NORFOLK ISLAND
Regional Council

ASSET MANAGEMENT PLAN

Fleet and Plant

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Document Control	Fleet and Plant Asset Management Plan

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1.0 EXECUTIVE SUMMARY

1.1 Context

This Asset Management Plan (AM Plan) details information about Fleet and Plant assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks.

This plan covers the assets classed in the asset register as Fleet and Plant comprising:

- **Fleet vehicles** are designed to carry passengers, light cargo and equipment. Fleet vehicles include four wheel drives, cars, motorbikes, utes and vans.
- **Heavy duty plant** is designed primarily for heavy construction and earth moving. Often referred to as yellow plant due to the distinctive yellow colour commonly used on these types of machinery. Heavy duty plant includes bobcats, a bulldozer, a crane, an excavator, forklifts, a grader, loaders and trucks.
- **Light duty plant** includes a range of mobile items that assist with construction and maintenance works including trailers, light towers and generators.
- **Grounds-care plant** is used in the maintenance of parks and reserves. Grounds-care plant includes mowers, a mulcher, tractors and a wood chipper.
- **Road plant** is machinery identified in the asset register as being specifically for the construction and maintenance of roads including an aggregate spreader, a Jet master patching truck, a line marker, rollers, a truck and a trailer.
- **Marine vehicles** consist of cargo transfer vessels and emergency services' jet skis.

The above infrastructure assets have a recorded value of $11.15m as of December 2022[1].

1.2 Levels of Service

Fleet and plant are recorded in the asset register at historical cost, so it is unclear if the planned budget is sufficient to continue providing existing services at current levels for the planning period. The target level of service is to ensure that assets remain in a serviceable condition. However, there is a risk that the existing number of maintenance staff and the current staff profiles will adversely impact the assets' ongoing service capacity, particularly with the transition to renewable energy vehicles.

1.3 Condition Assessment

The April 2023 condition assessment identified that thirty one percent of fleet and plant assets are rated as being in poor or very poor condition. This means that these assets have significant defects or are physically unsound. A further twelve percent is assessed as being in fair condition and requiring regular or significant maintenance to maintain service levels.

1.4 Lifecycle Management Plan

The forecast lifecycle costs necessary to provide the services covered by this AM Plan include operating, maintenance, renewal and acquisition of assets. The AM Plan informs a long-term financial planning period of ten years. Therefore, a summary output from the AM Plan is the forecast of ten year total outlays, which for the fleet and plant assets is estimated at $1.49m on average per year.

1.5 Financial Summary

The reality is that only what is funded in annual budgets can be provided. Informed decision making depends on the AM Plan emphasising the consequences of planned budgets on the service levels provided and risks. One of the key assumptions in this AM Plan is that there is sufficient funding in forward estimates of updated long term financial plans to cover the required outlays contained in this AM Plan.

[1] Fleet and plant are recorded in the asset register at their purchase cost (historical cost). The current replacement cost is expected to be materially more than the recorded cost.

1.6 Monitoring and Improvement Program

Reviewing and updating this AM Plan as part of the annual budget process will ensure that it remains current and funding allocations are in line with service requirements. Asset management practices, asset hierarchy management and the asset management system will be reviewed in line with the improvement plan.

2.0 Introduction

2.1 Background

An AM Plan is developed to demonstrate planned management of assets and the services provided from those assets, compliance with regulatory requirements, and to define the funding needed to provide the planned levels of service over a ten year planning period.

The development of this AM Plan was guided by the AM Plan structure and content recommendations set down in the IPWEA's International Infrastructure Management Manual (IIMM, Version 6.0, 2020)

This AM Plan is to be read in conjunction with Council's Asset Management Policy and with reference to the current versions of the following key planning documents:

- Community Strategic Plan
- Long Term Financial Plan
- Operational Plan including the annual budget

Asset management planning within Council is developing. The aim is to have asset management plans at the IPWEA's Core maturity level[2]. This means that AM Plans contain content including asset information, levels of service, demand and lifecycle strategies linking to financial forecasts with key assumptions stated.

Fit for purpose fleet and plant assets are an essential element to enabling the Council to effectively deliver the defined level of services to the community.

The fleet and plant assets covered by this AM Plan are shown in Table 2.1.

Table 2.1: Fleet and Plant assets covered by this AM Plan

Category	Estimated Replacement Value[3]	Category	Estimated Replacement Value
■ Fleet vehicles	$1.27m	■ Grounds-care plant	$840.9k
■ Heavy duty plant	$5.95m	■ Marine vehicles	$1.77m
■ Light duty plant	$371.4k	■ Road plant	$949.9k

The above infrastructure assets have a recorded value of $11.15m as of December 2022.

2.2 Asset Data

Council's Asset Management System, AssetFinda, currently stores data on fleet and plant assets controlled by Council.

The data being captured relies on the type of asset entered into the AssetFinda system. For example, larger complex assets, such as networks, that have significant parts with differing lifecycles are componentised.

The asset hierarchy, componentisation and estimated useful lives are set down in Council Policy Statement No. 3.07 Asset Accounting Policy and are summarised in Table 5.3 of this AM Plan.

[2] IPWEA, 2020, Sec 3.6.5, Aligning the AM PLANs and Corporate Plan: identifies 5 levels of maturity from Aware to Advanced. Core level is level 3. Currently, Council's AM planning is considered to be at level 2, Basic.

[3] Fleet and plant are recorded in the asset register at their purchase cost (historical cost). The actual replacement cost is expected to be materially more than the current recorded cost.

2.3 Key Stakeholders

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.3.

Table 2.3: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Norfolk Island Community	■ As consumers of the services supported by the assets.
Emergency services	■ As direct consumers of the fire and rescue vehicles.
Tourists and visitors	■ As consumers of the services supported by the assets.
Council Administrator and General Manager	■ Endorse the AM Plan, ■ Allocate resources to meet planning objectives in providing services while managing risks, ■ Ensure services are sustainable.
Audit and Risk Management Committee	■ Independent assurance and assistance to Council on Council's risk, control and compliance frameworks, and external accountability.
Management	■ Support the objectives of the AM Plan, ■ Provide strategic and operational input and support, ■ Project manage the selection and acquisition of renewal, upgrade and new assets. ■ Allocate and manage the necessary resources to support the implementation of the AM Plan.
Engineer and technical officers	■ Provide technical input and support, ■ Prepare and update works programmes, ■ Delivery of works programmes, ■ Update and maintain the integrity of asset data.
Corporate and Finance	■ Ensure the integrity of financial data relevant to the implementation of the AM Plan.
Council staff	■ Utilise the assets in their roles with Council.

2.4 Goals and Objectives of Asset Management

Our goal for fleet and plant assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for the present and future community. We have acquired these assets by purchase, by contract and from donations by the Commonwealth and others.

The key elements of asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and 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.

2.5 AM Plan Framework

- The IIMM outlines that there is no single correct way to structure an AM Plan and many councils have developed their own[4]. This plan incorporates the IIMM AM Plan structure although it has modified elements to suit Council's asset management position at this point in time.
- The key structure of the plan is as follows:
    - 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,
    - Risk management,
    - Financial summary – what funds are required to provide the defined services,
    - Monitoring – how the plan will be monitored to ensure objectives are met,
    - Asset management improvement plan – how we increase asset management maturity.

[4] IPWEA, IIMM,2020, Sec 3.6.3, The Portfolio AM PLAN, Activity and Service Plans

3.0 LEVELS OF SERVICE

The provision of reliable, fit for purpose and efficient fleet and plant is a key element in the provision of services which meet or exceed, the expectation of the Community.

3.1 Community Research and Expectations

Council receives community input from a variety of sources including:

- the community strategic planning consultation process,
- feedback on Council's delivery program,
- submissions on the annual Operational Plan including the annual budget,
- reports from the Council advisory committees,
- consultation outcomes from planning and review undertakings, and
- ad hoc representations from community groups and individuals.

The **Norfolk Island Community Strategic Plan: 2016-2026** was prepared in consultation and cooperation with a broad cross section of the community and reflects the aspirations and values of the people who live on Norfolk Island. Development of the Plan was undertaken in three phases and included twenty-one focus groups, individual surveys, community workshops, public forums and a draft plan released for public consultation during each phase.

The community's vision and the Council's mission are set down in the Plan.

Our vision is:

> *Norfolk Island – the Best Small Island in the World*

Our mission is:

> *The Norfolk Island Regional Council will provide local civic leadership and governance through good decision making, accountability and transparency.*
>
> *We will protect and enhance our unique culture, heritage, traditions and environment for the Norfolk Island People. We will do this through promoting a healthy and sustainable lifestyle, by looking after our community assets, and by fostering a prosperous economy.*

The community's aspirations from the Strategic Plan are incorporated into the **Delivery Program** that each elected Council commits to undertake during its four-year term of office. These commitments are given substance by Council's annual **Operational Plan** which includes the annual budget. The cost to procure and renew assets are detailed in the annual budget along with the forecast operation and maintenance costs to ensure that the assets can deliver their intended level of service to the community.

The local government act covering Norfolk Island stipulates a minimum of twenty-eight days of public exhibition of the draft operational plan before it is adopted. During that period, submissions from the community are received and considered by Council.

Council advisory committees provide a structure for interested residents and subject matter experts to play an active role in contributing to council policy and direction. Advisory committees provide an important link for the council with the community and are supported via other community consultative methods.

Council has established four advisory committees, being:

- Business, Innovation and Tourism,
- Reserves and Conservation,
- Sustainability, and
- Youth.

3.2 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 are important to the community,
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision.

Fleet and plant assets contribute indirectly to the provision of community services. It is not practical to identify the exact customer values as these assets are behind all of Council's service provision.

The Norfolk Island Community Strategic Plan: 2016 - 2026 identifies a high level customer value as *The Norfolk community sees value in the renovation of infrastructure and the provision of quality services.*

3.3 Levels of Service

Levels of service are the defined qualities of assets against which performance can be measured.

Table 3.3: Technical Levels of Service

Service attribute	Level of Service Objective	Performance Measure	Desired Level of Service	Current Level of Service
Quality/ Condition	Provide fleet and plant which is operational	Scheduled/reactive maintenance ratio	Assets are maintained to the manufacturer's specifications	Scheduled maintenance is being undertaken on fire and rescue vehicles. Most other maintenance is reactive
Safety	Assets are safe to operate	Roadworthy compliance	100% compliant with legislation	100% compliant
Utilisation	Maximise utilisation rates	Recorded usage hours	Annual usage (hours) aligns with expectations	Utilisation is not being monitored.

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged changing circumstances such as technology and customer priorities will change over time.

3.4 Legislative Requirements

There are many legislative requirements relating to the management of assets. The key legislative requirements that impact the fleet and plant assets are outlined in Table 3.4.

Table 3.4: Legislative Requirements

Legislation	Requirement
Local Government Act 1993 (NSW) (NI)	Sets out the role, purpose, responsibilities, and powers of the Norfolk Island Regional Council including the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery.
Employment Act 1988 (NI)	Part 4, Safe Working Practices, sets out employer and employee obligations to prevent a person's death, injury, or illness from being caused by a workplace, by a relevant workplace area, by work activities, or by machinery or substances for use at a relevant place.

Legislation	Requirement
Environment Act 1990 (NI)	To prevent, so far as is practicable, the degradation and destruction of the natural environment and landscape beauty of Norfolk Island.
Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)	To protect and manage unique plants, animals, habitats and places. This includes heritage sites and the Norfolk Marine Park.
Australian Accounting Standards (AAS)	The Local Government Act 1993 (NSW) (NI) requires Council to comply with AAS. Standard AASB 116, Property Plant and Equipment stipulates requirements on the recognition, valuation, depreciation and disposal of assets.
Traffic Act 2010 (NI)	Prescribes for the registration of motor vehicles and the licensing of operators.
Civil Aviation Act 1988 (Commonwealth)	The main object of this Act is to establish a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

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, community preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

Norfolk Island is one of Australia's most isolated communities. It is an external Australian territory in the Pacific Ocean about 1600 km northeast of Sydney. The island has notable historic sites having been settled six weeks after Australia's initial settlement and is of significant biological importance with many native species being unique to the island.

The projection and impact on services from demand drivers on the fleet and plant assets is documented in Table 4.1

Table 4.1: Demand Drivers and Impact on Services

Demand Drivers	Projection	Impact on Services
Population	Norfolk Island has a population of 2,188 (ABS 2021), this compares with a population of 1,748 (ABS 2016) and 1,796 in 2011 (Norfolk Island Government Census).	Minimal
Development	Moderate growth over the term of this plan	Minimal
Technological	Transitioning to renewable power sources may expedite the replacement of fleet and plant assets.	Moderate
Legislative change	Replacing current Norfolk legislation with Australian mainland legislation may impact the provision of services.	Unknown
Climate change	This may have an effect in the future, particularly if climate extremes such as increased rainfall eventuate.	Unknown
Community expectations	Affordable, reliable, sustainable services	Moderate

4.2 Demand Impact and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets will be managed through a combination of managing existing assets, upgrading 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.

Subject to available resources, demand management plans will be developed in future revisions of this AM 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 AM Plan are shown in Table 5.1.1.

Table 5.1.1: Assets covered by this Plan

Category and sub-category	Number	Recorded Replacement Cost[5]	Category and sub-category	Number	Recorded Replacement Cost
■ **Fleet vehicles**	**47**	**$1.27m**	■ **Road plant**	**9**	**$949.9k**
– 4 wheel drives	7	$156k	– Aggregate spreader	1	$37k
– Cars	3	$22.9k	– Patching truck	1	$242.7k
– Hearse	1	$35k	– Line maker	1	$13k
– Motorbikes	6	$54.8k	– Rollers	4	$492.2k
– Station wagons	2	$60k	– Truck	1	$120k
– Utes	24	$851.3k	– Trailer	1	$45k
– Vans	4	$90k			
■ **Heavy duty plant**	**53**	**$5.95m**	■ **Light duty plant**	**29**	**$371.4k**
– Bobcats	4	$220.9k	– Generator on trailer	1	$56k
– Bulldozer	1	$75k	– Light towers	5	$129.1k
– Crane	1	$670k	– Steam cleaner on trailer	1	$12.8k
– Excavator	1	$70k	– Trailers	20	$98.5k
– Forklifts	11	$645.7k	– Trencher	1	$50k
– Grader	1	$44k	– Welder on trailer	1	$25k
– Loaders	4	$545.6k			
– Trucks	26	$1.74m			
– Emergency vehicles	4	$1.93m			
■ **Marine vehicles**	**7**	**$1.77m**	■ **Grounds-care plant**	**15**	**$840.9k**
– Transfer vessels	2	$1.44m	– Mowers	8	$277.3k
– Trailers	3	$204.4k	– Mulcher	1	$172.9k
– Emergency Services Jet skis	2	$128.4k	– Tractors	5	$340.7k
			– Woodchipper	1	$50k

[5] Fleet and plant are recorded in the asset register at their purchase cost (historical cost). The actual replacement cost is expected to be materially more than the current recorded cost.

The heavy duty plant is the most significant category within the fleet and plant assets making up 53% of the recorded purchase cost. Marine vehicles constitute 16%, with fleet vehicles being 11%. Collectively, the categories of grounds-care plant, road plant and light duty plant make up the final 20% of the recorded purchase cost for this asset class.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there are insufficient resources to assess and address all deficiencies.

5.1.3 Asset condition

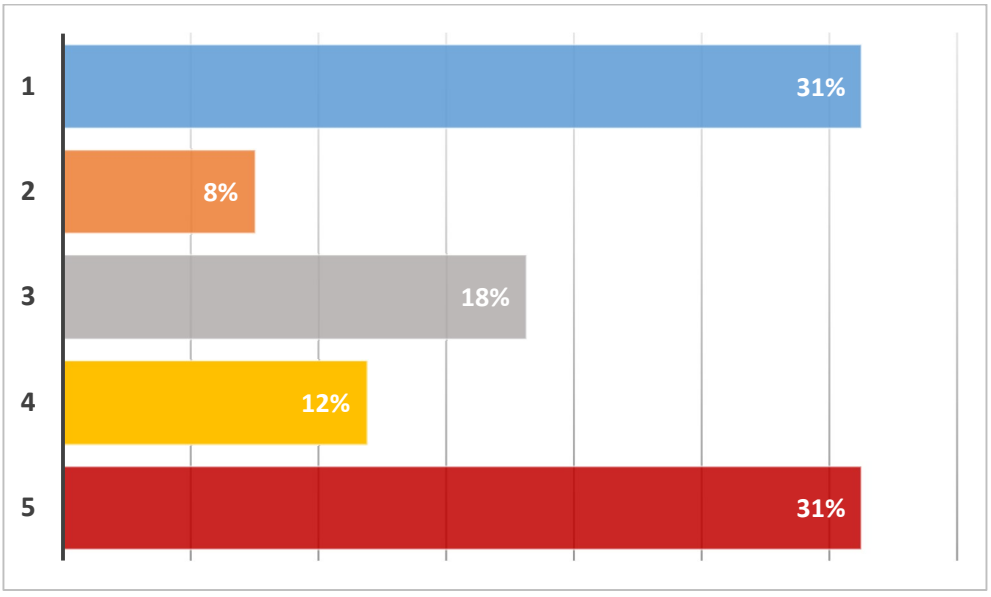
Condition is measured using a 1 – 5 grading system[6] as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required
2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to maintain service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of the Council's fleet and plant assets is shown in Figure 1.

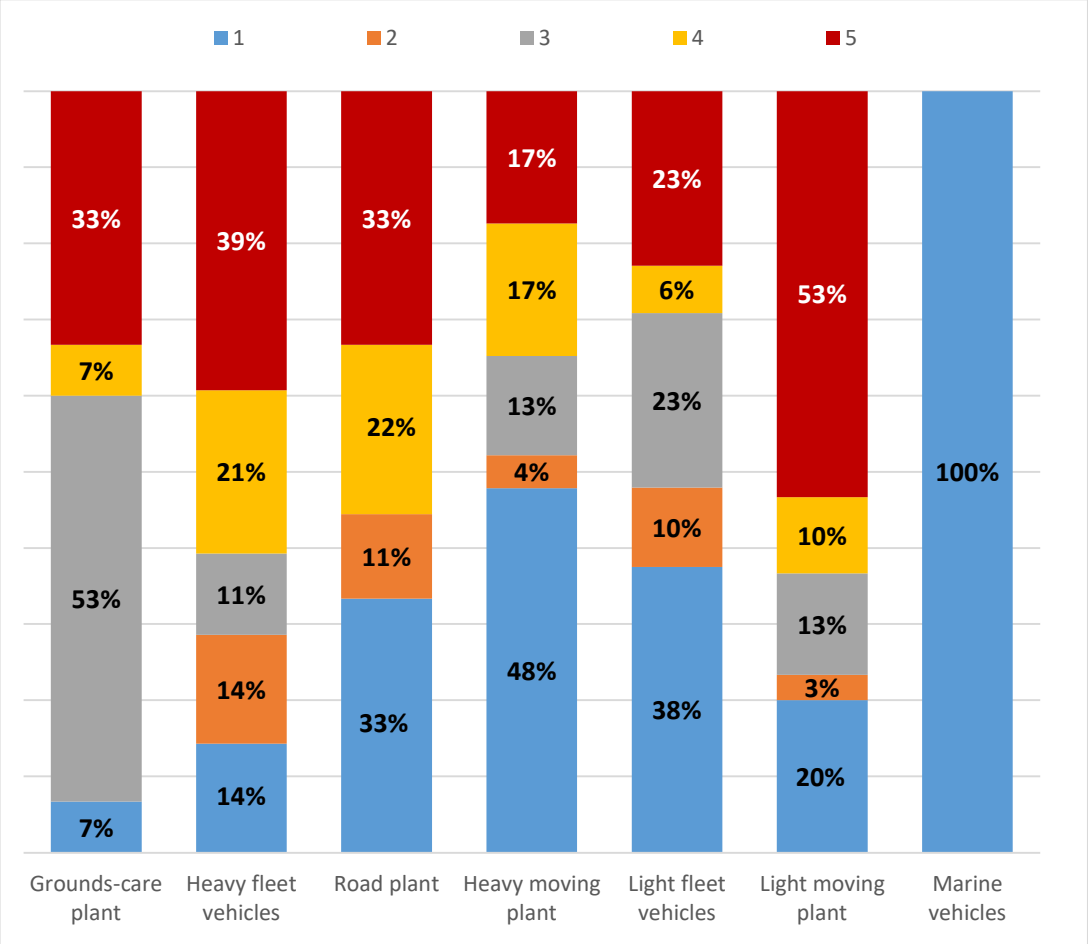
Figure 1: Asset Condition Profile



[6] IPWEA, 2020, IIMM, Sec 2.5.4

The April 2023 condition assessment identified that thirty one pecent of fleet and plant assets are rated as being in poor or very poor condition[7]. This means that these assets have significant defects or are physically unsound. A further twelve percent is assessed as being in fair condition and requiring regular or significant maintenance to maintain service levels.

Figure 2: Asset Category Condition Profile



Asset condition gradings for existing assets were assessed in April 2023 by Council's mechanics. Renewed and new assets are given a condition grading of 1 at the date of commissioning.

5.2 Operations and Maintenance Work

Operations are the regular day to day activities undertaken by the Council in order to provide a level of service to the community. To be able to deliver these services, the Council is required to allocate funds for resources such as staff wages, utility consumption, fuel, overheads, contractors, etc.

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.

The Council does not distinguish between operating and maintenance costs in the works and finance systems.

[7] Council mechanics from the Airport workshop and the Depot workshop assessed the condition of each item of fleet and plant in April 2023 using the grading system described in Table 5.1.3.

The trend in operation and maintenance costs is shown in Table 5.2.

Table 5.2: Operating and Maintenance Cost[8]

Cost Centre	2022 Actuals $(000)	2023 Budget $(000)	2024 Forecast $(000)
Garage Operations	227.5	242.4	264.6

The direct allocation of operating and maintenance costs attributable to the provision of services from plant and fleet is not possible due to the Fleet and Plant register within the Assets module of the Civica system not being utilised effectively. A proxy for operating and maintenance costs is the costs incurred by the Garage Operations cost centre.

Planned or scheduled maintenance is repair work identified and managed through planned inspections by assessing the condition of the assets through various skilled technicians and general condition surveys.

Reactive maintenance is all maintenance that is not planned. The assessment and priority of reactive maintenance work is undertaken by staff using experience and judgement.

Scheduled maintenance is being undertaken on fire and rescue vehicles. Most other maintenance is reactive.

Forecast operations and maintenance costs

In general, maintenance costs will vary in relation to the total value of the asset stock. If additional assets are acquired, future maintenance costs will increase. If assets are disposed of future maintenance costs are expected to decrease.

Forecast operations and maintenance costs are stated in today's dollars for the ten year planning period, the annual forecast is $265k.

Maintenance costs are expected to decline over time as conventional fossil fuel powered vehicles are replaced with electric powered vehicles in line with Council's 100% renewable energy target. This section of the AM Plan will be updated with revised figures once the change to maintenance requirements is clear.

5.3 Renewal Plan

Renewal is 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 its original service potential is considered to be an acquisition resulting in additional future maintenance costs.

Assets requiring renewal are identified using 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.

The typical useful lives of assets used to develop projected asset renewal forecasts[9] along with the average remaining useful life of each subcategory are shown in Table 5.3. Asset useful lives were last reviewed in April 2023.

[8] Depreciation expense and an allocation of Council wide overheads are excluded from these figures.

[9] Guided by the Asset Accounting Policy, Council policy number 3.07

Table 5.3: Useful Lives of Assets

Asset Category / Subcategory	Useful life	Average remaining useful life
Fleet vehicles		
– 4 wheel drives	8 – 10 years	2 years
– Cars	8 – 10 years	3 years
– Hearse	40 years	0 years
– Motorbikes	10 – 20 years	6 years
– Station wagons	8 – 20 years	0 years
– Utes	8 – 20 years	3 years
– Vans	8 – 20 years	1 year
Grounds-care plant		
– Mowers	5 – 35 years	4 years
– Mulcher	20 years	2 years
– Tractors	10 – 30 years	1 year
– Woodchipper	10 years	0 years
Heavy duty plant		
– Bobcats	8 – 20 years	0 years
– Bulldozer	30 – 40 years	0 years
– Crane	20 years	15 years
– Excavator	20 years	12 years
– Forklifts	20 years	10 years
– Grader	12 years	0 years
– Loaders	8 – 20 years	8 years
– Trucks	8 – 40 years	2 years
– Aviation rescue trucks	10 years	1 year
– Fire and rescue trucks	20 years	0 years
Light duty plant		
– Generator on trailer	20 years	12 years
– Light towers	20 years	10 years

Asset Category / Subcategory	Useful life	Average remaining useful life
– Steam cleaner on trailer	20 years	15 years
– Trencher	26 years	0 years
– Welder on trailer	23 years	0 years
– Trailers	10 – 35 years	1 year
Marine vehicles		
– Transfer vessels	5 years	3 years
– Trailers	5 – 10 years	5 years
– Jet skis	10 years	8 years
Road plant		
– Aggregate spreader	8 years	4 years
– Jet master patching truck	20 years	18 years
– Line maker	15 years	8 years
– Truck	20 years	2 years
– Trailer	20 years	2 years

5.3.1 Renewal strategy

The Council plans capital renewal projects to meet the level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service most efficiently,
- Undertaking project scoping for all capital renewal 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 option that could address the service deficiency,
    - evaluate the options against evaluation criteria adopted by the Council, and
    - select the best option to be included in capital renewal programmes,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Review current and required skills base to determine if contractors will be required or the workforce requires training and development to meet required construction and renewal needs,
- Review management of capital renewal and replacement activities to ensure Council is obtaining the best value for resources used.

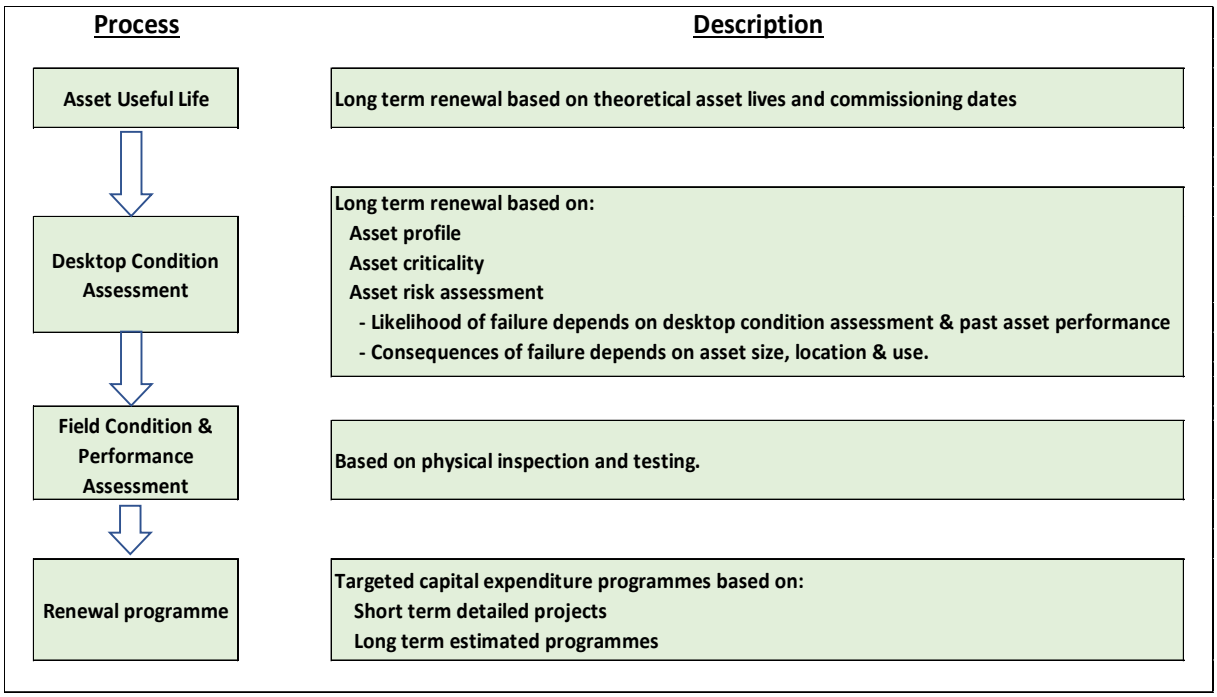
5.3.2 Renewal process

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register. Identified assets are inspected to verify the accuracy of the remaining life estimate and to develop a preliminary renewal estimate. Verified proposals will be ranked by priority and available funds and scheduled in future works programmes.

As Council proceeds towards its objective of 100% renewable energy, the intention is to investigate what types of electric powered fleet and plant vehicles are available to replace the existing vehicles as they come to the end of their useful lives. Suitable electric powered vehicles will be ranked ahead of equivalent fossil fuel powered vehicles.

The renewal process is summarised in the following diagram.

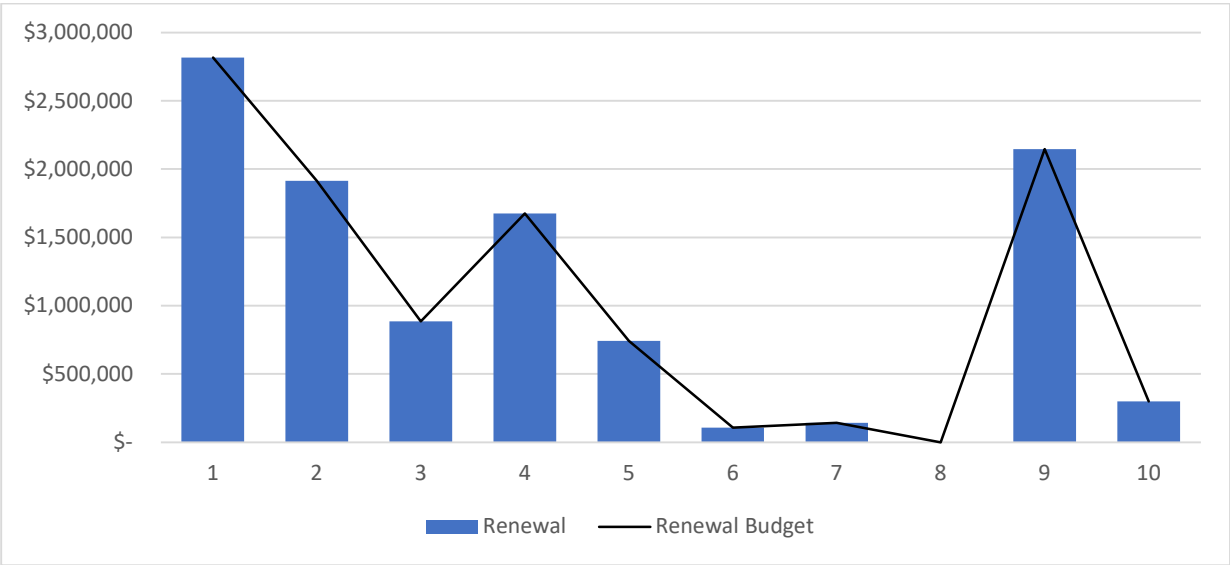
Figure 3: Renewal process



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 4. A detailed summary of the forecast renewal costs is shown in Appendix A.

Figure 4: Forecast Renewal Costs and Planned Budget



All figure values are shown in current-day dollars (December 2022).[10]

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register while the budget forecast is based on an estimate of what can be achieved with the available resources. The total budget allocation required over the ten year period is $10.7m, averaging $1.07m per year.

By using the renewal process identified in section 5.3.2 above, the replacement of assets which are not critical can be deferred to balance service delivery with funding limits. A risk analysis will be included as part of this process to identify those assets with the lowest risk being scheduled for future periods. A consequence of renewal deferral is increased maintenance costs that will need to be assessed and included in future versions of this AM Plan.

5.5 Acquisition Plan

Acquisitions 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, enhanced technology and social or environmental needs. Assets may also be donated or come under the control of the Council.

5.5.1 Selection criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrades and new works should be reviewed to verify that they are essential to the provision of services to the community. The 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. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes.

5.5.2 Future asset acquisitions

When a council commits to new assets, it must be prepared to fund future operations, maintenance and renewal costs. Council must also account for future depreciation when reviewing long-term sustainability.

Expenditure on new assets in the capital works program will be accommodated in the long-term financial plan, but only to the extent that there is available funding.

Planned future acquisitions for Infrastructure programmes are listed in Table 5.5.2.

Table 5.5.2 Planned Future Acquisitions

Programme description	Forecast period	Forecast Cost
5 GWM Ora electric vehicles	2024	$304.7k
5 LDV T60 double cab electric utes	2024	$534.8k
5 Hyundai Kona SUVs	2024	$506k
Waste management truck	2024	$138k

5.6 Summary of asset forecast costs

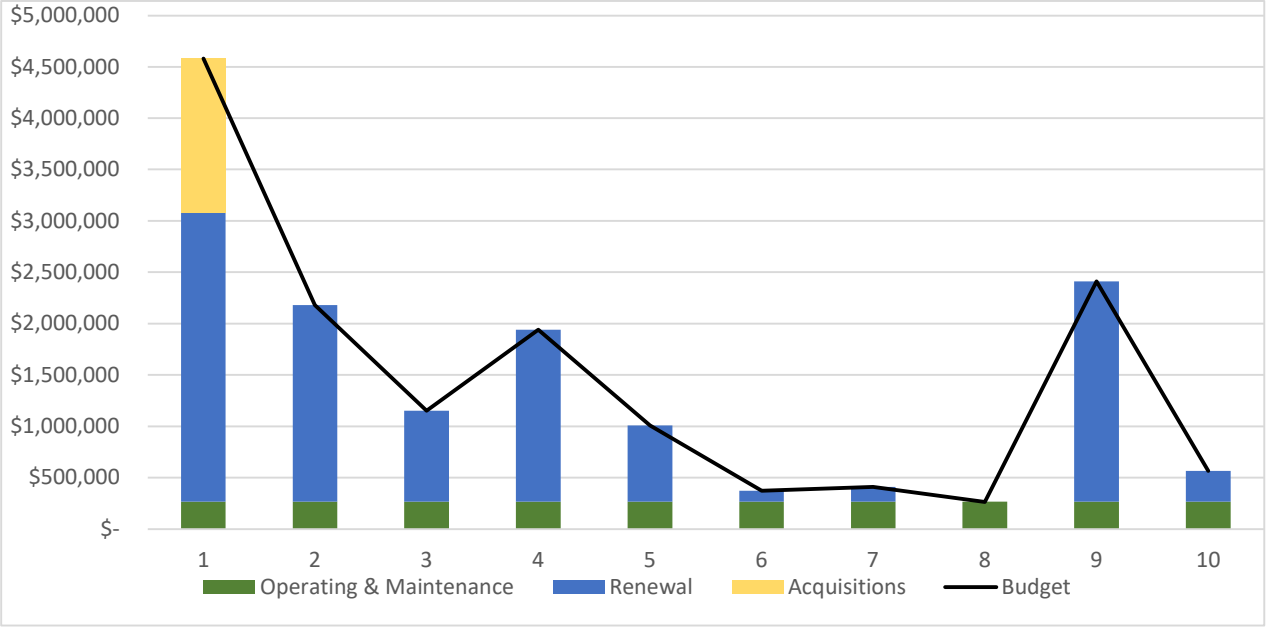
The financial projections from this asset plan are shown in Figure 5. These projections include the estimated forecast costs for operating, maintenance, renewal and acquisitions. These forecast costs are shown relative to the proposed budget.

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

[10] Fleet and plant are recorded in the asset register at their purchase cost (historical cost). The actual replacement cost is expected to be materially more than the current recorded cost.

forecast work and the proposed budget is the basis of the discussion on achieving a balance between costs, levels of service and risk to achieve the best value outcome.

Figure 5: Lifecycle Summary



All figure values are shown in current-day dollars (December 2022). Fleet and plant are recorded in the asset register at their purchase cost (historical cost). The actual replacement cost is expected to be materially more than the current recorded cost.

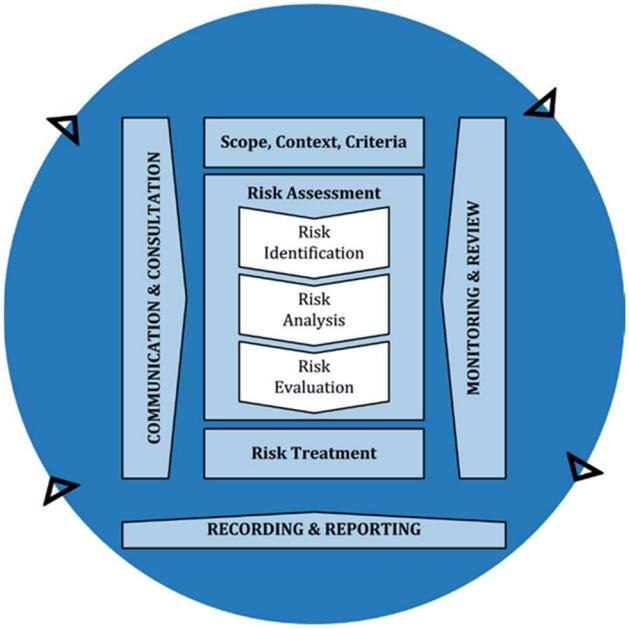
6.0 RISK MANAGEMENT PLANNING

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.

The risk management process used is shown in Figure 6 below.

Figure 6: Risk Management Process – Abridged

Source: ISO 31000:2018, Figure 1, p9



It is an analysis and problem-solving technique designed to provide a logical process for the management of unacceptable risks.

6.1 Risk Assessment

A risk assessment documents the significance of risks through the allocation of a risk rating to each identified risk, the evaluation of those risks, and the development of a risk treatment plan for each risk.

Council manages risks at the strategic level throughout the organisation and at the operational level.

The NIRC Strategic Risk Register (2023) contains information on risk assessment, risk rating and required actions for strategic risk management.

An assessment of strategic risks[11] has identified 2 significant strategic risks relating to effective asset management which are summarised in Table 6.1.1.

Table 6.1.1 Significant Strategic Risks

Risk Description	Detail	Risk Rating*
Sub-optimal management of infrastructure & assets	Asset management and infrastructure strategies do not meet the needs of the Council or the community. Assets and infrastructure are not appropriately maintained and replaced in accordance with established levels of service.	High 16

[11] Refer NIRC Strategic Risk Register, 2023.

Risk Description	Detail	Risk Rating*
Financial sustainability is compromised	Council is unable to maintain its financial and infrastructure capital over the medium to long term due to poor short-term financial decisions, and/or political and management financial literacy deficiencies.	Moderate 8

* See the NIRC Strategic Risk Register for an understanding of the risk ratings.

Identified operational risks associated with the service delivery of the assets covered by this AM Plan are summarised in Table 6.1.2.

Table 6.1.2 Identified Operational Risks

Detail	Risk Treatment
Loss of key staff and operators.	Succession planning for key operational positions to be included in workforce management planning.
Assets fail to provide expected service due to inadequate maintenance programs and staff levels.	Develop and implement maintenance programmes. Define the optimal staffing profile to meet the requirements of the maintenance programmes and incorporate into workforce management planning[12]
Changing technical skill requirements due to the transition to renewable energy powered vehicles.	Understand requirements and incorporate into workforce management planning.
Unnecessary, and/or inefficient fleet and plant.	Annual assessment of fleet and plant utilisation and capacity.
No ongoing resources to ensure the collection, recording and maintenance of asset data.	Establish a permanent asset management position with sufficient authority to establish and maintain asset management practices across the organisation.

[12] The IPWEA provide guidance on estimating servicing hours and staff FTE. See Appendix B.

7.0 FINANCIAL SUMMARY

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

7.1 Financial Sustainability and Projections

7.1.1 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AM Plan for this service area. The two indicators are the:

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

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio is 100% due to the assumption that all identified renewal works are funded over the ten year planning period.

Fleet and plant are recorded in the asset register at historical cost, so it is unclear if the planned budget is sufficient to continue providing existing services at current levels for the planning period.

The forecast renewal work along with the estimated cost of each renewal project is provided in Appendix A.

Medium-term – ten year financial planning period

This AM Plan identifies the forecast operating, maintenance, renewal and acquisition costs required to provide an agreed level of service to the community over the ten year period. This provides input into the long term financial planning process aimed at providing the required services in a sustainable manner.

The forecast costs over the ten year planning period is $1.49m on average per year. Currently, this is fully funded.

7.1.2 Forecast costs (outlays) for the long-term financial plan

Table 7.1.2 shows the forecast costs (outlays) required for consideration in the ten year long-term financial plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the long-term financial plan.

Forecast costs are shown in current-day dollars (December 2022). Fleet and plant assets are recorded in the asset register at their purchase cost (historical cost). The actual renewal cost is expected to be materially more than the current recorded cost.

Table 7.1.2: Forecast Costs (Outlays) for the Long-Term Financial Plan

Plan Period	Year	Operating and Maintenance $	Renewal $	Acquisitions $	Total Outlays $
1	2024	265,000	2,817,295	1,500,000	4,582,295
2	2025	265,000	1,914,670		2,179,670
3	2026	265,000	884,932		1,149,932
4	2027	265,000	1,674,976		1,939,976
5	2028	265,000	742,787		1,007,787
6	2029	265,000	106,340		371,340
7	2030	265,000	143,120		408,120
8	2031	265,000	-		265,000
9	2032	265,000	2,147,087		2,412,087

Plan Period	Year	Operating and Maintenance $	Renewal $	Acquisitions $	Total Outlays $
10	2033	265,000	299,622		564,622

7.2 Funding Strategy

The proposed funding for assets is outlined in the Council's Long Term Financial Plan and annual budget.

The financial strategy of the entity determines how funding will be provided, whereas the AM Plan communicates how and when this will be spent, along with any service and risk consequences of various service alternatives if required.

7.3 Asset Valuations

The best available estimate of the value of assets included in this AM Plan is shown below. The assets are valued at the gross carrying amount recorded in the asset register:

Estimated Renewal Cost (December 2022)[13] $11,152,748

Gross carrying amount (June 2022)[14] $11,152,748

Depreciated Cost[15] $3,924,839

Annual Depreciation $1,036,797

7.4 Key assumptions made in financial forecasts

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key financial 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 financial assumptions made in this AM Plan are:

- Data recorded in the asset register is a fair reflection of the condition and remaining useful life of the fleet and plant assets.
- The operating and maintenance forecast cost estimate reflects actual costs and will remain constant over the ten year plan.
- There is sufficient funding in forward estimates of updated long term financial plans to cover the required outlays contained in this AM Plan.

[13] Fleet and plant assets are recorded in the asset register at their purchase cost (historical cost). The actual replacement cost is expected to be materially more than the current recorded cost.

[14] The book value before deducting accumulated depreciation as recorded in the asset register.

[15] Also reported as Written Down Value, Carrying amount or Net Book Value.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Asset management and financial data source

This AM Plan utilises asset management and financial data sourced from the council's asset register being the Assetfinda product supplied and maintained by Univerus software solutions.

The data being captured relies on the type of asset data being entered into the AssetFinda system. For example, larger complex assets, such as roads, that have significant parts with differing lifecycles are componentised.

The asset hierarchy, componentisation and estimated useful lives are set down in Council Policy Statement No. 3.07 Asset Accounting Policy and are summarised in Table 5.3 of this AM Plan.

Council utilises modules in the Civica enterprise management system to process and store financial information. The general ledger records and reports high level financial information across the Council while the work order system is designed to record, track and report the detail of financial transactions. There are only consolidated work orders being used to record transactions for the assets in this AM Plan. Therefore, there is no distinction between operating and maintenance costs.

Acquisitions of plant and fleet have been incorporated into project level capital work's work orders covering an entire capital work project making it impossible to identify and cost individual works for updating the asset register without the assistance of the engineer and technical staff.

The Fleet and Plant register within the Assets module of the Civica system is not being utilised effectively. It has the capacity to record costs and utilisation of each item of fleet and plant and to allocate time in use charges to work orders. These functions are not being utilised so fleet and plant costs and usage are not being captured or costed to maintenance or capital works.

8.2 Improvement Plan

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

Table 8.2: Improvement Plan

Task #	Task	Timeline
1	Review the estimated useful lives of assets. Amend the useful life brackets in the Asset Accounting Policy with all amendments	By the end of December 2023
2	Establish a review process to align the replacement values of assets with the market prices of fleet and plant assets.	By the end of June 2024
3	Establish an inspection programme for assets covered by this AM Plan and undertake planned maintenance to reduce the extent of reactive maintenance.	By the end of December 2024
4	Update forward estimates and budgets in this AM Plan with updates from the Long Term Financial Plan.	Following updates of the Long Term Financial Plan.

8.3 Monitoring and Review Procedures

This AM Plan will be reviewed in time for 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, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget will be incorporated into the Long-Term Financial Plan once completed.

9.0 REFERENCES

- IPWEA, 2020, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org
- IPWEA, 2015, 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org
- IPWEA, 'Plant and Vehicle Management Manual', 4th Edition, Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org
- IPWEA, 'Plant and Vehicle Maintenance Safe Practice Guide', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org
- ISO, 2014, ISO 55000:2014, Asset management overview, principles and terminology
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Norfolk Island Regional Council, Policy Statement No. 4.04: Asset Management Policy, V2, Draft
- Norfolk Island Community Strategic Plan: 2016-2026
- Norfolk Island Regional Council, Draft Operational Plan 2023-2024
- Norfolk Island Regional Council, Operational Plan 2022-2023
- Norfolk Island Regional Council, Policy Statement No. 3.07: Asset Accounting Policy
- Norfolk Island Regional Council, Strategic Risk Register, 2023

10.0 APPENDICES

Appendix A 10 year Renewal Forecast

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
20.0	Light fleet vehicles	Utility - "TOYOTA" Model Town Ace 1.5 tonne with "HIAB" Model 1.35 tonne lift	Van	0	2024	50,000	10
30.0	Light fleet vehicles	Utility - "TOYOTA" Model Hilux single cab, w/tray built from Norfolk Pine (1 tonne)	Utility	0	2024	30,000	10
98.0	Light fleet vehicles	Utility 4WD Landcruiser	4WD	0	2024	45,000	10
13.0	Light fleet vehicles	Utility - MAZDA white	Utility	0	2024	30,000	10
133.0	Grounds-care plant	TRACTOR MOWER KUBOTA L2900 - Airport	Tractor	0	2024	65,000	10
62.0	Light fleet vehicles	"MAZDA" Model B2500 Utility (1998)	Utility	0	2024	30,000	10
57.0	Light fleet vehicles	Utility - "TOYOTA" Model Hilux single cab	Utility	0	2024	30,000	10
58.0	Light fleet vehicles	Utility - "TOYOTA" Model Hilux 3.0D	Utility	0	2024	30,000	10
438.0	Heavy fleet vehicles	4 T Truck	Truck	0	2024	49,591	15
149.0	Heavy moving plant	Local Forklift Trailer (Reg A9053)	Forklift	0	2024	10,000	20
111.0	Light moving plant	Trailer - Unbranded single axle Tar trailer (REG A9007)	Trailer	0	2024	5,000	10
107.0	Light moving plant	Trailer dual axle plant trailer with loading ramps	Trailer	0	2024	5,500	10
367.0	Light moving plant	TRAILER FOR MOWER (WAITING FOR NUMBER PLATE) - GROUNDS	Trailer	0	2024	5,000	20
129.0	Heavy moving plant	"BOBCAT" - Model S205 - Shared with Telecom (reg A9029)	Bobcat	0	2024	35,000	10
115.0	Grounds-care plant	Tractor - KUBOTU Mower	Tractor	0	2024	65,000	10
131.0	Grounds-care plant	Woodchipper - "VERMEER" Model 1250BC S/N IVRC14138P100413 mobile on trailer	Wood chipper	0	2024	50,000	10
471.0	Light fleet vehicles	Utility - NISSAN, purchased 11/2/18 from QFES	Utility	0	2024	12,000	10
87.0	Light fleet vehicles	Navara Dual Cab	Utility	0	2024	10,605	8
91.0	Light fleet vehicles	Nissan Navara Ute	Utility	0	2024	9,237	8
56.0	Heavy fleet vehicles	Truck - "ISUZU" 4 x 2 single cab tipper w/ "SHINMAYWA" Model DR8-17S tipper body	Truck	0	2024	10,034	8
74.0	Heavy fleet vehicles	Truck - "HINO" Model Dutro with attached work kits/boxes	Truck	0	2024	12,417	8

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
110.0	Heavy moving plant	Bobcat	Bobcat	0	2024	15,859	8
35.0	Heavy moving plant	Forklift - "TCM" Model 700 series diesel 1,500kg lift capacity and forklift hydraulic	Forklift	0	2024	40,000	20
123.0	Light moving plant	Trailer - Locally made	Trailer	0	2024	2,500	10
83.0	Light fleet vehicles	Mazda Bongo Van - 2011 - A99 STORES WKS DEPOT	Van	0	2024	17,000	10
140.0	Light fleet vehicles	Motor Bike - "HONDA" Model CT110 postie bike	Motorbike	0	2024	9,136	20
141.0	Light fleet vehicles	Motor Bike - "HONDA" Model CT110 Postie bike	Motorbike	0	2024	9,136	20
469.0	Light fleet vehicles	Mazda BT50 Ute	Utility	0	2024	35,000	10
432.0	Light fleet vehicles	Ford Ranger Utility	Utility	0	2024	17,000	10
17.0	Heavy moving plant	Wheel Loader - "BOBCAT" Model 753 , S/N: 515843963 w/bucket attachment	Bobcat	0	2024	75,000	20
28.0	Heavy fleet vehicles	Fire Engine - "ISUZU" Model FY FTS, 13,000gvm	Truck - fire and rescue	0	2024	200,000	20
29.0	Heavy fleet vehicles	Fire Engine - "ISUZU" Model FY FTS, 13,000gvm	Truck - fire and rescue	0	2024	200,000	20
401.0	Grounds-care plant	Mower - Toro Reelmaster Fairway Mower	Mower	0	2024	56,340	5
90.0	Heavy moving plant	Loader L50D Front End Wheel PIN: L5OODP7O267 with 1.2m³ bucket	Loader	0	2024	120,000	20
144.0	Heavy moving plant	Bobcat - "KOMATSU" Model SK714 wheel bobcat	Bobcat	0	2024	95,000	20
148.0	Heavy moving plant	Grader - "CATERPILLAR" Model 12G Motor Grader, PIN: 3WC01517 (REG A9049)	Grader	0	2024	44,030	12
114.0	Heavy moving plant	Bulldozer - Caterpillar (rego A9010)	Bulldozer	0	2024	75,000	33
104.0	Heavy fleet vehicles	Truck - Mitsubishi Fuso Tipper	Truck	0	2024	32,000	8
7.0	Heavy moving plant	Forklift - "TOYOTA" Model diesel 62-6FD3o, 2,500kg lift capacity, ROPS	Forklift	0	2024	40,000	20
34.0	Heavy fleet vehicles	Truck - Diahatsu 4x4 Tipper	Truck	0	2024	15,000	26
10.0	Grounds-care plant	Tractor M8030DT	Tractor	0	2024	65,000	26
54.0	Grounds-care plant	Tractor - "KUBOTA" Model M6800, 917 hours with rear older 6 foot slasher attachment	Tractor	0	2024	50,000	20

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
132.0	Grounds-care plant	Mower - "KUBOTA" Model L2900 Ride on 4WD, 72"inch cut	Mower	0	2024	65,000	27
273.0	Grounds-care plant	Mower - "JOHN DEERE" Model X370 ride on mower 42" inch cut deck	Mower	0	2024	12,000	35
355.0	Grounds-care plant	Mower - Kubota Ride On Mower	Mower	0	2024	22,000	14
69.0	Heavy fleet vehicles	Truck - "MAZDA" Model T5300 2 tonne	Truck	0	2024	55,000	26
72.0	Heavy fleet vehicles	Truck - "MITSUBUSHI" Model FK45, 8 tonne flat bed	Truck	0	2024	65,000	38
88.0	Heavy fleet vehicles	Truck Model Delta 2T Tipper	Truck	0	2024	50,000	39
89.0	Heavy fleet vehicles	Truck Tar spray tanker, hot/cold 3kl/1.2kl, S/S tank	Truck	0	2024	100,000	32
96.0	Heavy fleet vehicles	Truck Model T3500 Flat Tray, 4 tonne	Truck	0	2024	55,000	26
8.0	Heavy fleet vehicles	Truck - "FORD" Model Trader model 0409 single cab with work lockers cabinet	Truck	0	2024	50,000	38
27.0	Heavy fleet vehicles	Truck - "TOYOTA" Model dyna 150 1.5 tonne	Truck	0	2024	50,000	28
43.0	Heavy fleet vehicles	Truck - MAZDA Titan	Truck	0	2024	65,000	29
45.0	Heavy fleet vehicles	Truck - MAZDA Titan	Truck	0	2024	5,000	9
2.0	Light fleet vehicles	Hearse - "FORD" Falcon Model Falcon,	Hearse	0	2024	35,000	40
11.0	Light fleet vehicles	Station Wagon Model Carib 4 x4	Station wagon	0	2024	30,000	26
41.0	Light fleet vehicles	Station Wagon - "TOYOTA" Model Carib 4 x4	Station wagon	0	2024	30,000	26
36.0	Light fleet vehicles	A41 - Toyota Hilux Utility 4 *2 - 2012	Utility	0	2024	25,000	8
353.0	Light fleet vehicles	Mazda Bongo	Van	0	2024	12,000	23
108.0	Light moving plant	Trailer Gibbons - Rescue Boats	Trailer	0	2024	5,000	23
113.0	Light moving plant	Trailer - Launch Trailer	Trailer	0	2024	7,500	23
116.0	Light moving plant	Trailer - Lighter trailer	Trailer	0	2024	7,500	35
117.0	Light moving plant	Trailer - Lighter trailer	Trailer	0	2024	7,500	35
118.0	Light moving plant	Trailer - Tar Drum	Trailer	0	2024	5,000	35
119.0	Light moving plant	Trailer - Launch Trailer	Trailer	0	2024	7,500	35
124.0	Light moving plant	Trailer - Ditch Witch	Trailer	0	2024	2,000	32
126.0	Light moving plant	Trailer - Diesel trailer (REG A9026)	Trailer	0	2024	1,000	30

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
128.0	Light moving plant	Trailer - Mower Trailer	Trailer	0	2024	1,000	30
130.0	Light moving plant	Trailer - single axle fuel box with 500 litre capacity and manual hand pump	Trailer	0	2024	3,000	29
134.0	Light moving plant	Trailer - Lighter trailer	Trailer	0	2024	7,500	35
145.0	Light moving plant	Trailer - "SCORPIAN" Model V-Twin, 9.0HP screw compressor on trailer (Reg A9046)	Trailer	0	2024	10,000	20
121.0	Light moving plant	Trailer - for A-1 Roadliner	Trailer	0	2024	2,500	33
122.0	Light moving plant	Trailer - Lincoln W/Power	Trailer	0	2024	2,500	33
32.0	Other plant	Trencher - "DITCH WITCH" Model 3700DD, S/N: 3RO612, 1448 hours	Trencher	0	2024	50,000	26
112.0	Other plant	Trailer - "LINCOLN" Model Weldan Power 230+ Electric welder on trailer	Welder on trailer	0	2024	25,000	23
5.0	Light moving plant	Tray Truck - "MAZDA" Model T4600, tray fitted "HIAB" Model 06T crane 1.8 tonne	Truck	0	2024	55,000	24
103.0	Road plant	Roller - SAKAI Roller TS8160-2 Multi Tyre	Roller	0	2024	44,705	8
102.0	Road plant	Roller - SAKAI Roller TS8160-2 Multi Tyre	Roller	0	2024	44,705	8
307.0	Light fleet vehicles	Vanette - Nissan	4WD	1	2025	14,000	8
308.0	Light fleet vehicles	Vanette - Nissan 4x4	4WD	1	2025	17,000	8
352.0	Light fleet vehicles	Mazda 2010 Bongo Diesel 4wd Van	4WD	1	2025	17,000	8
470.0	Light fleet vehicles	TOYOTA LITEACE 4X4 TRUCK - 7501	Truck	1	2025	55,000	10
370.0	Heavy fleet vehicles	Truck - Suzuki 2015 4WD Tipper	Truck	1	2025	19,000	8
80.0	Heavy fleet vehicles	Truck - "MAZDA" Model Bongo 4WD Tipper	Truck	1	2025	50,000	20
85.0	Heavy fleet vehicles	Rosenbaur Aviation Rescue Truck	Truck - Aviation rescue	1	2025	765,524	10
86.0	Heavy fleet vehicles	Rosenbaur Aviation Rescue Truck	Truck - Aviation rescue	1	2025	765,524	10
366.0	Heavy moving plant	Loader - Volvo L50H - Eng. D4J.4L. VIN VCEL50HP04321094	Loader	1	2025	211,622	8
455.0	Road plant	TRAILER MACK DOG TRAILER 4239 - ROADS	Trailer	2	2026	45,000	20

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
454.0	Road plant	Mack Tipper Truck A977 - ROADS	Truck	2	2026	120,000	20
49.0	Heavy fleet vehicles	Truck - "HINO" FM 6 x 4 cherry picker TF16M, S/N: L173 SWL 325KG	Truck	2	2026	372,532	10
40.0	Heavy fleet vehicles	Truck - Hino 8 Tonne	Truck	2	2026	75,000	20
109.0	Grounds-care plant	Mulcher - Telcor	Mulcher	2	2026	172,900	20
375.0	Light fleet vehicles	Mazda Bongo Van	4WD	2	2026	16,500	8
399.0	Light fleet vehicles	Hilux ute	Utility	2	2026	32,000	8
388.0	Light fleet vehicles	Mazda Bongo Van	Van	2	2026	11,000	8
146.0	Other plant	Light Tower - "COATS HIRE" "JLG" Model mobile lighting tower	Light tower	2	2026	20,000	20
147.0	Other plant	Light Tower - "COATS HIRE" "JLG" Model mobile lighting tower	Light tower	2	2026	20,000	20
602.0	Marine vehicles	PUNT MARINE VESSEL 460334	Barge	3	2027	494,625	5
302.0	Light fleet vehicles	Toyota Ractis	Car	3	2027	7,300	8
303.0	Light fleet vehicles	TOYOTA RACTIS 2008	Car	3	2027	7,300	8
304.0	Light fleet vehicles	Suzuki Sierra	4WD	3	2027	9,300	8
315.0	Light fleet vehicles	TOYOTA RACTIS	Car	3	2027	8,300	8
601.0	Light moving plant	TRAILER FLAT BED - FOR BARGE (WHITE)	Trailer	3	2027	129,926	5
603.0	Light moving plant	TRAILER FOR PUNT	Trailer	3	2027	70,617	5
600.0	Marine vehicles	BARGE LANDING NLK SUPPLIER 1 - LIGHTERAGE	Barge	3	2027	947,608	5
461.0	Light fleet vehicles	MUX SUV	SUV	4	2028	37,210	8
439.0	Light fleet vehicles	single cab 4 x 4 Max wiyh GP alloy deck	Utility	4	2028	32,400	8
440.0	Light fleet vehicles	space cab 4 X 4 D Max with GP Alloy deck	Utility	4	2028	37,194	8
442.0	Light fleet vehicles	Dual Cab 4X 4 D Max with style/side hub deck	Utility	4	2028	35,940	8
443.0	Light fleet vehicles	Dual Cab 4X 4 D Max with style/side hub deck	Utility	4	2028	33,811	8
457.0	Light fleet vehicles	Space Cab 4x 4 D Max with XL Body fit outs	Utility	4	2028	32,400	8
458.0	Light fleet vehicles	Space Cab 4x 4 D Max with XL Body fit outs	Utility	4	2028	50,609	8
459.0	Light fleet vehicles	Dual Cab 4 X 4 Max with GP alloy deck-XL Body fit out	Utility	4	2028	48,987	8

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
462.0	Light fleet vehicles	single cab 4 x 4 Max with GP alloy deck	Utility	4	2028	50,609	8
463.0	Light fleet vehicles	Space Cab 4x 4 D Max with XL Body fit outs	Utility	4	2028	50,609	8
464.0	Light fleet vehicles	Dual Cab 4X 4 D Max with style/side hub deck	Utility	4	2028	35,940	8
460.0	Heavy fleet vehicles	Dual Cab 4 X 4 Max with GP alloy deck-XL Body fit out	Truck	4	2028	48,987	8
437.0	Heavy fleet vehicles	8T Truck with 4T Crane	Truck	4	2028	211,096	8
493.0	Road plant	Aggregate spreader	Aggregate spreader	4	2028	36,995	8
401.0	Grounds-care plant	Mower - Toro Reelmaster Fairway Mower	Mower		2029	56,340	5
22.0	Heavy moving plant	Forklift - "TOYOTA" diesel model, Mode 02-7f=FD3O ROPS, with 3,0 tonne lift	Forklift	5	2029	50,000	20
371.0	Grounds-care plant	Tractor/Slasher M9540	Tractor	6	2030	95,712	15
433.0	Grounds-care plant	Wright 48" mower	Mower	6	2030	20,000	15
466.0	Light fleet vehicles	Motor Bike - "HONDA" Postie Bike Model CT110	Motorbike	6	2030	9,136	10
467.0	Light fleet vehicles	Motor Bike - "HONDA" Model CT110 postie bike	Motorbike	6	2030	9,136	10
468.0	Light fleet vehicles	Motor Bike - "HONDA" Model postie bike CT110	Motorbike	6	2030	9,136	10
600.0	Marine vehicles	BARGE LANDING NLK SUPPLIER 1 - LIGHTERAGE	Barge		2032	947,608	5
603.0	Light moving plant	TRAILER FOR PUNT	Trailer		2032	70,617	5
601.0	Light moving plant	TRAILER FLAT BED - FOR BARGE (WHITE)	Trailer		2032	129,926	5
91.0	Light fleet vehicles	Nissan Navara Ute	Utility		2032	9,237	8
36.0	Light fleet vehicles	A41 - Toyota Hilux Utility 4 *2 - 2012	Utility		2032	25,000	8
87.0	Light fleet vehicles	Navara Dual Cab	Utility		2032	10,605	8
56.0	Heavy fleet vehicles	Truck - "ISUZU" 4 x 2 single cab tipper w/ "SHINMAYWA" Model DR8-17S tipper body	Truck		2032	10,034	8
74.0	Heavy fleet vehicles	Truck - "HINO" Model Dutro with attached work kits/boxes	Truck		2032	12,417	8
104.0	Heavy fleet vehicles	Truck - Mitsubishi Fuso Tipper	Truck		2032	32,000	8
110.0	Heavy moving plant	Bobcat	Bobcat		2032	15,859	8
102.0	Road plant	Roller - SAKAI Roller TS8160-2 Multi Tyre	Roller		2032	44,705	8
602.0	Marine vehicles	PUNT MARINE VESSEL 460334	Barge		2032	494,625	5

Asset ID	Category	Asset Name	Sub-category	Remaining Life	Forecast Renewal Year	Historical Renewal Cost $	Useful Life
103.0	Road plant	Roller - SAKAI Roller TS8160-2 Multi Tyre	Roller		2032	44,705	8
363.0	Road plant	Sprayer - Airport Line maker and truck attachment	Line maker	8	2032	13,035	15
613.0	Marine vehicles	JET SKI SEA DOO FISHPRO - FIRE SERVICE RESCUE CRFT1	JetSki	8	2032	64,182	10
614.0	Marine vehicles	JET SKI SEA DOO FISHPRO - FIRE SERVICE RESCUE CRFT2	JetSki	8	2032	64,182	10
615.0	Marine vehicles	SUPERIOR DUAL JETSKI TRAILER - FIRE SERVICE	Trailer	8	2032	3,818	10
368.0	Heavy fleet vehicles	4 Tonne truck	Truck	8	2032	66,266	15
369.0	Heavy fleet vehicles	Truck - Isuzu 4 Tonne	Truck	8	2032	66,266	15
365.0	Grounds-care plant	Mower - Walker Ride On mower 36"	Mower	8	2032	22,000	15
45.0	Heavy fleet vehicles	Truck - MAZDA Titan	Truck		2033	5,000	9
370.0	Heavy fleet vehicles	Truck - Suzuki 2015 4WD Tipper	Truck		2033	19,000	8
366.0	Heavy moving plant	Loader - Volvo L50H - Eng. D4J.4L. VIN VCEL50HP04321094	Loader		2033	211,622	8
307.0	Light fleet vehicles	Vanette - Nissan	4WD		2033	14,000	8
352.0	Light fleet vehicles	Mazda 2010 Bongo Diesel 4wd Van	4WD		2033	17,000	8
308.0	Light fleet vehicles	Vanette - Nissan 4x4	4WD		2033	17,000	8
120.0	Light moving plant	Trailer	Trailer	9	2033	1,000	15
421.0	Grounds-care plant	Sherpa Mower	Mower	9	2033	15,000	15

Appendix B: IPWEA vehicle maintenance hours and staff level estimate

The IPWEA has adopted from the American Airforce a methodology for estimating fleet and plant service hours and corresponding staff levels. The IPWEA has incorporated this methodology into a spreadsheet. Refer IPWEA – Plant and Vehicle Maintenance Manual (PVMM), Chapter 7, Workshop Management - 7.2 Workshop Staffing - Vehicle Equivalent

Entering Council fleet and plant data into this spreadsheet has produced *Table B.1*. The estimate is 3,241 maintenance hours requiring 2.315 FTE.

Table B.1: Estimate of annual fleet and plant maintenance hours and staff FTE.

Asset Type	Flat Rate Estimate	Vehicle Equivalent	Quantity of Asset	Total Vehicle Equivalent	Estimated Base Unit	Total Hours Per Asset Type
Plant Light	15.00	1	25	25.00	15	375
Truck Heavy	15.00	1	12	12.00	15	180
Plant Medium	30.00	2	7	14.00	15	210
Plant Heavy	40.00	2.67	8	21.33	15	320
Motor Cycles (Including E-Bikes)	2.00	0.13	30	4.00	15	60
Trailers	2.00	0.13	26	3.47	15	52
Cars & Utes	5.00	0.33	41	13.67	15	205
Trucks Light	5.00	0.33	5	1.67	15	25
Trucks Medium	8.00	0.53	13	6.93	15	104
Generators Electrical (Power House) FlatRate Unknown?	150.00	10.00	6	60.00	15	900
Small Motors /Mowers/Motorised Gardening equip/ Motorised Compressors etc	3.00	0.20	250	50.00	15	750
Generator Electrical (Works Depot)	60.00	4.00	1	4.00	15	60
					Total Hours	**3241**
Recommended Hours per Annum Staff	1400.00	Hours			Total Staff	2.315

Please Note that this only takes into account a Flat Rate based on recommended services. This does not take into account break downs and call outs

Historical data is not available at this time and would be more accurate representation of hours worked

Appendix C Glossary

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* (Council definition)

This means property, plant and equipment controlled by the Council that supports the provision of services to the community or produces revenue to contribute to the provision of services or is held for administration purposes and is expected to be used for more than 12 months. Infrastructure is included in this definition

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 Management Plan (AM Plan)

A plan developed for the management of each asset class that identifies asset service standards and long-term (at least 10 years) projects and cash flow estimates for maintenance, rehabilitation, replacement and improvement.

Asset Management Policy*

A Council policy that describes how Council intends to apply asset management across the organisation. It establishes the Asset Management Strategy; asset management plans and allocates responsibility to ensure effective asset management.

Asset Management Strategy*

The Council document that describes the strategy for asset management covering the development and implementation of plans and programmes for asset creation, operation, maintenance, rehabilitation/replacement, disposal and performance monitoring to ensure that the desired levels of service and other operational objectives are achieved.

Asset Register*

A record of asset information including inventory, historical, condition, construction, technical and financial details.

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 AM Plan for the same period.

Capital Expenditure (Renewal, Upgrade, Acquisition)

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, rehabilitation, 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.

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.

Commissioned

When the asset is in the location and condition necessary for it to be capable of operating in the manner intended by management. The date depreciation commences.

Community Strategic Plan*

Council document that states the community's vision and aspirations for a period of ten years.

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.

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.

Depreciable Amount (DA)

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.

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 arm's length transaction.

Funding Gap

A funding 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.

Gross Carrying Amount

The amount that a class of assets is recognised prior to deducting any accumulated depreciation and accumulated impairment losses.

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, e.g. 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. They are fixed in place and are often have no separate market value.

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 the average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure and 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.

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, e.g. road patching but excluding rehabilitation or renewal. It is the 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 needs 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.

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 e.g. the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Operations

Regular activities to provide services such as public health, safety and amenity, e.g. 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, e.g. power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in the operating expense category of financial reports.

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.

Operations, Maintenance and Renewal Financing Ratio

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

Operational Plan*

Council's annual action plan for achieving the community priorities outlined in the Community Strategic Plan. Includes the annual budget and revenue policy.

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 the 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 the depreciable amount (capital renewal expenditure/DA).

Recoverable Amount

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

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.

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.

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.

Road Pavement

The formed and sealed part of the road reserve used for traffic, generally measured from the back of kerb to back of kerb (or shoulder).

Road

Includes the entire gazetted road reserve area from property boundary to property boundary.

Service Potential

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and useful 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.

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.

Sub-Component

Smaller individual parts that make up a component part.

Useful Life

Either:

(a) the period over which an asset is expected to be available for use by an entity, or

(b) the number of production or similar units expected to be obtained from the asset by the entity.

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

Verge

The area from behind a kerb or road shoulder to a private property boundary.

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, 2020, Glossary
* Additional and modified glossary items shown