

## **Enterprise Asset Management Plan**

## **Executive Summary**

In 2019, the Council of the Town of Blind River approved a Strategic Asset Management Policy aimed at ensuring its municipal infrastructure systems are supported by plans and financing decisions that demonstrate effective service support and appropriate regard for managing lifecycle costs.

The Strategic Asset Management Policy was prepared to meet the first requirement of *O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure* under the *Infrastructure for Jobs and Prosperities Act, 2015. Ontario Regulation 588/17* was formally approved by the Province on December 13, 2017. The Regulation dictates the scheduled phase in dates for asset management policies and plans and provides a description of the content required for each milestone. For example: asset management plans are to describe an asset's expected service level and performance based on technical data.

In June 2022, the Town of Blind River achieved the critical second milestone of the Provincial Regulation with the approval of the Asset Management Plan - 2021. The plan successfully met the requirements of *O. Reg. 588/17* for core assets. The regulation defines core infrastructure as water, wastewater, stormwater management, roads, bridges, and large culverts. The Town of Blind River's Asset Management Plan – 2021 can be found on the Town's website. This Plan exceeded the requirements by also including a high-level analysis of all asset classes and a financial strategy to provide a path for the Town to address infrastructure funding gaps over the long term.

The Enterprise Asset Management Plan (2024) is a strategic document that uses a risk-based approach to asset management planning. The plan meets the second phase requirements of *O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure* with a mandated completion date of July 1, 2024 (formerly 2023).

Asset classes included within this asset management plan are the previous asset classes as described above in the 2021 AMP as well as more in-depth Fire services, Fleet & Equipment, Parks & Recreation, and Buildings & Facilities.

The asset class specific asset management plans describe the characteristics and condition of infrastructure assets along with action and investment plans, required to achieve the current level of service set out by Council.

The Enterprise Asset Management Plan is a consolidated and integrated document of core infrastructure asset management plans that provide a clear integrated and holistic picture of core infrastructure and their asset maturity level. The plan will serve as a roadmap for future action plans by defining the next steps which include the legislated milestones to further the maturity of asset management planning. A state of the infrastructure provides comprehensive information regarding the asset classes included within the plan.

The Enterprise Asset Management Plan was developed in line with the Strategic Asset Management Policy which provides the guiding principles for the plan.

Unless otherwise stated, all financial values in this asset management plan are described in 2024 dollars.

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## 1. Introduction

Asset management is the systematic and coordinated activities and practices of an organization to realize value from an asset by optimally and sustainably delivering on its service objectives through cost-effective lifecycle management of assets.

Service delivery to the community is based on managing existing assets in an environmental, social, and economically sustainable manner to reduce cost and risks, while complying with regulation.

The majority of the Town's assets have long service lives extending beyond a decade. These assets require significant ongoing investment in operation, maintenance, and renewal activities to maintain a safe and reliable condition to support service delivery.

The Town, like most Canadian municipalities, must overcome multiple challenges in managing assets including aging infrastructure; expectations of higher levels of service with minimal financial impact; increasingly demanding and complicated legislation with environmental requirements; and mitigation of the increased risk involved with the execution of service delivery. As a result, the Town is moving to implement a focused and calculated approach to address these challenges of managing infrastructure assets with the development and implementation of the Enterprise Asset Management Plan.

## 1.1. Background and Legislation

In June of 2011, the province of Ontario released a long-term infrastructure plan for Ontario entitled *Building Together*. *Building Together* laid out a standardized and calculated approach to asset management planning. *Building Together* in conjunction with the *Infrastructure for Jobs and Prosperity Act, 2015* established a criteria and timeline for all municipalities to have an asset management plan in place by December 31, 2016. An asset management plan was required by this date to continue to be eligible for Federal and Provincial Government funding. In response, PSD was retained to produce the Town of Blind River Asset Management Plan (2017).

On December 13, 2017, the province approved *O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure* under the *Infrastructure for Jobs and Prosperities Act, 2015.* The Town has been working to develop asset management plans for all infrastructure assets that comply with legislation. This includes describing the asset's expected performance level (that is, its "service level") based on technical data.

In 2019, Council of the Town of Blind River achieved the first requirement of *O. Reg. 588/17* with the approval of the Strategic Asset Management Policy aimed at ensuring municipal infrastructure systems are supported by plans and financing decisions that demonstrate effective service support and appropriate regard for managing lifecycle costs.

On April 16, 2021, the Province formally announced an amendment to *O. Reg. 588/17*. The amendment extends the legislative phase-in schedule by one year. Specifically, municipalities must have had approved phase one asset management plans for core assets (roads, bridges and culverts, water, wastewater, and storm water management systems) completed by July 1, 2022.

These plans identified current levels of service and the cost to maintain the current level of service. With the approval of the Enterprise Asset Management Plan (2024), the Town of Blind River will meet the second phase requirement of *O. Reg. 588/17*. The extension to the phase-in schedule is further reflected in the asset management roadmap.

Asset management represents the management of infrastructure, using proven lifecycle strategies that have been evolving over several years. Throughout this time, the Town has developed asset management planning knowledge that is formally defined as part of the strategies within the Enterprise Asset Management Plan. The plan will culminate with the establishment of an improved and evolving long-term strategy to address the Town's investment in infrastructure.

## 1.2. Maturity

The Federation of Canadian Municipalities (FCM) has prepared an Asset Management Readiness Scale to help municipalities understand where they started, where they currently are, and where they would like to be in asset management maturity. The levels that the Town of Blind River has currently achieved and will strive to achieve in the FCM Asset Management Readiness Scale are provided in Figure 1, which follows the description of the tool itself and how the tool is applied.

The readiness scale measures and analyzes five competency areas, with each competency acting as a building block. The five building block competencies include the following descriptions as provided by the FCM:

**Policy and Governance**: By developing this competency, the Town is putting in place policies and objectives related to asset management, bringing those policies to life through a strategy and roadmap, and then measuring progress and monitoring implementation over time.

This competency helps create the policy structure that lays out asset management goals and how they will be achieved, leading to organizational alignment and commitment.

**People and Leadership**: By developing this competency, the Town is setting up cross-functional teams with clear accountability and ensuring adequate resourcing and commitment from senior management and elected officials to advance asset management.

Asset Management requires collaboration and integration from multiple perspectives. At a minimum, the asset management team should be a representation of people who understand finance, decision-making, and the planning and operations of each relevant service area. This competency helps create and sustain connections across teams and build leadership in asset management.

**Data and Information**: By developing this competency, the Town is collecting and using asset data, performance data and financial information to support effective asset management planning and decision-making.

This competency helps improve data management practices to ensure appropriate asset information is available as required.

**Planning and Decision-Making**: By developing this competency, the Town is documenting and standardizing how the organization sets asset management priorities, conducts capital, operations, and maintenance (O&M) planning, and develops budgets.

This competency helps implement asset management, by ensuring that asset management

policies, objectives and information are consistently informing organizational plans.

**Contribution to Asset Management Practice:** By developing this competency, the Town is supporting staff in asset management training, sharing knowledge internally to communicate the benefits of asset management, and participating in external knowledge sharing.

This competency helps build the organization's overall asset management practice by ensuring that internal stakeholders are well-informed and that the organization stays current with, and contributes to, leading practices, training, and education.

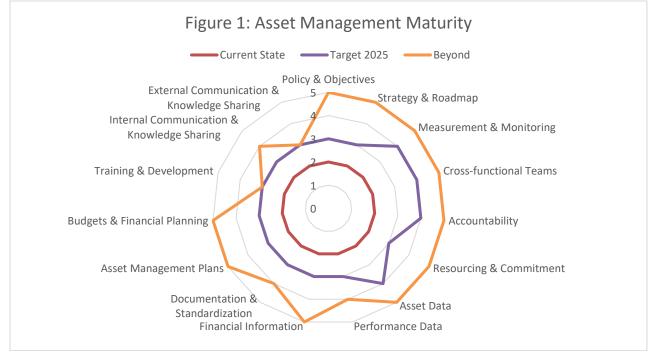
Each of the five competency areas is organized on a progressive scale of five levels. Each level is further broken down into three outcome areas. The outcomes describe milestones in asset management from initial investigation of practices to adoption, and eventually to full integration of asset management practices into daily routines. Each of these outcome areas need to be achieved by the entire organization before a level can be achieved. Examples of outcomes within the readiness scale are Policy and Objectives, Asset Data, Financial Information, Asset Management Plans, Training and Development, among others.

Various asset classes may progress in the competencies at different rates and be further along in some competencies than in others. Furthermore, some asset classes may be further along with asset management practices than others. The entire organization must achieve each outcome prior to advancing a level, meaning the overall rating should reflect the less advanced asset classes. The levels are useful in planning for improvement.

Once the Town achieves a Level 4 in the Asset Management Readiness Scale, the Town will be roughly aligned with the requirements of the ISO 55000 standard; which is a significant accomplishment. The ISO 55000 provides an overview of asset management, its principles and terminology, and the expected benefits from adopting asset management.

The Town's asset management maturity has been measured in the readiness tool on several occasions during grant applications with the FCM. The latest maturity measurement and targets are provided in Figure 1. Please note, the readiness scale is intended for the Town of Blind River to measure progress and set goals, it is not intended to benchmark or compare progress of various municipalities. For further details on the readiness tool and the various competency outcomes and levels please visit: <u>https://fcm.ca/en/resources/mamp/tool-asset-management-readiness-scale</u>.

## Figure 1: Asset Management Maturity



Currently, the Town's asset management maturity score is a Level 2. As an example of what is required to improve, per the FCMs scoring criteria, the Training and Development Level is at a Level 2. To achieve a Level 4, an asset management training plan must be in place for **all** Town staff, even staff whose job descriptions do not include the operation or management of infrastructure assets. Currently, the approach to training and development is to implement proactive development training and role appropriate training for staff. If the Town were to develop a training plan and provide asset management training to all staff, the Training and Development score would move directly to a Level 5. A copy of the Asset Management Readiness Scale Assessment Tool is attached at Appendix C which outlines all the requirements to attain the various different levels.

The Town will continue to use this assessment tool to develop action plans and monitor progress towards greater asset management maturity.

## 1.3. Roadmap

The asset management roadmap outlines the actions, and time frames needed to implement and deliver asset management objectives. The key steps that must be performed to develop and implement effective asset management plans are detailed in Figure 2.

Within the asset management roadmap, the legislated phase 1 and 2 asset management plans are developed in steps 1 through 6 (Assess and Plan). The implement column represents requirements of the phase 3 asset management plan. Recently, activity has been focused on data collection and analysis to identify existing level of service, quantifiable risk, and infrastructure need. Over the next months, activities will be focused on the development of a sustainable financing strategy to achieve target level of service at an acceptable level of risk.

## Figure 2: The Asset Management Roadmap

A) Assess	B) Plan	C) Implement
<ul> <li><b>1. Framework</b></li> <li>Asset Management Policy</li> <li>Review Asset Management Practices</li> <li>Develop Council Reporting</li> </ul>	<ul> <li>4. Modeling</li> <li>Criticality</li> <li>Failure Prediction</li> <li>Climate Change Resiliency</li> <li>Risk Management</li> <li>Framework</li> </ul>	<ul> <li>7. Benchmark</li> <li>Target Level of Service</li> <li>Framework</li> <li>Review Existing and</li> <li>Generate Additional Key</li> <li>Performance Indicators</li> </ul>
<ul> <li>2. Need and Gap Analysis</li> <li>Data Availability</li> <li>Data Collection Practices</li> <li>Path to Improvement</li> </ul>	<ul> <li><b>5. Prioritization</b></li> <li>Asset Lifecycle Planning and Optimization</li> <li>Cost Benefit Analysis</li> <li>Project Scheduling</li> </ul>	<ul> <li>8. Sustainability Strategy</li> <li>Financing Strategy for Target Levels of Service</li> <li>Plan to manage infrastructure within the Town's capaTown to renew and maintain assets, and accept the associated risk</li> <li>Cost &amp; Asset Tracking</li> </ul>
<ul> <li><b>3. Assessment</b></li> <li>Data Analysis</li> <li>Asset Performance</li> <li>Legislative and Industry</li> <li>Standards</li> <li>Levels of Service</li> </ul>	<ul> <li>6. Financial Strategy</li> <li>Long-Term Needs</li> <li>Capital expenditure and significant operating costs to maintain life cycle activities</li> <li>Funding Gap</li> <li>Future Demand</li> </ul>	<b>9. Execution</b> • Monitor Performance of Asset ManagementProgram

The asset management roadmap will be guided by the principle of continuous improvement, industry best practices, and regulatory requirements. Asset management planning is dynamic and must be continuously evolving to leverage opportunities and address upcoming challenges.

Upcoming milestones that will be achieved within the asset management roadmap are provided in Table 1.

Table 1	Table 1: Asset Management Roadmap upcoming Milestones				
Year	Year Milestone Actions				
2024	2nd Enterprise Asset Management Plan (Phase 2)	Include all core and non-core infrastructure. EAMP now includes all asset classes			
	Define Target Levels of Service	Prepare Level of Service options for Council review and selection			
2024- 2025	Prepare Sustainability Strategy	Prepare investment and financing plan to achieve the targets directed by Council			
2025	3rd Enterprise Asset Management Plan (Phase 3)	Complete compliance with O. Reg. 588/17			
2026 & beyond	Continuous Improvement	Monitor the progress, achievements and needs of asset management planning Revise Enterprise Asset Management Plans, Strategies and Policy to reflect improvement objectives			

## 1.4. Purpose of the Enterprise Asset Management Plan

The plan provides details to facilitate the best possible decisions regarding construction, operation, maintenance, renewal, replacement, expansion, and disposal of infrastructure assets while minimizing risk and cost and maximizing service delivery. The plan integrates several individual plans by asset class including Water and Wastewater, Storm Water Management, Roads and Transportation, Bridges and Large Culverts (included in Transportation), Fleet and Equipment, Fire Services, Parks and Recreation, and Buildings and Facilities.

The Enterprise Asset Management Plan is developed in accordance with Building Together – Guide for Municipal Asset Management Plans and *Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure, 2017* and the principles included in Section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015.* 

Asset management plans provide a framework that functions along with annual budgets and longterm financial plans to help understand the implications of budget and investment planning decisions on infrastructure. The 2024 Enterprise Asset Management Plan establishes a baseline of current asset management practices.

Asset class specific asset management plans are attached to the document in the appendices. Most asset class specific details such as current level of service, condition, risk exposure and financial need are provided in the appendices.

Also included within the appendices is the Strategic Asset Management Policy and the Asset Management Strategy. The strategy builds upon the principles set out in the Strategic Asset Management Policy. The strategy provides practices that can be applied consistently across the Town of Blind River aimed to improve asset management and support the objectives of the roadmap.

The Enterprise Asset Management Plan is dynamic and will be revised and updated regularly as a

minimum per legislative schedule or as significant revisions become available. Revisions are expected as the Town's maturity in asset management planning progresses.

## 2. State of the Infrastructure

The Town of Blind River asset inventory serves various functions, but in all cases the assets are physical infrastructure assets that depreciate over time.

The State of the Infrastructure communicates the performance of infrastructure assets that are included in the Enterprise Asset Management Plan.

While the available asset data and information did not indicate that there are any major physical issues with the assets at the network level, normal degradation of assets will continue at the individual asset level and will require funding to address future needs. Leading up to 2024, the Town has greatly increased the maturity and availability of datasets for the major asset classes included in the State of the Infrastructure.

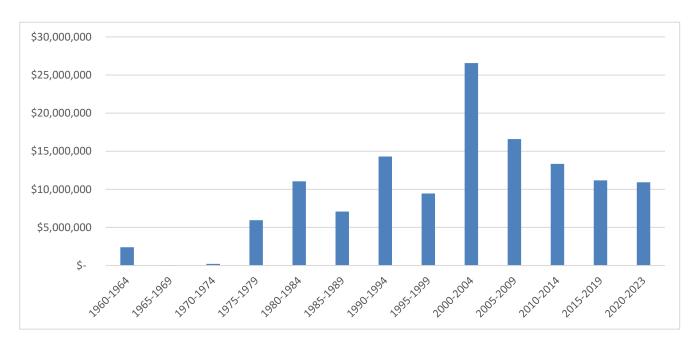
## 2.1. Asset Valuation

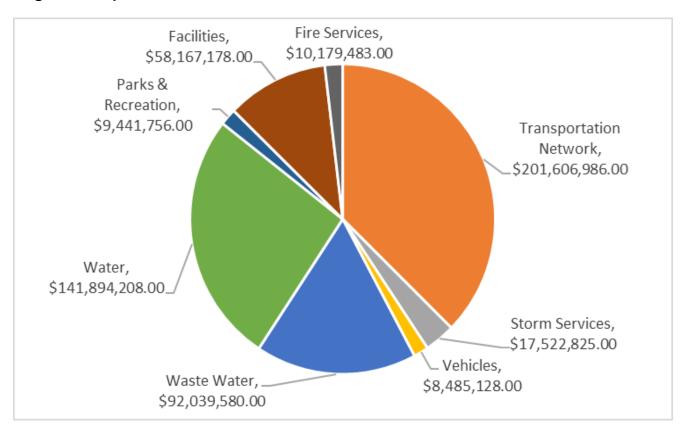
The Town has a historical capital investment of \$129.1M (2023) invested into infrastructure assets that is detailed in Figure 3. The expenditure data to develop Figure 3 is managed within the Town's Tangible Capital Asset Database.

## Figure 3: Asset Investment History for ALL Infrastructure (2023)

The historical investment of \$129.1M (2023) invested into all infrastructure assets spans across a large portfolio that translates into a \$539M replacement value for all infrastructure assets.

Replacement values for all infrastructure assets are presented in Figure 4.

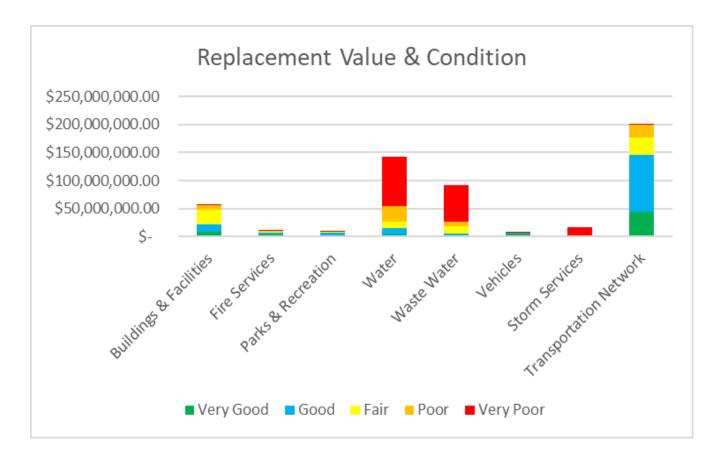




## Figure 4: Replacement Value for Town Infrastructure

## 2.2. Summary of Replacement Valuation for Asset Classes within the Enterprise Asset Management Plan

The replacement value of the Town's assets is \$539M. Elements related to the Roads Network comprise 35.7% of the Town's total replacement valuation. Water and Waste Water follow at 26.3% and 17.1% respectively. Buildings & Facilities account for 10.8% of the total replacement value. These four asset classes represent 89.9% of the total replacement value of the Town's assets.



## 2.3. Infrastructure Summary Reports

Please see the following Infrastructure Summary Reports by asset class.

Intentionally Blank

# **Transportation Network**

The transportation network comprises:

- Paved Roads High Class Bituminous Roads (HCB)
- Surface Treated Roads Low Class Bituminous (LCB)
- Gravel Roads
- Sidewalks
- Curbs
- Traffic Signs
- Bridges
- Culverts

The above infrastructure assets have replacement value estimated at \$ 201,606,985.

#### **Levels of Service**

The allocation in the planned budget is insufficient to continue providing existing services at current levels for the planning period.

The main service consequences of the Planned Budget are:

- Continued degradation of the condition of roads
- Decreased levels of service
- Increased long-term life-cycle costs for the transportation network

#### **Future Demand**

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

- Climate Change
- Tourism and Seasonal Variation
- Population Growth
- Regulatory Changes
- Public Expectations and Levels of Service
- Technological Advancements

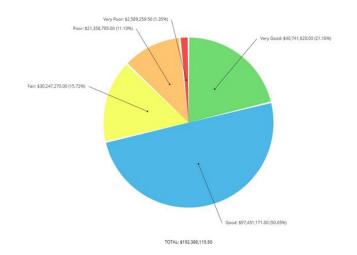
These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

- Proactive plan for monitoring population growth trends and forecasting of expansion/improvements to the transportation network
- Citizen expectation surveys
- Review and continual improvement of the efficiency and efficacy of maintenance practices
- Development of a climate change resiliency plan

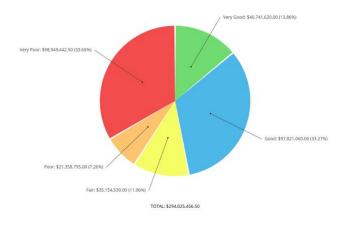
## What does it Cost?

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 a 10 year total outlay, which for the transportation network is estimated as **\$ 72,435,671 or \$ 7,243,567** on average per year.

#### Road Network Asset Condition Profile



Bridges and Culverts Asset Condition Profile



Funding Gap			
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>10</sub>	Funding Gap
Transportation Network	\$904,749	\$7,243,567	\$6,338,818

# **Drinking Water System**

The Town of Blind River's water distribution system serves a population of approximately 2,500 residents.

Asset Segment	Asset	2024
	Count	Replacement
		Cost (\$)
	1,212	\$3,277,186
Control Valves	each	
Hydrants	197 each	\$2,557,179
Service Leads	8,536 m	\$15,730,290
Treatment Plant	1 each	\$16,379,090
	1,196	\$451,500
Valve Box	each	
Water Mains	34,131 m	\$100,957,121
Water Treatment		\$475,232
Equipment	17.00	
Water Well	5	\$2,064,740

#### Drinking Water Assets

The above infrastructure assets have replacement value estimated at \$141,894,208.00.

#### 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 maintenance and repairs costs of water assets.
- Increased replacement costs.
- Disruption to water service for residents

#### **Future Demand**

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

- Population growth and future housing development. 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.
- Regulatory changes which will result in a required increased level of service for water assets.

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.

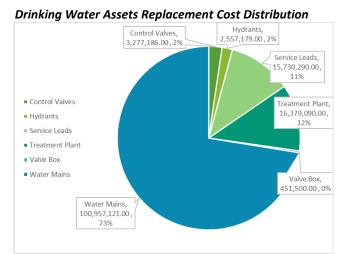
- Drinking water assets are scheduled for replacement after 60 years of service to minimize repairs costs and asset failure. This timeframe can be extended or reduced based on condition assessments.
- Replacements of water assets are completed in conjunction with the replacements of roads, and other underground services.
- Water assets due for replacement will undergo a needs analysis to determine if the replacement can be completed in conjunction with the replacement of other assets to minimize the cost.

#### 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 over the 10 years planning period, which for Fleet Assets is estimated as **\$91,229,790** or **\$9,122,979** on average per year.

However, the Drinking Waster System Asset Management Policy directs the staff to investigate the following factors before deciding on DWS asset replacements:

- The number of historical water lines breaks
- 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



Water Asset Age Distribution



Funding Gap			
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>10</sub>	Funding Gap
Drinking Water System	\$1,489,675	\$9,122,979	\$7,633,304

## Wastewater System

The Town of Blind River's water distribution system serves a population of approximately 2,500 residents.

Asset Segment	Asset	Unit of	2024
	Count	Measure	Replacement
			Cost (\$)
Fittings	1,477.00	each	123,900.00
Manholes	349.00	each	4,927,438.00
Sanitary Pumping Stations	4.00	each	2,117,700.00
Sewer Lines - Unknown	3.00	each	6,062,132.00
Sewer Lines 100-200mm	9,409.30	length (m)	
			21,641,390.00
Sewer Lines 201-300mm	15,009.90	length (m)	
			34,522,770.00
Sewer Lines 301-400mm	1,186.60	length (m)	2,514,720.00
Sewer Lines 401-500mm	707.10	length (m)	1,767,750.00
Sewer Lines 501mm and over	747.90	length (m)	1,869,750.00
Sewer Services	6,835.60	length (m)	
			11,620,520.00
Wastewater	1.00	each	4,871,510.00
Treatment/Disposal Facility			

#### Wastewater Assets

The above infrastructure assets have replacement value estimated at \$92,039,580.00.

### **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 maintenance and repairs costs of wastewater assets.
- Increased replacement costs.
- Disruption to wastewater service for residents.

### **Future Demand**

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

- Population growth and future housing development. 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.
- Regulatory changes which will result in the a required increased level of service for wastewater assets.

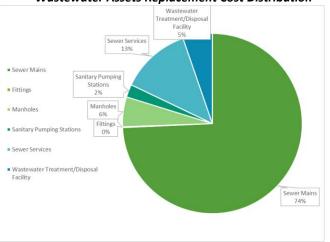
These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

- The biggest component of the wastewater system is the sewer lines which are scheduled for replacement after 40 years of service to minimize repairs costs and asset failure. This timeframe can be extended or reduced based on condition assessments.
- Replacements of wastewater assets are completed in conjunction with the replacements of roads, and other underground services.
- Wastewater assets due for replacement will undergo a needs analysis to determine the if the replacement can be completed in conjunction with the replacement of other assets to minimize the cost.

### What does it Cost?

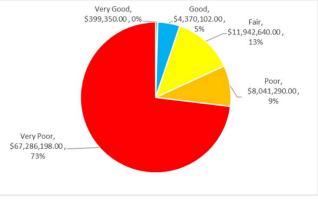
The forecast lifecycle costs necessary to provide the services covered by this AM Plan includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AM Plan may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years. Therefore, a summary output from the AM Plan is the forecast over the 10 years planning period, which for Fleet Assets is estimated as **\$71,988,500** or **\$7,198,850** on average per year. The following factors are reviewed prior to asset replacements:

- 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.



#### Wastewater Assets Replacement Cost Distribution





Funding Gap			
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>10</sub>	Funding Gap
Wastewater System	\$956,274	\$7,198,850	\$6,242,576

# Storm Water Management

The Town is responsible for owning and maintaining a stormwater network of 6km storm sewer mains, catch basins, and other supporting infrastructure.

Stormwater Assets					
Asset Segment	Asset	Unit of	2024		
	Count	Measure	Replacement		
			Cost (\$)		
		length	123,900.00		
Catch Basin Leads	564	(m)			
Catch Basins	164	each	4,927,438.00		
Culverts	274	each	2,117,700.00		
Manholes	82	each	6,062,132.00		
Storm Sewer Lines		length			
- Unknown	4	(m)	21,641,390.00		
Storm Sewer Lines		length			
200-300mm	4,789	(m)	34,522,770.00		
Storm Sewer Lines		length	2,514,720.00		
301-400mm	355	(m)			
Storm Sewer Lines		length	1,767,750.00		
401-500mm	613	(m)			
Storm Sewer Lines	318	length	1,869,750.00		
501mm and over	310	(m)			

The above infrastructure assets have replacement value estimated at \$ 17,522,825.

#### 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 maintenance and repairs costs of stormwater assets.
- Increased replacement costs.
- Disruption to stormwater service.

#### **Future Demand**

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

- Population growth and future housing development. 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.
- Regulatory changes which will result in a required increased level of service for stormwater assets.
- Climate change and extreme precipitation events may require the storm water system capacity to be upgraded to accommodate these events.

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.

- Replacements of stormwater assets are completed in conjunction with the replacements of roads, and other underground services.
- Stormwater assets due for replacement will undergo a needs analysis to determine the if the replacement can be completed in conjunction with the replacement of other assets to minimize the cost.

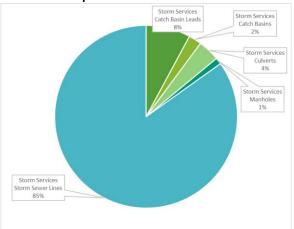
## What does it Cost?

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 over the 10 years planning period, which for Stormwater Assets is estimated as

**\$ 14,446,720** or **\$1,444,672** on average per year.

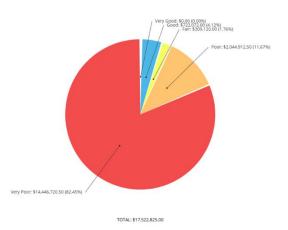
The following factors are reviewed prior to asset replacements:

- Condition and Usability determined through routine inspections and preventative maintenance by public works staff.
- Annual operating and repair costs taken from budget and in the future Citywide Maintenance Manager
- Age/Year of asset vs expected lifecycle



#### Stormwater Replacement Cost Distribution Overview

#### **Stormwater Asset Overview**



Funding Gap			
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>10</sub>	Funding Gap
Stormwater System	\$315,229	\$1,444,672	\$1,129,443

# **Fleet Assets**

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.

### 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.

#### **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.

### What does it Cost?

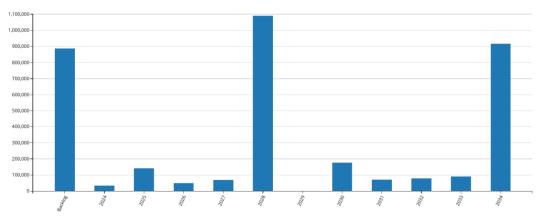
The forecast lifecycle costs necessary to provide the services covered by this AM Plan includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AM Plan may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years. 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

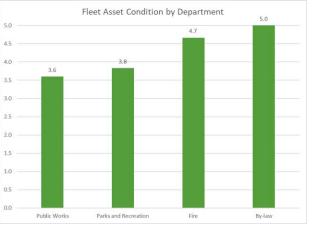
#### Fleet Assets by Department

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			

Fleet Asset Replacement Forecast



#### Average Fleet Asset Condition by Department

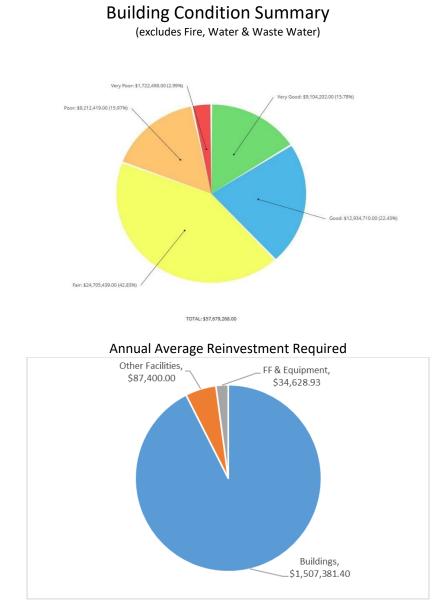


Funding Gap			
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>10</sub>	Funding Gap
Fleet	\$611,007	\$280,581	(\$330,426)

(Note that the funding gap is skewed by the purchase of 2 fire trucks in 2021 & 2022)

## **Buildings & Facilities**

The Buildings & Facilities Asset Management Plan covers 20 facilities that equates to over 100,000 square feet. This plan does not include the Fire, Water or Waste Water facilities as they are included in their own respective plans. The building inventory is managed across several areas including Public Works, Cemetery Services, Administrative Services, Emergency Services, Community Services, Library Services and the Golf Course.



### Asset (Technical) – Key Performance Indicators (KPI)

Buildings and Facilities Existing Level of Service, outlines the levels of services that are currently being offered by facilities within the Town of Blind River. This current level of service is the condition of the facility as a percentage based on the current and deferred investment requirement by the Facility replacement value in current dollars.

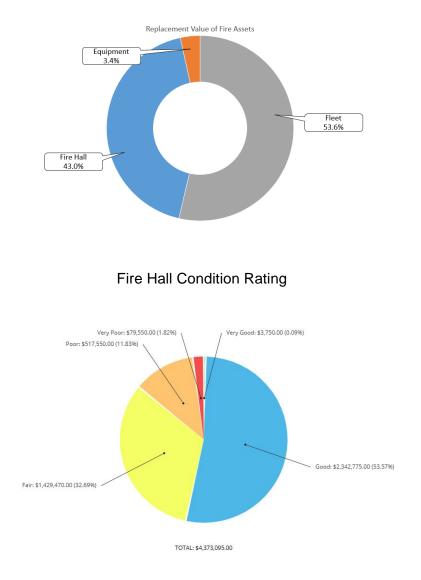
- Facility condition state = % of facilities in various condition state, by Current Replacement Value
  - % of facilities in poor or very poor condition = 18.96%
  - $\circ$  % of facilities in fair condition = 42.83%
  - $\circ$  % of facilities in good or very good condition = 22.43%
- 100% of Buildings and Facilities have Facility Condition Assessments completed.
- Facility Condition Assessments completed at 5-year intervals for all Buildings and Facilities.

Next Steps			
Section	Category	Action Item	
State of the Infrastructure	Inventory	<ul> <li>Monitor and refine the building and facility asset inventory to reduce the quantity of data assumptions</li> <li>Develop and implement an updated asset identification standard for all buildings and facilities</li> <li>Perform audits on building and facility site conditions at five (5) year intervals</li> </ul>	
Level of Service	Asset Level of Service	Develop target service levels for Council review	
Asset Management Strategy	Lifecycle Management Plan	<ul> <li>Review and refine strategies as necessary</li> </ul>	
Failure Prediction Risk Management	Risk Assessment and Exposure	<ul> <li>Monitor and refine the risk framework for buildings and facilities as necessary</li> </ul>	
Long-Term Needs	Funding Sources	<ul> <li>Develop a sustainability strategy to achieve target levels of service for Council review, discussion, and approval.</li> <li>Determine funding source for infrastructure need.</li> </ul>	

Funding Gap (Capital)					
Asset Class	5 Yr Expenditure (Avg)	AAR <sub>50</sub>	Funding Gap		
Buildings and Facilities	\$827,225	\$1,630,000	\$802,775		

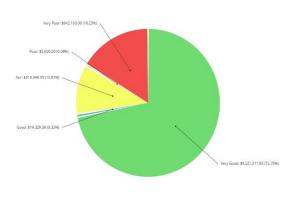
## **Fire Services**

The Blind River Fire Department has one full-time Fire Chief, 17 volunteer firefighters and 7 probationary volunteer firefighters that operate from one fire station located at 241 Causley Street.



Total Replacement Cost of Fire Assets: \$10,179,500

Vehicle & Equipment Condition Rating



TOTAL: \$5,806,388.28

Funding Gap				
Asset Class	5 Yr. Expenditure (Avg)	AAR10	Funding Gap	
Fire Services	\$371,419	\$357,945	(\$13,474)	

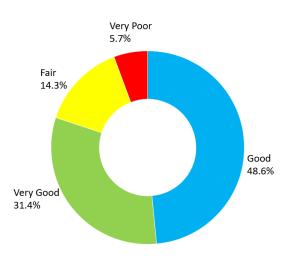
## Parks and Recreation

The Parks & Recreation asset management plan covers 35 assets with an estimated replacement cost of \$9,441,756. The portfolio consists of boat launches & marine facilities, parks & playgrounds, sports fields and a golf course, among others.

## Trails \$0.9M Parks & Playgrounds \$1.2M \$9.4M Surfaces \$4.8M Marine Facilities \$2.5M

## **Replacement Value Distribution of Parks and Recreation Infrastructure**

## **Asset Condition Rating**



## Asset (Technical) Level of Service and Key Performance Indicators (KPI)

An asset level of service is a quantitative measure that defines the performance expectations for a given asset to produce the desired levels of service. These services are measured and can include asset conditions, responsiveness, expenditure, and asset

value.

Levels of service can be evaluated by measures that consider customer complaints, customer surveys, community engagement, technical data, or discussions with municipal staff familiar with service operations.

The key performance indicators currently included in the asset levels of service are indicated below.

- Asset data collection and Inspections completed on an annual basis
- Asset condition breakdown
- % of assets in poor or very poor condition = 6%
- % of assets in fair condition = **14%**
- % of assets in good or very good condition = **80%**

Next Steps				
Section	Category	Action Item		
State of the Infrastructure	Inventory	<ul> <li>Monitor and refine the parks and recreation asset inventory to reduce the quantity of data assumptions</li> <li>Implement a digital solution to track, monitor and analyze parks and recreation data</li> </ul>		
Level of Service	Asset Level of Service	Develop target service levels for Council review		
Asset Management Strategy	Lifecycle Management Plan	Review and refine strategies as necessary		
Failure Prediction Risk Management	Risk Assessment and Exposure	Monitor and refine the deterioration model for Parks and Recreation assets as necessary		
Long-Term Needs	Funding Sources	<ul> <li>Develop a sustainability strategy to achieve target levels of service for Council review, discussion, and approval.</li> <li>Determine funding source for infrastructure need.</li> </ul>		

Funding Gap (Capital)				
Asset Class	5 Yr. Expenditure (Avg)	AAR20	Funding Gap	
Parks and Recreation	\$658,400	\$495,000	(\$163,400)	

## 2.4. Infrastructure Deficit and Annual Funding Gap

The Town of Blind River must balance a multitude of competing spending priorities with limited resources. As the Town's infrastructure ages, the need to make sustainable, well-timed infrastructure investments is essential to continue to deliver high-quality services to the community.

A combination of department-specific and Town-wide financial strategies are required to effectively address the infrastructure deficit.

The infrastructure need detailed in the asset management plans are prepared for appropriate periods of time that were determined by the service life duration of the asset class. For example, a road or a sanitary sewer will have different service lives while also having significantly longer service lives than fleet or equipment. The capital need is based upon lifecycle management strategies required for the selected period.

The average annual reinvestment requirement (AAR) is the mean investment required for a selected period. The AAR is useful for defining the required rate of funding based on the investment profiles prepared for various asset classes. With the average annual reinvestment requirement, the Town may either benchmark infrastructure investment against the AAR metric while monitoring the variability year to year or contribute to reserves in years where the annual investment is short of the average annual reinvestment value.

Following the identification of the average annual capital requirement by asset class, the capital reinvestment needs are compared to the recent annual capital budget to determine the adequacy of the funding for the sustainability of the infrastructure. The comparison yields the financial risk associated with asset ownership known as a funding gap.

### Addressing the Capital Funding Gap

In recent years, the Town of Blind River has taken some steps to increase capital funding and maintain infrastructure asset level of service. Most notably, Council approved a 9% increase to the water and wastewater rates for 2022 and for the remaining 10-year period covered by the plan as recommended in the Town of Blind River Water and Wastewater Financial Plan adopted in December 2021. The annual increase to the water and wastewater rates begins to steer the Town on the path to sustainability for water and wastewater service delivery.

The latest Water and Wastewater Long-Range Financial Plan is subject to a revision every 5 years, with the next revision scheduled for the year 2026.

Within the Town of Blind River Asset Management Plan - 2021 prepared by PSD, it was recommended that the Town pursue a municipal levy increase of 3.2% per year to fund capital expenditures. The actual changes in levy-funded capital are summarized below:

## Table 2: 5-Year History Levy-Funded Capital

Year	Actual Levy Funded Capital		Target	Ac	tual change	Percent
2020	\$	1,361,845	\$ 1,358,850	\$	52,741	3.87%
2021	\$	1,381,900	\$ 1,413,595	\$	20,055	1.45%
2022	\$	1,303,145	\$ 1,434,412	\$	(78,755)	-6.04%
2023	\$	1,735,414	\$ 1,488,920	\$	432,269	24.91%
2024	\$	1,461,207	\$ 1,545,499	\$	(274,207)	-18.77%

This translates to an average increase of only 2.32% or \$170,000 per year. With the significant cost increases since the COVID-19 pandemic, the Town continues to fall behind in terms of capital funding.

A recommendation from the previous asset management plan is to make use of borrowing for infrastructure investments. Historically, borrowing as a means of funding infrastructure investment has not been commonplace for Town of Blind River. However, recent decisions by Council have been more accepting of borrowing. Additionally, the Town does look for opportunity to periodically debt finance infrastructure investment as per the recommended criteria provided below; conditional upon one or more of the following:

- The principles of debt financing are in accordance with the Town of Blind River Debt Management Policy; **and**
- The infrastructure investment will provide a stream of non-taxation revenues that can be used to fund some or all the associated debt servicing costs; and/or
- The Town requires debt financing to fund its portion of infrastructure projects that are cost shared with senior government; and/or
- The infrastructure investment is unavoidable because of regulatory changes or concerns over public health and safety and cannot be funded through other means; and/or
- The associated debt servicing costs would not jeopardize the Town's financial sustainability or result in the Town exceeding its annual debt repayment limit.

Furthermore, as asset management planning progresses, Council will have the ability to set target levels of service to mitigate the financial risks of infrastructure ownership. The Ontario Regulation 588/17 requires that the Town explain their reason for selecting target levels of service and their ability to afford the proposed service levels. In the upcoming target level of service conversations, the Town will define not only the targets, but the risk that is associated with a level of service. Concurrently, a lifecycle management and financial strategy will be prepared to outline how the Town plans to invest annual funding projected to be available.

In some cases, the risk of a declining asset condition may be acceptable to a certain degree. At the appropriate time, detailed service level scenarios will be prepared for Council's review and discussion.

## 2.5. Future Demand

The entirety of the Town's infrastructure assets will be monitored and benchmarked against future demand. The most significant future demand drivers are growth (which can be negative), the aging population and population health. The Town of Blind River should implement preventative measures in anticipation of the demand drivers. In some cases, the preventative measures may be linked through accompanying documents; for example, a Transportation Master Plan, a Water/Wastewater Master Plan, and policy initiatives. Preventative measures may include:

- Review of the Town's buildings and facilities and opportunities for economy of scale and multipurpose uses of existing facilities;
- An increase in capacity of water treatment and distribution along with sanitary sewer collection and treatment;
- Review of fleet and equipment usage and service requirements prior to replacement;
- Repurposing under-utilized facilities to address activities with greater need;
- Optimizing existing facility use through programming, strategic partnerships, and allocation processes to increase the potential of existing assets;
- Intensifying existing parks by adding new amenities as appropriate for the site and Town- wide service levels.

Further evaluation of the need and cost-benefit of each of the above strategies would need to be undertaken in the future.

## A. Appendix A: Strategic Asset Management Policy

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## B. Appendix B: Asset Management Strategy

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C. Appendix C: Asset Management Readiness Scale Assessment Tool

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## D. Appendix D: Asset Management Plans by Asset Class

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