



TOWN OF BLIND RIVER ASSET MANAGEMENT PLAN

FLEET ASSETS

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1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

This Asset Management Plan (AM Plan) details information about infrastructure assets with 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 over the 10 year planning period. In the future, the AM Plan will link to a Long-Term Financial Plan which typically considers a 10 year planning period.

1.2 Asset Description

This plan covers the infrastructure assets that provide fleet support to the Town's services. The Town has 34 fleet in its inventory. This includes fire apparatus which are also covered in the Fire AMP. The Fleet network is classed by:

- Class 1 - Light Duty Fleet
- Class 2 - Medium Duty Fleet
- Class 3 - Heavy Duty Fleet

The above infrastructure assets have replacement value estimated at \$8,485,128.

1.3 Levels of Service

The allocation of funding in the planned budget is will dictate the performance of these assets and whether they continue providing existing services at current levels for the planning period.

The main service consequences of an insufficient Planned Budget are:

- Increased downtime of fleet assets.
- Increased repair costs for fleets assets.
- A reduction in service that the Town can provide.

1.4 Future Demand

The factors influencing future demand and the impacts they have on service delivery are created by:

- Growth in fleet due to demand for other services. These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand.
- Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.
- Preventative Maintenance (PM) of Fleet using a work order system called Citywide Maintenance Manager
- The Fleet Forecast and development of a Fleet Management Policy as a driver for fleet replacement.

These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

- Fleet assets are scheduled for replacement after 10 years of service to minimize repairs costs and maximize return on trade when purchasing a replacement. This timeframe can be extended or reduced based on the condition assessment and recommendation of mechanic staff as well as other factors.
- Requests for the addition of fleet assets are reviewed for approval by the Director of Public Services.
- Fleet assets due for replacement will undergo a needs analysis to determine if replacement is necessary or if the asset's service can be fulfilled within the existing fleet.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AM Plan includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AM Plan may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years. Therefore, a summary output from the AM Plan is the forecast of 10 year total outlays, which for Fleet Assets is estimated as **\$2,805,814 or \$ 280,581** on average per year. However, the Fleet Asset Management Policy directs the staff to investigate the following factors before deciding on fleet replacements:

- Usage through mileage/ Hours vs Expected, and these readings are tracked using Citywide Maintenance Manager
- Condition and Usability determined through routine inspections and preventative maintenance by mechanic staff.
- Annual operating and repair costs taken from budget and in the future Citywide Maintenance Manager
- Age/Year of asset vs expected lifecycle

1.6 Financial Summary

1.6.1 What we will do

The infrastructure reality is that only what is funded in the long-term financial plan can be provided. The Informed decision making depends on the AM Plan emphasising the consequences of Planned Budgets on the service levels provided and risks.

Forecast Lifecycle Costs and Planned Budgets

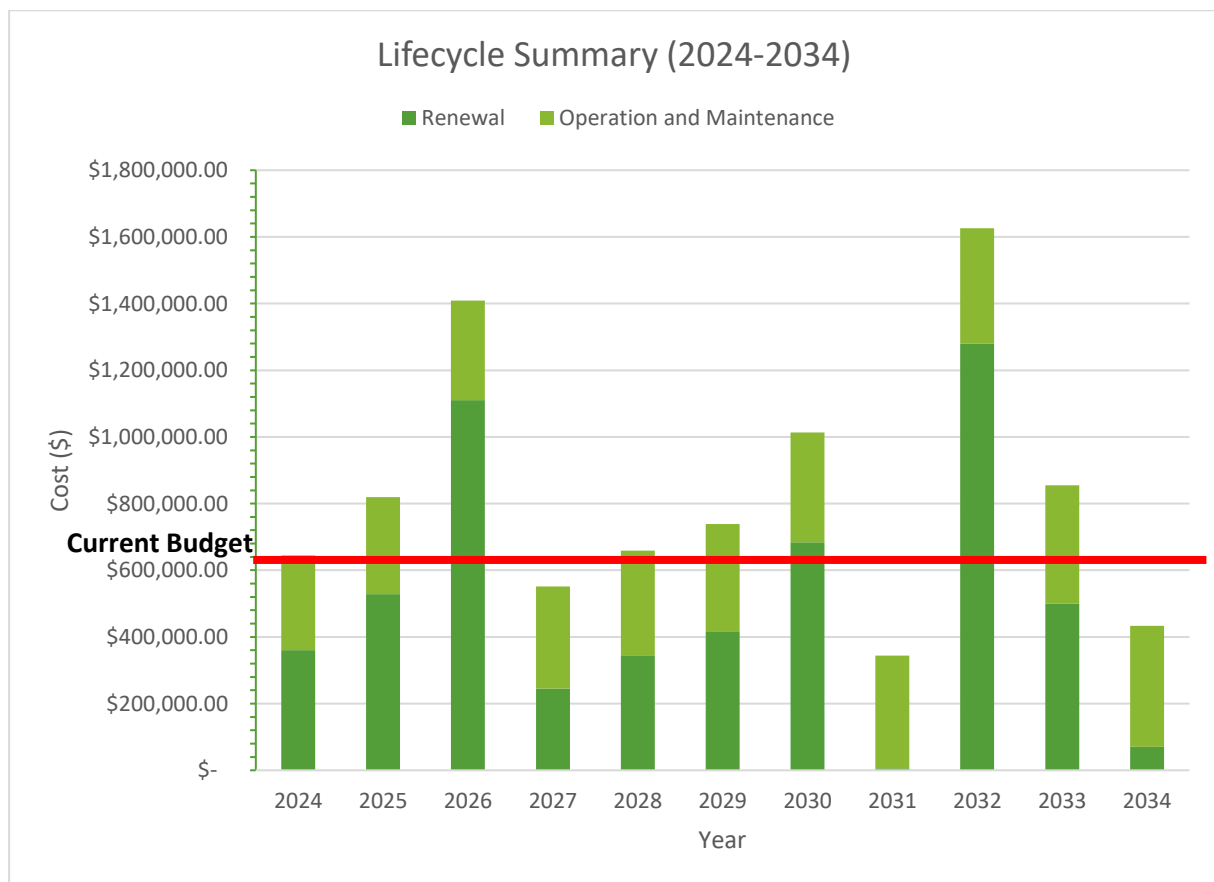


Figure Values are in current dollars.

We plan to provide fleet asset services for the following:

- Operation, maintenance, renewal and acquisition of light, medium and heavy duty vehicles to meet service levels set by Town Council in annual budgets.
- \$2,805,814 within the 10 year planning period.

1.6.2 What we cannot do

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

- Future planned fleet asset renewals

1.6.3 Managing the Risks

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

The main risk consequences are:

- Impact to service of critical services (transportation, water and wastewater services)
- Loss of the arena service and maintenance of recreational spaces
- Loss of fire services

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

- Routine inspection and preventative maintenance
- Forecasted proactive fleet replacement
- Repurposing of fleet assets whenever possible.

1.7 Asset Management Planning Practices

Key assumptions made in this AM Plan are:

- Service levels during the planning period will remain consistent with current levels.
- Future budgets will remain close to current funding levels.

Assets requiring renewal are identified from either the asset register or an alternative method.

- The timing of capital renewals based on the asset register is applied by adding the useful life to the year of acquisition or year of last renewal,
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems and may be supplemented with, or based on, expert knowledge.

The asset register and 2024 fleet forecast was used to forecast the renewal lifecycle costs for this AM Plan.

This AM Plan is based on a medium to high level of confidence information.

1.8 Monitoring and Improvement Program

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

- Improved fleet maintenance tracking using a computerized maintenance management system. This will greatly refine the costs of each asset within the fleet.
- Increased preventative maintenance scheduling. This will vehicle downtime and long-term maintenance costs.
- Development of an organization wide fleet management plan which will standardize our approach to fleet acquisitions and replacements. This will ensure we are looking at every opportunity for efficiency within our current fleet.

2.0 Introduction

2.1 Background

This AM 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 planning period.

The AM Plan is to be read with the Town of Blind River planning documents. This should include the Asset Management Policy and Asset Management Strategy, along with other key planning documents:

- 2024 Fleet Forecast
- Fleet Service List
- 2024 Planned Budget

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

The infrastructure assets covered by this AM Plan include light, medium and heavy duty assets utilized by the Parks and Recreation, By-law, Fire and Public Works departments. For a detailed summary of the assets covered in this AM Plan refer to Table in Section 5.

These assets are used to provide transportation, maintenance, construction, by-law enforcement and emergency response services.

The infrastructure assets included in this plan have a total replacement value of \$8,485,128.

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Council	<ul style="list-style-type: none"> ■ Represent needs of community/shareholders, ■ Allocate resources to meet planning objectives in providing services while managing risks, ■ Ensure service sustainable.
Clerk’s Department	<ul style="list-style-type: none"> ■ Provide leadership with imbedding asset management practices across the organization. ■ Evaluate that adequate resources are available for development and implementation of AM initiatives ■ Ensure consistency of asset management approaches across the Town’s Services Areas ■ Approve future plan revisions ■ Suggest budgetary, property tax/rate and Infrastructure Levy to Council.
Management Team	<ul style="list-style-type: none"> ■ Review department fleet replacements and acquisitions to ensure a collaborative approach to asset usage whenever possible. ■ Recommends project selection criteria and weightings to Council.
Mechanic Staff	<ul style="list-style-type: none"> ■ Track fleet asset condition through routine inspection and preventative maintenance.

Key Stakeholder	Role in Asset Management Plan
	<ul style="list-style-type: none"> ■ Provide replacement recommendations based on condition.

2.2 Asset Hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the fleet asset class and department that is used to determine fleet prioritization and estimated usable life. The Town has 39 fleet assets of which the Public Works Department owns the largest fleet. The fleet hierarchy is broken down into Light, Medium, Heavy Duty and Fire Fleet. This categorization will be used in the Fleet Replacement Policy as well developing Fleet Reserves.

Table 2.1.1 Fleet Assets by Department

Department	Fleet Asset Count
Protective Services	
Fire	6
By-law Enforcement	1
Community Services and Facilities	
Parks and Recreation	6
Public Services	
Public Works	22
Total Assets	34

2.3 Goals and Objectives of Asset Ownership

Our goal for 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. This is planned to be completed in 2025.

Key elements of the planning framework are

- State of Local Infrastructure – current condition at the Town and replacement value of fleet assets
- Levels of Service and continuous improvement– specifies the services and levels of service to be provided
- Asset Management Strategies like risk, disposal, lifecycle, and future demand and how this will impact on future service delivery and managing existing and future assets at defined levels of service
- Financial summary – what funds are required to provide the defined services and funding availability through provision of adequate reserves.
- Continuous Improvement and Monitoring – how the plan can be continuously improved and then monitored to ensure objectives are met. This also includes increasing the asset management maturity, identifying emerging technologies in fleet like greening of fleet by including electric and hybrid fleet, charging stations and related infrastructure.

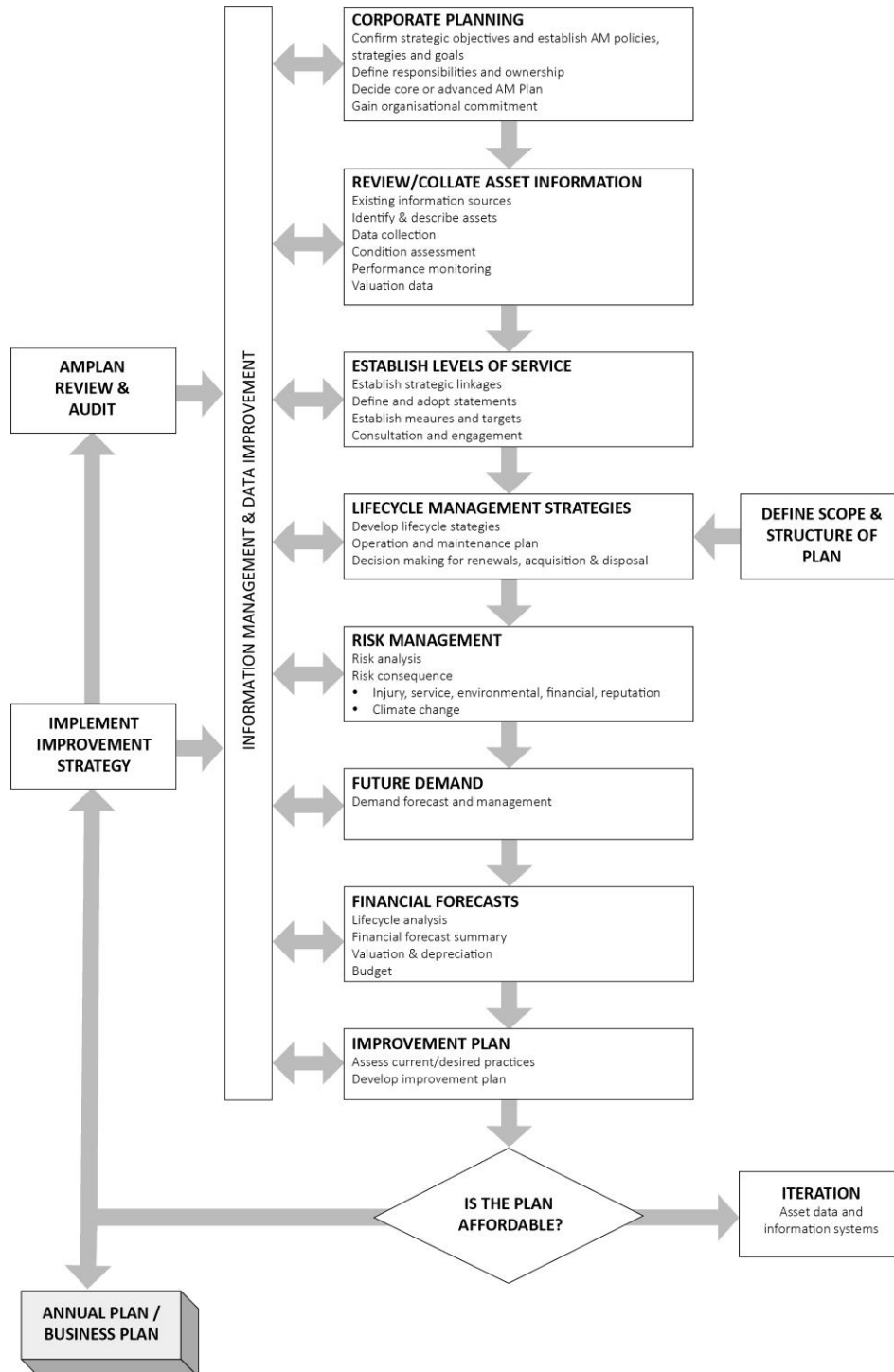
Other references to the benefits, fundamentals principles and objectives of asset management are:

- ISO 55000¹

A road map for preparing an AM Plan is shown below.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11



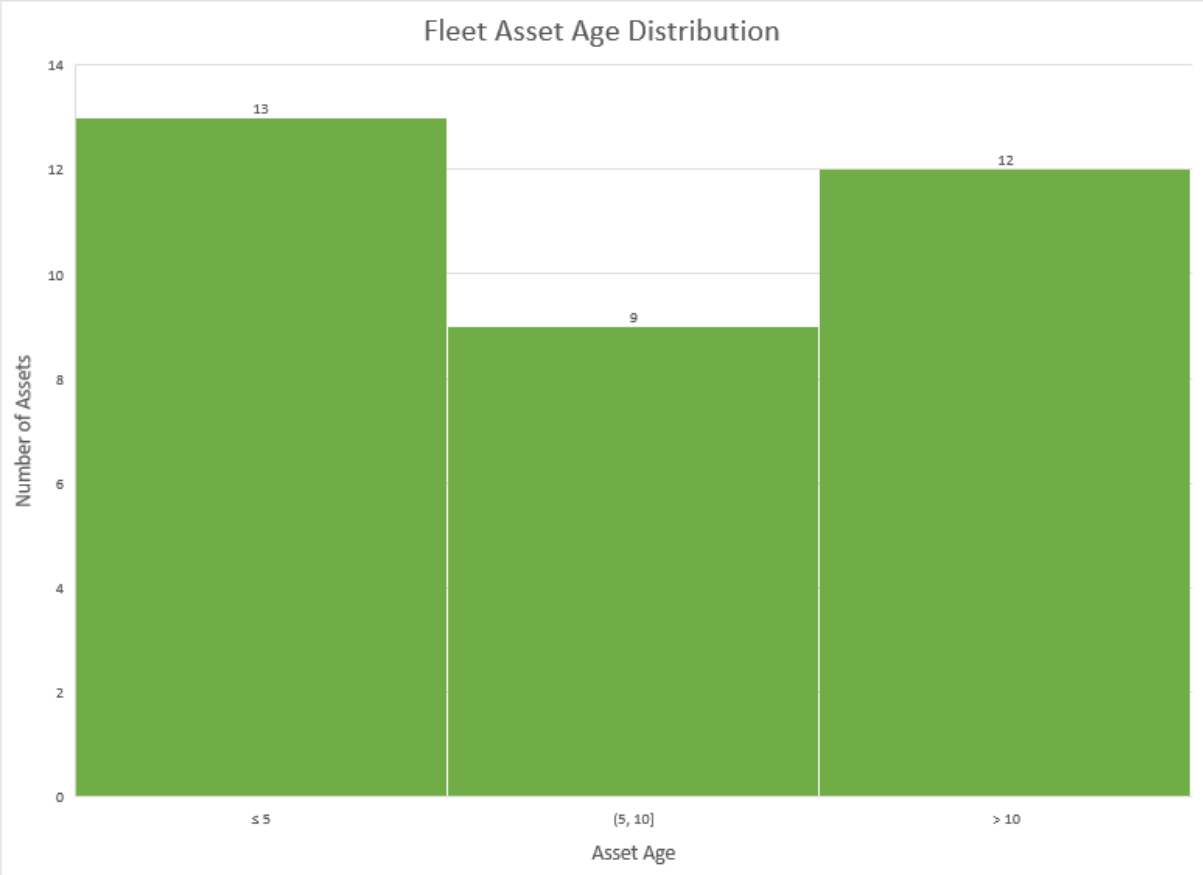
¹ ISO 55000 Overview, principles and terminology

3.0 STATE OF INFRASTRUCTURE

3.1 Fleet Asset Age

The average age of fleet assets by department is 10 years. This age is skewed slightly by the presence of a 33 year old fleet asset and the secondary fire apparatus. The fleet asset age distribution is shown in Figure 3.1.1.

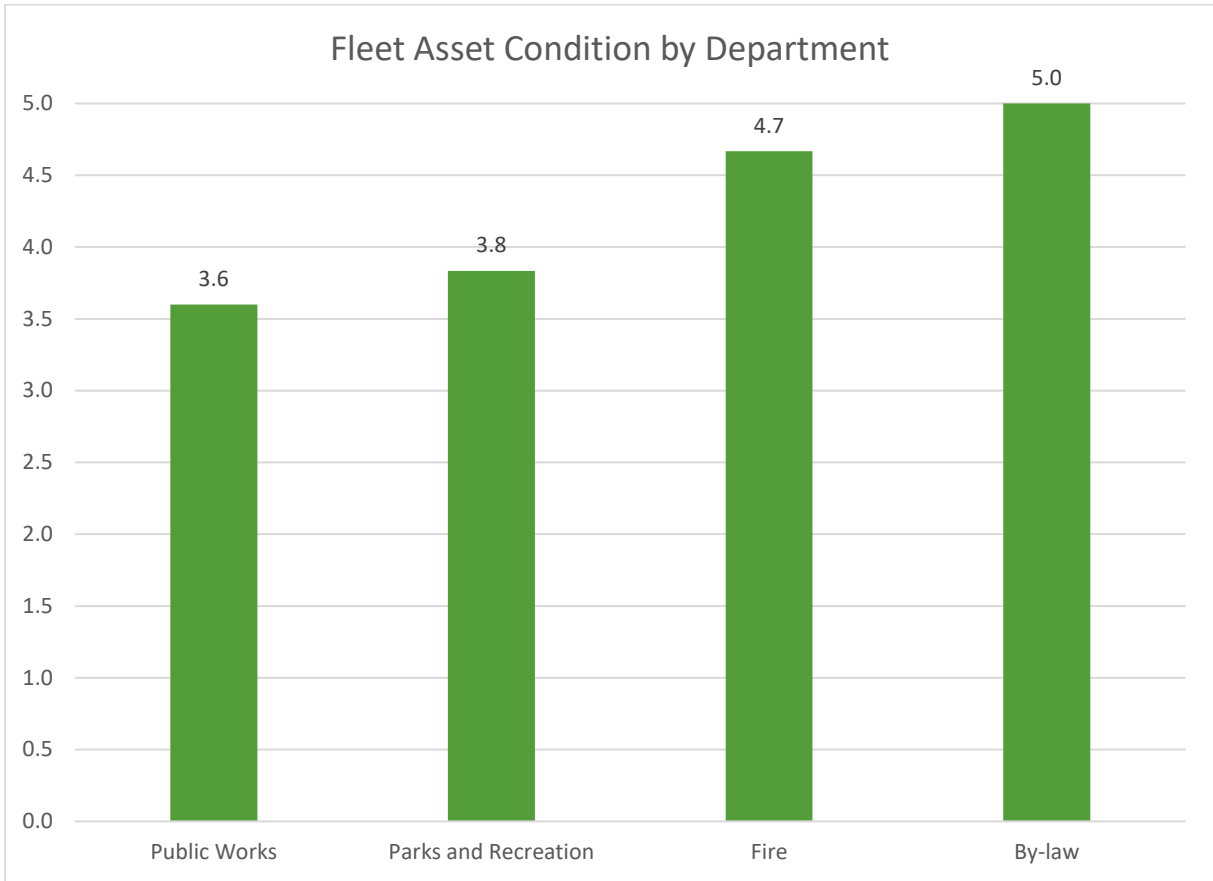
Figure 3.1.1 Fleet Asset Age Distribution



3.2 Fleet Asset Condition

The average condition of fleet assets is 4 out of 5. The distribution of fleet asset condition is shown in Figure 3.2.1.

Figure 3.2.1 Average Fleet Asset Condition by Department



3.3 Forecasted Fleet Replacements

The total replacement cost of the fleet assets is \$8,485,128. The forecasted replacement costs during the 10-year planning period of the Fleet Asset Management Plan are \$5,300,000. These forecasted replacements are broken down by department in Figure 3.3.1 and Figure 3.3.2.

Figure 3.3.1 Fleet Asset Replacement Forecast

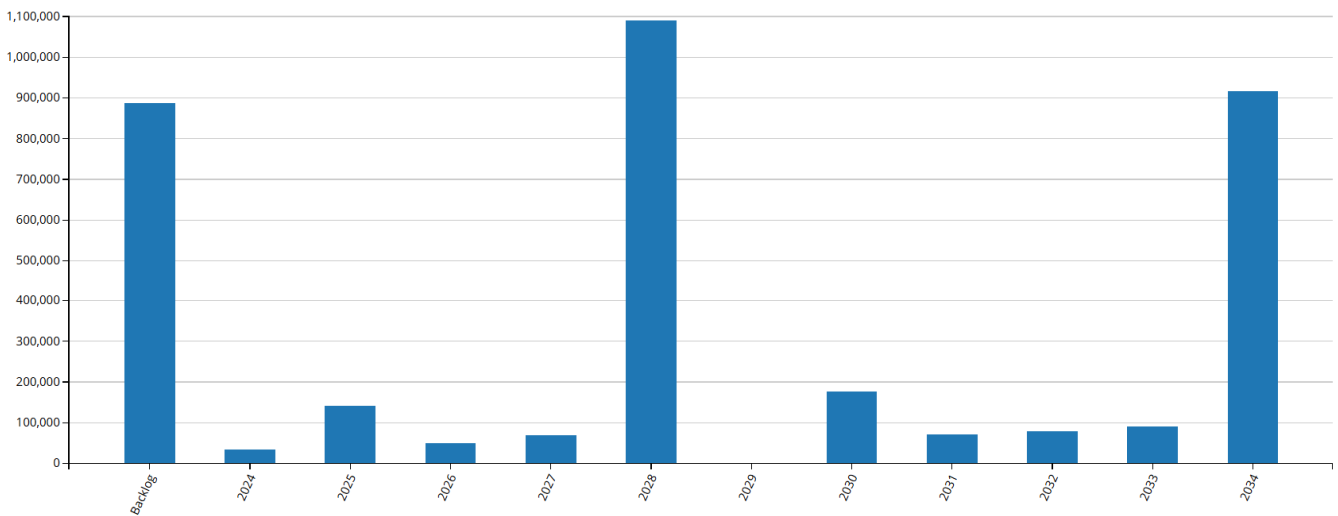
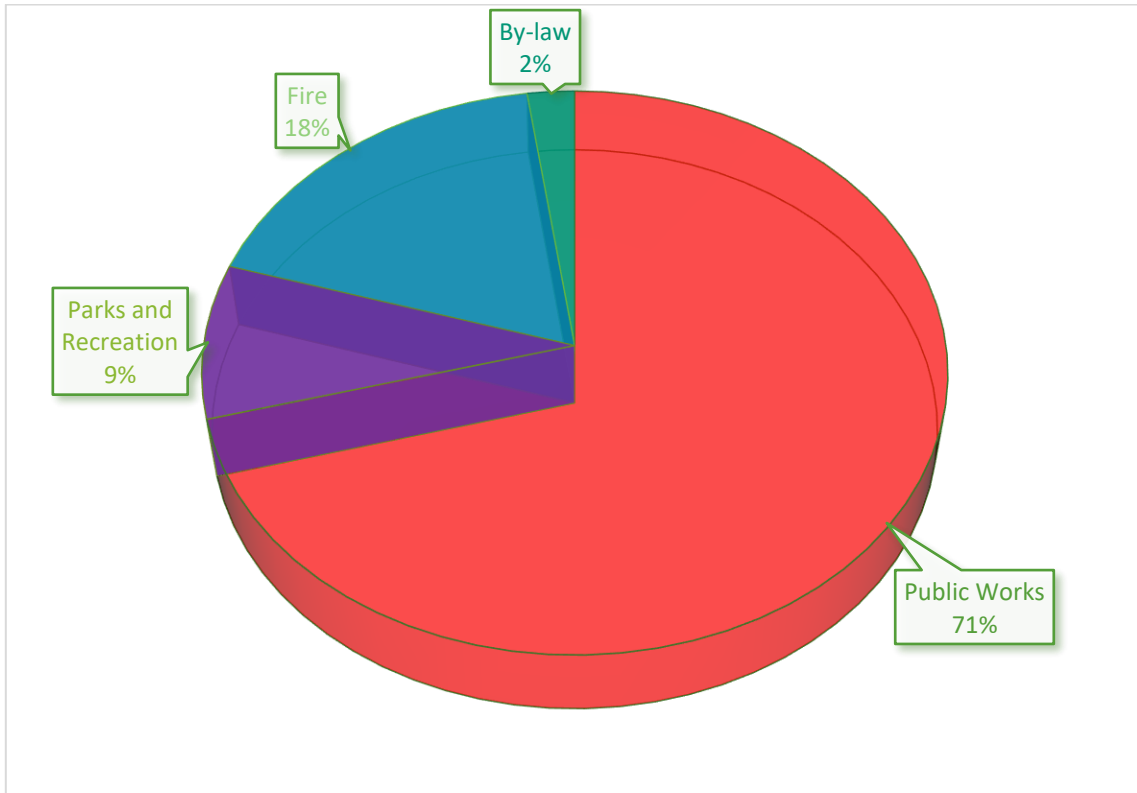


Figure 3.3.2 Fleet Asset Replacement Forecast Distribution by Department (2024 – 2034)



4.0 LEVELS OF SERVICE

4.1 Customer Research and Expectations

This AM Plan is prepared to facilitate consultation prior to adoption of levels of service by the Blind River Town Council. Future revisions of the AM Plan will incorporate customer consultation on service levels and costs of providing the service. This will assist the Blind River Town Council and stakeholders in matching the level of service required, service risks and consequences with the customer's ability and willingness to pay for the service.

4.2 Understand your customers

The Customer is defined as those who use or are impacted by activities associated with providing the fleet services. The fleet service supports various departments and, in the Town, and the services they deliver. The customer base for fleet is primarily other department in the Town used to provide services for the residents.

Table 4.2.1 gives a snapshot of stakeholders and customer groups.

Table 4.2.1: Customer Groups and Stakeholders

<i>Stakeholder</i>	<i>Customer Groups</i>
<i>Service Users</i>	<i>Town Departments</i>
<i>Regulatory Bodies</i>	<i>Ministry of Transportation</i>
<i>External Stakeholders</i>	<i>Council</i>

4.3 Strategic and Corporate Goals

This AM Plan is prepared under the direction of the Town of Blind River vision, mission, goals and objectives.

Our vision is:

Driven by extraordinary volunteers and supported by its community leaders, Blind River is a vibrant and prosperous town that has established itself as a year-round destination and ideal community in which to live and do business.

Our mission is:

Providing quality services and leadership that reflect the social, cultural, environmental and economic needs of the community, while creating regional partnerships and managing resources in a fiscally responsible manner.

Strategic goals have been set by the Town of Blind River Asset Management Strategy. The relevant goals and objectives and how these are addressed in this AM 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
Good Governance	Ensure the Town maintains the Levels of Service for Fleet assets	Routine inspection and maintenance of fleet using Maintenance Manager work orders and inspections for all Town fleet
Environmental Sustainability	Lead in promoting and preserving our unique physical environment	Endeavour to maintain an environmentally conscious fleet whenever possible by opting for the equipment which is not over-sized to meet our needs and electric or hybrid vehicles when applicable in the future both of which have less impact on environment.

4.4 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the Flee Asset service are outlined in Table 4.4.

Table 4.4: Legislative Requirements

Legislation	Requirement
Compliance with MTO (Ministry of Transportation)	Drivers Licensing and MTO requirements for general and CVOR license for the Town fleet
Ontario Regulation 555/06	Compliance of “Hours of Service” on use of Towns fleet
HIGHWAY TRAFFIC ACT, R.S.O. 1990, C. H.8	<p>These regulations outline the key requirements for the following with respect to municipal road systems:</p> <ul style="list-style-type: none"> • Traffic Control Devices • Speed Limits • Parking Regulations • Enforcement of Traffic Offenses • Road Closure and Temporary Traffic Control • Road Maintenance and Repair <p>Compliance with Provincial Regulations</p>
O. Reg. 588/17: ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE	<p>These regulations outline the requirements for the following with respect to municipal road systems:</p> <ul style="list-style-type: none"> • Inventory and Condition Assessment • Performance Monitoring and Reporting • Lifecycle Planning and Asset Valuation • Risk Assessment and Mitigation • Financial Planning and Budgeting • Stakeholder Engagement and Communication <p>Continuous Improvement and Review</p>

4.5 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

Table 4.5: Community Values

Service Objective: To maintain a safe, efficient and reliable fleet.		
Compliance	Compliance of MTO, Highway Traffic Act, Town of New Tecumseth Fleet Management Policy	All Fleet
Safety and Condition	Ensure fleet assets are in Fair to Very Good condition	All Fleet
Conformance	Ensure conformance of MTO guidelines	All Fleet
Environmental Sustainability	% of fleet of commercial fleet which meet emissions testing requirements.	All Fleet

4.6 Community Levels of Service

The Customer Levels of Service as shown in Table 4.6 is reflected under each of the service measures types (, Compliance, Safety and Condition, Conformance, Environment Sustainability). There is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation. These are measures of fact related to the service delivery outcome (e.g. Percentage of Town’s fleet meeting the MTO guidelines or proportion of fleet by condition percentages) to provide balance in comparison to the customer perception that may be more subjective. The Figure 4.6 shows the condition of fleet by asset class and table 4.6 represents the Service Levels at the current state of funding and corresponding performance measures.

Figure 4.6: Average Condition of Fleet Assets by Department

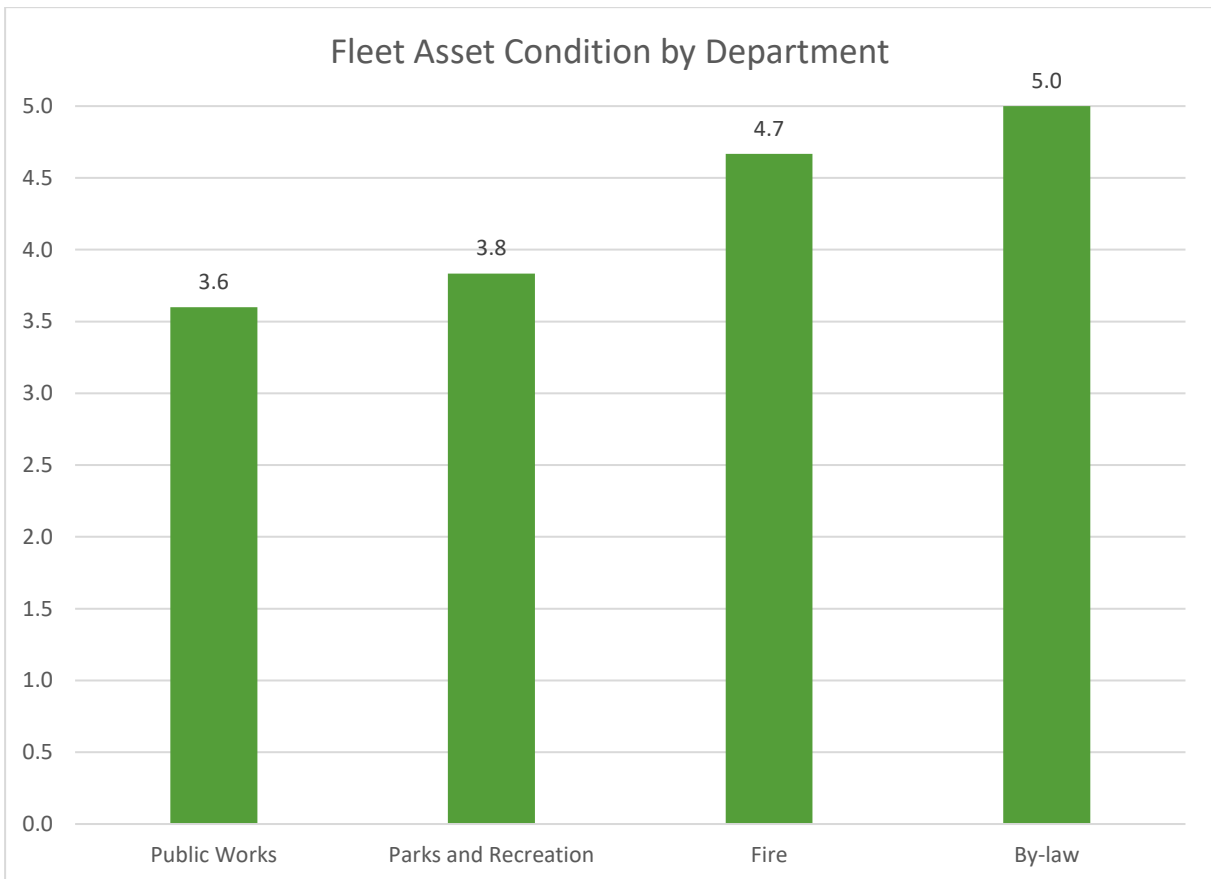


Table 4.6: Community Level of Service Measures

Service Attribute/ Customer Values	Customer Levels of Service	Current Performance	Expected Trend Based on Planned Budget
Compliance	Meeting compliance set by the MTO guidelines	Compliant with Ontario Regulation	This is not expected to change.
Compliance	Compliance with Town's Fleet Management Policy	This policy is planned to be developed to support the 2025 AMP.	This is expected to improve the cost effectiveness of this service moving forward.
Safety and Condition	Condition of Fleet – >85% of fleet assets with condition between Fair to Very Good.	89%	This is expected to remain consistent if the planned budget follows the fleet forecast.
Conformance	Number of Fleet or % age of Fleet that meets the MTO standards	100%	This is not expected to change.
Environment sustainability	% of fleet of commercial fleet which meet emissions testing requirements	100%	This is not expected to change.

4.7 Technical Levels of Service

Technical Levels of Service – To deliver the Community Values, and impact the achieved Community 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 Levels of Service apply to internal stakeholders such as staff, or senior management. The Technical LOS (Levels of Service) description is a brief statement summarizing measures related to operation and maintenance of an asset.

Town of Blind River Management implement and control technical Service Levels to influence the service outcomes. Table 4.7 shows the activities expected to be provided under the current 10-year planned budget allocation, and the forecast activity requirements being recommended in the Fleet AMP. The current technical Levels of Service for fleet are the financial sustainability of operating and maintenance (O&M) costs and renewals in fleet. The measures are important from the Town's perspective as it aims to understand the growth of fleet and hence the corresponding increase in operations and maintenance cost. The renewals in fleet will also help Council and Management to understand the resource capacity in department fleet assets. Also, for the fleet assets to be in a state of good repair, it is important for the staff to know the fleet utilization and replacement levels.

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),

Table 4.7 shows the activities expected to be provided under the current 10 year Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 4.7: Technical Levels of Service

Service Attribute	Technical Levels of Service	2020	2021	2022	2023	2024
Financial Sustainability	Average annual spending on Operations and Maintenance for Fleet.	\$164,550	\$167,650	\$173,050	\$212,050	\$239,000
Reliability	Number of new fleets assets acquired annually.	0	0	0	0	1
	Number of fleet assets replaced annually	3	1	5	3	1

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.

5.0 FUTURE DEMAND

5.1 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. Demand drivers affecting fleet are generally triggered by growth in the Town services or responsibilities, technological changes, economic factors and, environmental awareness, etc. With the growth in the Town and acquisition of assets like new roads or parks will trigger a growth in the fleet to support these services.

5.2 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.

5.3 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 5.3. Further opportunities will be developed in future revisions of this AM Plan.

Table 5.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Climate Change	No consideration of the impacts of climate change are considered in the maintenance of fleet assets	Increased regulations related to emissions could result in an increased cost to meet compliance.	If additional funding is not allocated the level of service will decrease.	<ul style="list-style-type: none"> Evaluate fleet replacements to look evaluate the use of electric vehicles and equipment where able. Allocate additional funds towards these activities.
Population Growth	A process doesn't currently exist to monitor and forecast the impacts of growth on service delivery	Population will increase slowly	The level of service will decrease slowly over time in relation to population growth.	Establish a process for monitoring and forecasting population growth to proactively plan for required expansion/acquisitions to the Fleet network.
Regulatory Changes	The process of addressing changing regulations is reactionary.	New regulations related to vehicle maintenance standards and environmental sustainability will be introduced	The cost of operation and maintenance of the fleet will increase to meet new regulatory requirements.	Monitor industry and regulatory trends, address anticipated changes proactively prior to the ratification of regulatory requirement.

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Public Expectations and Service Levels	Complaints from the public are tracked through an online reporting portal.	Public requests will result in the provision of additional services and additional fleet assets will be required to meet these services.	The operation/ maintenance and replacement costs will increase proportionately to the increase in service	Citizen surveys should be introduced to determine their expectations and involve residents in Asset Management discussions to ensure are aware of the cost to deliver services.
Technological Advancements	No consideration of the impacts of technological advancements are considered in the maintenance/renewal of the road network.	Advancements in transportation technology, such as electric vehicles (EVs) will alter the demands related to the fleet.	The long-term resident expectations will change resulting in a required change to technical levels of service.	<ul style="list-style-type: none"> • EV charging infrastructure may need to be installed.
Increasing Fuel Costs	Minimal consideration is currently given to the continuous rise in fuel costs.	The cost of fuel will continue to increase along with the operation of fleet assets.	This will result in continually increasing costs to deliver the same levels of service.	<ul style="list-style-type: none"> • Whenever possible the fleet assets will be repurposed to minimize the size of the fleet as much as possible. • Speeding and idling are tracked on vehicles via telematics and infractions are followed up on to ensure fuel efficient usage.

5.4 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 Town of Blind River 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 future long-term financial plan.

5.5 Climate Change Adaptation

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

Climate change may have a significant impact on the assets we manage and the services they provide. Future initiatives within the Fleet AMP aim to reduce the greenhouse gas emissions by making an effort to have an environmentally friendly fleet. A lower impact to the environment can be also be achieved by considering electric or hybrid vehicles in place of a standard gas fleet. Greening the fleet consists of the following objectives:

- Reduce greenhouse gas emissions through direct purchase of “cleaner” vehicles/equipment and through operational policies/procedures such as anti-idling, speed enforcement and preventative maintenance.

- Improve overall fuel efficiency of the Towns Fleet through purchase of fuel-efficient vehicles, “right sizing” fleet assets, anti-idling policy, speed management and preventative maintenance.
- Review new technologies and initiatives in Green Fleet Management and implementation of proven initiatives by the Fleet Business Unit.
- Recycle, reuse, recover and reduce, wherever possible, including fleet assets, components, fluids, etc.

Additionally, the way in which we renew existing and acquire new assets should recognise that there is opportunity to build in resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change;
- Services can be sustained; and
- 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 AM Plan.

6.0 LIFECYCLE MANAGEMENT PLAN

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

6.1 Background Data

6.1.1 Physical parameters

The assets covered by this AM Plan are shown in Table 6.1.1.

Blind River’s fleet assets are categorized in 3 categories: light, medium and heavy duty.

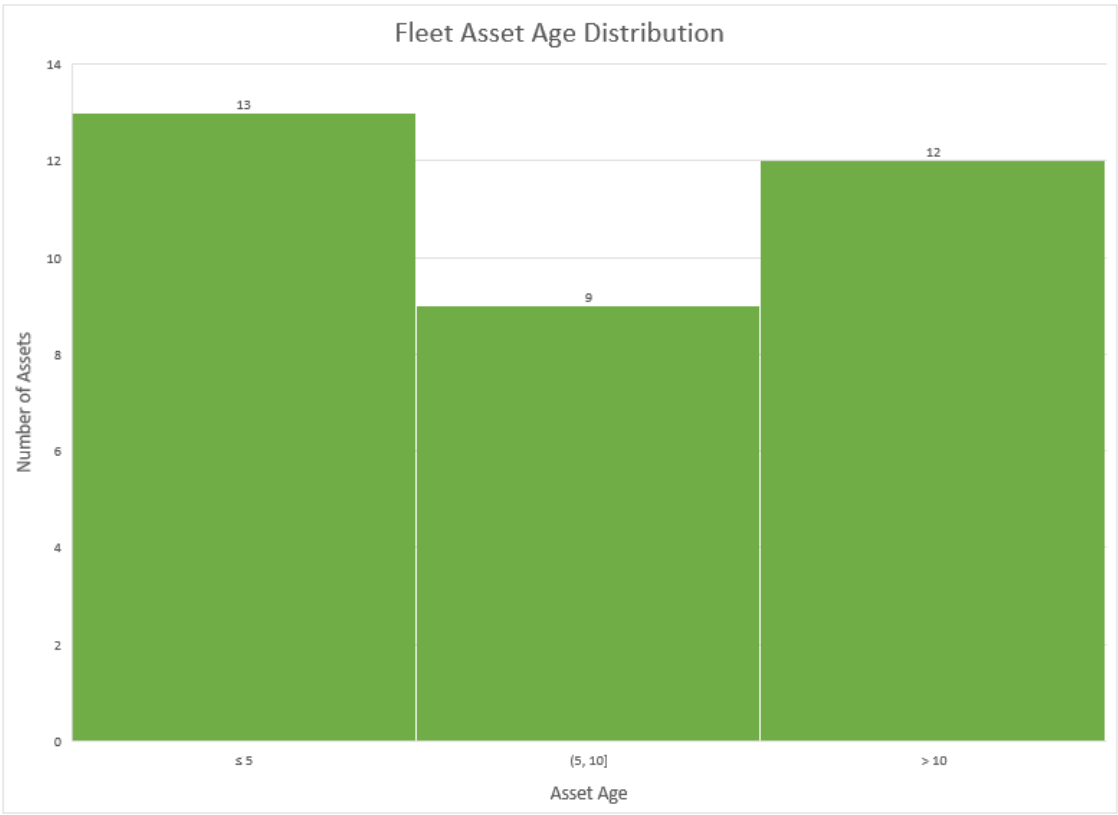
The age profile of the assets included in this AM Plan are shown in Figure 6.1.1.

Table 6.1.1: Assets covered by this Plan

Asset Category	Dimension
Light Duty	13
Medium Duty	2
Heavy Duty	19
TOTAL	34

*All figure values are shown in current day dollars.

Figure 6.1.1: Fleet Asset Age Profile



The general service life for fleet assets is 10 years but replacements evaluate age, service delivered and condition when deciding on the appropriate time to replace an asset. Fire Services assets have a longer

estimated useful life which is further outlined in the Fire Services AMP. The majority of Blind River’s fleet assets (65%) are less than 10 years in age.

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. Locations where deficiencies in service performance are known are detailed in Table 6.1.2.

Table 6.1.2: Known Service Performance Deficiencies

Asset	Service Deficiency
Public Works - Water Truck Fleet #1	This vehicle has greatly surpassed its usable life due to its minimal usage. However, due to its age it faces imminent failure and is unlikely to meet updated inspection practices.
Parks and Recreation – Light Duty Pick-up Trucks Fleet numbers PR-33 and PR-53	The vehicles have greatly surpassed their service life and are in poor condition with a high likelihood of imminent failure.

The above service deficiencies were identified from the 2024 Fleet Forecast

6.1.2 Asset condition

Condition is currently monitored through routine annual or bi-annual inspections

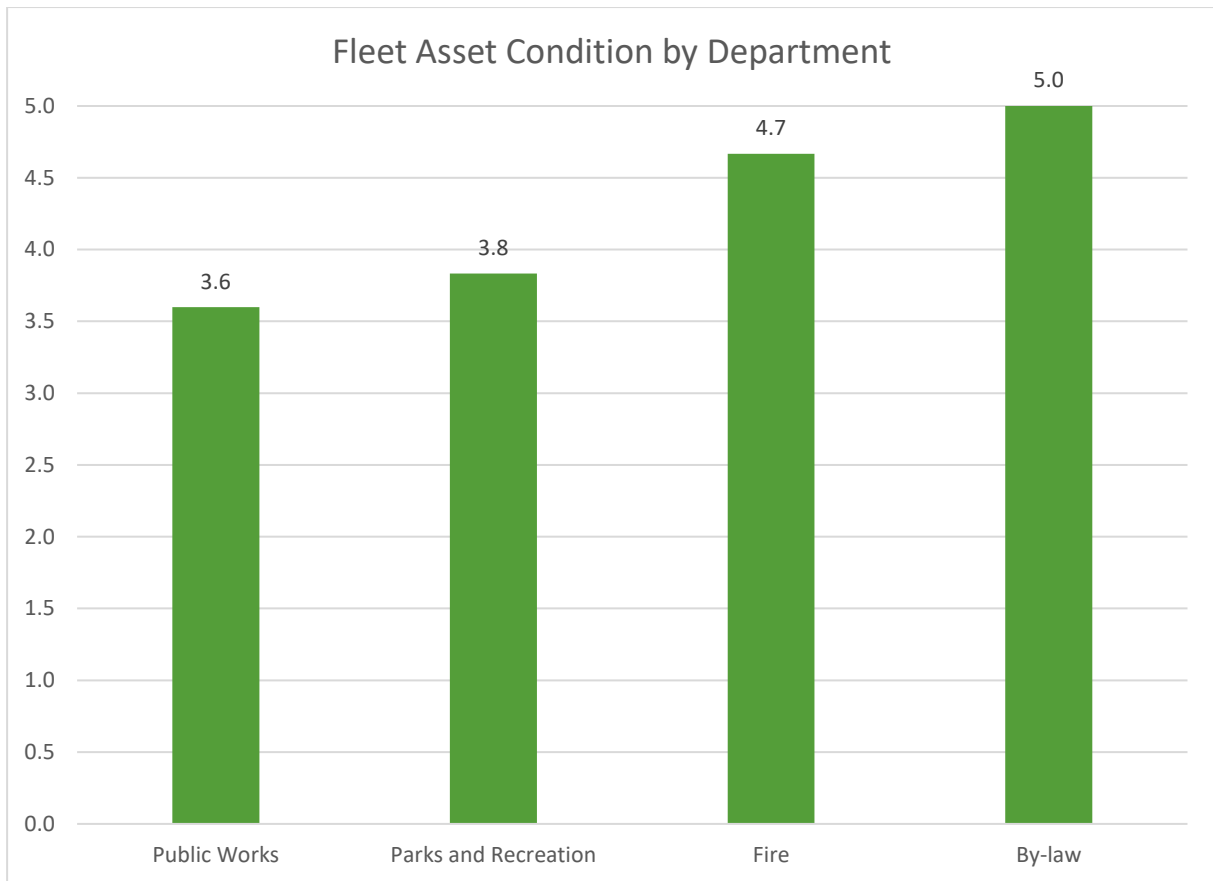
Condition is measured using a 1 – 5 grading system as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results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

Table 6.1.3: Condition Grading System

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

The condition profile of our assets is shown in Figure 6.1.3.

Figure 6.1.3: Asset Condition Profile



Fleet asset condition is currently reported by the mechanic staff through routine inspection of fleet assets and is also based on the frequency of repair. In 2025, this will be further enhanced through the tracking of fleet maintenance using the computerized maintenance management system (CMMS) Citywide Maintenance Manager.

All figure values are shown in current day dollars.

6.2 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 is shown in Table 6.2.1.

Table 6.2.1: Maintenance Budget Trends

Year	Maintenance Budget \$
2020	\$199,750.00
2021	\$197,250.00
2022	\$199,350
2023	\$253,150.00
2024	\$284,200.00

The 5-year average operating budget for fleet maintenance is \$226,740.00. 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 Risk Management section of this plan. The Operations and Maintenance costs varies each year based on new fleet acquisitions and replacements. The average cost between 2020 and 2024 is \$226,740.00 for the existing fleet.

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

Summary of forecast operations and maintenance costs

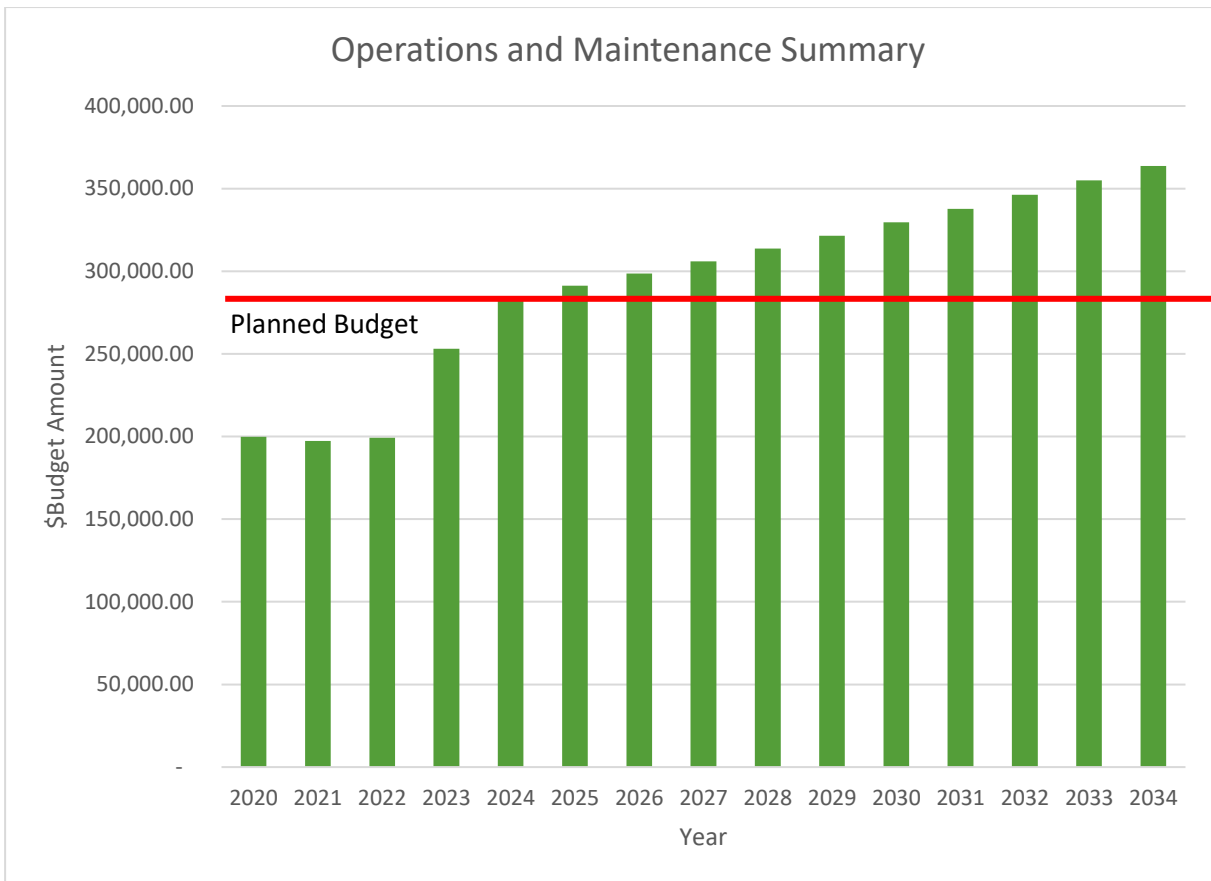
Forecast operations and maintenance costs are expected to vary in relation to the total value of the fleet stock. If additional fleet assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Fleet stock has varied of late due to supply chain and demand issues worldwide.

We have seen an approximate 10% average increase in maintenance costs due to inflation and fuel over the last 5 years. In the last year this inflation has normalized to roughly 2.5%². The fleet is not expected to see growth over the ten-year planning period so the forecast operation and maintenance costs were based on current inflation rates alone.

Figure 6.2.1 shows the forecast operations and maintenance costs based on proposed operations and maintenance planned budget. The figure shows the total operations and maintenance costs with an increase of 2.5% increase in costs which should be reflective of rising O&M costs, fuel, and costs associated with the expansion of fleet for the next 10 years.

² Statista Research Department, & 4, D. (2024). Canada: inflation rate and bank rate monthly 2024. Retrieved from <https://www.statista.com/statistics/1312251/canada-inflation-rate-bank-rate-monthly/#:~:text=Canada's%20inflation%20rate%20and%20bank,2.5%20percent%20by%20October%202024.>

Figure 6.2.1: Operations and Maintenance Summary



All figure values are shown in current day dollars.

6.3 Maintenance Plan

As demands for maintenance of roads, parks, water, and other assets increase in the Town it is necessary to enlarge the Fleet to provide support to these services. Today’s fleet maintenance has become more complex due to advancements in vehicle technology, increased connectivity, environmental initiatives and legislation. Fleet maintenance organizations, whether municipal, commercial, or industrial, must have a way to ensure that vehicles receive the maintenance they need, when they needed it. Deferring or ignoring even minor repairs can indirectly affect the longevity or future maintenance costs of the assets. With any fleet it is necessary to track when vehicles are due for maintenance.

The Town’s Fleet has preventative maintenance programs built into the work order system called Maintenance Manager. A proactive fleet maintenance program will reduce reactive maintenance of fleet and unscheduled down time. The Public Works supervisor will send a notification to respective departments when scheduled maintenance is required. A “preventative maintenance checklist” is built into each maintenance interval. This checklist must be reviewed by the fleet technicians to be considered complete. These tasks can include tire depth check, cab checks, road test checks, lubrication and engine services, cab/body inspection, wheel end and brake checks, exhaust/suspension/ steering component inspection, fuel system inspection and engine/transmission checks. Each checklist is different and is based on the manufacturer’s specification for each fleet asset. In addition, fleet with 4,600 kg Gross Vehicle Weight Rating (GVWR) are required to have annual MTO inspections performed. Fire and Emergency fleet are subjected to NFPA 1911 standards.

6.4 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).

Currently, we use a combination of both methods. The asset register projects replacements based on age which prompts directors to review their assets with the fleet manager and determine the suitability for replacement.

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 6.4. Asset useful lives were last reviewed on October 2024.

Table 6.4: Useful Lives of Assets

Asset (Sub)Category	Useful life
Light Duty	10 years
Medium Duty	10 years
Heavy Duty	10 years
Fire Apparatus	15-25 years
Trailers	15-20 years (based on condition)

The estimates for renewals in this AM Plan were based on the asset register and 2024 Fleet Forecast.

6.4.1 Renewal ranking criteria

Asset renewal is typically undertaken by fleet prioritization for the fleet when the asset is nearing or at end-of-life is done by analysing the details pertaining to each unit in the following order:

- Economic Lifecycle Analysis
- Mileage/Hours of the Asset
- Condition/Usability of the Asset
- Annual operating/repair costs of the asset (i.e., one-year retention costs exceed the estimated value of vehicle/equipment.)
- Age or Year of Asset

The ranking criteria and weighting used to determine the priority of identified renewal proposals in the Fleet Management Policy is detailed in Table 5.3.6.2.

Table 6.4.1: Renewal Priority Ranking Criteria

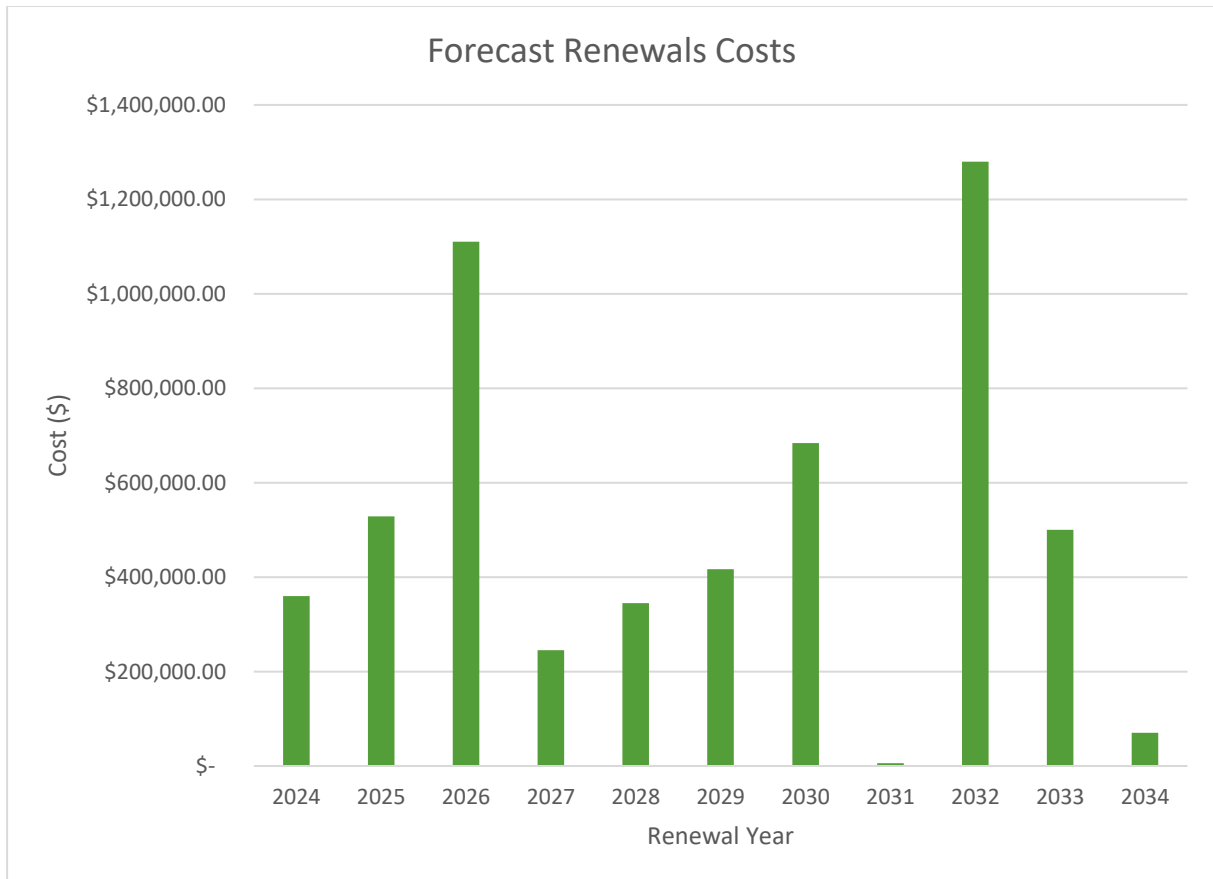
Criteria	Weighting
Mileage/ Hours vs Expected	20%
Condition/Usability	40%
Annual Maintenance Costs vs Estimated Value	30%
Year of Asset purchased vs Expected Lifecycle	10%
Total	100%

The estimated service life schedule was developed based on fleet management best practice and historical data. This service life schedule will continue to be refined as we gain data additional data on the maintenance costs of the fleet assets through the use of our CMMS.

6.5 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 6.5.1. A detailed summary of the forecast renewal costs is shown in Appendix D.

Figure 6.5.1: Forecast Renewal Costs



All figure values are shown in current day dollars.

The forecast renewals vary significantly from year to year with 2026 and 2032 being very high years of reinvestment (\$1,000,000). The average annual renewal cost is \$554,550. Renewals scheduled in 2026 and 2032 could be deferred based on condition or renewed early to reduce the replacement costs in those years. \$554,550 will need to be budgeted each year at a minimum to maintain the future renewals and ensure operation and maintenance costs stay as low as possible. When possible, fleet assets may be renewed through

grant funding at a reduced cost. A grant for the accessible transit bus has been approved, when this funding is received this will further reduce the renewal costs in 2026.

6.6 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 Town of Blind River.

6.6.1 Selection criteria

Acquisition of fleet are new assets that did not previously exist or works which will upgrade or improve an existing fleet beyond its existing capacity. They may result from growth, demand, social or environmental needs. New fleet acquisitions are budgeted in their service departments (not the Fleet Department). The growth of fleet will depend on the demand for services or change in service levels. Fleet acquisition expenditures on new assets are forecasted in the future Long-Term Financial Plan.

There are no acquisitions planned for fleet assets at the current time. In 2026, increased to services may be proposed when the proposed service levels are completed. Fleet aquisitions may be required to meet the increased levels of service and the proposed budget will need to be increased to reflect these changes.

6.7 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 6.7. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined in Table 5.6. Any costs or revenue gained from asset disposals is included in the long-term financial plan.

Table 6.7: Assets Identified for Disposal

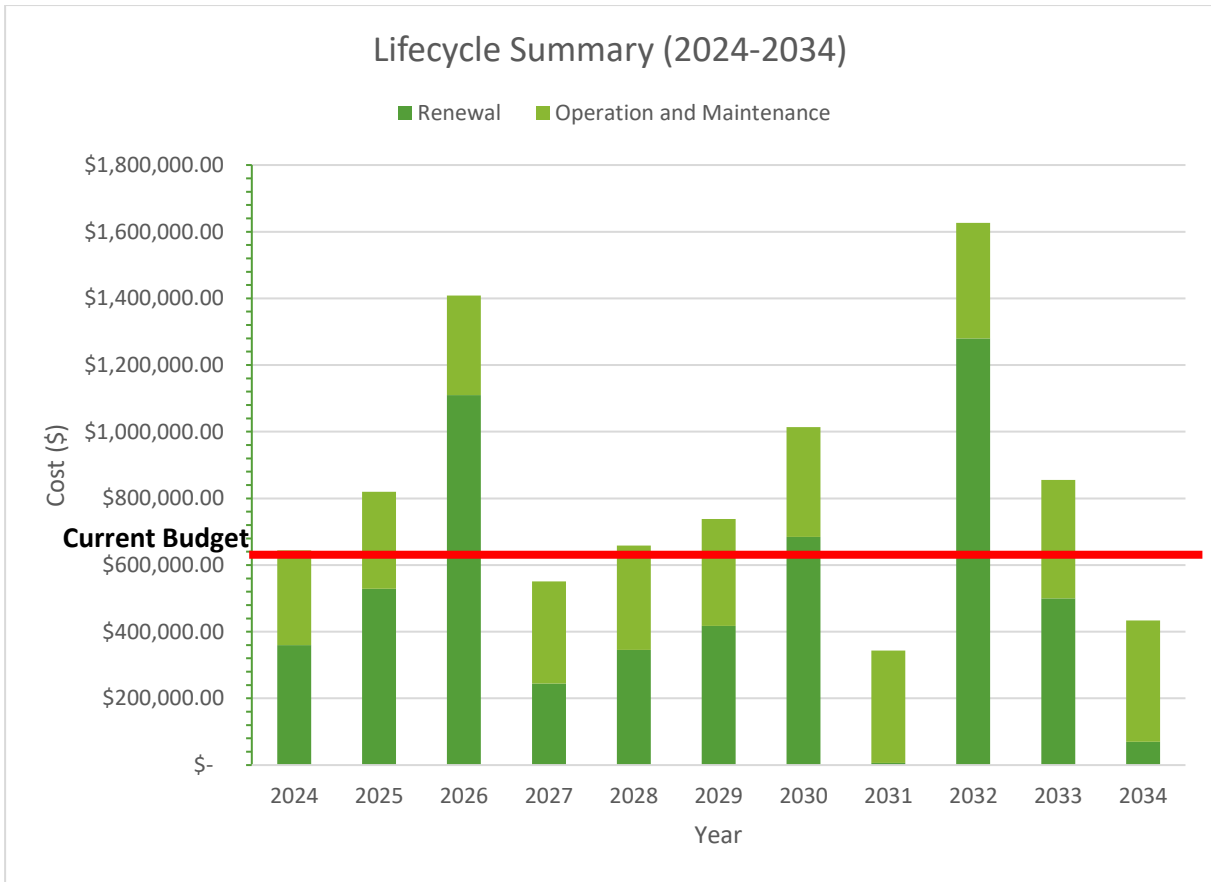
Asset	Reason for Disposal	Timing	Disposal Costs	Operations & Maintenance Annual Savings
#1 1991 GMC C85 (Water Truck)	We are looking to renew and asset with equipment that will also fill this assets service level.	2025	0	Approximately \$8,000.00

6.8 Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 6.8.1. 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 6.8.1: Lifecycle Summary



All figure values are shown in current day dollars.

The planned annual budget for fleet assets will need to meet requirements of the future lifecycle forecasts for these assets to maintain the current level of service that these assets provide to the municipality and the departments who use them. The current budget is insufficient to meet the lifecycle costs of fleet assets in 7 of the 10 years within the planning period.

7.0 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.

An assessment of risks 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.

7.1 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 7.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 7.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Public Works Fleet	Accidents, breakdowns	Diminished capability to maintain essential services < Transportation and waster/wastewater distribution
Facilities Fleet – Ice Resurfacers	Accidents, breakdowns	Complete loss of service for the arena.
Fire Fleet	Accidents, breakdowns	Loss of capability to provide Emergency Services

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.

7.2 Risk Assessment

The risk management process used is shown in Figure 7.2.1 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.

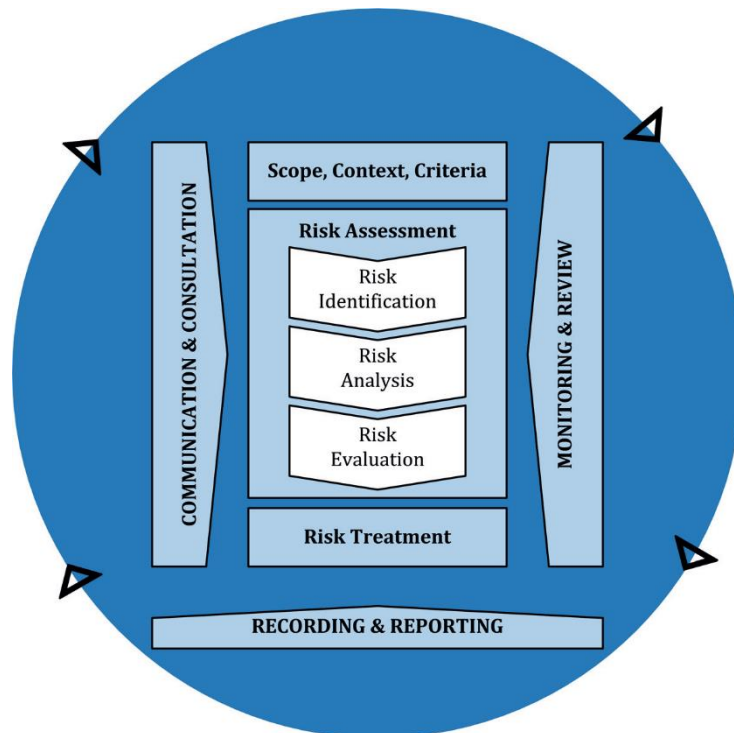


Fig 7.2.1 Risk Management Process – Abridged
 Source: ISO 31000:2018, Figure 1, p9

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.

The Town’s Asset Management Risk Strategy provides a detailed description of consequence and risk scores which have been incorporated into the Town’s Asset Management technology; Citywide. The probability of failure is based on the condition of the assets shown in Figure 7.2.2. The consequence of failure helps in determining the impact if failure does occur as shown in Figure 7.2.3. The consequence and probability together provide risk scores for each of the fleet assets. Figure 7.2.4 is the risk matrix for the Town.

Table 7.2.2 Probability of Failure Model

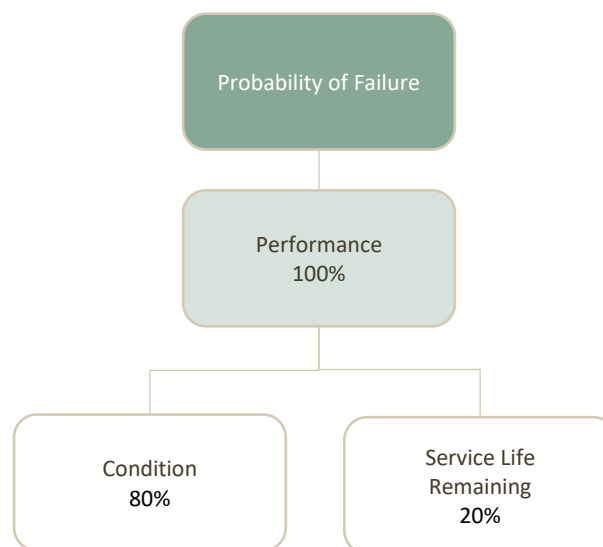
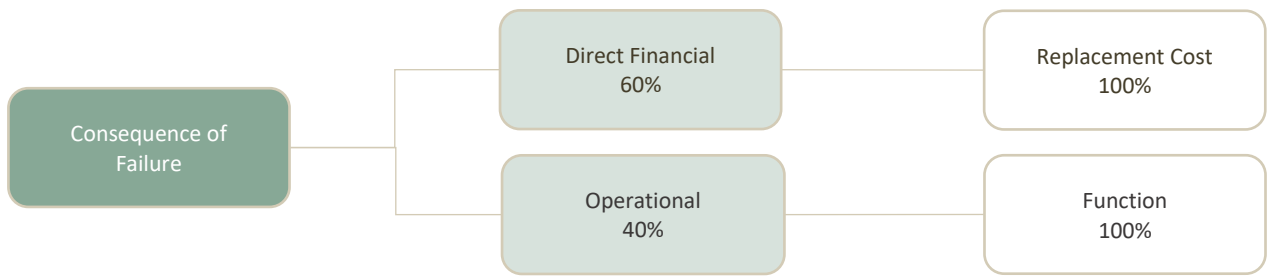
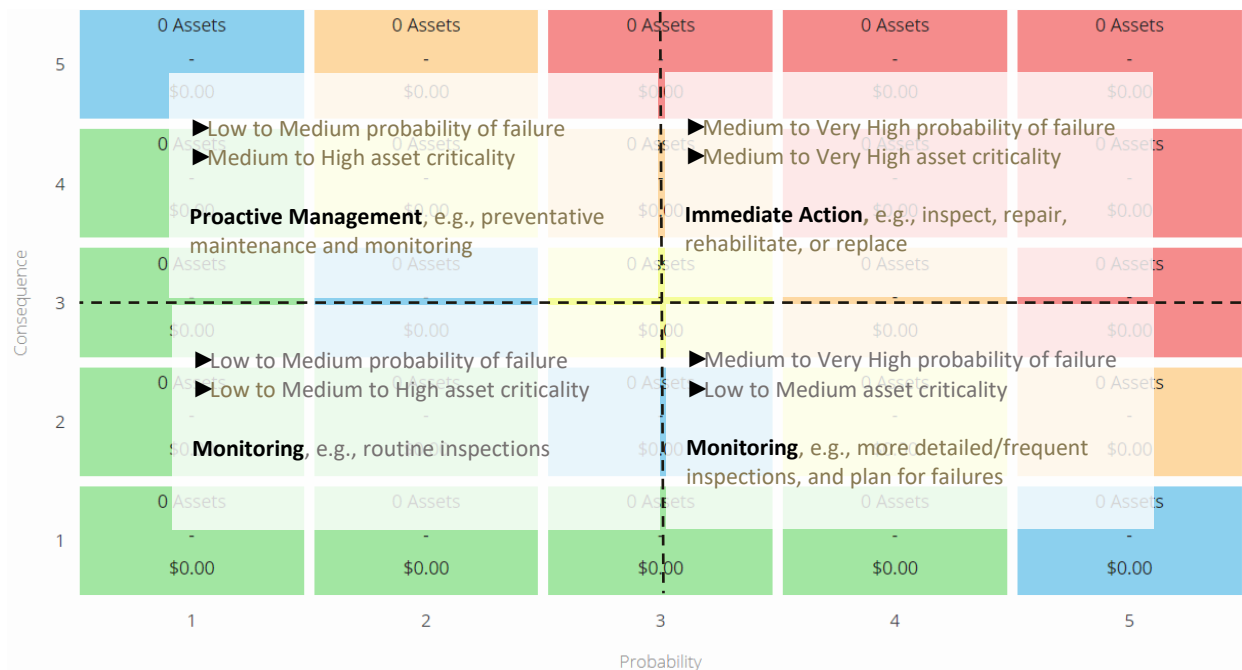


Table 7.2.3 Consequence of Failure Model



An assessment of risks 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.

Table 7.2.4 Risk Matrix



Critical risks are those assessed with ‘Very High’ (requiring immediate corrective action) and ‘High’ (requiring corrective action) risk ratings identified in this plan. The residual risk and treatment costs of implementing the selected treatment plan are reported in each plan. It is essential that these critical risks and costs are reported to management and the Town Council. There are currently no High or Very High risks associated with fleet assets.

7.3 Infrastructure Resilience Approach

The services provided by fleet can be impacted by the disruption from natural disasters, infrastructure failures, and human threats. 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, and to respond to possible disruptions, and to ensure continuity of service. The consequences of disruptive events can be minimized by pre-emptively safeguarding vehicles, fuel availability, and infrastructure and by providing back-up power to fueling stations and maintaining a ten-day supply of fuel in case of emergencies.

Our current measure of resilience is shown in Table 7.3 which includes the type of threats and hazards and the current measures that the organization takes to ensure service delivery resilience. Taking a risk-informed approach to resilience planning allows the Public Services department to proactively protect fleet assets and mitigate damage at the time of emergency or in the aftermath of a disruptive event. Directors can play a role in securing fleet vehicles, and transportation infrastructure from theft or damage. Our current measures of resilience is shown in Table 7.3 which includes the type of threats and hazards and the current measures that the organisation takes to ensure service delivery resilience.

Table 7.3: Resilience Assessment

Threat / Hazard	Assessment Method
Accidents	Number of accidents involving the fleet
Breakdown	Number of reactive maintenance events and incidents of vehicle damage.
Fuel Unavailability	Record of incidents where fuel tanks reach 30% or lower.

7.4 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.

Future iterations of the asset management plan will include:

- Incorporation of risk generated from our asset register for each fleet asset and use this factor for fleet prioritization
- Improved understanding of fleet utilization in each department through the organization wide implementation of Maintenance Manager (CMMS)

7.4.1 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. There are no anticipated service trade-offs that will be required during the planning period.

7.4.2 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. There are no anticipated risk trade-offs that will be required during the planning period.

8.0 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 scale³ in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	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 $\pm 2\%$
B. High	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 $\pm 10\%$
C. Medium	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 $\pm 25\%$
D. Low	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 $\pm 40\%$
E. Very Low	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 7.5.2.

Table 7.5.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Medium	Demands are built on commonly demands on municipal infrastructure
Growth projections	High	Growth is based a recent population and housing report completed by CanCensus
Acquisition forecast	High	There are currently no planned increases to Levels of Service
Operation forecast	Medium	
Maintenance forecast	Medium	
Renewal forecast		
- Asset values	High	[Enter comment on reliability of data in AM Plan]
- Asset useful lives	Medium	Additional information will further refine these in future plans.
- Condition modelling	Medium	The addition of the CMMS will provide additional data on repair costs which will improve condition modelling.
Disposal forecast	High	

³ IPWEA, 2015, IIMM, Table 2.4.6, p 2 | 71.

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



9.0 PLAN IMPROVEMENT AND MONITORING

9.1 Status of Asset Management Practices⁴

9.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data. The source of the data is planned budgets and historical expenditures.

9.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source of the data is the 2024 fleet forecast as well as the asset register maintained in Citywide.

9.2 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 9.2.

Table 9.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Development of a Fleet Management Plan	Director of Public Services		3 months
2	Add the condition assessment to all fleet assets to the asset register	Director of Public Services		2 months
3	Consolidate departments across the vehicle assets.	Director of Finance and Public Services		2 months
4	Make names and descriptions of assets consistent amongst all assets and to include fleet #.	Director of Public Services		2 months
5	Update replacement costing in asset register	Director of Public Services		2 months
6	Segregate the costs of fleet maintenance from the overall Shop and Yard budget using maintenance manager	Director of Finance		Ongoing

9.3 Monitoring and Review Procedures

This AM 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, acquisition and asset disposal costs and planned 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 within 1 year of each Town Council election.

⁴ ISO 55000 Refers to this as the Asset Management System

9.4 Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the future long-term financial plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans,
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 90 – 100%).

10.0 REFERENCES

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