitored by regular inspections of buildings by relevant qualified staff. As part of the revaluation scheduled for 2017-2018, Building Services staff are presently carrying out comprehensive condition assessments of all buildings and building components. The condition profile shown below is as of the last building revaluation, undertaken in 2013.

Fig 3: Asset Condition Profile



Condition is measured using the Office of Local Government's IP&R 1 – 5 grading system[6] as detailed in Table 5.1.3.

Table 5.1.3: Integrated Planning and Reporting Grading Model

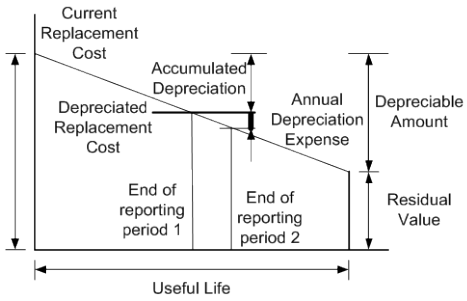
Condition Grading	Description of Condition
1	**Excellent**: No work required (normal maintenance)
2	**Good**: Only minor maintenance work required
3	**Average**: Maintenance work required
4	**Poor**: Renewal required
5	**Very Poor**: Urgent renewal/upgrading required

[6] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

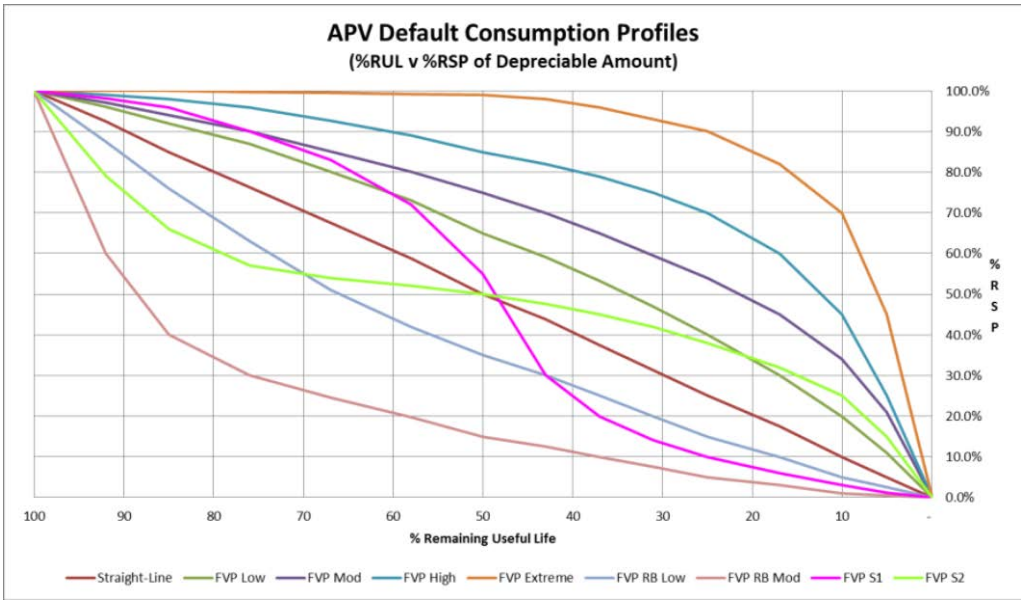
5.1.4 Asset valuations

The value of assets recorded in the asset register as at 20th January 2014 covered by this asset management plan is shown below. Assets were last revalued at 30th June 2013.

Current Replacement Cost	$61,578,000
Depreciable Amount	$35,244,000
Depreciated Replacement Cost[7]	$49,103,000
Annual Depreciation Expense[8]	$ 792,000



Useful lives were reviewed in 30th June 2013 by APV Valuers and Asset Management using the table below.



[7] Also reported as Written Down Value (WDv). [8]Annual Depreciation Expense shows the results of a reversal of a software error inflating current figures which has not been processed in Council's databases

Key assumptions made in preparing the valuations were:

Asset (Sub)Category	Type	Assumptions
Floor	Timber – STD	The major reason for problems with the floors would be subsidence and the appropriate treatment would be underpinning. It is estimated that this would be done well before the floor reached a stage requiring complete reconstruction and the cost of doing such work would equate to roughly 50% of the Gross cost of the floor. The total life of a Concrete floor (given normal wear and tear) is estimated at approximately 100 years whereas for timber floors it is expected that the total life (under normal conditions) would only be 60 years.
Floor	Timber – Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the timber starts to deteriorate at a quicker pace due to environmental factors.
Floor	Concrete – STD	The major reason for problems with the floors would be subsidence and the appropriate treatment would be underpinning. It is estimated that this would be done well before the floor reached a stage requiring complete reconstruction and the cost of doing such work would equate to roughly 50% of the Gross cost of the floor. The total life of a Concrete floor (given normal wear and tear) is estimated at approximately 100 years whereas for timber floors it is expected that the total life (under normal conditions) would only be 60 years.
Floor	Concrete – Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the floor starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted as slightly greater than for timber floors.
Envelope	Concrete-STD	Consistent with Floors, the major cause of a problem with the Envelope would most likely be subsidence with the appropriate treatment being under-pinning. In the case of concrete envelopes this would normally be carried out well before the asset reached condition 5 and the cost to undertake such work is estimated at 50% of total cost to construct in cases where the damage was significant (cond 5). Accordingly RV has been set at 50%. Useful Life for a concrete shell is also considered very long with 80 - 100 years often adopted.

Envelope	Concrete-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Timber-STD	Consistent with Floors, the major cause of a problem with the Envelope would most likely be subsidence. For timber buildings the cause of the issue would be fixed either through under-pinning or strengthening of the frame with timber boards replaced in the affected areas. Accordingly RV has been set at 65%. Generally such work would be carried well before the major intervention point at minimal cost. Useful Life for a timber structure is considered to be approximately 50 - 70 years. However, providing there is adequate maintenance and obsolescence is not an issue the useful life could be extended indefinitely.
Envelope	Timber-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the timber starts to deteriorate at a quicker pace due to environmental factors.
Envelope	Conc Block – STD	Consistent with Floors, the major cause of a problem with the Envelope would most likely be subsidence with the appropriate treatment being under-pinning. In the case of Block Walls, the mortar is produced at a lower strength to the blocks so that any cracks appear on the joins. The problems would be fixed by under-pinning and re-sealing the cracks which is worst case scenario is likely to be less than 35% of the total cost of construction. Accordingly RV has been set relatively high at 65%. The total life for Block is estimated at 75 years and it is expected that Brick would have a slightly lower total life (65 years) with timber slightly less again (60 years). This is due to the extra strength afforded by block walls and increased effect of environmental factors on brick and timber.
Envelope	Conc Block-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Cavity Brick-STD	Consistent with Floors, the major cause of a problem with the Envelope would most likely be subsidence. For brick envelopes, under-

		pinning would also be performed with individual effected bricks removed and replaced with new mortar. The problems would be fixed by under-pinning and re-sealing the cracks which is worst case scenario is likely to be less than 35% of the total cost of construction. Accordingly RV has been set relatively high at 65%. The total life for Block is estimated at 65 years consistent with standard Design Life predictions.
Envelope	Cavity Brick-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Brick Veneer-STD	Considered same as Cavity Brick
Envelope	C/Bond M/Deck-STD	The major cause of problems with the Envelope would most likely be subsidence or corrosion. Treatments would normally include either under-pinning or replacement of affected sheeting. The structure is unlikely to be affected significantly and therefore when in condition 5 replacement would normally only be replacement of sheeting. Accordingly a high residual value (65%) has been set. The total life for steel envelopes is estimated at 45 years consistent with standard Design Life predictions.
Envelope	Fibre Cement-STD	Similar lifecycle to cavity brick but a slightly lower Residual Vale as more cost involved in replacing panels when reaches condition 5. Structure of building unlikely to affected from wear and tear and therefore RV set at 50%.
Envelope	Corr Galv Iron-STD	The major cause of problems with the Envelope would most likely be subsidence or corrosion. Treatments would normally include either under-pinning or replacement of affected sheeting. The structure is unlikely to be affected significantly and therefore when in condition 5 replacement would normally only be replacement of sheeting. Accordingly a high residual value (65%) has been set. The total life for steel envelopes is estimated at 45 years consistent with standard Design Life predictions.
Envelope	Corr Galv Iron-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.

Envelope	Corr Asbestos-STD	Similar physical wear and tear to fibre cement but reduced lifecycle due to health risks associated with product. Once deterioration of the produce commences the replacements of it is considered a high priority. There is also significant additional cost in removal of product resulting in a lower RV (35%). Lifecycle has been set at 40 years which is consistent with standard practice.
Fit Out (Floors)	Carpet	Includes: Carpet & Vinyl. Life varies significantly depending upon situation. However pattern is consistent. Generally no residual value as fully replaced at end of life
Fit Out (Floors)	Vinyl	Includes: Carpet & Vinyl. Life varies significantly depending upon situation. However pattern is consistent. Generally no residual value as fully replaced at end of life
Fit Out (Floors)	Ceramic Tiles	Includes Tiles and Floating floor. Life may vary depending upon situation. However pattern is consistent. Generally no residual value as fully replaced at end of life
Fit Out (Floors)	Polished Timber	Timber floors are generally repaired well before the intervention point by fixing problems before they become a major issue. Even if allowed to deteriorate to very poor condition significant sections of the floor will remain. Hence RV = 50%
Fit Out (Internal Screens)	Fibre Cement-STD	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle. However, the renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. The cost of the renewal over the cycle is estimated to be approximately 40% of the total cost of the fit-out. Accordingly the Residual Value has been set at 60%. The drivers of renewal tend to also be related to obsolescence or changing fashion and therefore the consumption tends to be greater as the asset nears the intervention point.
Fit Out (Internal Screens)	Glass	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle. However, the renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. The cost of the renewal over the cycle is estimated to be approximately 40% of the total cost of the fit-out. Accordingly the Residual Value has been set at 60%. The

		drivers of renewal tend to also be related to obsolescence or changing fashion and therefore the consumption tends to be greater as the asset nears the intervention point.
Fit Out (Internal Screens)	Plaster Board	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle. However, the renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. The cost of the renewal over the cycle is estimated to be approximately 40% of the total cost of the fit-out. Accordingly the Residual Value has been set a 60%. The drivers of renewal tend to also be related to obsolescence or changing fashion and therefore the consumption tends to be greater as the asset nears the intervention point.
Fit Out (Internal Screens)	Hardboard	This typically includes lower profile buildings with timber or hardboard panels where renewal is less often and not driven by aesthetics. The renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. The cost of the renewal over the cycle is estimated to be approximately 40% of the total cost of the fit-out. Accordingly the Residual Value has been set a 60%. Similar to short life fit-outs the consumption tends to be greater as the asset nears the intervention point and a decision is made to undertake renewal.
Fit Out (Internal Screens)	Timber Panel	This typically includes lower profile buildings with timber or hardboard panels where renewal is less often and not driven by aesthetics. The renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. The cost of the renewal over the cycle is estimated to be approximately 40% of the total cost of the fit-out. Accordingly the Residual Value has been set at 60%. Similar to short life fit-outs the consumption tends to be greater as the asset nears the intervention point and a decision is made to undertake renewal.
Roof	Colour Bonded Metal Decking	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets. Full renewal only replaces the sheeting and not the trusses. Hence RV = 50%

Roof	Corrugated Galv Iron	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets. Full renewal only replaces the sheeting and not the trusses. Hence RV = 50%
Roof	Metal Decking (no colour)	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets. Full renewal only replaces the sheeting and not the trusses. Hence RV = 50%
Roof	Corrugated Asbestos	Generally a longer life than a metal roof but a similar pattern of maintenance processes and full renewal only replaces tiles/sheeting and not trusses. Hence RV = 50%
Roof	Concrete Tile	Generally a longer life than a metal roof but a similar pattern of maintenance processes and full renewal only replaces tiles/sheeting and not trusses. Hence RV = 50%
Roof	Clay Tile	Generally a longer life than a metal roof but a similar pattern of maintenance processes and full renewal only replaces tiles/sheeting and not trusses. Hence RV = 50%
Roof	Reinforced Concrete	Very long life. Repairs are generally made when problems first appear and therefore it is unlikely the asset will progress much beyond condition 1 or 2. If however it does deteriorate to condition 5 the major renewal repairs are expected to be no more than 50% of the cost of constructing as new. Hence RV = 50%
Roof	Shadecloth	Very short life but can vary from 10 years to 25 years. Fully replaced at end with no residual value.
Roof	Timber-STD	Typically used for park pergolas and similar structures. General have a relatively short life but longer than shadecloth. Residual is generally about 50% representing that timber roofing material is completely replaced but roof structure remains.
Mechanical Services	Air Con (Ducted)	The total life of services tend to vary ranging anywhere between 15 and 45 years with ducted air-conditioning tending to have a slightly longer life. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence, changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention

		undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point. With ducted there is normally a residual value associated with the ducting as normally only the motors and units are replaced. Accordingly a Residual Value of 25% has been set.
Mechanical Services	Air Con (Split)	Includes air conditioning and similar items. The total life of services tend to vary ranging anywhere between 15 and 40 years. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence, changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point. The services tend to be completely replaced and therefore the Residual Value is considered to be Nil.
Mechanical Services	Air Con (Wall)	Includes air conditioning and similar items. The total life of services tend to vary ranging anywhere between 15 and 40 years. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence, changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point. The services tend to be completely replaced and therefore the Residual Value is considered to be Nil.
Mechanical Services	Ventilation	Considered same as Ducted Air-Conditioning but with higher Residual Value as less cost involved in replacement of motors. RV set at 40%
Other Services	Emer Gen	Life can range anywhere from 10 - 20 years depending on use, location and maintenance practices. Consumption increases as it nears the intervention point due to deterioration and resulting diminishing performance.
Other Services	Transportation	Includes lifts and elevators. Lifecycle considered requiring major renewal after about 20 years but this tends to only work out at about 30% the cost of construction as new as mainly relates to electrical components and wearing parts.
Other Services	Fire Services	Includes extinguishers, detectors, hydrants and sprinklers. Regularly tested and small components replaced. Major components

		have very long design life. Major renewal after about 40 years is expected to be no more than 30% of total cost. Hence RV = 70%

Major changes from previous valuations are

- An increase of $9,000,000 in Replacement Cost.
- An increase of $17,000,000 in fair value.
- A decrease of $490,000 in annual depreciation.

5.2 Infrastructure Risk Management Plan

An assessment of risks[8] associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. 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, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council/Board.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H,M,L)	Risk Treatment Plan
All buildings	Deterioration of building assets	H	- 6 monthly condition inspections. - Improved allocation of appropriate funding. - Improvement of Buildings AM practices
All buildings	Significant loss from disaster	M	- Keep insurances current with correct valuations. - Undertake and implement Business Interruption Plan.
All buildings	Injury to staff or community member	M	- Prioritise capital and renewal works based on condition. - Allocate applicable funding and resources. - Ensure staff and community are notified and aware of specific dangers.
All buildings	Non compliance with legislation or regulations	L	- Undertake regular inspections and maintenance. - Non-Compliance works to be given priority.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

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 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. Maintenance may be classifies into reactive, planned and specific 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.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	**Unplanned**
2016/17	$571,365.52	$77,913.48
2015/16	$606,586.64	$82,716.36
2014/15	$594,495.44	$81,067.56
2013/14	$640,014.32	$87,274.68
2012/13	$602,538.64	$82164.36
2011/12	$	$
2010/11	$	$

Planned maintenance work is currently 88% of total maintenance expenditure.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by the organisation's staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure the organisation is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation's service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Structural	NCC
Roof	NCC
Walls	NCC
Floor	NCC
Services	NCC

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refines investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Operations & Maintenance Activities
Administration Buildings	Regular risk and maintenance assessments
Depots	Regular risk and maintenance assessments
Naroo Hostel	Monthly maintenance of A/C, fire systems, security

Standards and specifications

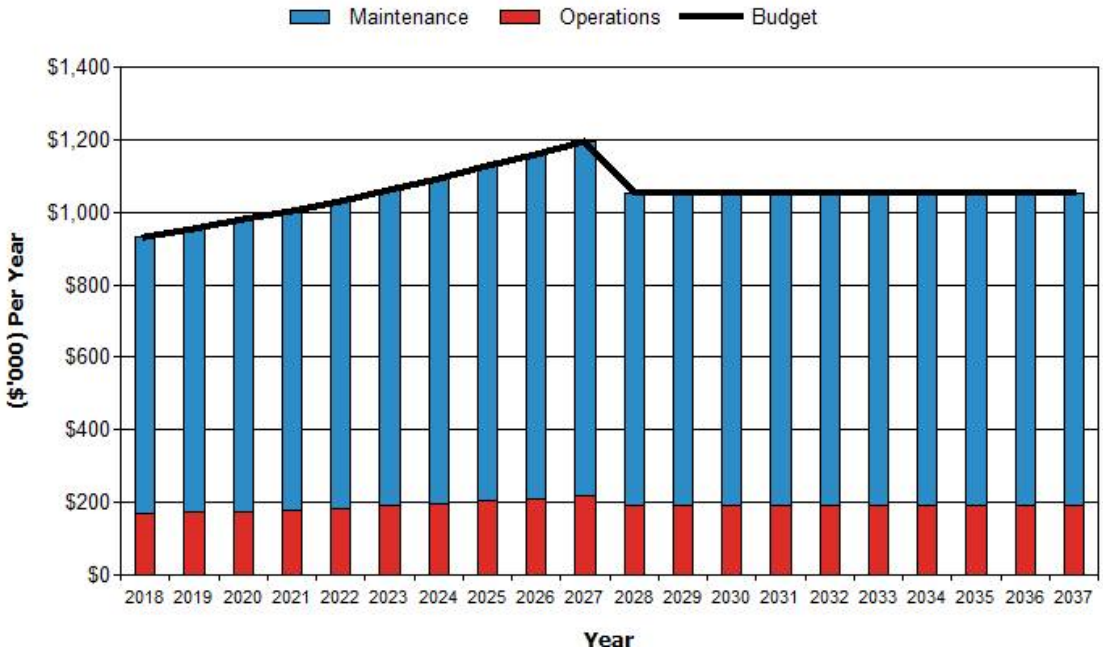
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Building Code of Australia
- Relevant Australian Standards and Codes
- Material and Product Specifications

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2016/17 dollar values (ie real values).

Figure 4: Projected Operations and Maintenance Expenditure



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

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement 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 or lesser required 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/replacement are identified from one of three methods provided in the 'Expenditure Template'.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 30th June 2013.

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Type	Useful Life
Floor	Timber - STD	The total life of a Concrete floor (given normal wear and tear) is estimated at approximately 100 years whereas for timber floors it is expected that the total life (under normal conditions) would only be 60 years.
Floor	Timber - Heritage	Significantly longer life as a physical condition is not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the timber starts to deteriorate at a quicker pace due to environmental factors.
Floor	Concrete - STD	The total life of a Concrete floor (given normal wear and tear) is estimated at approximately 100 years whereas for timber floors it is expected that the total life (under normal conditions) would only be 60 years.
Floor	Concrete - Heritage	Useful life of 150 years adopted as slightly greater than for timber floors.
Envelope	Concrete-STD	Useful Life for a concrete shell is also considered very long with 80 - 100 years often adopted.
Envelope	Concrete-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Timber-STD	Generally such work would be carried well before the major intervention point at minimal cost. Useful Life for a timber structure is considered to be approximately 50 - 70 years. However, providing there is adequate maintenance and obsolescence is not an issue the useful life could be extended indefinitely.

Envelope	Timber-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the timber starts to deteriorate at a quicker pace due to environmental factors.
Envelope	Conc Block - STD	The total life for Block is estimated at 75 years and it is expected that Brick would have a slightly lower total life (65 years) with timber slightly less again (60 years). This is due to the extra strength afforded by block walls and increased effect of environmental factors on brick and timber.
Envelope	Conc Block-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Cavity Brick-STD	The total life for Block is estimated at 65 years consistent with standard Design Life predictions.
Envelope	Cavity Brick-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Brick Veneer-STD	Considered same as Cavity Brick
Envelope	C/Bond M/Deck-STD	The total life for steel envelopes is estimated at 45 years consistent with standard Design Life predictions.
Envelope	Fibre Cement-STD	Similar lifecycle to cavity brick but a slightly lower Residual Vale as more cost involved in replacing panels when reaches condition 5.
Envelope	Corr Galv Iron-STD	The total life for steel envelopes is estimated at 45 years consistent with standard Design Life predictions.

Envelope	Corr Galv Iron-Heritage	Significantly longer life as physical condition not as important and often are unable to be repaired due to historical factors. The service potential tends to diminish more significantly towards end of life as the structure starts to deteriorate at a quicker pace due to environmental factors. Useful life of 150 years adopted.
Envelope	Corr Asbestos-STD	Lifecycle has been set at 40 years which is consistent with standard practice.
Fit Out (Floors)	Carpet	Includes: Carpet & Vinyl. Life varies significantly depending upon situation. However pattern is consistent.
Fit Out (Floors)	Vinyl	Includes: Carpet & Vinyl. Life varies significantly depending upon situation. However pattern is consistent. replaced at end of life
Fit Out (Floors)	Ceramic Tiles	Includes Tiles and Floating floor. Life may vary depending upon situation. However pattern is consistent.
Fit Out (Floors)	Polished Timber	Timber floors are generally repaired well before the intervention point by fixing problems before they become a major issue. Even if allowed to deteriorate to very poor condition significant sections of the floor will remain.
Fit Out (Internal Screens)	Fibre Cement-STD	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle.
Fit Out (Internal Screens)	Glass	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle.
Fit Out (Internal Screens)	Plaster Board	This typically includes high profile buildings with Plasterboard, Glass and Fibre Cement fit-outs. The history of these buildings indicates a pattern of gradual and constant renewal and upgrade of the fit-out over a 10 - 15 year cycle.

Fit Out (Internal Screens)	Hardboard	This typically includes lower profile buildings with timber or hardboard panels where renewal is less often and not driven by aesthetics. The renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. Similar to short life fit-outs the consumption tends to be greater as the asset nears the intervention point and a decision is made to undertake renewal.
Fit Out (Internal Screens)	Timber Panel	This typically includes lower profile buildings with timber or hardboard panels where renewal is less often and not driven by aesthetics. The renewal tends to be on wearing and some aesthetic aspects of the fit-out and not in relation to all aspects such as internal walls and wall cladding. Similar to short life fit-outs the consumption tends to be greater as the asset nears the intervention point and a decision is made to undertake renewal.
Roof	Colour Bonded Metal Decking	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets.
Roof	Corrugated Galv Iron	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets.
Roof	Metal Decking (no colour)	The lifecycle of a metal roof is highly dependent on environmental factors and a as consequence it can range anywhere from 20 years to 50 or more. Repairs are generally done when still in condition 1 or 2 as only need to replace a few sheets.
Roof	Corrugated Asbestos	Generally a longer life than a metal roof but a similar pattern of maintenance processes.
Roof	Concrete Tile	Generally a longer life than a metal roof but a similar pattern of maintenance processes.

Roof	Clay Tile	Generally a longer life than a metal roof but a similar pattern of maintenance processes.
Roof	Reinforced Concrete	Very long life. Repairs are generally made when problems first appear and therefore it is unlikely the asset will progress much beyond condition 1 or 2.
Roof	Shadecloth	Very short life but can vary from 10 years to 25 years.
Roof	Timber-STD	Typically used for park pergolas and similar structures. General have a relatively short life but longer than shade cloth.
Mechanical Services	Air Con (Ducted)	The total life of services tend to vary ranging anywhere between 15 and 45 years with ducted air-conditioning tending to have a slightly longer life. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence, changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point.
Mechanical Services	Air Con (Split)	Includes air conditioning and similar items. The total life of services tend to vary ranging anywhere between 15 and 40 years. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence, changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point.
Mechanical Services	Air Con (Wall)	Includes air conditioning and similar items. The total life of services tend to vary ranging anywhere between 15 and 40 years. The drivers for intervention vary but are often linked to either changing expectations of the level of service, technical obsolescence,

		changing safety requirements or decreased performance. The time to intervention tends to become only clear very close to when the intervention undertaken and the pattern of consumption is considered to increase significantly as the services approach the intervention point.
Mechanical Services	Ventilation	Considered same as Ducted Air-Conditioning but with higher
Other Services	Emergency	Life can range anywhere from 10 - 20 years depending on use, location and maintenance practices. Consumption increases as it nears the intervention point due to deterioration and resulting diminishing performance.
Other Services	Transportation	Includes lifts and elevators. Lifecycle considered requiring major renewal after about 20 years but this tends to only work out at about 30% the cost of construction as new as mainly relates to electrical components and wearing parts.
Other Services	Fire Services	Includes extinguishers, detectors, hydrants and sprinklers. Regularly tested and small components replaced. Major components have very long design life. Major renewal after about 40 years is expected.

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
  - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
  - the project objectives to rectify the deficiency,
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
  - and evaluate the options against evaluation criteria adopted by the organisation, and select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and the Council/Board,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure the organisation is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (eg replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road).[9]

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[10]

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
Safety	30%

[9] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[10] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

Condition	25%
Percentage of useful life	25%
No. of service requests	20%
Total	**100%**

Renewal and replacement standards

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

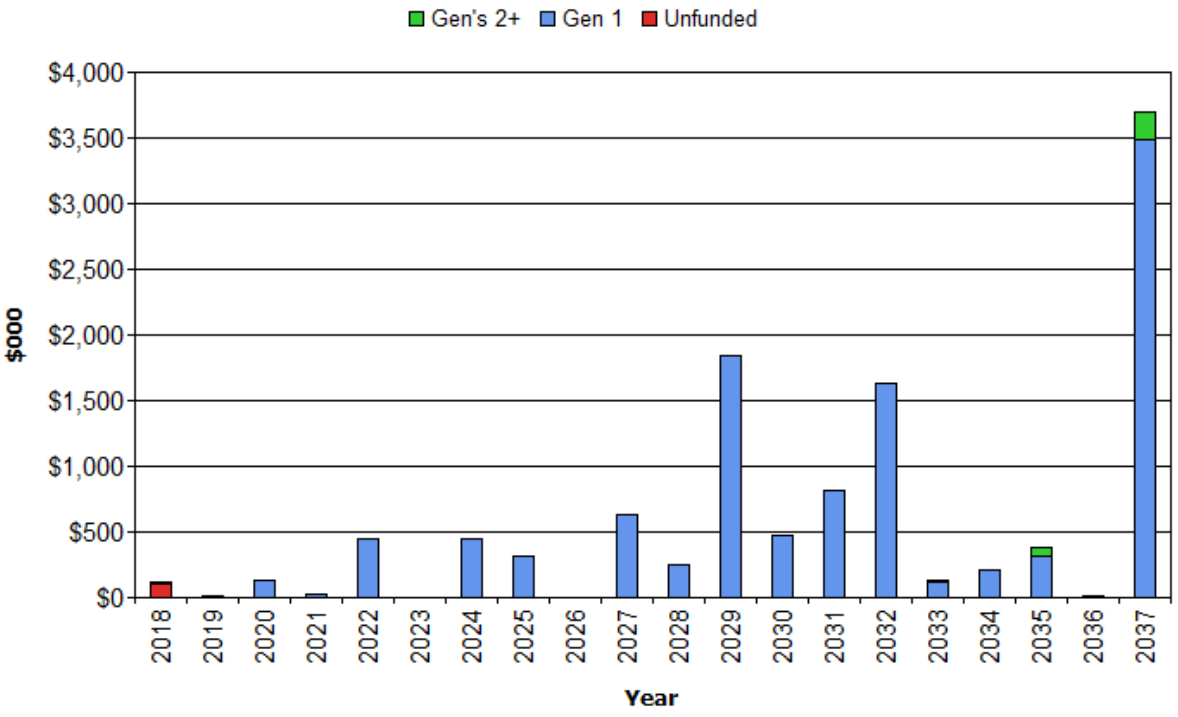
- Local Government Act
- Building Code of Australia 2012
- WHS Act 2011
- Australian Accounting Standards
- Environmental Planning and Assessment Act 2008
- Relevant Australian Standards and Codes

5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

Fig 5: Projected Capital Renewal and Replacement Expenditure



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

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. 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 organisation from land development. These 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
Safety	30%
Condition	25%
Percentage of useful life	25%
No. of service requests	20%
Total	**100%**

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
  - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
  - the project objectives to rectify the deficiency including value management for major projects,
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
  - management of risks associated with alternative options,
  - and evaluate the options against evaluation criteria adopted by Council/Board, and
  - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure the organisation is obtaining best value for resources used.

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

Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. 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, together with estimated annual savings from not having to fund operations and maintenance of the assets. 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. Any revenue gained from asset disposals is accommodated in the organisation's long term financial plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Revenue	Operations & Maintenance Annual Savings
3 Bowen St Bingara	Fund new residential asset	2014/15	$280,000	$7,000
84 Finch St Bingara	Fund new residential asset	2014/15	$260,000	$7,000
5 Holden St Warialda	Fund new residential asset	2014/15	$190,000	$7,000
11 Holden St Warialda	Fund new residential asset	2014/15	$180,000	$7,000

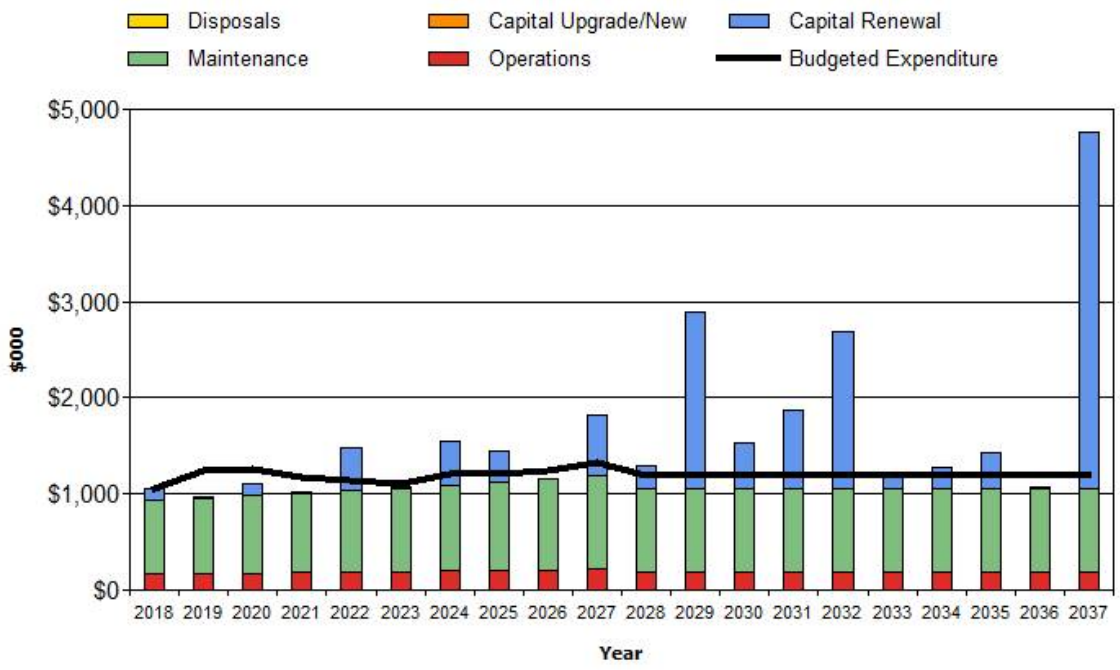
6. FINANCIAL SUMMARY

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 projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

Fig 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[11] 94%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, the organisation is forecasting that it will have 94% of the funds required for the optimal renewal and replacement of its assets. To achieve this ratio, a thorough analysis was undertaken of renewal requirements within the 10 year planning period and renewals considered unwarranted, removed.

The building asset components tabled overleaf have been identified in the Building Asset Register as needing renewal, however due to factors such as the type of materials, usage and ongoing maintenance it is clear that this is not the case. As part of the revaluation of Building Assets the life of building components will be reassessed and adjusted to fit within Council's current building maintenance philosophy and program.

This can be shown using a number of examples from the tabled items

8334	Floor Coverings	Bingara Caravan Park Main Amenities Block - Floor Coverings	Caravan Park	$13,936	The concrete floor has either no floor covering or has a tile finish, which is in good condition and currently does not warrant replacement.
8398	Floor Coverings	Bingara Staff Amenities And Store Keepers Office - Floor Coverings	Main Depot	$6,311	The concrete floor has no floor covering and due the type of usage does not warrant the installation of floor coverings.
8563	Internal Structures	Tennis Courts/Pavilion - Internal Structures	Sporting Field	$2,208	The internal structure is constructed of masonry and due to the type of usage and the condition does not need maintenance.

[11] AIFMG, 2009, Financial Sustainability Indicator 8, Sec 2.6, p 2.18

CVR_Number	Asset Type	Description	Category	Replacement Cost
8562	Floor Coverings	Tennis Courts/Pavilion - Floor Coverings	Sporting Field	$18,768
8265	Units 1 and 2 - Floor Coverings	Warialda Aged Units 1, 2 - Floor Coverings	Aged Care Units	$7,827
8686	Units 3 and 4 - Floor Coverings	Warialda Aged Units 3, 4 - Floor Coverings	Aged Care Units	$7,061
8436	Floor Coverings	Bingara Hatchery Main Building And Shed - Floor Coverings	Hatchery	$10,897
8334	Floor Coverings	Bingara Caravan Park Main Amenities Block - Floor Coverings	Caravan Park	$13,936
8398	Floor Coverings	Bingara Staff Amenities And Store Keepers Office - Floor Coverings	Main Depot	$6,311
8485	Roof	Bingara Sale Yards Kiosk And Toilets - Roof	Public Amenities	$10,237
8350	Floor Coverings	Main Office - Floor Coverings Former Cabin 4 (Site #61)	Caravan Park	$3,746
8299	Roof	Gravesend Public Hall - Roof (To Be Demolished 2017)	Public Hall	$127,595
8563	Internal Structures	Tennis Courts/Pavilion - Internal Structures	Sporting Field	$2,208
8225	Internal Screens	Warialda Public Hall - Internal Structures	Public Hall	$27,453
8516	Internal Screens	Bingara Administration Building - Bingara Showground - Internal	Showground	$2,576
724	Envelope	Warialda Shop & Sheds (Leased Building) Bradburn - Envelope	Commercial Building	$57,175
8260	Unit 1 - Floor Coverings	Warialda Aged Unit 1 - Floor Coverings	Aged Care Units	$2,490
8668	Units 2, 3, and 4 - Floor Coverings	Warialda Aged Units 2,3 and 4 - Floor Coverings	Aged Care Units	$10,732
8698	Unit 5 - Floor Coverings	Warialda Aged Unit 5 - Floor Coverings	Aged Care Units	$2,490
8703	Unit 6 - Floor Coverings	Warialda Aged Unit 6 - Floor Coverings	Aged Care Units	$2,490
8746	Unit 7 - Floor Coverings	Warialda Aged Unit 7 - Floor Coverings	Aged Care Units	$2,715
709	Envelope	Gravesend Public Hall - Envelope (To Be Demolished 2017)	Public Hall	$272,449
8062	Envelope	Historical School House - Envelope	Museum	$51,561
8634	Floor	Historical School House - Floor	Museum	$29,772
8629	Roof	Bingara Men's Shed - Roof	Community Centre	$74,691
8387	Roof	Bingara Central Garage (Offices And Storage) - Roof	Commercial Building	$169,786
8295	Roof	Crooble Public Hall - Roof	Public Hall	$139,765
8566	Roof	Dressing Sheds/Gymnasium - Roof	Sporting Field	$13,245

8627	Roof	Former Anglican Church Building - Gravesend Museum - Roof	Public Hall	$29,725
789	Envelope	Bingara Sale Yards Kiosk And Toilets - Envelope	Public Amenities	$13,460
8242	Roof	Former Emergency Services Centre - Roof	Emergency Services Building	$23,963
8320	Roof	Warialda Shop & Sheds (Leased Building) Bradburn - Roof	Commercial Building	$40,585
8594	Roof	Warialda Masonic Lodge - Roof	Commercial Building	$103,057
708	Envelope	Crooble Public Hall - Envelope	Public Hall	$293,319
8294	Internal Screens	Crooble Public Hall - Internal Structures	Public Hall	$6,363
8190	Internal Screens	Roxy - Fitout Internal Screens	Roxy Theatre	$81,541
8183	Floor Coverings	Bing CCL Chamber - Floor Coverings	Administration Building	$155,360
8266	Units 1 and 2 - Internal Structures	Warialda Aged Units 1, 2 - Internal Structures	Aged Care Units	$20,199
8687	Units 3 and 4 - Internal Structures	Warialda Aged Units 3, 4 - Internal Structures	Aged Care Units	$20,015
8261	Unit 1 - Internal Services	Warialda Aged Unit 1 - Internal Services	Aged Care Units	$650
8669	Units 2, 3, and 4 - Internal Structures	Warialda Aged Units 2,3 and 4 - Internal Structures	Aged Care Units	$24,766
8699	Unit 5 - Internal Structures	Warialda Aged Unit 5 - Internal Structures	Aged Care Units	$650
8704	Unit 6 - Internal Structures	Warialda Aged Unit 6 - Internal Structures	Aged Care Units	$650
8747	Unit 7 - Internal Screens	Warialda Aged Unit 7 - Internal Screens	Aged Care Units	$709
8546	Hall & Tuckshop - Internal Screens	Bingara St Marys School Complex - Hall & Tuckshop - Internal	Community Centre	$2,058
744	Envelope	Bingara Central Garage (Offices And Storage) - Envelope	Commercial Building	$292,736
8287	Internal Structures	Yallaroi Public Hall - Internal Structures	Public Hall	$9,947
8302	Internal Screens	Gravesend RSL Hall - Internal Structures	Public Hall	$4,016
8391	Internal Screens	Bingara Court House - Internal Structures	Administration Building	$7,408
8626	Internal Screens	Former Anglican Church Building - Gravesend Museum - Internal	Public Hall	$2,426
8399	Internal Screens	Bingara Staff Amenities And Store Keepers Office - Internal	Main Depot	$644
749	Envelope	Bingara Garages (13 Bay) - Envelope	Main Depot	$56,597
8305	Internal Structures	Coolatai Public Hall - Internal Structures	Public Hall	$10,798
8219	Floor Coverings	Caravan Park Cabins X 3 - Floor Coverings	Caravan Park	$3,882
8298	Internal Screens	Gravesend Public Hall - Internal Structures (To Be Demolished	Public Hall	$7,397

		2017)		
8593	Internal Screens	Warialda Masonic Lodge - Internal Structures	Commercial Building	$3,662
8513	Roof	Bingara Shed 5 (Barn) - Bingara Showground - Roof	Showground	$31,927
8520	Roof	Bingara Toilet Block 1 - Bingara Showground - Roof	Showground	$21,911
8185	Internal Screens	War CCL Chamber - Fitout Internal Screens	Administration Building	$103,505
8189	Fitout Internal Screens	Bing CCL Chamber - Fitout Internal Screens	Administration Building	$26,065
8293	Floor Coverings	Crooble Public Hall - Floor Coverings	Public Hall	$54,087
8179	Floor Coverings	War CCL Chamber - Floor Coverings	Administration Building	$57,077
8191	Other Services	War CCL Chamber - Other Services	Administration Building	$12,972
8679	Roof	Bingara Gwydir Oval Scout Hall - Roof	Sporting Field	$53,097
8708	Roof	Public Hall Toilets - Roof	Public Amenities	$4,357
8717	Roof	Bingara Hatchery Store Shed - Roof	Hatchery	$10,465
8244	Floor Coverings	Warialda SES Shed - Floor Coverings	Emergency Services Building	$15,407
8385	Floor Coverings	Bingara Central Garage (Offices And Storage) - Floor Coverings	Commercial Building	$64,976
8386	Internal Screens	Bingara Central Garage (Offices And Storage) - Internal Structures	Commercial Building	$4,787
8383	Roof	Bingara Civic Centre One Storey Building - Roof	Public Hall	$316,948
8392	Roof	Bingara Court House - Roof	Administration Building	$207,413
8449	Roof	Bingara Museum Main Building - Roof	Museum	$87,534
8484	Floor	Bingara Sale Yards Kiosk And Toilets - Floor	Public Amenities	$11,724
8471	Roof	Bingara Cunningham Park Public Privy - Roof	Public Amenities	$11,272
8405	Roof	Bingara Garages (13 Bay) - Roof	Main Depot	$40,176
8420	Internal Structures	Bingara HACC Offices - Internal Structures	HACC Office	$1,714
8423	Other Services	Bingara HACC Offices - Other Services	HACC Office	$1,225
8454	Roof	Bingara Old Blacksmiths Shop - Roof	Museum	$31,107
8451	Roof	Bingara Preparation Building - Roof	Museum	$13,890
8533	Floor Coverings	Bingara R.F.S. Headquarters - Floor Coverings	Emergency Services Building	$14,858
8539	Floor Coverings	Bingara S.E.S. Building - Floor Coverings	Emergency Services Building	$10,449
8456	Roof	Bingara School Building - Roof	Museum	$12,136

8413	Floor Coverings	Bingara Works Office (Old S.E.S. Building) - Floor Coverings	Main Depot	$4,255
8220	Internal Screens	Caravan Park Cabins X 3 - Internal Structures	Caravan Park	$931
8228	Floor Coverings	Warialda Depot Office And Store - Floor Coverings	Main Depot	$16,046
8234	Floor Coverings	Warialda Workshop And Amenities - Floor Coverings	Main Depot	$27,827
8635	Roof	Historical School House - Roof	Museum	$26,536
8292	Floor Structure	Crooble Public Hall - Floor	Public Hall	$175,673
3463	Envelope	Dressing Sheds/Gymnasium - Envelope	Sporting Field	$120,492
699	Units 1 and 2 - Envelope	Warialda Aged Units 1, 2 - Envelope	Aged Care Units	$117,177
8264	Units 1 and 2 - Floor	Warialda Aged Units 1, 2 - Floor	Aged Care Units	$44,660
8203	Units 3 and 4 - Envelope	Warialda Aged Units 3, 4 - Envelope	Aged Care Units	$109,501
8685	Units 3 and 4 - Floor	Warialda Aged Units 3, 4 - Floor	Aged Care Units	$38,469
8202	Units 5 and 6 - Envelope	Warialda Aged Units 5, 6 - Envelope	Aged Care Units	$117,177
8475	Roof	Bingara Swimming Pool Plant Room - Roof	Public Swimming Pool	$16,164
706	Envelope	Yallaroi Public Hall - Envelope	Public Hall	$231,280
8625	Floor	Former Anglican Church Building - Gravesend Museum - Floor	Public Hall	$32,758
773	Envelope	Bingara Museum Main Building - Envelope	Museum	$125,399
8447	Floor	Bingara Museum Main Building - Floor	Museum	$72,812
8448	Internal Screens	Bingara Museum Main Building - Internal Structures	Museum	$5,394
806	Envelope	Bingara Shed 5 (Barn) - Bingara Showground - Envelope	Showground	$18,650
750	Envelope	Bingara Fuel Store - Envelope	Main Depot	$9,322
767	Envelope	Bingara Grandstand - Envelope	Sporting Field	$132,423
752	Envelope	Bingara Pipe Shed - Envelope	Main Depot	$19,427
8296	Floor	Gravesend Public Hall - Floor (To Be Demolished 2017)	Public Hall	$146,087

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 asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is $1,846,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $1,193,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is $653,000 per year.

Life cycle expenditure is 65% of life cycle costs. The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

While a large funding gap is shown by this indicator, it is pertinent to note that this calculation uses average annual depreciation as the funding requirement, rather than projected renewals and is thus inflated by renewals falling well outside the 10 year planning period. By balancing renewal budgets against projected renewal budgets instead, Council is able to allocate funds to the appropriate areas, without unduly inflating renewal budgets. Increased funding requirements in the 10 years following this plan will be assessed in future iterations of this asset management plan and Council's future Long Term Financial Plans.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $1,266,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $1,193,000 on average per year giving a 10 year funding shortfall of $73,000 per year. This indicates that the organisation expects to have 94% of the projected expenditures needed to provide the services documented in the asset management plan. It is anticipated that following the scheduled revaluation of building assets, this indication will meet or exceed 100%

Medium Term – 5 year financial planning period

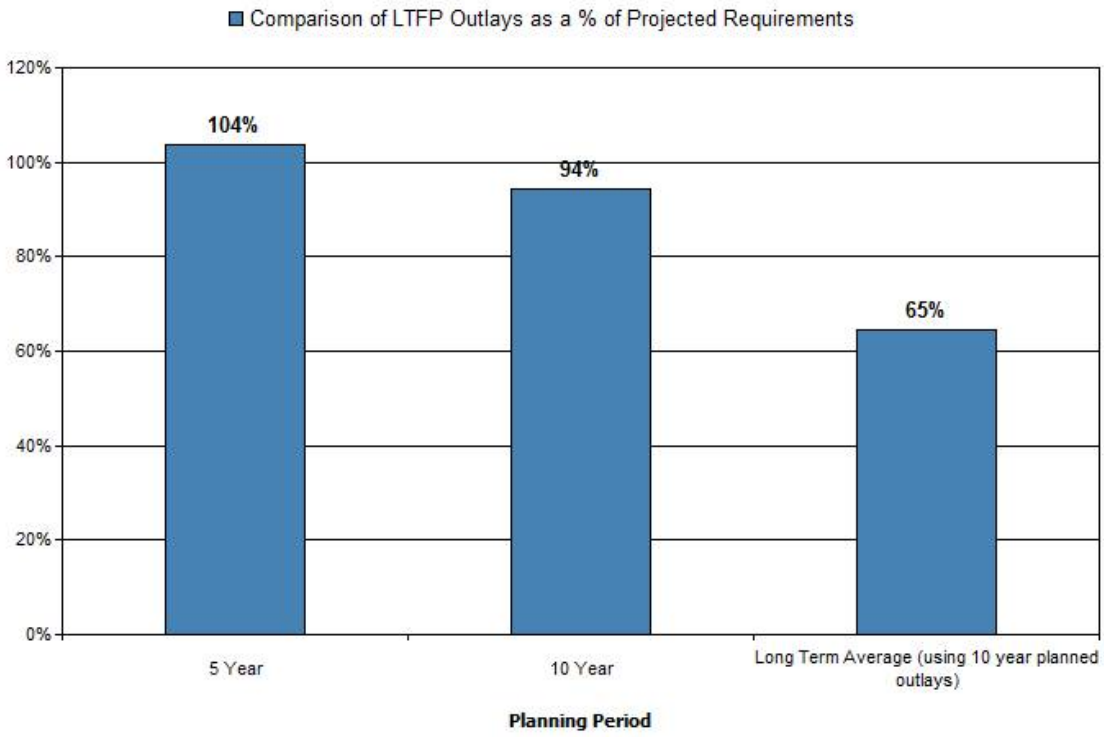
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $1,125,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $1,166,000 on average per year giving a 5 year funding ssurplus of $41,000 per year. This indicates that the organisation expects to have the required resources to provide the services shown in this asset management plan.

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

Figure 7A: Asset Management Financial Indicators



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan. Projected funding requirements, skewing financial indicators can be seen in 2029, 2032 and 2037. It is expected that future revaluations, and maturity of asset data as these years approach will minimise the spikes in future revisions of this plan.

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

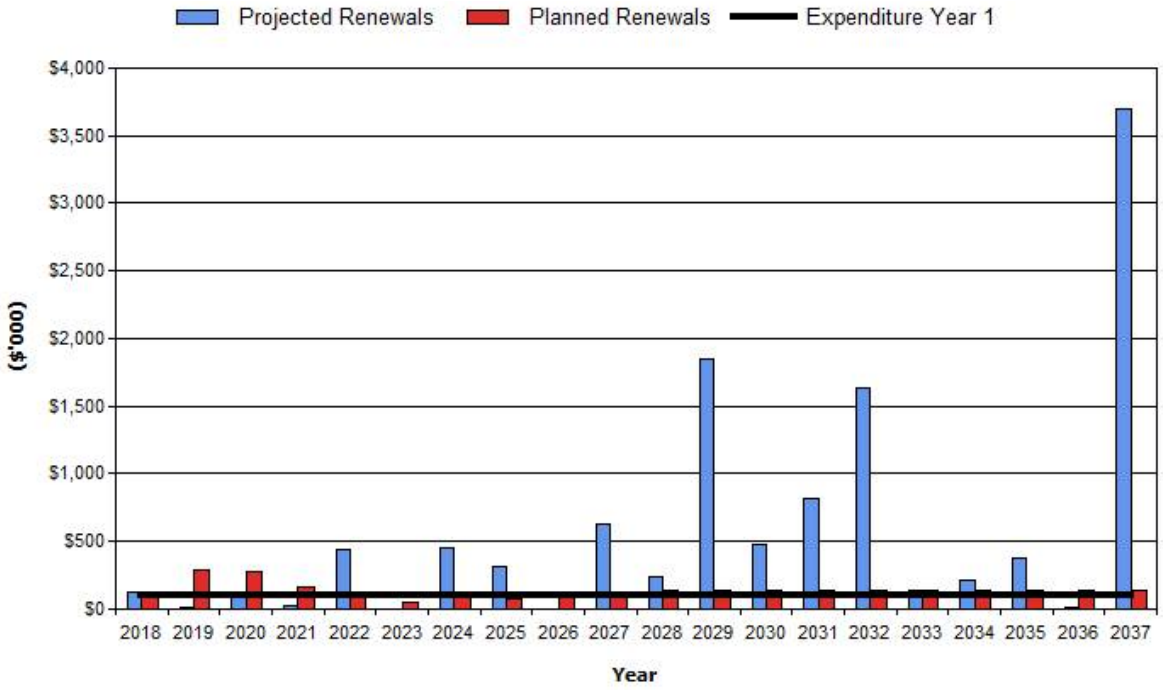


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2018	$121	$105	-$16	-$16
2019	$11	$285	$274	$258
2020	$126	$272	$146	$404
2021	$21	$162	$141	$545
2022	$442	$104	-$338	$207
2023	$3	$49	$46	$253
2024	$451	$120	-$331	-$78
2025	$318	$78	-$240	-$318
2026	$0	$84	$84	-$234
2027	$626	$127	-$499	-$732

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with the corresponding capital works program accommodated in the long term financial plan.

We will manage the 'gap' by refining asset knowledge,developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2014 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)
2018	$169	$765	$121
2019	$172	$783	$11
2020	$176	$803	$126
2021	$180	$824	$21
2022	$185	$846	$442
2023	$191	$870	$3
2024	$197	$896	$451
2025	$204	$923	$318
2026	$210	$951	$0
2027	$217	$979	$626

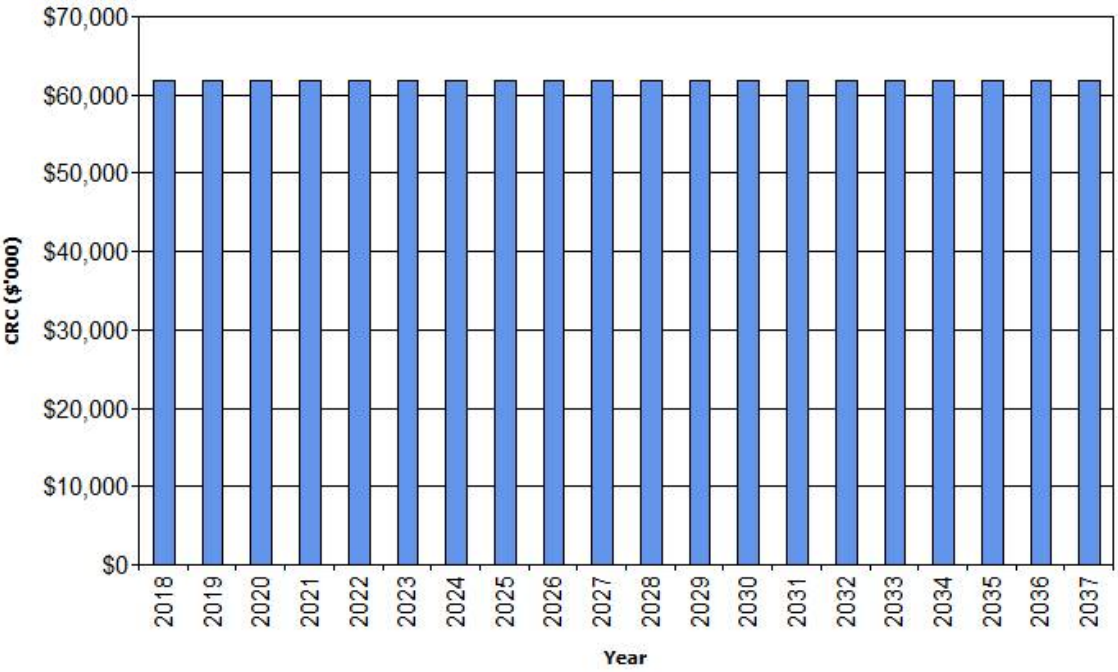
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the organisation's 10 year long term financial plan.

6.3 Valuation Forecasts

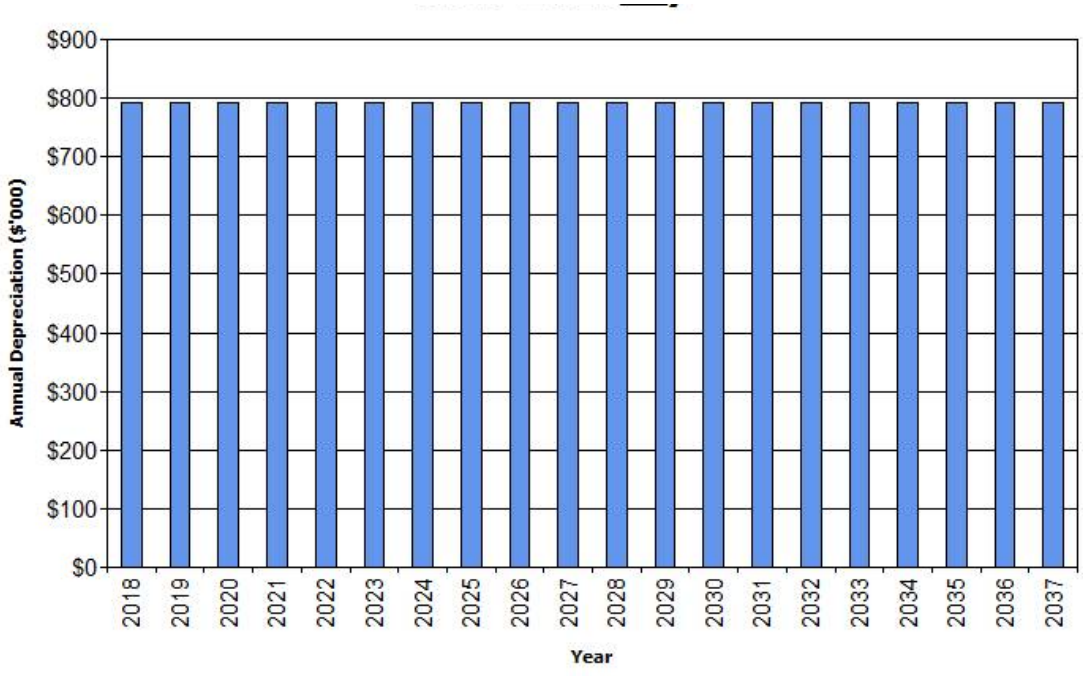
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by the organisation and from assets constructed by land developers and others and donated to the organisation. Figure 9 shows the projected replacement cost asset values over the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

Figure 9: Projected Asset Values



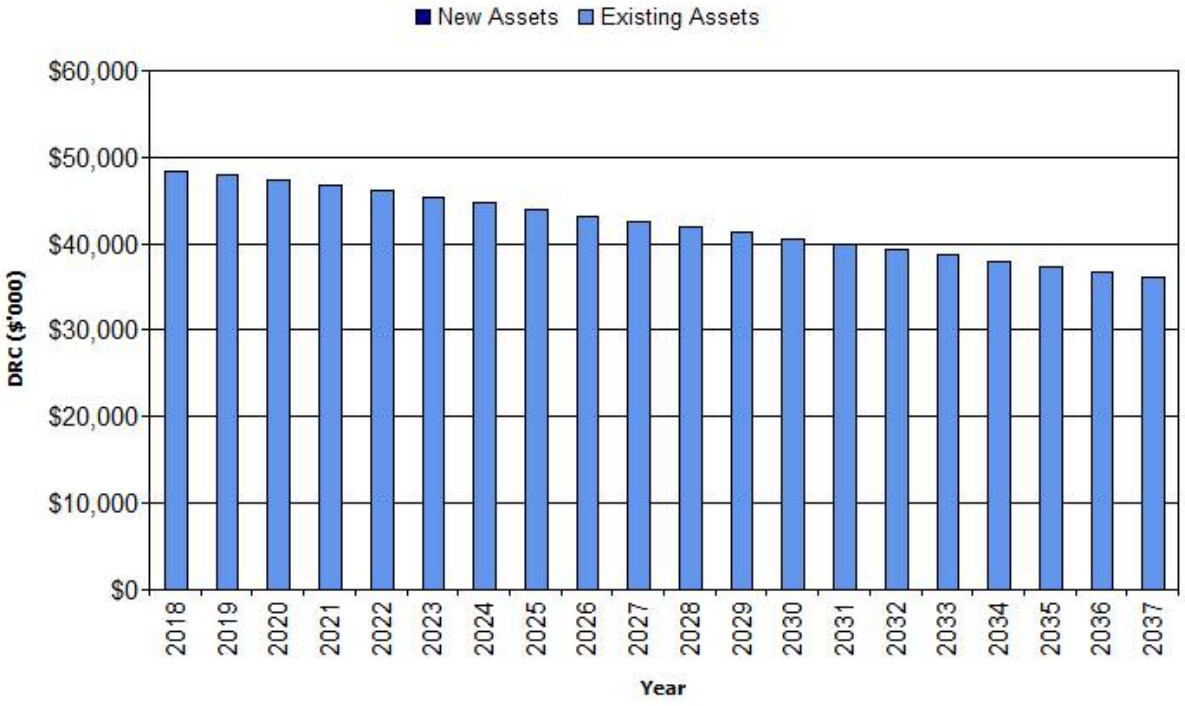
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



As no major additions or expansions of current assets are planned In the 10 year LTFP, depreciation as forecast to remain static within the planning period.

Figure 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 and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Percentage increase in asset values of 0.0%	Changes to population growth in area could potentially increase this significantly
Useful life of assets	Is likely to change following revaluation

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale[12] in accordance with Table 6.5.

[12] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Operations expenditures	B	Sourced from audited financial report
Maintenance expenditures	B	Sourced from audited financial report
Projected Renewal exps. - Asset values	B	Sourced from adopted LTFP
- Asset residual values	C	Sourced from audited APV Valuers revaluation of Building Assets for 30th June 2013. Data is approaching obsolescence.
- Asset useful lives	C	Sourced from audited APV Valuers revaluation of Building Assets for 30th June 2013.Data is approaching obsolescence.
- Condition modelling	C	Based on visual inspection and department knowledge.
- Network renewals	B	Based on condition inspection and LTFP forecasts
- Defect repairs	C	Based on work completed
Disposal revenue	B	Based on qualified valuers report

Over all data sources, the data confidence is assessed as medium confidence level for data used in the preparation of this AM Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council currently uses Civica's finance system to record and report financial transactions.

Accountabilities for financial systems

Council's Corporate Services Director is responsible for the financial systems of Council.

Accounting standards and regulations

Council is required to prepare their financial statements in accordance with all relevant Australian Accounting Standards; these include but are not limited to;

- AASB 116 Property, Plant and Equipment.
- AASB 136 Impairment of Assets.
- AASB 1021 Depreciation of Non-Current Assets.
- AASB 1041 Accounting Policies.
- AAS 27 Financial Reporting by Local Government.
- AAS 1010 Recoverable Amounts of Non-Current Assets.
- AAS 1015 Accounting for Acquisition of Assets

Required changes to accounting financial systems arising from this AM Plan

No change to Council's financial system is required.

7.1.2 Asset management system

Council currently uses Civica's Asset Management module as the Asset management system.

Asset registers

Asset registers are recorded within the Civica AM module.

Linkage from asset management to financial system

The Asset and Financial systems are both linked through the use of Civica modules.

Accountabilities for asset management system and data maintenance

Accountability for the asset management system is the responsibility of the Corporate Asset and Risk Manager.

Required changes to asset management system arising from this AM Plan

- Full utilisation of all components of the AM module.

- GIS links for easier asset location which improves rates of information reliability.

- Link customer requests with specific assets to give a better service indicator.

7.2 Improvement Program

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Fully utilise AM module	DAM/MBS	Internal	Jun 2018
2	Improve maintenance and renewal reporting back to AM Department	MBS	Internal	Jun 2018
3	Link Assets with GIS System for better mapping	DAM/MBS/GIS	Internal	Jun 2018
4	Implement documented procedure for capitalisation	CFO	Internal	Jun 2018
5	Fair Value Revaluation of asset class	DES/MBS/DAM	Internal	Jun 2018

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 6 months of each Council election.

7.4 Performance Measures

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

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into the organisation's long term financial 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,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the organisation's Strategic Plan and associated plans,

The Asset Renewal Funding Ratio achieving the target of 1.0.

8. REFERENCES

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM

Organisation, 'Strategic Plan 20XX – 20XX',

Organisation, 'Annual Plan and Budget'.

9. APPENDICES

Appendix A Budgeted Expenditures Accommodated in LTFP

Appendix B Abbreviations

Appendix C Glossary

Appendix A - Budgeted Expenditures Accommodated in LTFP

BUILDINGS - 2018-2027__ Asset Management Plan

IPWEA INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA JRA

First year of expenditure projections **2018** (financial yr ending)

BUILDINGS - 2018-2027

Asset values at start of planning period

Current replacement cost	$61,758	(000)	Calc CRC from Asset Register $61,758 (000)
Depreciable amount	$35,244	(000)	This is a check for you.
Depreciated replacement cost	$49,103	(000)	
Annual depreciation expense	$792	(000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.31%
Additional maintenance	1.40%
Additional depreciation	2.25%

Planned renewal budget (information only)

You may use these values calculated from your data or overwrite the links.

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2018** values

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations **budget**	$169	$172	$176	$180	$185	$191	$197	$204	$210	$217
Management **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AM systems **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$169	$172	$176	$180	$185	$191	$197	$204	$210	$217
Maintenance										
Reactive maintenance **budget**	$759	$765	$759	$766	$640	$664	$844	$799	$827	$855
Planned maintenance **budget**	$6	$18	$44	$58	$206	$206	$52	$124	$124	$124
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$765	$783	$803	$824	$846	$870	$896	$923	$951	$979
Capital										
Planned renewal **budget**	$105	$285	$272	$162	$104	$49	$120	$78	$84	$127
Planned upgrade/new **budget**	$18	$0	$0	$0	$0	$0	$0	$0	$0	$0

Appendix B Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRD	Written down current replacement cost

Appendix C Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   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 operations, maintenance, depreciation, finance opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

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 hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

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.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided**.**

Capital expenditure

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

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation'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 - new
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability 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 generally has no impact on revenue, but may reduce future operations 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.

Capital expenditure - upgrade
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 operations and maintenance expenditure in the future because of the increase in the organisation'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.

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.

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

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
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management
Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

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, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets
Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than noncritical assets.

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.

Deferred maintenance
The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

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 outlays.

Expenses
Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

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

Financing gap
A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels**.**

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 that contribute to meeting the needs of organisations or the 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 separate 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.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

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

Life Cycle Cost *
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. 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 average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that need to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

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
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

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 organisation, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses
Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

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

Operations, maintenance and renewal gap
Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

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

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

Rate of annual asset consumption *
The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *
The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

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

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 operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

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

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

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 total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit

sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. 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 (Depreciated Replacement Cost/Depreciable Amount).

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

Strategic Longer-Term Plan
A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

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 organisation.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. 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 net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, AIFMG Glossary

Additional and modified glossary items shown *