Nambucca Valley Council

Transport – Other Road Infrastructure

Asset Management Plan (Concise)

Version 4 Scenario 1

August, 2022

Document Control	Asset Management Plan				
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2	June, 2021	Revised for period 2022-2041	Asset Engineer	Manager Assets	
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4	August, 2022	Revised for revaluation due to increases material costs	Asset Engineer	Manager Assets	

This Asset Management Plan may be used as a supporting document to inform an overarching Strategic Asset Management Plan.

Contents

1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

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

This asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services generally over a 20-year planning period.

This plan covers the infrastructure assets that provide miscellaneous transport assets not addressed in other management plans. Assets includes are; bus shelters, guardrails, median islands.

1.2 Asset Description

These assets include:

The Transport Other Asset network comprises:

- Bus Shelters
- Guardrails
- Median Islands
- Planter Boxes

These infrastructure assets have significant value estimated at $6,046,366.

1.3 Levels of Service

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

The main service consequences of the Planned Budget are:

- Insufficient funds for growth of the network

1.4 Future Demand

The main demands for new services are created by:

- Development growth with increased traffic on the road network
- Increased demand for public transport services
- Road safety audit identifying road hazards to be addressed
- Changes in legislative requirements requiring upgrading of guardrails and protective fences

These 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.

- Monitor development applications in new growth areas
- Conduct road safety audit on the road network to identify any hazards
- Review legislation requirements and design standards for road safety infrastructure for compliance check.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operation, maintenance, renewal, acquisition, and disposal of assets over the 10-year planning period is $2,823,013 or $282,301 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for this period is $2,822,919 or $282,292 on average per year as per the long term financial plan or budget forecast. This is 100% of the cost to sustain the current level of service at the lowest lifecycle cost.

The infrastructure reality is that only what is funded in the long term financial plan can be provided. The emphasis of the Asset Management Plan is to communicate the consequences that this will have on the service provided and risks, so that decision making is informed.

The anticipated planned budget leaves a nil balance on average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with planned budget currently included in the Long Term Financial Plan. This is shown in the figure below.

Forecast Lifecycle Costs and Planned Budget

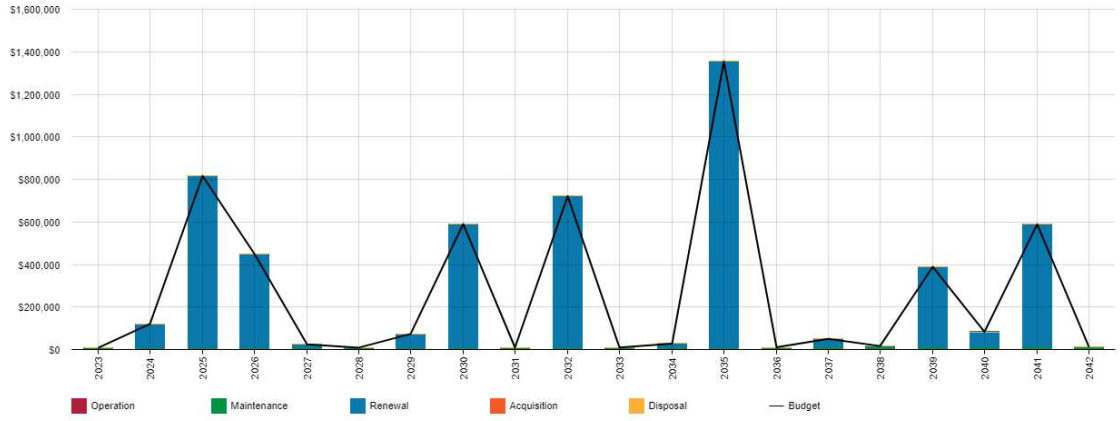


Figure Values are in current (real) dollars.

We plan to provide Other Transport infrastructure services for the following:

- Operation, maintenance, renewal and upgrade of Bus shelters, Guardrails etc., to meet service levels set by in annual budgets.
- Council intends to service and maintain the bus shelters and guard rails whilst reviewing its performance and useful life against its age within the 10-year planning period.

1.6.2 What we cannot do

We currently do allocate enough budget to sustain these services at the desired standard or to provide all new services being sought. Works and services that cannot be provided under present funding levels are:

- Extension of the network to provide new assets

1.6.3 Managing the Risks

Our present budget levels are sufficient to continue to manage risks in the medium term.

The main risk are:

- Poor public perception of aging infrastructure that is not renewed
- Funding for sections of guard rail to be replaced to meet revised standard
- Funding for traffic facilities required to meet road safety audit requirements

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

- Priorities projects for maintenance pending replacement
- Prioritise projects replacement based on risk matrix
- Priorities new projects based on risk matrix

1.7 Asset Management Practices

Our systems to manage assets include:

- Council uses Civica's Authority Enterprise Software Suite as the financial system
- Council utilises a combination of Excel spread sheets, the Capital Value Record Management component in the Authority corporate software package and the Reflect program

Assets requiring renewal/replacement are identified from either the asset register or an alternative method. These methods are part of the Lifecycle Model.

- If Asset Register data is used to forecast the renewal costs this is done using the acquisition year and the useful life,
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems (such as Pavement Management Systems) and may be supplemented with, or based on, expert knowledge.

The Asset Register or Alternate Method was used to forecast the renewal life cycle costs for this asset management plan.

1.8 Monitoring and Improvement Program

The next steps resulting from this asset management plan to improve asset management practices are:

- Reassess asset condition and review useful life
- Establish levels of Service through community consultation
- Further analysis of demand growth factors
- Establish renewal priority ranking criteria
- Further develop asset registers utilising asset management plans
- Develop maintenance response levels of service

[

2.0 Introduction

2.1 Background

This asset management plan communicates the requirements for the sustainable delivery of services through management of assets, compliance with regulatory requirements, and required funding to provide the appropriate levels of service over the long term planning period.

The asset management plan is to be read with the Council's planning documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key planning documents:

- Asset Management Policy
- Asset Management Strategy
- Asset Management Plans Summary

Comment on the current status of Asset Management in the Organisation.

The infrastructure assets covered by this asset management plan include Bus Shelters, Guardrails, Traffic Islands. For a detailed summary of the assets covered in this asset management plan refer to Table in Section 5.

These assets are used to provide Public Transport and traffic management services.

The infrastructure assets included in this plan have a total replacement value of insert $2,041,160.

2.2 Goals and Objectives of Asset Ownership

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 meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Linking to a long-term financial plan which identifies required, affordable forecast costs and how it will be allocated.

Key elements of the planning framework are

- Levels of service – specifies the services and levels of service to be provided,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices – how we manage provision of the services,
- Monitoring – how the plan will be monitored to ensure objectives are met,
- Asset management improvement plan – how we increase asset management maturity.

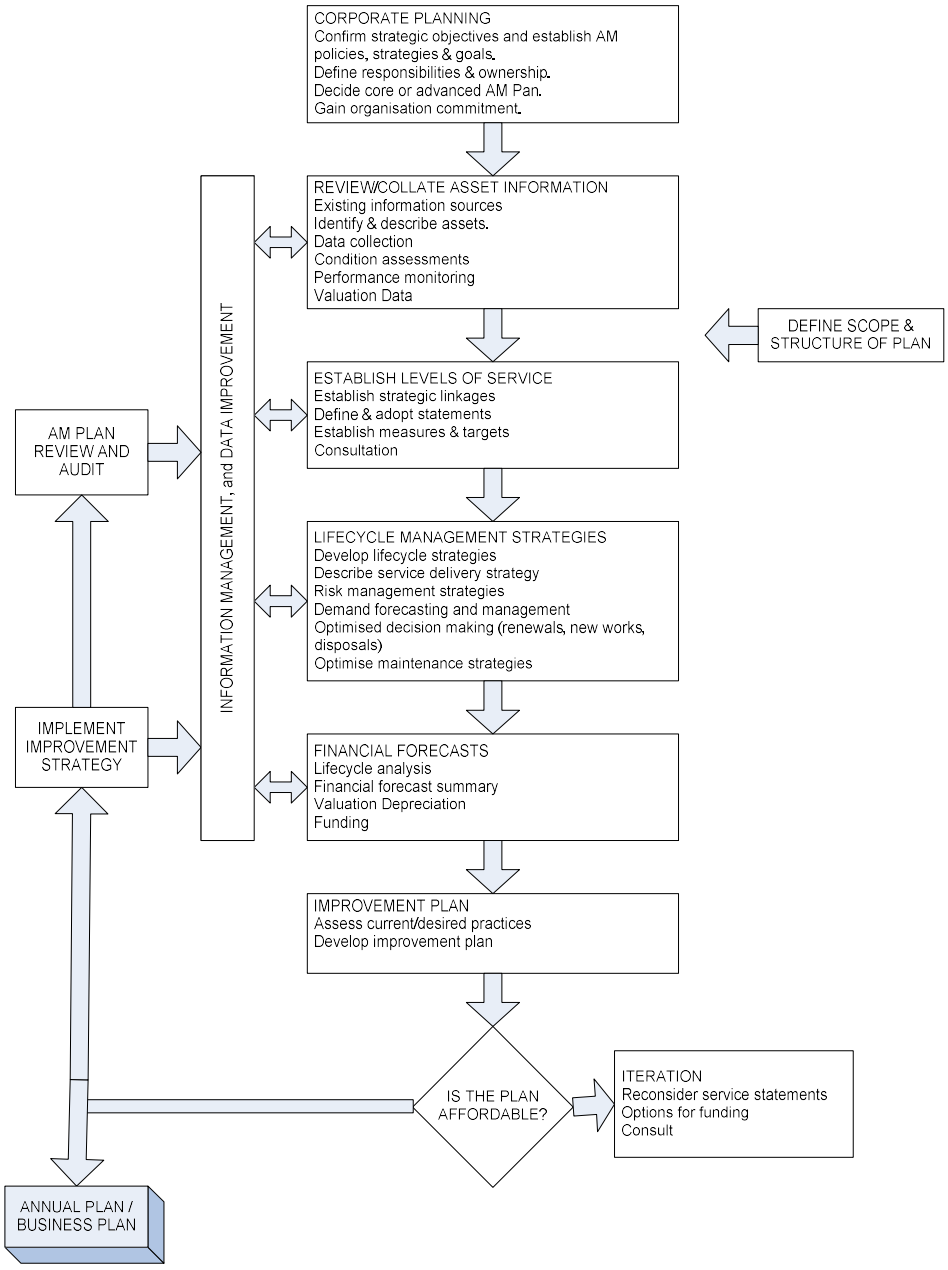
Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

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

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11

[1] Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13
[2] ISO 55000 Overview, principles and terminology


CORPORATE PLANNING
Confirm strategic objectives and establish AM policies, strategies & goals.
Define responsibilities & ownership.
Decide core or advanced AM Pan.
Gain organisation commitment.
REVIEW/COLLATE ASSET INFORMATION
Existing information sources
Identify & describe assets.
Data collection
Condition assessments
Performance monitoring
Valuation Data
DEFINE SCOPE & STRUCTURE OF PLAN
ESTABLISH LEVELS OF SERVICE
Establish strategic linkages
Define & adopt statements
Establish measures & targets
Consultation
AM PLAN REVIEW AND AUDIT
INFORMATION MANAGEMENT, and DATA IMPROVEMENT
LIFECYCLE MANAGEMENT STRATEGIES
Develop lifecycle strategies
Describe service delivery strategy
Risk management strategies
Demand forecasting and management
Optimised decision making (renewals, new works, disposals)
Optimise maintenance strategies
IMPLEMENT IMPROVEMENT STRATEGY
FINANCIAL FORECASTS
Lifecycle analysis
Financial forecast summary
Valuation Depreciation
Funding
IMPROVEMENT PLAN
Assess current/desired practices
Develop improvement plan
IS THE PLAN AFFORDABLE?
ITERATION
Reconsider service statements
Options for funding
Consult
ANNUAL PLAN / BUSINESS PLAN

3.0 LEVELS OF SERVICE

3.1 Customer Research and Expectations

Nambucca Valley Council Community Survey was undertaken in 2021 Table 3.1 summarises the results from our Customer Satisfaction Survey.

Table 3.1: Customer Satisfaction Survey Levels

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Council services and facilities		✓			

3.2 Strategic and Corporate Goals

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

Our vision is:

Nambucca Valley – Living at its best

Our mission is:

The Nambucca Valley will value and protect its natural environment, maintain its assets and infrastructure and develop opportunities for its people.

The Council has set strategic goals. The relevant goals and objectives and how these are addressed in this asset management plan are summarised in Table 3.2.

Table 3.2: Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in the AM Plan
Documented Levels of Service	Service levels to be provided and the costs of providing the service	Community consultation
Maintain asset	Provide and maintain assets which meet the needs of the Valley.	Establishing a maintenance and renewal program that ensures provision of adequate levels of service from public transport and traffic management assets.
Appropriate services	To have a community where services reflect the needs of the population.	Taking into account community expectations when setting levels of service for public transport and traffic management assets.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the public transport and traffic management service are outlined in Table 3.3.

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
Work Health and Safety Act	Secures and promotes health, safety and welfare of people at work
Roads Act 1993	Defines rights of passage on public roads and rights of property owners adjoining public roads. Confers the authority of the road authority and provides for road classifications
Australian Accounting Standards	Set out the financial reporting standards relating to, inter alia the (re)valuation and depreciation of infrastructure assets
Australian Road Rules	Contains powers for Council to install and remove traffic control devices
Native Vegetation Act 2003	Prevent broad scale clearing unless it improves or maintains environmental outcomes
Noxious Weeds Act 1993	Prevent the establishment of new and spread of existing significant weeds. Reduce existing significant weeds
Protection of the Environment Operations Act 1997	Protect, restore and enhance the quality of the environment, having regard to the need to maintain ecologically sustainable development. Rationalise, simplify and strengthen the regulatory framework for environment protection
Road Transport (Safety and Traffic Management) Act 1999	Improve safety and efficiency of transport on roads and road related issues.

3.4 Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Values indicate:

- what aspects of the service is important to the customer,
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision

3.5 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Quality How good is the service … what is the condition or quality of the service?

Function Is it suitable for its intended purpose …. Is it the right service?

Capacity/Use Is the service over or under used … do we need more or less of these assets?

In Table 3.5 under each of the service measures types (Quality, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current funding level.

These are measures of fact related to the service delivery outcome e.g. number of occasions when service is not available, condition %'s of Very Poor, Poor/Average/Good, Very Good and provide a balance in comparison to the customer perception that may be more subjective.

Table 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Suitable network for purpose and aesthetically satisfactory	Free of defects, straight and aligned	Majority is in good condition, defects noted through regular inspections and referred for repair	Defects will be rectified as they are identified subject to risk matrix.
	Confidence levels		High	High
Function	Fit for purpose in supporting public transport and road safety	Free of defects, straight and structurally sound	Majority is in good condition, defects noted and referred for repair	Defects will be rectified as they are identified subject to risk matrix.
	Confidence levels		High	High
Capacity	Fit for purpose in supporting growth in public transport and road safety	Free of defects, straight and structurally sound	Majority is in good condition, defects noted and referred for repair	Defects will be rectified as they are identified subject to risk matrix.
	Confidence levels		High	High

3.6 Technical Levels of Service

Technical Levels of Service – To deliver the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Acquisition** – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).
- **Operation** – the regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc.
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. 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 provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[3]

Table 3.6 shows the activities expected to be provided under the current Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	Provision of additional bus stops to support growth public transport	New Bus stops	No budget provided for new bus stops	Extend service to match growth
	Provision of traffic management facilities to improve road safety	Facilities match road safety requirements	No budget provided to facilitate further facilities	Undertake road safety audit and provide facilities that match audit requirements
		Budget	*Nil*	*$100,000*
Operation	Bus Shelters are cleaned to support use of public transport	Frequency of cleaning	Cleaned with regular street cleaning, varies subject to location	Cleaned with regular street cleaning, varies subject to location
	Traffic facilities (medians) are cleaned and mowed	Frequency of cleaning	Cleaned with regular street cleaning, varies subject to location	Cleaned with regular street cleaning, varies subject to location
		Budget	*No specific budget for bus shelters and medians*	*No specific budget for bus shelters and medians*
Maintenance	Maintain network fit for purpose and aesthetically satisfactory	Frequency of inspections and pro-active/re-active response	Review with regular road inspections and in response to customer requests.	Review with regular road inspections and in response to customer requests.
	Ensure that road safety facilities are kept fully functional	Frequency of inspections and pro-active/re-active response	Review with regular road inspections and in response to customer requests.	Review with regular road inspections and in response to customer requests.
		Budget	*$8,000 for bus stops, Nil for traffic facilities*	Increase CPI and include traffic facilities
Renewal	Ensure that bus stop facilities are replaced at the end of their useful life and	Useful life based on condition assessment	Condition assessment with road inspection and useful life reviewed annually	Condition assessment with road inspection and useful life reviewed annually

[3] IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	maintain their aesthetic value.			
	Ensure that traffic management facilities are replaced to maintain their functionality	Useful life based on condition assessment	Condition assessment with road inspection and useful life reviewed annually	Condition assessment with road inspection and useful life reviewed annually
		Budget	*Nil*	*$120,000*
Disposal	Not applicable to bus shelters	Measure used	Frequency or annual amount spent on Activity	Optimal frequency or annual amount spent on Activity
	Not applicable to traffic management facilities	Measure used	Frequency or annual amount spent on Activity	Optimal frequency or annual amount spent on Activity
		Budget	*Average Planning Period Proposed Disposal Budget*	*Average Planning Period Forecast Disposal Work*

Note: * Current activities related to planned budget.

** Forecast required performance related to forecast lifecycle costs.

It is important to monitor the service levels provided regularly as these will change. The current performance is influenced by work efficiencies and technology, and customer priorities will change over time.

4.0 FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

4.3 Demand Impact and Demand Management Plan

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

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 can include non-asset solutions, insuring against risks and managing failures.

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

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population	Present population of just over 20,000	Forecast population by 2025 is in the order of 22,000	Increase in population will generate demand for new assets	Monitoring development applications for changing trends in population growth
Legislation changes	Traffic management assets were designed to standards that may have changed	Infrastructure may require replacement	Traffic management infrastructure may be non-compliant with standards	Commit to a road safety audit to assess compliance with modern design standards.

4.4 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

Acquiring new assets will commit the Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the long term financial plan (Refer to Section 5).

4.5 Climate Change and Adaption

The impacts of climate change can have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process climate change can be considered as both a future demand and a risk.

How climate change will impact on assets can vary significantly depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.

As a minimum we should consider both how to manage our existing assets given the potential climate change impacts, and then also how to create resilience to climate change in any new works or acquisitions.

Opportunities identified to date for management of climate change impacts on existing assets are shown in Table 4.4.

Table 4.4 Managing the Impact of Climate Change on Assets

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Reduction in use of private owned vehicles	Increase in use of public transport	Extension of public transport networks and facilities	Monitor change and review public transport plans

Additionally, the way in which we construct new assets should recognise that there is opportunity to build in resilience to climate change impacts. Buildings resilience will have benefits:

- Assets will withstand the impacts of climate change
- Services can be sustained
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this asset management plan.

5.0 LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Council plans to manage and operate the assets at the agreed levels of service (Refer to Section 3) while managing life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 5.1.1.

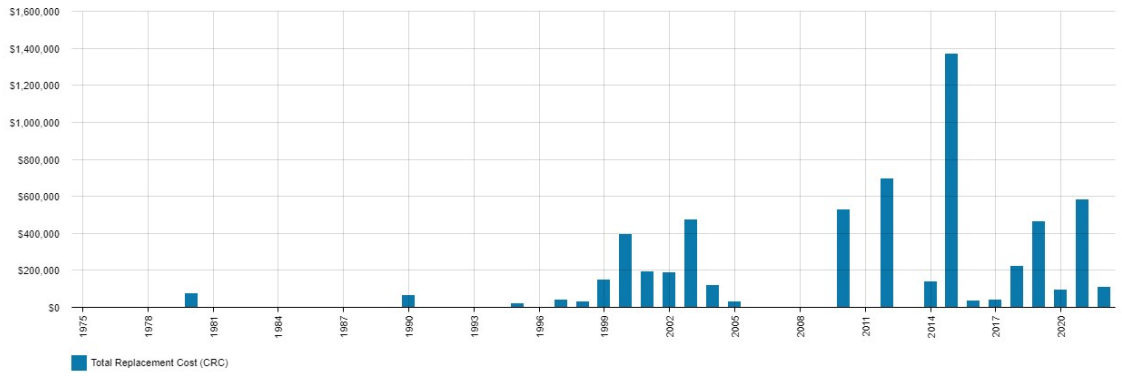
Bus shelters and traffic management facilities

The age profile of the assets included in this AM Plan are shown in Figure 5.1.1.

Table 5.1.1: Assets covered by this Plan

Asset Category	Dimension	Replacement Value
Guard Rail	10.91 Km	$4,974,274
Medians, Planter boxes	22	$406,707
Bus Shelters	79	$665,385
TOTAL		$6,046,366

Figure 5.1.1: Asset Age Profile



All figure values are shown in current (real) dollars.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Deficiencies are typically associated with damage from vehicle collisions. This damage is reviewed and its repair/replacement prioritised based on the impact on traffic safety.

5.1.3 Asset condition

Condition is currently monitored through periodic inspections of the road network or in response to customer requests.

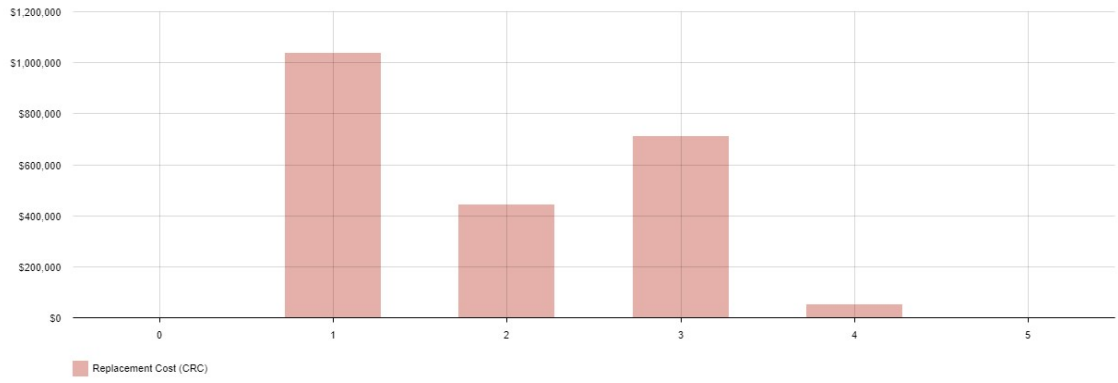
Condition is measured using a 1 – 5 grading system[4] as detailed in Table 5.1.3. It is important that consistent condition grades be used in reporting various assets across an organisation. This supports effective communication. At the detailed level assets may be measured utilising different condition scales, however, for reporting in the AM plan they are all translated to the 1 – 5 grading scale.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	Description of Condition
1	**Very Good**: only planned maintenance required
2	**Good**: minor maintenance required plus planned maintenance
3	**Fair**: significant maintenance required
4	**Poor**: significant renewal/rehabilitation required
5	**Very Poor**: physically unsound and/or beyond rehabilitation

The condition profile of our assets is shown in Figure 5.1.3.

Figure 5.1.3: Asset Condition Profile



Asset condition is reviewed regularly with periodic road inspections and customer requests. Traffic management facilities are kept in good order, as they are integral to road safety. Conditions relate to the age of the asset with Condition 4 assets predicted to be reaching the end of the nominated useful life. These assets will be reviewed and where found to be in good condition may have an extension of useful life.

All figure values are shown in current (real) dollars.

5.2 Operations and Maintenance Plan

Operations include regular activities to provide services. Examples of typical operational activities include cleaning, street sweeping, asset inspection, and utility costs.

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. Examples of typical maintenance activities include pipe repairs, asphalt patching, and equipment repairs.

The trend in maintenance budgets are shown in Table 5.2.1.

[4] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget $
2020/21	$4.185
2021/22	$8,000
2022/23	$8,000

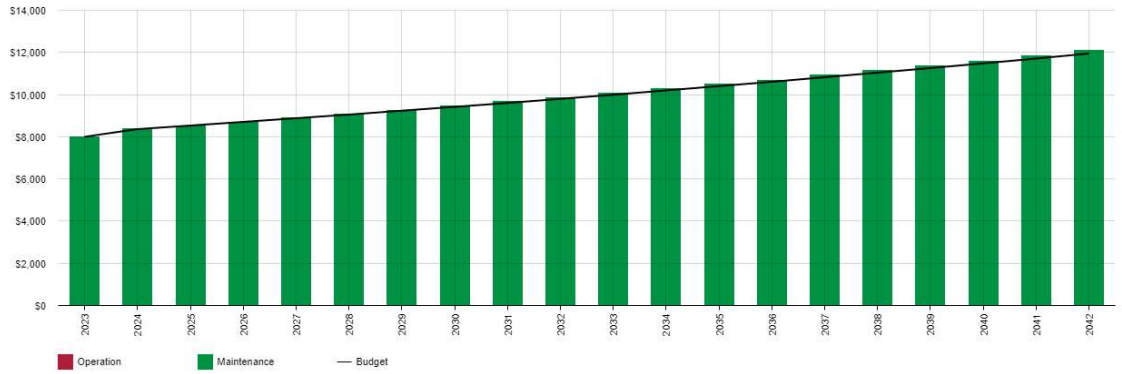
Maintenance budget levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified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

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

Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance planned budget.

Figure 5.2: Operations and Maintenance Summary



All figure values are shown in current (real) dollars.

The figure above represents the maintenance budget associated with public transport assets. No allocation is specifically made for traffic management facilities, their maintenance is undertaken with the associated road maintenance. Similarly operational costs as included with the associated road costs i.e. street and footpath sweeping and cleaning.

5.3 Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- The first method uses Asset Register data to project the renewal costs (current replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or
- The second method uses an alternative approach to estimate the timing and cost of forecast renewal work (i.e. condition modelling system, staff judgement, average network renewals, or other).

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed with the asset revaluation in 2020.

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Guard rails	20 years
Bus Shelters (steel)	30 years
Bus Shelters (Concrete)	80 years
Traffic islands (structures)	100 years

The estimates for renewals in this asset management plan were based on the asset register or an alternate Method.

5.3.1 Renewal ranking criteria

Asset renewal is typically undertaken to either:

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

It is possible to prioritise renewals by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have high use and subsequent impact on users would be significant,
- Have higher than expected operational or maintenance costs, and
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.[6]

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Physical Conditions (e.g. type of material, structure, defects)	50%
Risk and Safety Impact	25%
Environmental Condition including aesthetic	10%

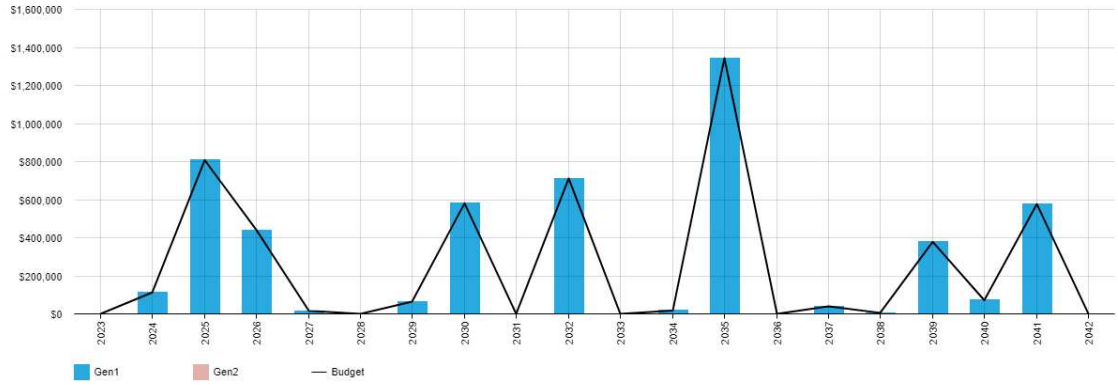
[5] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.
[6] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

Criteria	Weighting
Social conditions (e.g. Location – shopping center etc.)	15%
Total	**100%**

5.4 Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.3.2. A detailed summary of the forecast renewal costs is shown in Appendix A.

Figure 5.3.2: Forecast Renewal Costs



All figure values are shown in current (real) dollars.

At this time budget has been allocated for guardrail replacement and some future bus shelter renewal.

5.5 Acquisition Plan

Acquisition reflects are new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated to the Council. The summary of the cumulative value of additional contributed assets is shown in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand – (Cumulative)

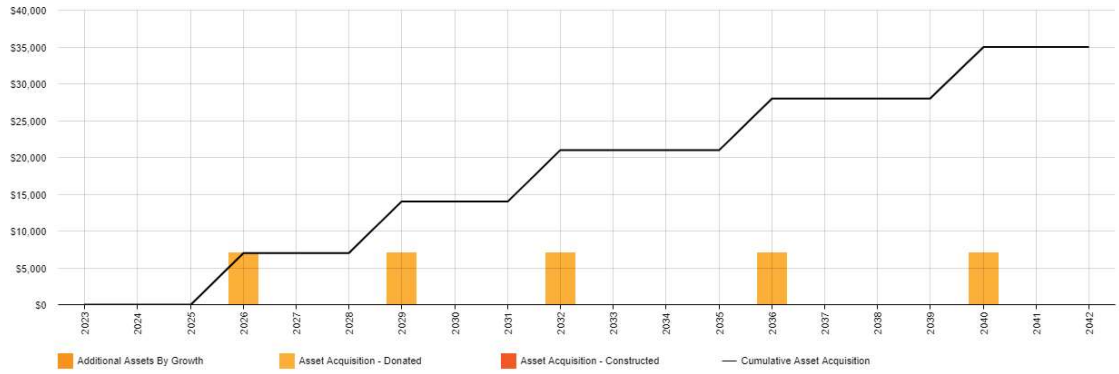


Figure Values are in current (real) dollars.

5.5.1 Selection criteria

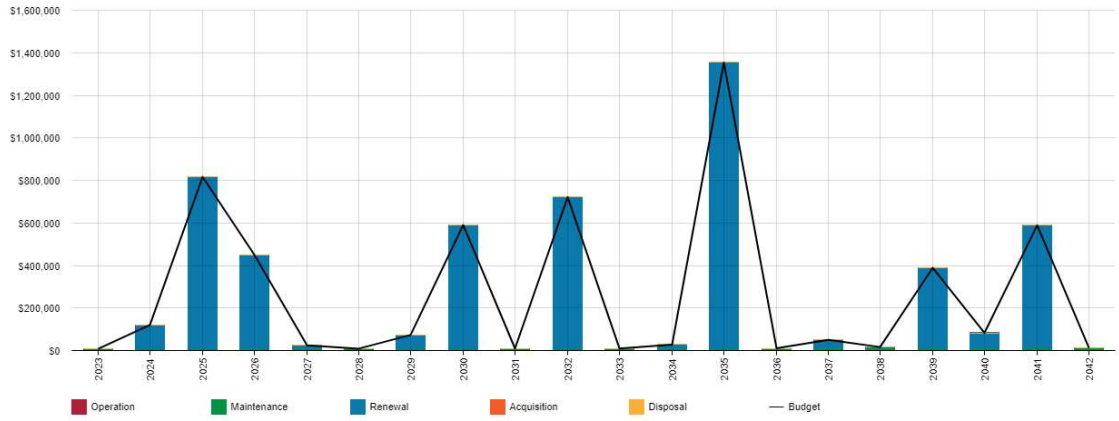
Proposed upgrade of existing assets, and new assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrade and new works should be reviewed to verify that they are essential to the Entities needs. Proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. At this time, there are no plans to acquire or extend the public transport or traffic facilities networks and no associated budget allocation to deliver it.

Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.4.3. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimise the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving balance between costs, levels of service and risk to achieve the best value outcome.

Figure 5.4.3: Lifecycle Summary



All figure values are shown in current (real) dollars.

The summary provides information on maintenance for bus shelters and anticipated asset renewal. This asset class has been only recently defined and further work will be done during the life of this plan to identify a renewal program, any expansion required by changes in legislation and its associated funding, and identification and isolation of any ongoing operational costs.

5.6 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation.

At the time of writing this asset management plan, Council has not identified any assets for disposal.

6.0 RISK MANAGEMENT PLANNING

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'[7].

An assessment of risks[8] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, are summarised in Table 6.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Guard rail	Vehicle collision	Guardrail may be "un-safe" pending repair. Urgent attention is required
Traffic islands	Vehicle collision	Traffic island may be "un-safe" pending repair. Urgent attention is required

By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 below.

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

The process is based on the fundamentals of International Standard ISO 31000:2018.

[7] ISO 31000:2009, p 2

[8] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

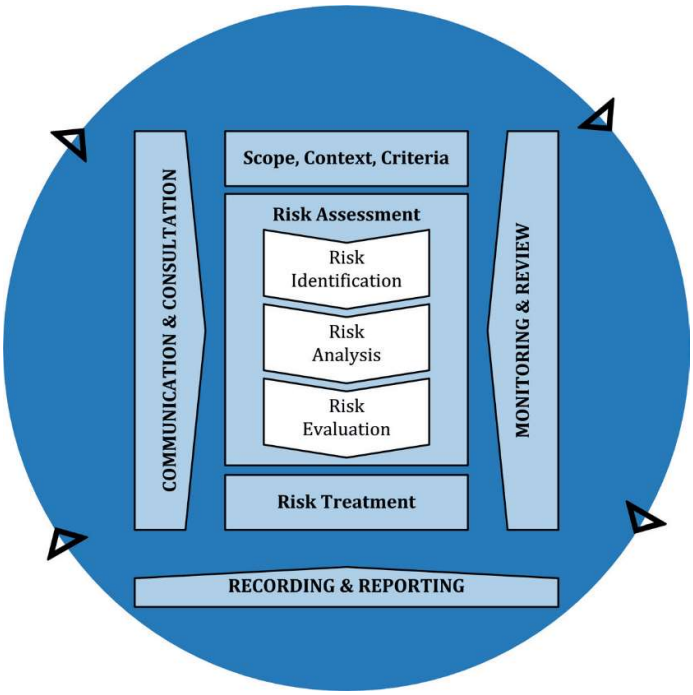


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

An assessment of risks[9] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and the Council.

Table 6.2: Risks and Treatment Plans

[9] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Guardrail	Guard rail not renewed/replaced	High	Monitor condition of guard rail and budget for renewal/replacement	Low	100,000 p.a.
Guardrail	Guard rail does not meet modern standards	Medium	Undertake road safety audit against current standards	Low	50,000

Note * The residual risk is the risk remaining after the selected risk treatment plan is implemented.

6.3 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', 1 and to respond to possible disruptions to ensure continuity of service.

Resilience is built on aspects such as response and recovery planning, financial capacity, climate change and crisis leadership.

Our current measure of resilience is shown in Table 6.3 which includes the type of threats and hazards and the current measures that the organisation takes to ensure service delivery resilience.

Table 6.3: Resilience

Threat / Hazard	Current Resilience Approach
Discontinuation of road network service (including guard rail and traffic facilities) due to severe weather damage	Council require a Business Continuity Policy and Plans to ensure that in the event of disruption to the services, a strategy is in place to provide for the reinstatement of those services as soon as possible to minimise any disruption to the community

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

6.4.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- No budget has been allocated for expansion of the network for the planning period

6.4.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

Nil

6.4.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Traffic management facilities may not meet design standards

These actions and expenditures are considered and included in the forecast costs, and where developed, the Risk Management Plan.

7.0 FINANCIAL SUMMARY

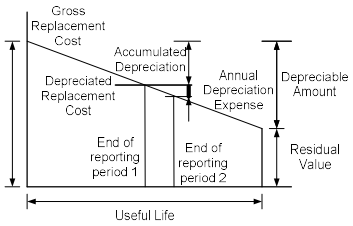
This section contains the financial requirements resulting from the information presented in the previous sections of this asset management plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

7.1 Financial Statements and Projections

7.1.1 Asset valuations

The best available estimate of the value of assets included in this Asset Management Plan are shown below. The assets are valued at fair market value replacement costs at present day:

Current (Gross) Replacement Cost	$6,046,366
Depreciable Amount	$6,046,366
Depreciated Replacement Cost[10]	$3,191,349
Depreciation	$2,855,016



7.1.2 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the asset management plan for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years), and
- medium term forecast costs/proposed budget (over 10 years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[11] 100%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 100% of the funds required for the optimal renewal of assets. Budget, primarily for guardrail renewal, is required over the planning period.

The forecast renewal work along with the proposed renewal budget is illustrated in Appendix D.

Medium term – 10-year financial planning period

This asset management plan identifies the forecast operations, maintenance and renewal costs 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.

This forecast work can be compared to the proposed budget over the 10 year period to identify any funding shortfall.

The forecast operations, maintenance and renewal costs over the 10 year planning period is $282,301 on average per year.

The proposed (budget) operations, maintenance and renewal funding is $282,292 on average per year giving a 10 year funding nil balance per year. This indicates that 100% of the forecast costs needed to provide the services documented in this asset management plan are accommodated in the proposed budget. This excludes acquired assets.

[10] Also reported as Written Down Value, Carrying or Net Book Value.
[11] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast costs 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.

7.1.3 Forecast costs for long term financial plan

Table 7.1.3 shows the forecast costs for the 10 year long term financial plan.

Forecast costs are shown in 2021 real values.

Table 7.1.3: Forecast Costs for Long Term Financial Plan

Year	Forecast Acquisition	Forecast Operation	Forecast Maintenance	Forecast Renewal	Forecast Disposal
2023	$0	$0	$8,000.00	$0.00	$0
2024	$0	$0	$8,364.00	$112,148.00	$0
2025	$0	$0	$8,531.28	$807,535.00	$0
2026	$0	$0	$8,701.91	$441,580.00	$0
2027	$0	$0	$8,886.44	$16,000.00	$0
2028	$0	$0	$9,063.96	$0.00	$0
2029	$0	$0	$9,245.03	$64,000.00	$0
2030	$0	$0	$9,440.22	$580,756.00	$0
2031	$0	$0	$9,628.61	$0.00	$0
2032	$0	$0	$9,820.76	$711,312.00	$0

7.2 Funding Strategy

The proposed funding for assets is outlined in the Entity's budget and long term financial plan.

The financial strategy of the entity determines how funding will be provided, whereas the asset management plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

7.4 Key Assumptions Made in Financial Forecasts

In compiling this asset management plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- Unit rates derived from manufactures information
- Condition assessment was made from visual survey of roads and streets
- Renewal associated with age of asset except where varied by condition assessment.

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on a A - E level scale[12] in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

Confidence Grade	Description
A. Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed 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 6.5.1.

Table 7.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	B	Based on 10 year budget and development trend
Growth projections	B	Based on 10 year budget and development trend
Acquisition forecast	B	Based on 10 year budget and development trend
Operation forecast	C	Operation cost are contained within road operation costs
Maintenance forecast	D	Maintenance information does not extend to traffic management facilities
Renewal forecast - Asset values	B	Unit rates revised 2020, renewal based in age
- Asset useful lives	C	Will be adjusted to suit actual asset condition
- Condition modelling	B	Based on field inspection
Disposal forecast		Not applicable

The estimated confidence level for and reliability of data used in this AM Plan is considered to be B.

[12] IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices[13]

8.1.1 Accounting and financial data sources

This asset management plan utilises accounting and financial data. The source of the data is Council's forward planning financial budget for the next 10 years.

8.1.2 Asset management data sources

This asset management plan also utilises asset management data. The source of the data is Council's asset register for Transportation – other Road Assets, updated by field inspections.

8.2 Improvement Plan

It is important that an entity recognise areas of their asset management plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this asset management plan is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Review the asset condition to support a renewal/replacement strategy and associated budget.	Manager Assets, Asset Engineer	Internal	2023
2	Undertake a road safety audit to review traffic management facilities against current standards to support a renewal/replacement/extension and associated budge	Manager Assets, Asset Engineer, Road safety officer	Internal	2023
3	Identity and prepare a budget for maintenance of the traffic management facilities to inform the Long Term Financial Plan	Manager Assets, Asset Engineer	Internal	2023
4				
5				
6				
7				
8				
9				
10				

[13] ISO 55000 Refers to this the Asset Management System

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, upgrade/new and asset disposal costs and proposed budgets. These forecast costs and proposed budget are incorporated into the long-term financial plan or will be incorporated into the long-term financial plan once completed.

The AM Plan has a maximum life of 4 years and is due for complete revision and updating before 2024. This cycle matches the Council election cycle and IP & R periods.

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this asset management plan are incorporated into the long term financial plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate 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, risks and residual risks are incorporated into the Strategic Plan and associated plans,
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 1.0).

9.0 REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMM.
- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2012 LTFP Practice Note 6 PN Long Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Nambucca Valley Council 2023 community Strategic plan
- Nambucca Valley Council Annual Plan and Budget.

10.0 APPENDICES

Appendix A Acquisition Forecast

No constructed acquisitions are predicted for the planning period.

Table A1 - Acquisition Forecast Summary

Year	Constructed	Contributed	Growth
2023	$0	$0	$0
2024	$0	$0	$0
2025	$0	$0	$0
2026	$0	$7,000	$0
2027	$0	$0	$0
2028	$0	$0	$0
2029	$0	$7,000	$0
2030	$0	$0	$0
2031	$0	$0	$0
2032	$0	$7,000	$0
2033	$0	$0	$0
2034	$0	$0	$0
2035	$0	$0	$0
2036	$0	$7,000	$0
2037	$0	$0	$0
2038	$0	$0	$0
2039	$0	$0	$0
2040	$0	$7,000	$0
2041	$0	$0	$0
2042	$0	$0	$0

Appendix B Operation Forecast

No operational costs are forecast for the planning period

Table B1 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
[Year]	[Operation Forecast]	[Additional Operation Forecast]	[Total Operation Forecast]

Appendix C Maintenance Forecast

Maintenance forecast is, at present only for public transport assets.

Table C1 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2023	$8,000.00	$0.00	$8,000.00
2024	$8,364.00	$0.00	$8,364.00
2025	$8,531.28	$0.00	$8,531.28
2026	$8,701.91	$10.50	$8,701.91
2027	$8,875.94	$0.00	$8,886.44
2028	$9,053.46	$0.00	$9,063.96
2029	$9,234.53	$10.50	$9,245.03
2030	$9,419.22	$0.00	$9,440.22
2031	$9,607.61	$0.00	$9,628.61
2032	$9,799.76	$10.50	$9,820.76
2033	$9,995.75	$0.00	$10,027.25
2034	$10,195.67	$0.00	$10,227.17
2035	$10,399.58	$0.00	$10,431.08
2036	$10,607.57	$10.50	$10,639.07
2037	$10,819.73	$0.00	$10,861.73
2038	$11,036.12	$0.00	$11,078.12
2039	$11,256.84	$0.00	$11,298.84
2040	$11,481.98	$10.50	$11,523.98
2041	$11,711.62	$0.00	$11,764.12
2042	$11,945.85	$0.00	$11,998.35

Appendix D Renewal Forecast Summary

Table D1 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2023	$0.00	$0.00
2024	$112,148.00	$112,148.00
2025	$807,535.00	$807,535.00
2026	$441,580.00	$441,580.00
2027	$16,000.00	$16,000.00
2028	$0.00	$0.00
2029	$64,000.00	$64,000.00
2030	$580,756.00	$580,756.00
2031	$0.00	$0.00
2032	$711,312.00	$711,312.00
2033	$0.00	$0.00
2034	$17,813.00	$17,813.00
2035	$1,343,656.00	$1,343,656.00
2036	$0.00	$0.00
2037	$39,252.00	$39,252.00
2038	$5,562.00	$5,562.00
2039	$378,030.00	$378,030.00
2040	$71,732.00	$71,732.00
2041	$576,905.00	$576,905.00
2042	$0.00	$0.00

Appendix E Disposal Summary

No assets identified for disposal

Table E1 – Disposal Activity Summary

Year	Disposal Forecast	Disposal Budget
[Year]	[Disposal Forecast]	[Disposal Budget]

Appendix F Budget Summary by Lifecycle Activity

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total Budget
2023	$0	$0	$8,000.00	$0.00	$0	$8,000.00
2024	$0	$0	$8,364.00	$112,148.00	$0	$120,512.00
2025	$0	$0	$8,531.28	$807,535.00	$0	$816,066.25
2026	$0	$0	$8,701.91	$441,580.00	$0	$450,281.91
2027	$0	$0	$8,886.44	$16,000.00	$0	$24,875.94
2028	$0	$0	$9,063.96	$0.00	$0	$9,053.46
2029	$0	$0	$9,245.03	$64,000.00	$0	$73,234.53
2030	$0	$0	$9,440.22	$580,756.00	$0	$590,175.25
2031	$0	$0	$9,628.61	$0.00	$0	$9,607.61
2032	$0	$0	$9,820.76	$711,312.00	$0	$721,111.75
2033	$0	$0	$10,027.25	$0.00	$0	$9,995.75
2034	$0	$0	$10,227.17	$17,813.00	$0	$28,008.67
2035	$0	$0	$10,431.08	$1,343,656.00	$0	$1,354,055.63
2036	$0	$0	$10,639.07	$0.00	$0	$10,607.58
2037	$0	$0	$10,861.73	$39,252.00	$0	$50,071.73
2038	$0	$0	$11,078.12	$5,562.00	$0	$16,598.12
2039	$0	$0	$11,298.84	$378,030.00	$0	$389,286.84
2040	$0	$0	$11,523.98	$71,732.00	$0	$83,213.98
2041	$0	$0	$11,764.12	$576,905.00	$0	$588,616.63
2042	$0	$0	$11,998.35	$0.00	$0	$11,945.85

Appendix G 10 year Forecast Renewal

CVR ID	GIS ID	Asset Name	From	To	Remaining Life	Renewal Year	Renewal Cost	Useful Life
355027	21007	Guardrail - Captain Cook Lookout - Shell	Guard Rail	GRL	1	2024	$11,215.00	20
355211	11608	Guardrail - Scotts Head Road Scotts Head	Guard Rail	GRL	1	2024	$60,746.00	20
355248	10796	Guardrail - Valla Beach Road Valla Beach	Guard Rail	GRL	1	2024	$21,495.00	20
355505	11609	Guardrail - Scotts Head Road Scotts Head	Guard Rail	GRL	1	2024	$9,346.00	20
355506	11610	Guardrail - Scotts Head Road Scotts Head	Guard Rail	GRL	1	2024	$9,346.00	20
							$112,148.00	
355486	10705	Guardrail - East West Road Valla - GIS ID	Guard Rail	GRL	2	2025	$47,663.00	23
355502	10654	Guardrail - Rodeo Drive Wirrimbi - GIS ID	Guard Rail	GRL	2	2025	$22,429.00	24
355511	10442	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$15,888.00	25
355512	10443	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$51,401.00	25
355513	10449	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$30,449.00	22
355516	10459	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$44,392.00	25
355517	10460	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$60,746.00	25
355518	10461	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	2	2025	$44,392.00	25
355475	10085	Guardrail - Albert Drive Eungai - GIS ID 1	Guard Rail	GRL	2	2025	$30,840.00	27
355476	10086	Guardrail - Albert Drive Eungai - GIS ID 1	Guard Rail	GRL	2	2025	$7,944.00	26
355477	10087	Guardrail - Albert Drive Eungai - GIS ID 1	Guard Rail	GRL	2	2025	$10,280.00	25
355478	10089	Guardrail - Albert Drive Eungai - GIS ID 1	Guard Rail	GRL	2	2025	$18,691.00	25
355489	10708	Guardrail - East West Road Valla - GIS ID	Guard Rail	GRL	2	2025	$25,233.00	23
355490	10709	Guardrail - East West Road Valla - GIS ID	Guard Rail	GRL	2	2025	$25,233.00	23
355495	10609	Guardrail - Missabotti Road Missabotti -	Guard Rail	GRL	2	2025	$9,346.00	24
355496	10590	Guardrail - North Arm Road Bowraville -	Guard Rail	GRL	2	2025	$52,335.00	24
355497	10591	Guardrail - North Arm Road Bowraville -	Guard Rail	GRL	2	2025	$30,840.00	24
355465	10421	Guardrail - Wilson Road Macksville - GIS	Guard Rail	GRL	2	2025	$52,335.00	25
355504	10662	Guardrail - Rodeo Drive Wirrimbi - GIS ID	Guard Rail	GRL	2	2025	$40,186.00	23
355522	10653	Guardrail - Wirrimbi Rd - GIS ID 10653	Guard Rail	GRL	2	2025	$14,018.00	24
355523	10663	Guardrail - Wirrimbi Rd - GIS ID 10663	Guard Rail	GRL	2	2025	$16,822.00	30
355525	10670	Guardrail - Wirrimbi Rd - GIS ID 10670	Guard Rail	GRL	2	2025	$21,495.00	28
355202	10608	Guardrail - Missabotti Road Missabotti -	Guard Rail	GRL	2	2025	$10,280.00	24
355205	10589	Guardrail - North Arm Road Bowraville -	Guard Rail	GRL	2	2025	$28,037.00	24
355146	10672	Guardrail - Old Coast Road Nambucca He	Guard Rail	GRL	2	2025	$34,579.00	23
355192	10612	Guardrail - Bellingen Road Bowraville - G	Guard Rail	GRL	2	2025	$22,429.00	24
355100	10401	Guardrail - Taylors Arm Road Macksville	Guard Rail	GRL	2	2025	$16,355.00	25
355103	10075	Guardrail - Upper Warrell Creek Road Ma	Guard Rail	GRL	2	2025	$22,897.00	25
							$807,535.00	
355198	11674	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$67,756.00	23
355279	11662	Guardrail - Ocean Street Scotts Head - GI	Guard Rail	GRL	3	2026	$32,710.00	23
355281	11681	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$163,548.00	23
355491	11675	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$56,074.00	23
355492	11676	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$30,373.00	23
355493	11677	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$30,373.00	23
355494	11680	Guardrail - Eungai Creek Road Eungai Cre	Guard Rail	GRL	3	2026	$60,746.00	23
							$441,580.00	

350090	11683	Bus Shelter - Main Street Eungai Creek S	Steel Old Sh	SOS	4	2027	$8,000.00	30
350298	11685	Bus Shelter - Main Street Eungai Creek S	Steel Old Sh	SOS	4	2027	$8,000.00	30
							$16,000.00	
350153	11617	Bus Shelter Scotts Head Road - GIS ID 116	Steel Old Sh	SOS	6	2029	$8,000.00	30
350309	10389	Bus Shelter - Boundary Street Macksville	Steel Old Sh	SOS	6	2029	$8,000.00	30
350317	10516	Bus Shelter - Taylors Arm Road Taylors A	Steel Old Sh	SOS	6	2029	$8,000.00	30
350323	11528	Bus Shelter - Marshall Way Nambucca H	Steel Old Sh	SOS	6	2029	$8,000.00	30
355212	10712	Bus Shelter - Sharwill Drive Valla - GIS ID	Steel Old Sh	SOS	6	2029	$8,000.00	30
355016	11527	Bus Shelter - Marshall Way - Nambucca H	Steel Old Sh	SOS	6	2029	$8,000.00	30
355018	11532	Bus Shelter - GIINAGAY WAY - Nambucca	Steel Old Sh	SOS	6	2029	$16,000.00	30
							$64,000.00	
355009	21088	Guardrail - Beilbys Beach - Ulrick Drive, N	Guard Rail	GRL	7	2030	$16,355.00	20
355137	10856	Guardrail - Link Road Nambucca Heads -	Guard Rail	GRL	7	2030	$38,317.00	20
355140	11905	Bus Shelters - Mann Street Nambucca He	Steel Old Sh	SOS	7	2030	$8,000.00	30
355141	11907	Guardrail - Mann Street Nambucca Head	Guard Rail	GRL	7	2030	$23,364.00	20
355144	11337	Guardrail - Nelson Street Nambucca Hea	Guard Rail	GRL	7	2030	$26,635.00	20
355061	10917	Guardrail - Hyland Park Road Hyland Par	Guard Rail	GRL	7	2030	$28,037.00	20
355220	10685	Guardrail - Valla Road - GIS ID 10685	Guard Rail	GRL	7	2030	$34,579.00	20
355152	10866	Guardrail - Railway Road Nambucca Hea	Guard Rail	GRL	7	2030	$47,195.00	20
355167	10937	Bus Shelters - Seaview Street Nambucca	Steel Old Sh	SOS	7	2030	$8,000.00	30
355168	11916	Bus Shelters - Thornbill Glen Nambucca	Steel Old Sh	SOS	7	2030	$8,000.00	30
355172	11902	Guardrail - West Street Nambucca Heads	Guard Rail	GRL	7	2030	$9,346.00	20
350314	10938	Bus Shelter - Seaview Street Nambucca	Steel Old Sh	SOS	7	2030	$8,000.00	30
350308	10628	Bus Shelter - Cook Street Bowraville - G	Steel Old Sh	SOS	7	2030	$8,000.00	30
350175	10711	Bus Shelter Priory Parade Valla - GIS ID 1	Steel Old Sh	SOS	7	2030	$8,000.00	30
355507	11611	Guardrail - Scotts Head Road Scotts Hea	Guard Rail	GRL	7	2030	$15,420.00	20
355508	11614	Guardrail - Scotts Head Road Scotts Hea	Guard Rail	GRL	7	2030	$42,055.00	20
355509	11615	Guardrail - Scotts Head Road Scotts Hea	Guard Rail	GRL	7	2030	$51,401.00	20
355265	11218	Bus Shelter - V-Wall - Wellington Drive N	Steel Old Sh	SOS	7	2030	$8,000.00	30
355466	10857	Guardrail - Link Road Nambucca Heads -	Guard Rail	GRL	7	2030	$79,438.00	20
355467	11908	Guardrail - Mann Street Nambucca Head	Guard Rail	GRL	7	2030	$28,037.00	20
355468	11896	Guardrail - Nelson Street Nambucca Hea	Guard Rail	GRL	7	2030	$35,513.00	20
355469	10867	Guardrail - Railway Road Nambucca Hea	Guard Rail	GRL	7	2030	$10,280.00	20
355470	10868	Guardrail - Railway Road Nambucca Hea	Guard Rail	GRL	7	2030	$10,280.00	20
355472	11375	Guardrail - Riverside Drive Nambucca He	Guard Rail	GRL	7	2030	$26,635.00	20
355473	11478	Guardrail - Riverside Drive Nambucca He	Guard Rail	GRL	7	2030	$1,869.00	20
							$580,756.00	

355463	10076	Guardrail - Upper Warrell Creek Road Ma	Guard Rail	GRL	9	2032	$38,784.00	20
355460	10416	Guardrail - Taylors Arm Road Macksville	Guard Rail	GRL	9	2032	$16,822.00	20
355519	10462	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	9	2032	$44,392.00	20
355520	10463	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	9	2032	$47,195.00	20
355521	10464	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	9	2032	$47,195.00	20
355514	10450	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	9	2032	$49,064.00	20
355515	10453	Guardrail - Taylors Arm Road - GIS ID 104	Guard Rail	GRL	9	2032	$33,644.00	20
355498	10596	Guardrail - North Arm Road Bowraville -	Guard Rail	GRL	9	2032	$25,233.00	20
355527	10425	Guardrail - Wilson Road - GIS ID 10425	Guard Rail	GRL	9	2032	$125,231.00	20
355528	10426	Guardrail - Wilson Road - GIS ID 10426	Guard Rail	GRL	9	2032	$57,475.00	20
355529	10427	Guardrail - Wilson Road - GIS ID 10427	Guard Rail	GRL	9	2032	$33,644.00	20
355530	10213	Guardrail - River Street - GIS ID 10213	Guard Rail	GRL	9	2032	$6,542.00	20
800120	10424	Guardrail - Wilson Road - GIS ID 10424	Guard Rail	GRL	9	2032	$79,438.00	20
350105	10367	Bus Shelter - Giinagay Way (Dawkins Par	Steel Old Sh	SOS	9	2032	$16,000.00	30
355200	10255	Guardrail - Gumma Road Gumma - GIS ID	Guard Rail	GRL	9	2032	$41,121.00	20
355107	10406	Guardrail - Wilson Road Macksville - GIS	Guard Rail	GRL	9	2032	$49,532.00	20
							$711,312.00	