THE CORPORATION OF THE TOWN OF HEARST

BY-LAW NO. 14-2026

Being a by-law to adopt the 2024
Asset Management Plan established
in accordance with O. Reg. 588/17

WHEREAS the *Infrastructure for Jobs and Prosperity Act, 2015* and *Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure*, as amended, require municipalities to prepare and maintain asset management plans in respect of municipal infrastructure assets; and

WHEREAS Council deems it expedient to adopt the Town's updated Asset Management Plan established in accordance with the Phase II requirements of *Ontario Regulation 588/17*, to support sound infrastructure decision-making and to assist in prioritizing needs for capital and operating expenditures of municipal assets; and

NOW THEREFORE, BE IT RESOLVED that the Council of the Corporation of the Town of Hearst enacts as follows:

1. THAT the 2024 Asset Management Plan, established in accordance with *Ontario Regulation 588/17*, as amended, a copy of which is appended herewith and forms part of this by-law, be hereby adopted.

2. THAT By-law No. 47-2023 be hereby repealed.

READ AND PASSED IN OPEN COUNCIL

THIS 10th DAY OF MARCH, 2026.

MAYOR

CLERK

Asset Management Plan 2024

Town of Hearst

February 2026

psdcitywide

This Asset Management Plan was prepared by:

Empowering your organization through advanced asset management, budgeting & GIS solutions

Key Statistics

$338m	2024 Replacement Cost of Asset Portfolio
$71k	Replacement Cost of Infrastructure Per Household
36%	Percentage of Assets in Fair or Better Condition
4%	Percentage of Assets with Assessed Condition Data
$7.6m	Annual Capital Infrastructure Deficit
20 Years	Recommended Timeframe for Eliminating Annual Infrastructure Deficit
3.2%	Target Investment Rate
0.97%	Actual Investment Rate

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1. Executive Summary

Municipal infrastructure provides the foundation for the economic, social, and environmental health and growth of a community through the delivery of services. The goal of asset management is to balance delivering critical services in a cost-effective manner. This involves the development and implementation of asset management strategies and long-term financial planning.

The Town of Hearst's asset portfolio carries a total current replacement value of $338 million. For the assets in this AMP, 36% are projected to be in fair or better condition and assessed condition data is available for only 4% of the assets. For the remainder, age was used as a proxy, a common municipal data gap that can misrepresent true condition and highlights the ongoing need for assessments

A long-term financial plan was developed using the lifecycle strategies available and with the Town's best available data. To maintain service levels and fund the capital renewal and rehabilitation of current assets, Hearst requires $10.9 million annually. The Town currently contributes about $3.3 million, funding 30% of its needs and leaving a $7.6 million annual deficit.

$338m Replacement cost of Asset Portfolio	**$10.9m** Average Annual Requirement
$3.3m Current Annual Capital Funding Available	**$7.6m** Infrastructure Deficit
30% Current Funding Level	**$132.6m** Current Backlog
36% Fair or Better Condition (Cost Weighted)	**4%** Assets with Assessed Condition (Cost Weighted)

Figure 1 Key Statistics

Infrastructure funding gaps require long-term solutions. Short phase-in periods can be unreasonable and not realistic and place strain taxpayers, while overly long timelines risk further deterioration. A 2.8% annual revenue increase over 20 years is recommended to address the capital deficit for tax funded assets.

To close the annual capital funding deficit supported by utility revenues, it is recommended that the Town assess the feasibility of a 3.3% annual increase to water rates and a 1.7% annual increase to sanitary rates over a 20-year phase-in. Longer phase-in options are also available, which would lower the required yearly increases.

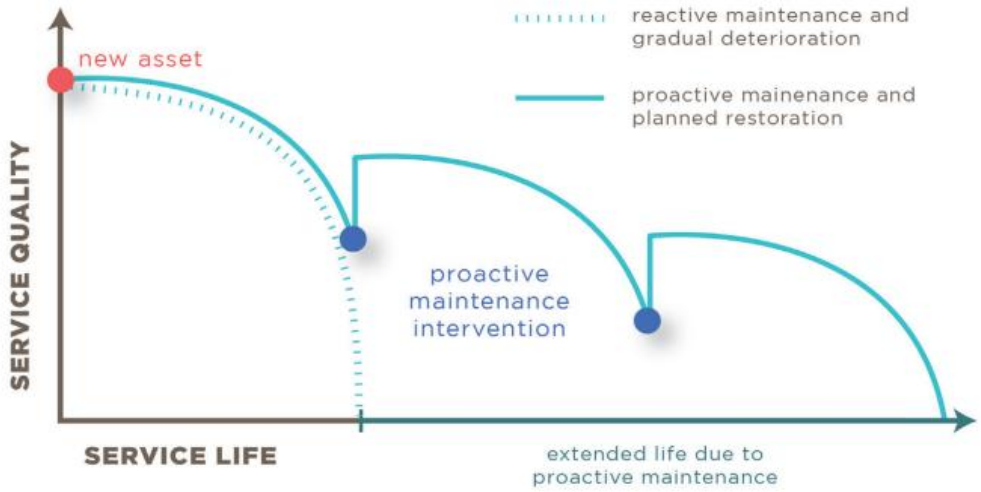

Figure 2 Asset Deterioration and Extended Life through Proactive/Preventative Maintenance.[1]

Much of the analysis and the financial forecast rely on replacement only scenarios, where no lifecycle strategy is taken into account and the analysis assumes end of life replacement only. Future development of proactive lifecycle strategies that identify key interventions, and strategic preventative maintenance events and scheduling will provide opportunity for the Town to realize substantial cost avoidance and significant extension to the reliability and estimated useful life of assets. This concept is illustrated in the figure above.

[1] Source: Asset Management BC: "*The Role of Operations and Maintenance in Asset Management: A Sustainable Service Delivery Primer (2019)"* https://www.assetmanagementbc.ca/wp-content/uploads/The-Role-of-Operations-Maintenance-in-Asset-Management.pdf

1.1 Scope

This Asset Management Plan (AMP) identifies the current practices and strategies that are in place to manage public infrastructure and makes recommendations where they can be further refined. Through the implementation of sound asset management strategies, the Town of Hearst can ensure that public infrastructure is managed to support the sustainable delivery of municipal services.

This AMP includes the following asset categories:

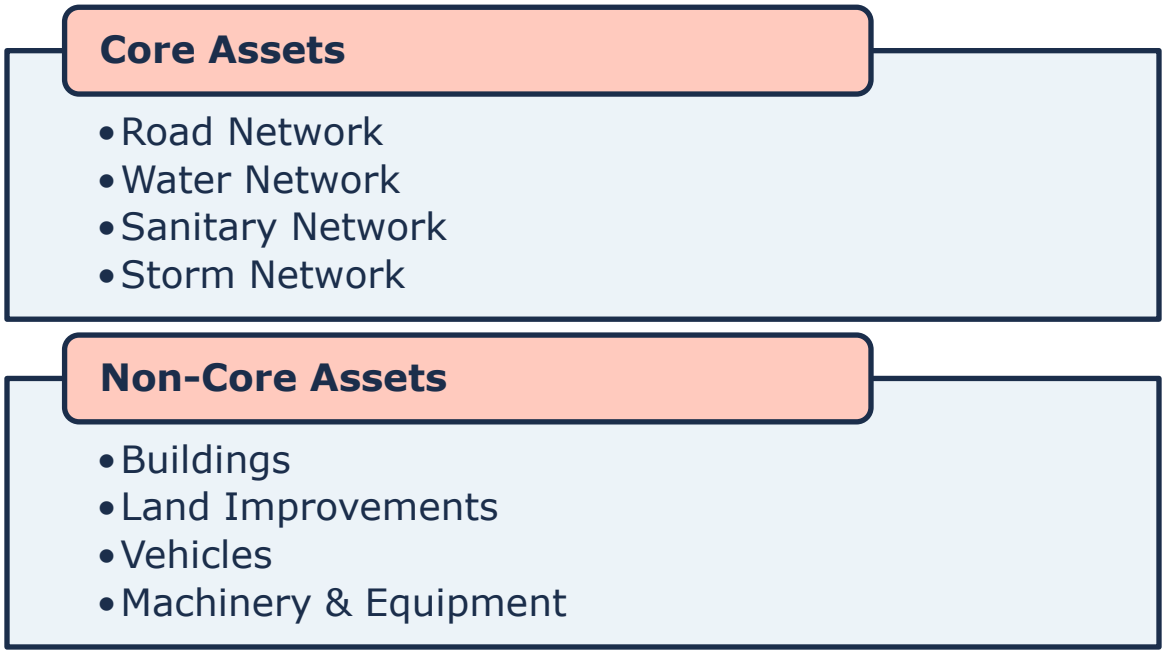

Figure 3 Core and Non-Core Asset Categories

1.2 O. Reg. 588/17 Compliance

With the development of this AMP the Town has achieved compliance with July 2024, requirements under O. Reg. 588/17. This includes requirements for levels of service and inventory reporting for all asset categories. More details on compliance can be found in section *2.5.1 O. Reg. 588/17 Compliance Review*.

1.3 Findings

The overall replacement cost of the asset categories included in this AMP totals $338 million. 36% of all assets analyzed in this AMP are in fair or better condition and assessed condition data was available for 4% of assets. For the remaining 96% of assets, assessed condition data was unavailable, and asset age was used to approximate condition, a data gap that persists in most municipalities. Generally, age misstates the true condition of assets, making assessments essential to accurate asset management planning, and a recurring recommendation in this AMP.

The development of a long-term, sustainable financial plan requires an analysis of whole lifecycle costs. This AMP uses a combination of proactive lifecycle strategies (paved roads) and

replacement only strategies (all other assets) to determine the lowest cost option to maintain the current level of service.

To meet capital replacement and rehabilitation needs for existing infrastructure, prevent infrastructure backlogs, and achieve long-term sustainability, the Town's average annual capital requirement totals $10.8 million. Based on a historical analysis of sustainable capital funding sources, the Town is committing approximately $3.3 million towards capital projects or reserves per year. As a result, there is currently an annual funding gap of $7.6 million.

It is important to note that this AMP represents a snapshot in time and is based on the best and currently available processes, data, and information at the Town. Strategic asset management planning is an ongoing and dynamic process that requires continuous improvement and dedicated resources.

1.4 Funding Recommendations

A financial strategy was developed to address the annual capital funding gap. The following graphics show the annual tax/rate change required to eliminate the Town's infrastructure deficit based on a 20-year plan. This is further detailed in *Section 13. Financial Strategy.*

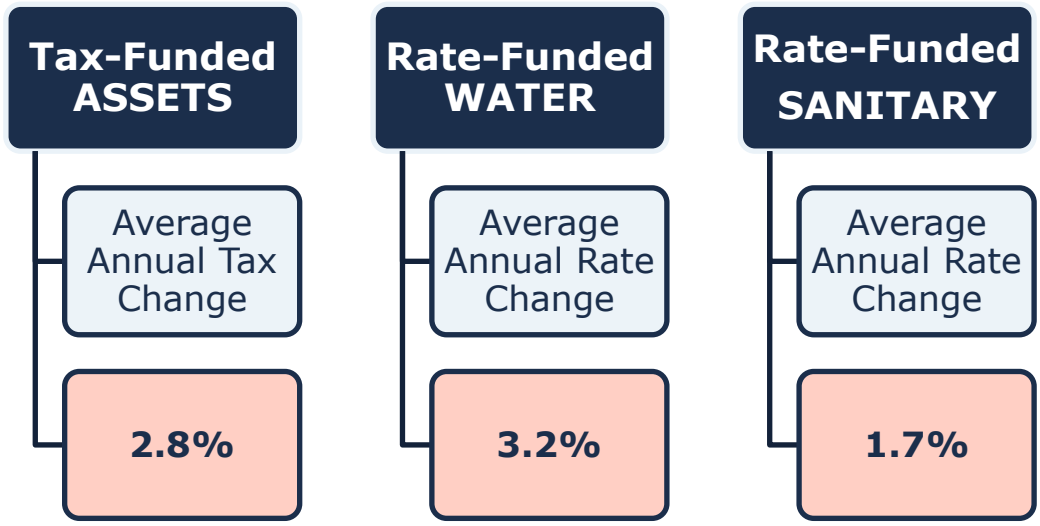

Figure 4 Proposed Tax/Rate Changes

2. Introduction & Context

2.1 Community Profile

Census Characteristic	Town of Hearst	Ontario
Population 2021	4,794	14,223,942
Population Change 2016-2021	-5.4%	+5.8%
Total Private Dwellings	2,373	5,929,250
Population Density	48.9/km²	15.9/km²
Land Area	98.06 km²	892,411.76 km²

Table 1 Town of Hearst Community Profile

The Town of Hearst is situated on the Trans-Canada Highway 11 in Cochrane District and has a predominantly French-speaking population (around 86%) and serves as a regional service center that, in total, services an estimated population of 10,000. Founded in the mid-1800s as "Grant," it was later renamed after Minister Howard Hearst in 1911. It grew as a Canadian National Railway (CNR) divisional point and incorporated in 1922, with forestry as its mainstay, from logging to modern sawmills and plywood operations.

Hearst delivers post-secondary education (Université de Hearst and Collège Boréal), healthcare (Hôpital Notre-Dame and le Foyer des Pionniers Hearst Nursing Home), and retail to isolated northern communities. Forestry accounts for 35% of the employment, complemented by transportation (railways including CNR and Ontario Northland, and the René Fontaine Airport), and tourism (1,000+ km snowmobile trails).

Leading employers include Villeneuve Construction (260), Notre-Dame Hospital (248), Columbia Forest Products (195), and Tembec (128), alongside municipal services and retail. The Town offers 12 parks along the Mattawishkwia River, modern utilities (Hearst Power Distribution) and incentives like the Downtown/Highway 11 CIP for business revitalization.

Known as the "Moose Capital of Canada," Hearst attracts tourists for fishing, hunting, snowmobiling, and boreal recreation. Amid projected population decline (population to 4,609 by 2036), the Community Improvement Plan (Housing CIP,2009/2019) along with the Business Improvement Area/Economic Development Corporation, targets the Highway 11/Front Street corridors to support strategies developed within the Perspective 2020 Insight. Strategies include support for mining opportunities, professional services and retail growth and expansion and support for the education sector and trade apprenticeship programs.

Further, a more recent plan, the Housing Community Improvement Plan (2024) identifies gaps that exist in relation to some of these strategies and the anticipated housing challenges. The Plan addresses a projected shortfall of approximately 300 housing units, with particular demand for smaller rental units, affordable housing, and accessible options for seniors. Rising construction costs and market rents have created a widening affordability gap, especially impacting students, seniors, and low to moderate income households. At the same time, a wave of retirements is intensifying labour shortages, with more than 700 newcomers required by 2031

to sustain the local economy. Without expanding housing supply and addressing regulatory constraints, the community faces increased risk of workforce shortages and economic stagnation.

2.2 Climate Change

Climate change has the potential to cause profound impacts on both human and natural systems globally. Its effects include rising temperatures, increased precipitation levels, prolonged droughts, and more frequent extreme weather events. In 2019, Environment and Climate Change Canada (ECCC) released Canada's Changing Climate Report (CCCR 2019), which outlines key findings about climate change impacts.

The report indicated that from 1948 to 2016, Canada experienced an average temperature increase of 1.7°C, with Northern Canada witnessing a more significant rise of 2.3°C during the same period. This rate of warming in Canada is double the global average. If emissions are not drastically reduced, temperatures in Canada could rise by as much as 6.3°C by 2100, compared to 2005 levels. Changes in precipitation have also been observed, with national levels increasing by approximately 20% between 1948 and 2012. By the end of the 21st century, precipitation is projected to increase by another 24%. Southern regions of Canada are likely to experience more frequent droughts during summer months, while extreme weather events, such as storms, floods, heat waves, cold spells, wildfires, and record-low Arctic sea ice levels, are expected to become increasingly common across the country.

The changing climate presents significant risks to Canada's economy, society, environment, and infrastructure. Infrastructure is particularly vulnerable to climate-related extremes, including droughts, flooding, frequent freeze-thaw cycles, extended heat waves, strong winds, and wildfires. These events can lead to accelerated damage and deterioration of physical assets. Canadian municipalities must take action to safeguard their local economies, communities, environments, and infrastructure from these growing risks.

2.2.1 Hearst Climate Profile

Hearst is situated in Northern Ontario's resource-rich Boreal Shield, characterized by long frigid winters, short cool summers, and rugged Precambrian terrain. Climate projections indicate that the town is expected to experience the following trends under a high-emissions scenario:

Higher Average Annual Temperature:

- Between 1971 and 2000, Hearst's annual average temperature was approximately 0.7°C.
- By 2050, this is projected to rise to 3.3°C, and by the end of the century, it could exceed 7.7°C.
- Warmer winters will lead to shorter snow seasons, while hotter summers may result in increased heat stress for residents.

Increase in Total Annual Precipitation:

- Total annual precipitation in Hearst is expected to increase by approximately 16% by 2080 and up to 21% by the end of the century.
- This increase is likely to be uneven, with higher concentrations during winter months, raising the risk of flooding and infrastructure strain due to freeze-thaw cycles.

- Summer precipitation patterns may become more erratic, potentially causing periods of drought interspersed with heavy rainfall.

Increase in Frequency of Extreme Weather Events:

Hearst is expected to face more frequent and severe extreme weather events, including:

- Intense storms that can lead to flash flooding.
- Heat waves, which may impact vulnerable populations and strain local energy systems.
- Erratic freeze-thaw cycles, exacerbating wear on roads, bridges, and water systems.
- Wildfire risks, heightened by warmer, drier summers, particularly in forested areas.

Integration of Climate Change and Asset Management

Asset management practices aim to ensure sustainable service delivery by providing reliable services to current residents without compromising the needs of future generations. However, climate change poses a direct threat to this objective by shortening the lifespan of assets, increasing the frequency and severity of asset failures, and introducing additional challenges such as flooding, heat stress, and storm damage.

Incorporating climate change adaptation into asset management practices is essential to ensure the Town's infrastructure remains resilient against these risks. Key strategies include integrating climate projections into lifecycle cost analyses, adopting risk-based decision-making approaches, and developing adaptive plans to address climate-related vulnerabilities.

By aligning asset management practices with climate change considerations, the Town of Hearst can strengthen its resilience and continue providing dependable services despite shifting environmental conditions. This integrated approach will enable the Town to manage risks comprehensively while promoting the long-term sustainability of its infrastructure and community well-being.

2.3 Asset Management Overview

Municipalities are responsible for managing and maintaining a broad portfolio of infrastructure assets to deliver services to the community. The goal of asset management is to minimize the lifecycle costs of delivering infrastructure services, manage the associated risks, while maximizing the value ratepayers receive from the asset portfolio.

The acquisition of capital assets accounts for only 10-20% of their total cost of ownership. The remaining 80-90% comes from operations and maintenance. This AMP focuses its analysis on the capital costs to maintain, rehabilitate and replace existing municipal infrastructure assets.

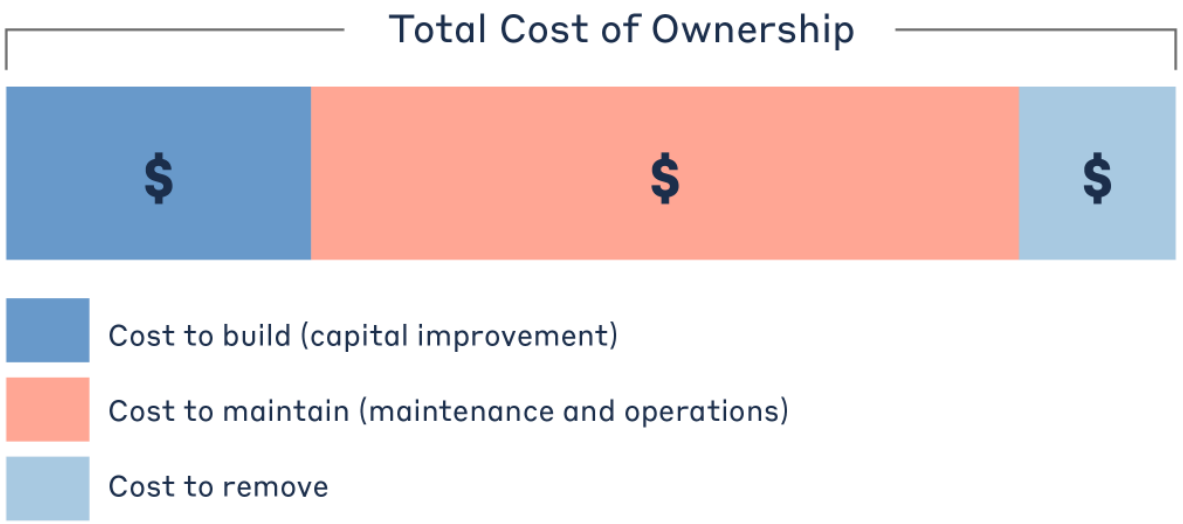

Figure 5 Total Cost of Asset Ownership

These costs can span decades, requiring planning and foresight to ensure financial responsibility is spread equitably across generations. An asset management plan is critical to this planning, and an essential element of broader asset management program. The industry-standard approach and sequence to developing a practical asset management program begins with a Strategic Plan, followed by an Asset Management Policy and an Asset Management Strategy, concluding with an Asset Management Plan.

This industry standard, defined by the Institute of Asset Management (IAM), emphasizes the alignment between the corporate strategic plan and various asset management documents. The strategic plan has a direct, and cascading impact on asset management planning and reporting.

2.3.1 Foundational Asset Management Documentation

The industry-standard approach and sequence to developing a practical asset management program begins with a Strategic Plan, followed by an Asset Management Policy and an Asset Management Strategy, concluding with an Asset Management Plan.

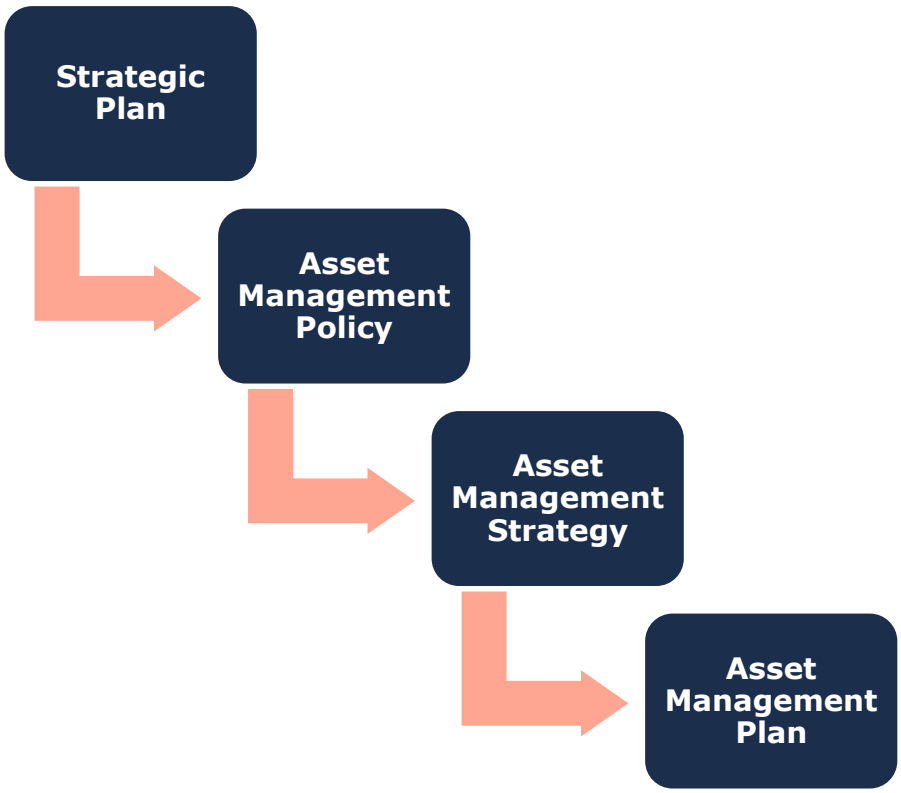

Figure 6 Foundational Asset Management Documents

This industry standard, defined by the Institute of Asset Management (IAM), emphasizes the alignment between the corporate strategic plan and various asset management documents. The strategic plan has a direct, and cascading impact on asset management planning and reporting.

Asset Management Policy

An asset management policy represents a statement of the principles guiding the Town's approach to asset management activities. It aligns with the organizational strategic plan and provides clear direction to municipal staff on their roles and responsibilities as part of the asset management program.

The Town of Hearst adopted an Asset Management Policy in June of 2018 in accordance with Ontario Regulation 588/17. The Policy states that the Town will continue to develop its best practices to manage all current and future assets. The objectives of the policy include:

- Ensuring that all municipal infrastructure assets meet expected performance levels and continue to provide desired service levels in the most efficient and effective manner.
- Linking service outcomes to infrastructure investment decisions to assist the Town on focusing on service-, rather than budget-, driven asset management approaches.
- Committing to good stewardship and improved accountability and transparency to the community.

Asset Management Strategy

An asset management strategy outlines the translation of organizational objectives into asset management objectives and provides a strategic overview of the activities required to meet these objectives. It provides greater detail than the policy on how the Town plans to achieve asset management objectives through planned activities and decision-making criteria.

Asset Management Plan

The asset management plan (AMP) presents the outcomes of the Town's asset management program and identifies the resource requirements needed to achieve a defined level of service. The AMP typically includes the following content:

- State of Infrastructure
- Asset Management Strategies
- Levels of Service
- Financial Strategies

The AMP is a living document that should be updated regularly as additional asset and financial data becomes available. This will allow the Town to re-evaluate the state of infrastructure and identify how the organization's asset management and financial strategies are progressing.

The Town's last iteration of the AMP was completed in 2022. Since then, the asset inventory has undergone revisions and updates. This document is an AMP that uses the updated asset inventory and has been prepared in accordance with O. Reg. 588/17.

2.3.2 Key Concepts in Asset Management

Effective asset management integrates several key components, including lifecycle management, risk & criticality, and levels of service. These concepts are applied throughout this asset management plan and are described below in greater detail.

Lifecycle Management Strategies

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including asset characteristics, location, utilization, maintenance history and environment. Asset deterioration has a negative effect on the ability of an asset to fulfill its intended function, and may be characterized by increased cost, risk and even service disruption.

To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

There are several field intervention activities that are available to extend the life of an asset. These activities can be generally placed into one of three categories: maintenance, rehabilitation, and replacement. The following table provides a description of each type of activity and the general difference in cost.

Depending on initial lifecycle management strategies, asset performance can be sustained through a combination of maintenance and rehabilitation, but at some point, replacement is required. Understanding what effect these activities will have on the lifecycle of an asset, and their cost, will enable staff to make better recommendations.

Lifecycle Activity	Cost	Typical Associated Risks
Maintenance Activities that prevent defects or deteriorations from occurring	**$**	• Balancing limited resources between planned maintenance and reactive, emergency repairs and interventions; • Diminishing returns associated with excessive maintenance activities, despite added costs; • Intervention selected may not be optimal and may not extend the useful life as expected, leading to lower payoff and potential premature asset failure;
Rehabilitation/ Renewal Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	**$$$**	• Useful life may not be extended as expected; • May be costlier in the long run when assessed against full reconstruction or replacement; • Loss or disruption of service, particularly for underground assets;
Replacement/ Reconstruction Asset end-of-life activities that often involve the complete replacement of assets	**$$$$$**	• Incorrect or unsafe disposal of existing asset; • Costs associated with asset retirement obligations; • Substantial exposure to high inflation and cost overruns; • Replacements may not meet capacity needs for a larger population; • Loss or disruption of service, particularly for underground assets;

Table 2 Lifecycle Management: Typical Lifecycle Interventions

The Town's approach to lifecycle management is described within each asset category outlined in this AMP. Staff will continue to evolve and innovate current practices for developing and implementing proactive lifecycle strategies to determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest total cost of ownership.

Risk & Criticality

Asset risk and criticality are essential building blocks of asset management, integral in prioritizing projects and distributing funds where they are needed most based on a variety of factors. Assets in disrepair may fail to perform their intended function, pose substantial risk to the community, lead to unplanned expenditures, and create liability for the municipality. In addition, some assets are simply more important to the community than others, based on their financial significance, their role in delivering essential services, the impact of their failure on public health and safety, and the extent to which they support a high quality of life for community stakeholders.

Risk is a product of two variables: the probability that an asset will fail, and the resulting consequences of that failure event. It can be a qualitative measurement, (i.e. low, medium, high) or quantitative measurement (i.e. 1-5), that can be used to rank assets and projects, identify appropriate lifecycle strategies, optimize short- and long-term budgets, minimize service disruptions, and maintain public health and safety.

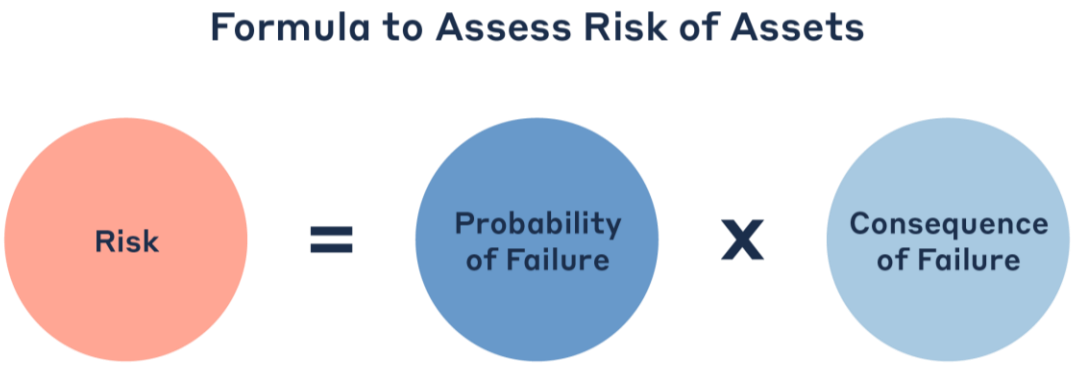

Figure 7 Risk Equations

The approach used in this AMP relies on a quantitative measurement of risk associated with each asset. The probability and consequence of failure are each scored from 1 to 5, producing a minimum risk index of 1 for the lowest risk assets, and a maximum risk index of 25 for the highest risk assets.

Probability of Failure

Several factors can help decision-makers estimate the probability or likelihood of an asset's failure, including its condition, age, previous performance history, and exposure to extreme weather events, such as flooding and ice jams, both a growing concern for municipalities in Canada.

Consequence of Failure

Estimating criticality also requires identifying the types of consequences that the organization and community may face from an asset's failure, and the magnitude of those consequences. Consequences of asset failure will vary across the infrastructure portfolio; the failure of some assets may result primarily in high direct financial cost but may pose limited risk to the community. Other assets may have a relatively minor financial value, but any downtime may pose significant health and safety hazards to residents.

Table 3 illustrates the various types of consequences that can be integrated in developing risk and criticality models for each asset category and segments within. We note that these consequences are common, but not exhaustive.

Type of Consequence	Description
Direct Financial	Direct financial consequences are typically measured as the replacement costs of the asset(s) affected by the failure event, including interdependent infrastructure.
Economic	Economic impacts of asset failure may include disruption to local economic activity and commerce, business closures, service disruptions, etc. Whereas direct financial impacts can be seen immediately or estimated within hours or days, economic impacts can take weeks, months and years to emerge, and may persist for even longer.
Socio-political	Socio-political impacts are more difficult to quantify and may include inconvenience to the public and key community stakeholders, adverse media coverage, and reputational damage to the community and the Municipality.
Environmental	Environmental consequences can include pollution, erosion, sedimentation, habitat damage, etc.
Public Health and Safety	Adverse health and safety impacts may include injury or death, or impeded access to critical services.
Strategic	These include the effects of an asset's failure on the community's long-term strategic objectives, including economic development, business attraction, etc.

Table 3 Risk Analysis: Types of Consequences of Failure

This AMP includes a preliminary evaluation of asset risk and criticality. Each asset has been assigned a probability of failure score and consequence of failure score based on available asset data. These risk scores can be used to prioritize maintenance, rehabilitation, and replacement strategies for critical assets.

These models have been built in Citywide Assets for continued review, updates, and refinements.

Levels of Service

A level of service (LOS) is a measure of the services that the Town provides to the community and the nature and quality of those services. Within each asset category in this AMP, technical metrics and qualitative descriptions that measure both technical and community levels of service have been established and measured as data is available.

The Town measures the level of service provided at two levels: Community Levels of Service, and Technical Levels of Service.

Community Levels of Service

Community levels of service are a simple, plain language description or measure of the service that the community receives. For core asset categories as applicable (Roads, Bridges & Culverts, Water, Sanitary, and Stormwater) the province, through O. Reg. 588/17, has provided qualitative descriptions that are required to be included in this AMP. For non-core asset categories, each municipality may incorporate community levels of service they find useful.

Technical Levels of Service

Technical levels of service are a measure of key technical attributes of the service being provided to the community. These include mostly quantitative measures and tend to reflect the impact of the Town's asset management strategies on the physical condition of assets or the quality/capacity of the services they provide.

For core asset categories as applicable (Roads, Bridges & Culverts, Water, Sanitary, and Stormwater) the province, through O. Reg. 588/17, has also provided technical metrics that are required to be included in this AMP. For non-core asset categories, each municipality may incorporate technical levels of service they find useful.

Current and Proposed Levels of Service

This AMP focuses on measuring the current level of service provided to the community. Once current levels of service have been measured, the Town plans to establish proposed levels of service over a 10-year period, in accordance with O. Reg. 588/17, as part of the 2025 requirements.

Proposed levels of service should be realistic and achievable within the timeframe outlined by the Town. They should also be determined with consideration of a variety of community expectations, fiscal capacity, regulatory requirements, corporate goals and long-term sustainability. Once proposed levels of service have been established, and in alignment with the 2025 O.Reg requirements, the Town must identify a lifecycle management and financial strategy which allows these targets to be achieved.

2.4 Scope & Methodology

2.4.1 Asset Categories for this AMP

This asset management plan for the Town is produced in compliance with O. Reg. 588/17. The July 2024 deadline under the regulation, the second of three AMPs, requires analysis of core and non-core asset categories.

The AMP summarizes the state of the infrastructure for the Town's asset portfolio, establishes current levels of service and the associated technical and customer oriented key metrics, outlines lifecycle strategies for optimal asset management and performance, and provides financial strategies to reach sustainability for the asset categories listed below.

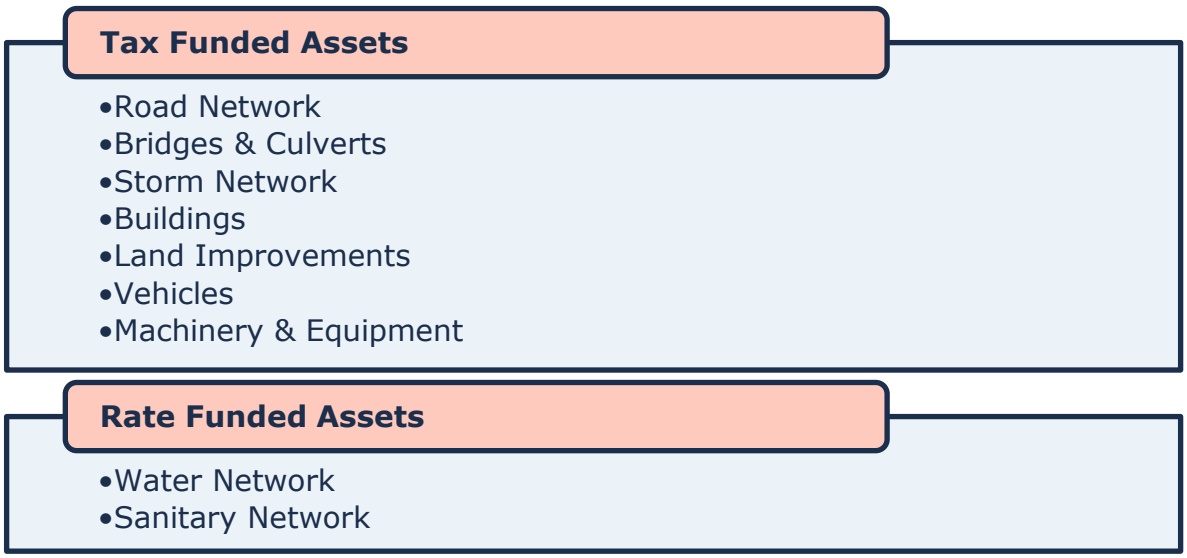

Figure 8 Tax Funded and Rate Funded Asset Categories

2.4.2 Data Effective Date

It is important to note that this plan is based on data as of **December 2024**; therefore, it represents a snapshot in time using the best available processes, data, and information at the Town. Strategic asset management planning is an ongoing and dynamic process that requires continuous data updates and dedicated data management resources.

2.4.3 Deriving Replacement Costs

There are a range of methods to determine the replacement cost of an asset, and some are more accurate and reliable than others. This AMP relies on two methodologies:

User-Defined Cost and Cost Per Unit

Based on costs provided by municipal staff which could include average costs from recent contracts; data from engineering reports and assessments; staff estimates based on knowledge and experience.

Cost Inflation / CPI Tables

Historical costs of the assets are inflated based on the Consumer Price Index or Non-Residential Building Construction Price Index.

User-defined costs based on reliable sources are a reasonably accurate and reliable way to determine asset replacement costs. Cost inflation is typically used in the absence of reliable replacement cost data. It is a reliable method for recently purchased and/or constructed assets where the total cost is reflective of the actual costs that the Town incurred. As assets age, and new products and technologies become available, cost inflation becomes a less reliable method.

2.4.4 Estimated Service Life & Service Life Remaining

The estimated useful life (EUL) of an asset is the period over which the Town expects the asset to be available for use and remain in service before requiring replacement or disposal. The EUL for each asset in this AMP was assigned according to the knowledge and expertise of municipal staff and supplemented by existing industry standards when necessary.

By using an asset's in-service data and its EUL, the Town can determine the service life remaining (SLR) for each asset. Using condition data and the asset's SLR, the Town can more accurately forecast when it will require replacement. The SLR is calculated as follows:

Figure 9 Service Life Remaining Calculation

2.4.5 Reinvestment Rate

As assets age and deteriorate, they require additional investment to maintain a state of good repair. The reinvestment of capital funds, through asset renewal or replacement, is necessary to sustain an adequate level of service. The reinvestment rate is a measurement of available or required funding relative to the total replacement cost.

By comparing the actual vs. target reinvestment rate the Town can determine the extent of any existing funding gap. The reinvestment rate is calculated as follows:

Figure 10 Target Reinvestment Rate Calculation

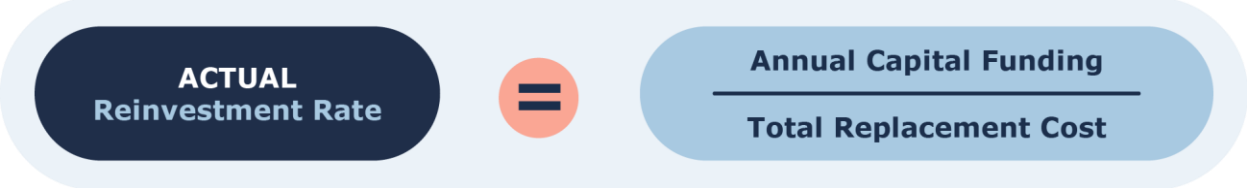

Figure 11 Actual Reinvestment Rate Calculation

2.4.6 Deriving Asset Condition

An incomplete or limited understanding of asset conditions can mislead long-term planning and decision-making. Accurate and reliable condition data helps to prevent premature and costly rehabilitation or replacement and ensures that lifecycle activities occur at the right time to maximize asset value and useful life.

A condition assessment rating system provides a standardized descriptive framework that allows comparative benchmarking across the Town's asset portfolio. The table below outlines the

condition rating system used in this AMP to determine asset condition. This rating system is aligned with the Canadian Core Public Infrastructure Survey which is used to develop the Canadian Infrastructure Report Card. When assessed condition data is not available, service life remaining is used to approximate asset condition.

Condition	Description	Criteria	Service Life Remaining (%)
Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated	80-100
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life	60-79
Fair	Requires attention	Signs of deterioration, some elements exhibit significant deficiencies	40-59
Poor	Increasing potential of affecting service	Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration	20-39
Very Poor	Unfit for sustained service	Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable	0-19

Table 4 Standard Condition Rating Scale

The analysis in this AMP is based on assessed condition data only as available. In the absence of assessed condition data, asset age is used as a proxy to determine asset condition.

2.5 Ontario Regulation 588/17

As part of the Infrastructure for Jobs and Prosperity Act, 2015, the Ontario government introduced Regulation 588/17 - Asset Management Planning for Municipal Infrastructure (O. Reg 588/17)[2]. Along with creating better performing organizations, more liveable and sustainable communities, regulation is a key, mandated driver of asset management planning and reporting. It places substantial emphasis on current and proposed levels of service and the lifecycle costs incurred in delivering them.

Figure 12 below outlines key reporting requirements under O. Reg 588/17 and the associated timelines.

[2] O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure https://www.ontario.ca/laws/regulation/170588

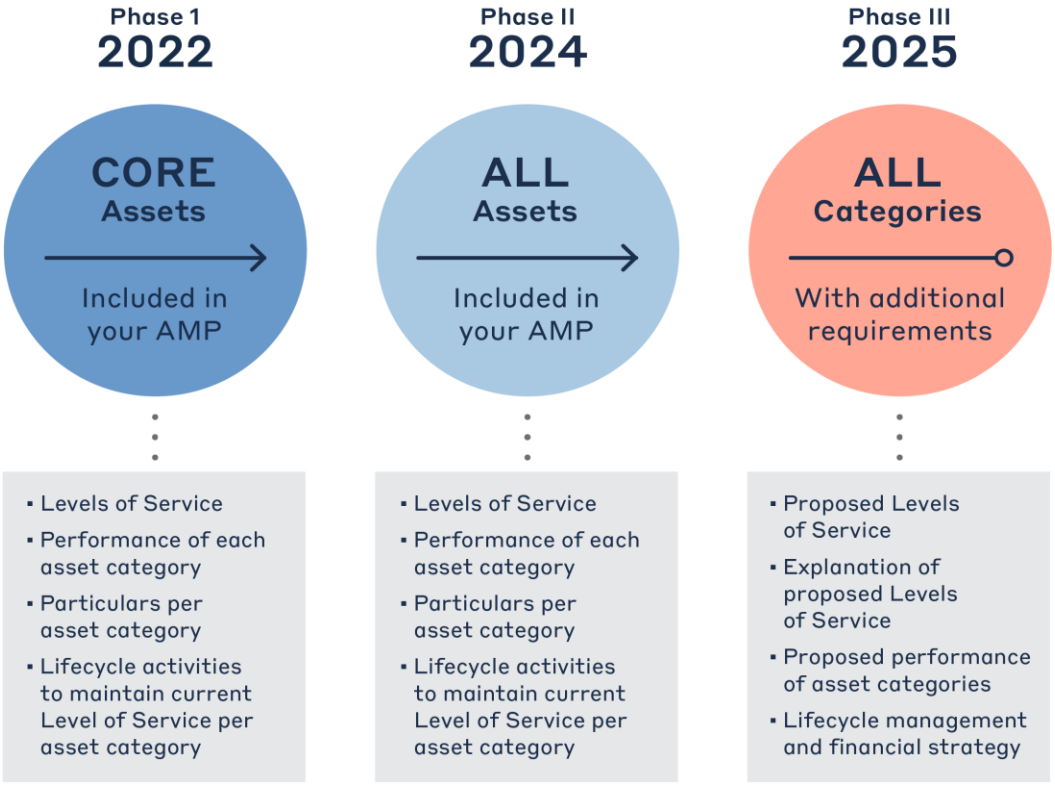

Figure 12 O. Reg. 588/17 Requirements and Reporting Deadlines

2.5.1 O. Reg. 588/17 Compliance Review

Requirement	O. Reg. 588/17 Section	AMP Section Reference	Status
Summary of assets in each category	S.5(2), 3(i)	4.1 – 12.1	Complete
Replacement cost of assets in each category	S.5(2), 3(ii)	4.1 – 12.1	Complete
Average age of assets in each category	S.5(2), 3(iii)	4.3 – 12.3	Complete
Condition of core assets in each category	S.5(2), 3(iv)	4.2 – 12.2	Complete
Description of municipality's approach to assessing the condition of assets in each category	S.5(2), 3(v)	4.4 – 12.4	Complete

Requirement	O. Reg. 588/17 Section	AMP Section Reference	Status
Current levels of service in each category	S.5(2), 1(i-ii)	4.7 – 12.7	Complete
Current performance measures in each category	S.5(2), 2	4.7 – 12.7	Complete
Lifecycle activities needed to maintain current levels of service for 10 years	S.5(2), 4	4.4 – 12.4	Complete
Costs of providing lifecycle activities for 10 years	S.5(2), 4	Appendix B	Complete
Growth assumptions	S.5(2), 5(i-ii) S.5(2), 6(i-vi)	13.1 – 13.3	Complete

Table 5 O. Reg. 588/17 Compliance Review

3. Portfolio Overview – State of the Infrastructure

The state of the infrastructure (SOTI) summarizes the inventory, condition, age profiles, and other key performance indicators for the Town's infrastructure portfolio. These details are presented for all core and non-core asset categories.

3.1 Asset Hierarchy & Data Classification

Asset hierarchy explains the relationship between individual assets and their components, and a wider, more expansive network and system. How assets are grouped in a hierarchy structure can impact how data is interpreted. Assets were structured to support meaningful, efficient reporting and analysis. Key category details are summarized at asset segment level.

Figure 13 Asset Hierarchy and Data Classification

3.2 Portfolio Overview

3.2.1 Total Replacement Cost of Asset Portfolio

The eight asset categories analyzed in this Asset Management Plan have a total current replacement cost of $338 million. This estimate was calculated using user-defined costing, as well as inflation of historical or original costs to current date. This estimate reflects the replacement of historical assets with similar, not necessarily identical, assets available for procurement today. Figure 14 illustrates the replacement cost of each asset category; at 40% of the total portfolio, the road network comprises the largest share of the Town's asset portfolio, followed by the water and sanitary network at 25%.

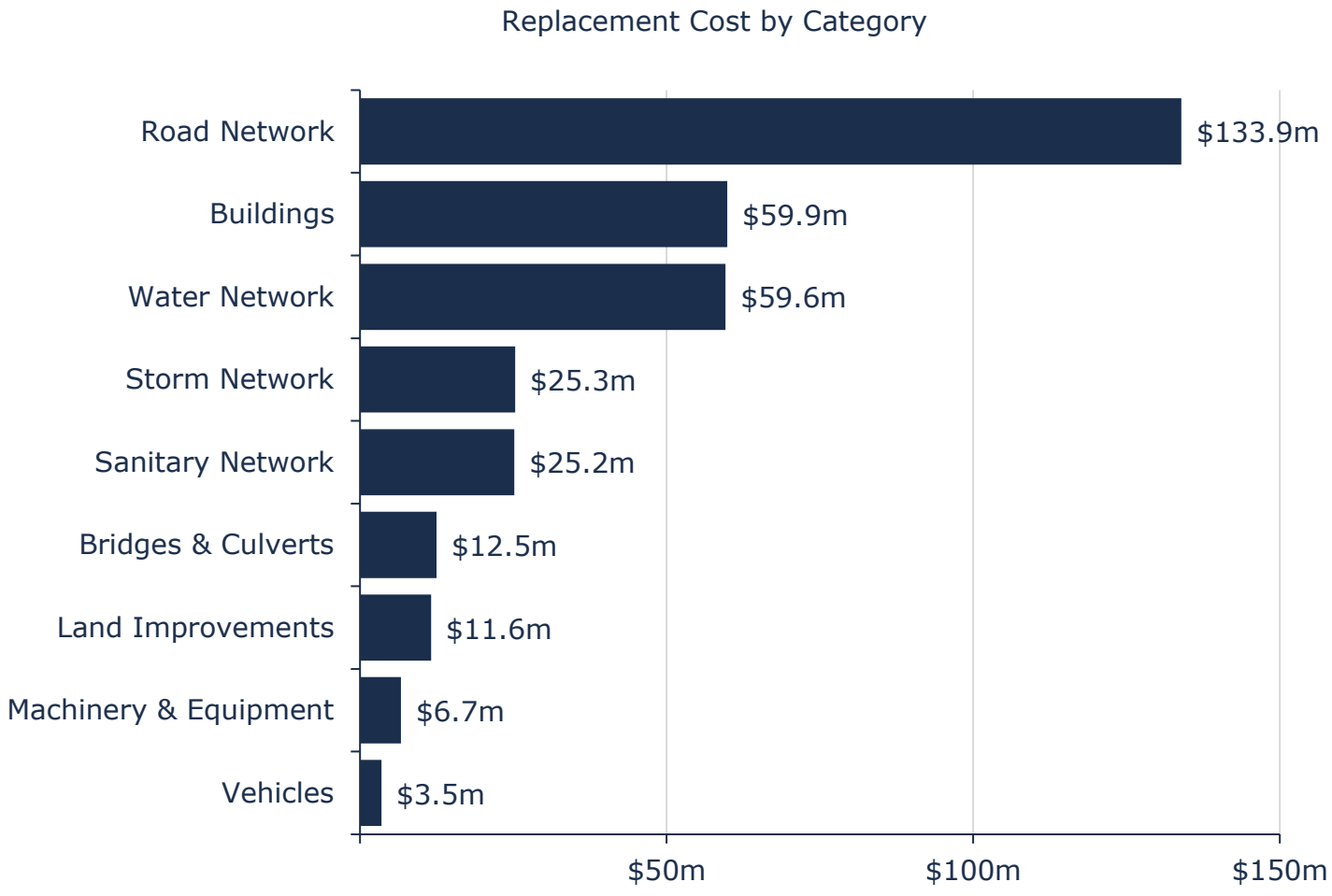

Figure 14 Current Replacement Cost by Asset Category

3.2.2 Target vs. Actual Reinvestment Rate

The graph below depicts funding gaps by comparing the target to the current reinvestment rate. To meet the existing long-term capital requirements, the Town requires an annual capital investment of $10.9 million, for a target portfolio reinvestment rate of 3.2%. Currently, annual investment from sustainable revenue sources is $3.3 million, for a current portfolio reinvestment rate of 0.97%. Target and current re-investment rates by asset category are detailed below.

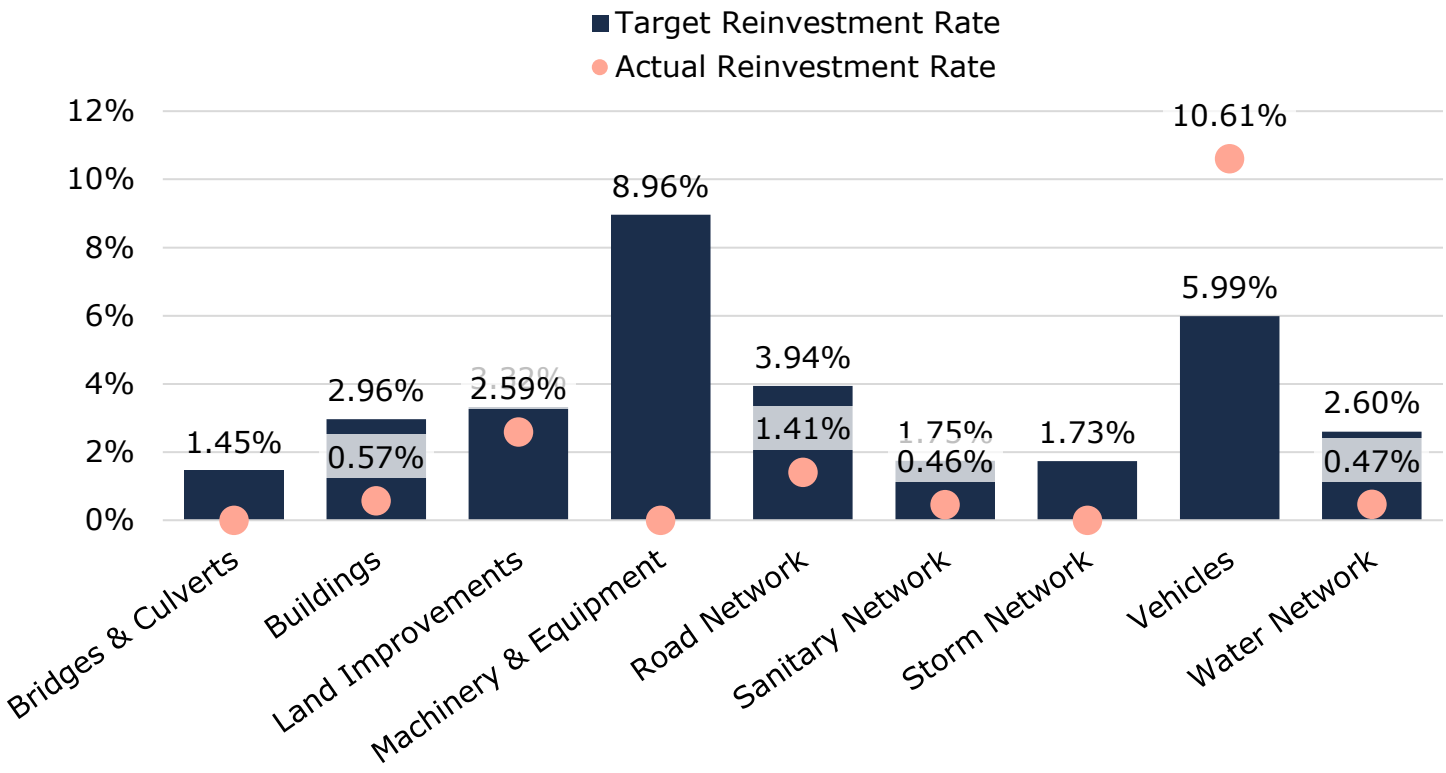

Figure 15 Current Vs. Target Reinvestment Rate

3.2.3 Condition of Asset Portfolio

Figure 16 and Figure 17 summarize asset condition at the portfolio and category levels, respectively. Based on both assessed condition and age-based analysis, 36% of the Town's infrastructure portfolio is in fair or better condition, with the remaining 64% in poor or worse condition. Typically, assets in poor or worse condition may require replacement or major rehabilitation in the immediate or short-term. Targeted condition assessments may help further refine the list of assets that may be candidates for immediate intervention, including potential replacement or reconstruction.

Similarly, assets in fair condition should be monitored for disrepair over the medium term. Keeping assets in fair or better condition is typically more cost-effective than addressing assets needs when they enter the latter stages of their lifecycle or decline to a lower condition rating, e.g., poor or worse.

Condition data was only available for the bridges & culverts asset category. For all remaining assets, age was used as an approximation of condition for these assets. Age-based condition estimations can skew data and lead to potential under- or overstatement of asset needs.

Further, when assessed condition data was available, it was projected to current year (2024). This 'projected condition' can generate lower condition ratings than those established at the time of the condition assessment. The rate of this deterioration will also depend on lifecycle curves used to project conditions over time.

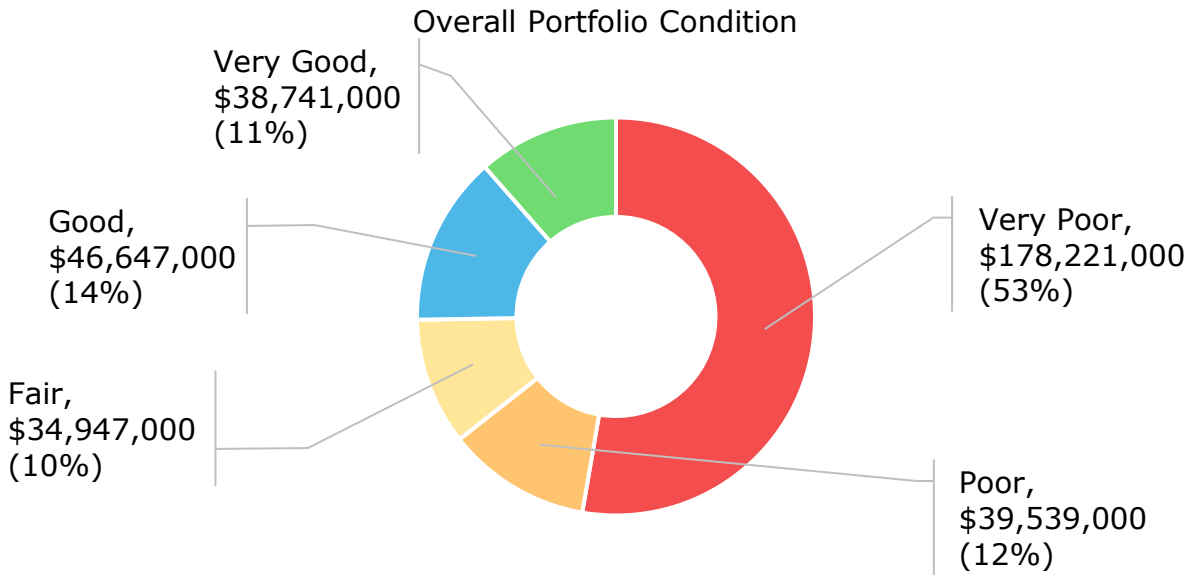

Figure 16 Asset Condition: Portfolio Overview

As further illustrated in Figure 17 at the category level, 36% of assets are in fair or better condition, with the remaining 64% in poor or worse condition, based primarily on age based projections.

See Table 6 for details on how condition data was derived for each asset segment.

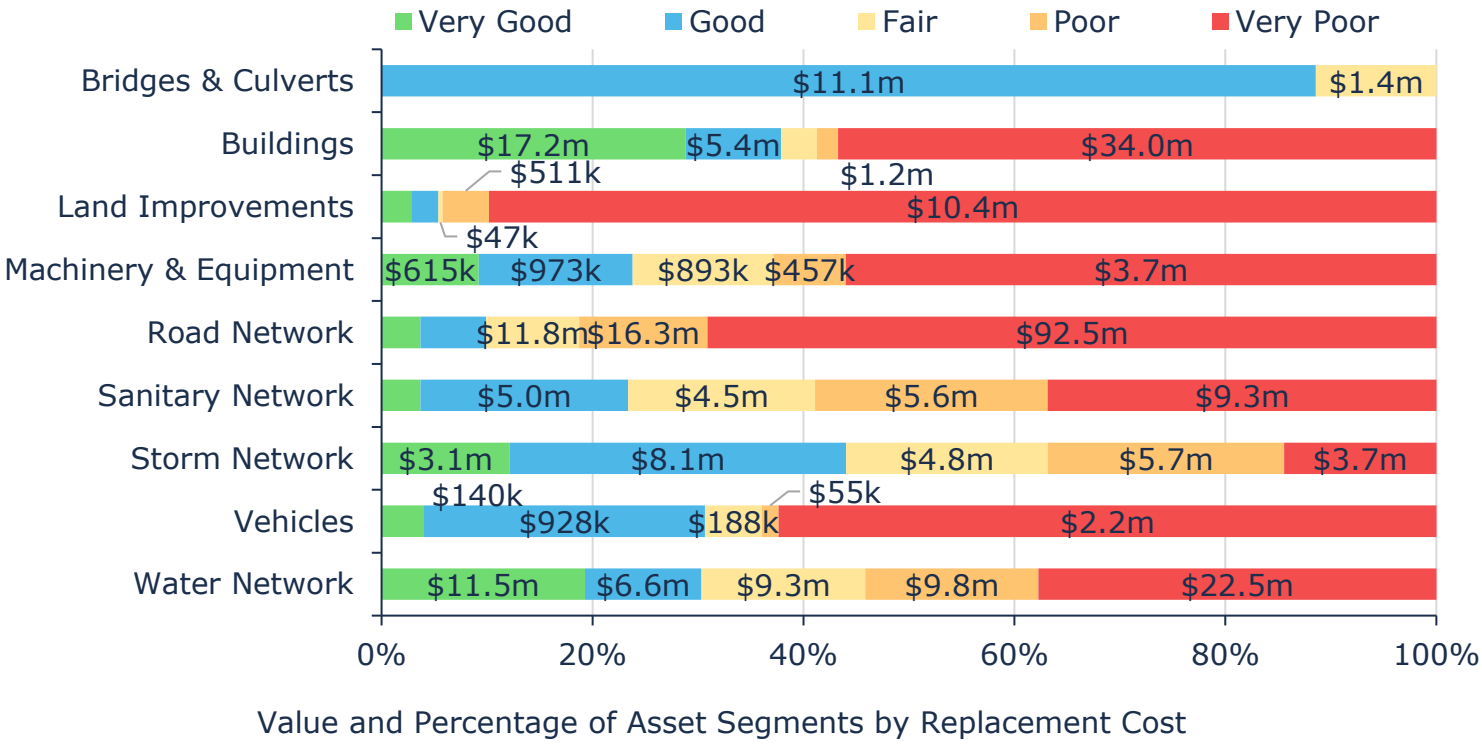

Figure 17 Asset Condition by Asset Category

As outlined previously, buildings and facilities are not componentized into their individual major elements and components. This limits the validity of current condition estimates as they are presented only at the 'parent' asset level.

Source of Condition Data

This AMP relies on assessed condition for 4% of assets, based on and weighted by replacement cost. For the remaining assets, age is used as an approximation of condition. Assessed condition data is invaluable in asset management planning as it reflects the true condition of the asset and its ability to perform its functions. The table below identifies the source of condition data used throughout this AMP.

Asset Category	Asset Segment(s)	% of Assets with Assessed Conditions	Source of Condition Data
Road Network	All	0%	Age-Based Condition
Bridges & Culverts	All	100%	OSIM Inspections
Storm Network	All	0%	Age-Based Condition
Water Network	All	0%	Age-Based Condition
Sanitary Network	All	0%	Age-Based Condition
Buildings	All	0%	Age-Based Condition
Vehicles	All	0%	Age-Based Condition
Machinery & Equipment	All	0%	Age-Based Condition
Land Improvements	All	0%	Age-Based Condition

Table 6 Source of Condition Data

3.2.4 Service Life Remaining

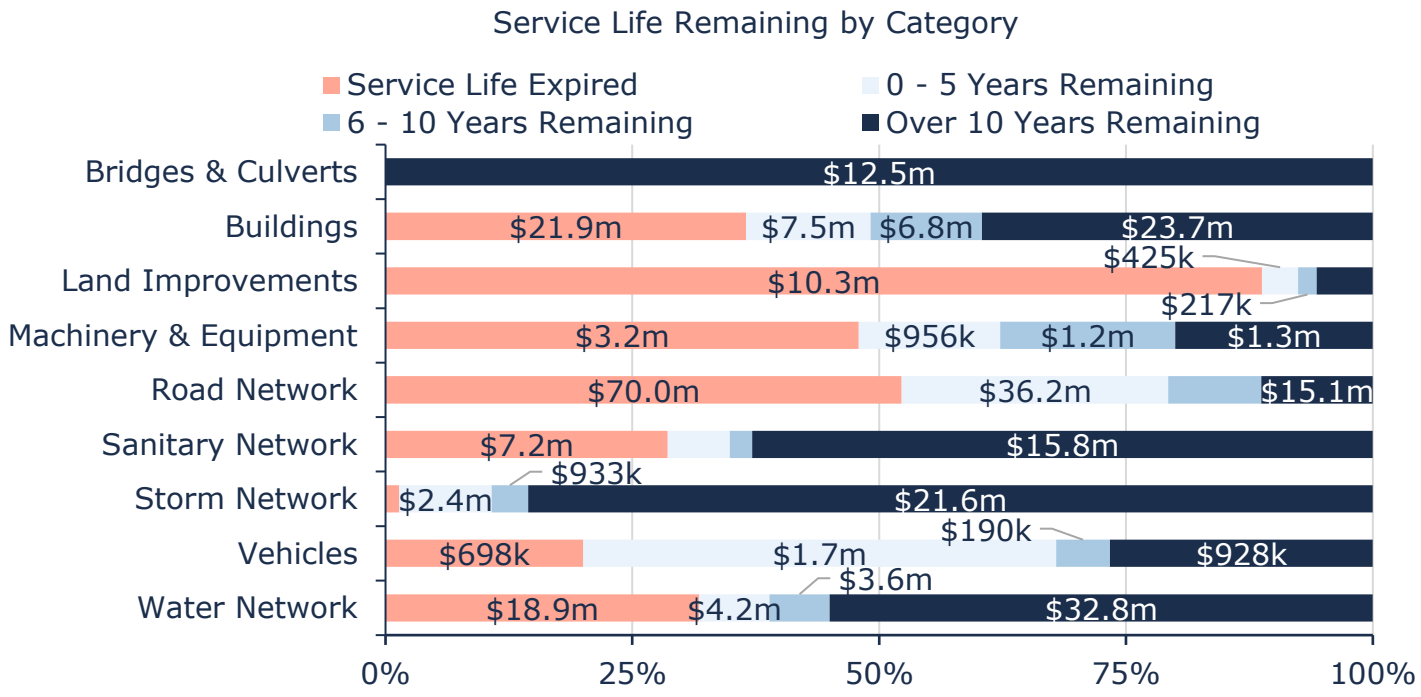

Figure 18 Service Life Remaining All Assets

Based on asset age, available assessed condition data and estimated useful life, 63% of the Town's assets will require replacement within the next 10 years. It is unlikely that all assets identified will require replacement, and therefore it will be critical for the Town to investigate and perform condition assessments to determine actual performance of the asset. Further this graph reflects the analysis relying heavily on age based conditions.

3.2.5 Risk Analysis

Qualitative Risk

The qualitative risk assessment involves the documentation of risks to the delivery of services that the municipality faces given the current state of the infrastructure and asset management strategies. These risks can be understood as corporate level risks.

	Risk Type	Description
	Asset Data Confidence	As the Town's asset management program matures, the Town is gaining more confidence in their asset data. A lack of confidence in asset data can result in a lack of confidence in the results of the asset management plan and subsequently result in uncertainty in funding requirements for the future.
	Lifecycle Management Strategies	The Town has developed lifecycle strategies for the road network. All other categories employ a replacement-only approach. It is recommended to consider the inclusion of proactive lifecycle management strategies for more asset categories, which have the potential to generate cost savings and extend the lifespan of existing assets.
	Aging Infrastructure	The Town's current state of infrastructure shows the majority of infrastructure in latter stages of their estimated useful lives. Ongoing infrastructure replacement should aim to maintain and improve these moderate levels and avoid significant portions of the infrastructure reaching the end of their useful lives at the same time.
	Infrastructure Reinvestment	Current investment levels in infrastructure must be carefully reviewed to ensure they align with lifecycle requirements and support the continued delivery of reliable services. Development of lifecycle strategies for core assets and further refinement for the road network strategies could lead to significant cost avoidance, higher level of service and reduced average annual requirement.

Risk Matrix

Using the risk equation and preliminary risk models, Figure 19 shows how assets across the different asset categories are stratified within a risk matrix.

1 - 4 Very Low $31,578,000 (9%)	5 - 7 Low $48,169,000 (14%)	8 - 9 Moderate $25,842,000 (8%)	10 - 14 High $54,147,000 (16%)	15 - 25 Very High $178,359,000 (53%)

Figure 19 Risk Matrix: All Asset Categories in 2024 AMP

The analysis shows that based on current risk models, approximately 53% of the Town's assets, with a current replacement cost of approximately $178.9 million, carry a risk rating of 15 or higher (red) out of 25. Assets in this group may have a high probability of failure based on available condition data and age-based estimates and were most essential to the Town.

As new asset attribute information and condition assessment data are integrated with the asset register, asset risk ratings will evolve, resulting in a redistribution of assets within the risk matrix. Staff should also continue to calibrate risk models.

We caution that since risk ratings rely on many factors beyond an asset's physical condition or age, assets in a state of disrepair can sometimes be classified as low-risk, despite their poor condition rating. In such cases, although the probability of failure for these assets may be high, their consequence of failure ratings were determined to be low based on the attributes used and the data available. Similarly, assets with very high condition ratings can receive a moderate to high-risk rating despite a low probability of failure. These assets may be deemed as highly critical to the Town based on their costs, economic importance, social significance, and other factors. Continued calibration of an asset's criticality and regular data updates are needed to ensure these models more accurately reflect an asset's actual risk profile.

3.2.6 Forecasted Capital Requirements

Aging assets require ongoing maintenance, rehabilitation, and eventual replacement. Figure 17 illustrates short-, medium-, and long-term replacement needs across all asset categories over a 75-year horizon. On average, $10.9 million per year is required to keep pace with capital replacement needs (red dotted line). While annual expenditures will vary, this benchmark supports capital budgeting and reserve planning to avoid deferrals and address needs as they arise. These projections are based on asset age and available condition data.

The chart also identifies a backlog exceeding $132.6 million, representing assets operating beyond their estimated useful life. Not all such assets require immediate replacement, reinforcing the importance of ongoing, targeted condition assessments. Risk-based frameworks, lifecycle strategies, and levels of service targets can then be applied to prioritize investments, refine backlog and capital estimates, and determine appropriate treatments. Improved building componentization will further strengthen these projections.

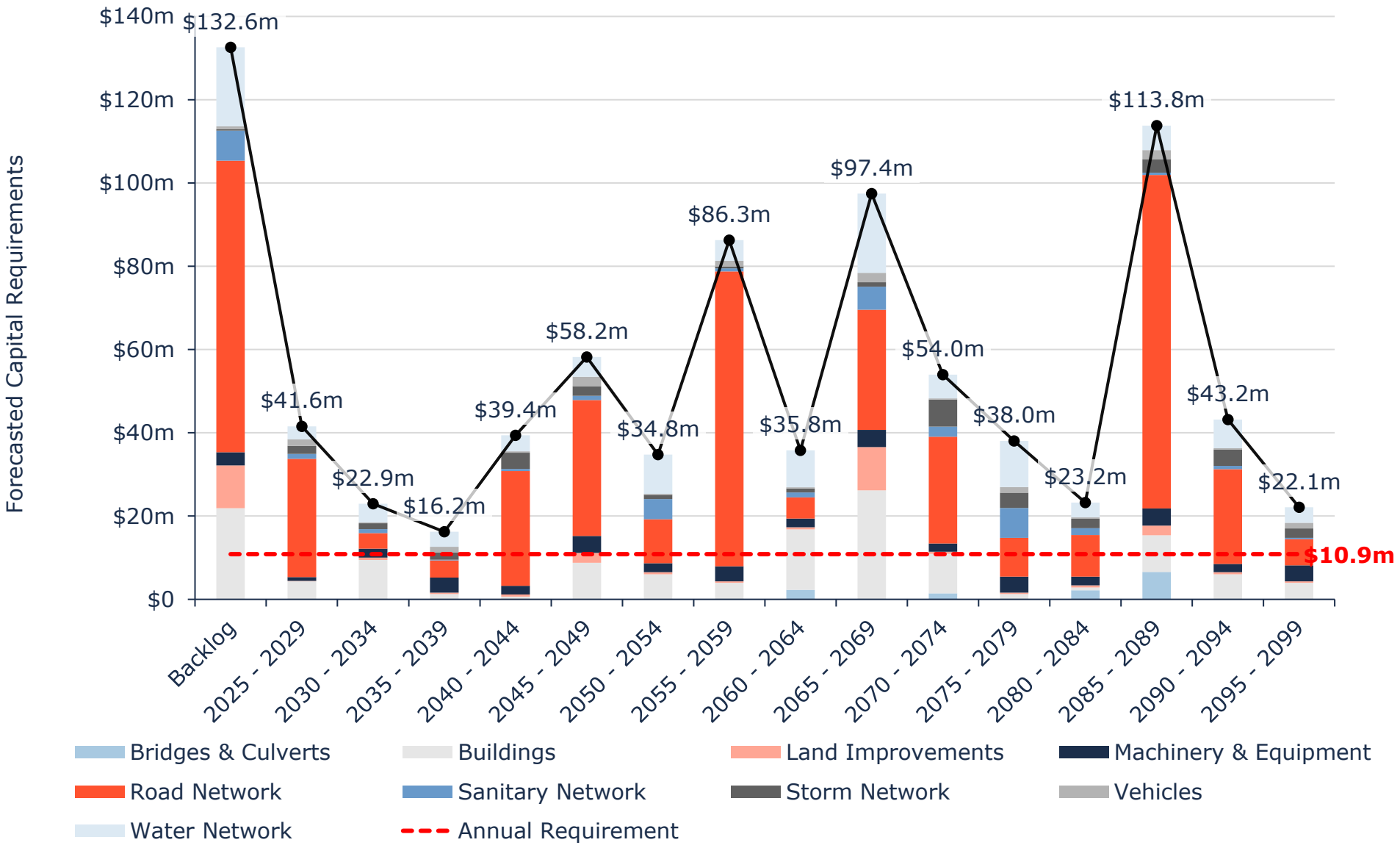

Figure 20 Capital Replacement Needs: Portfolio Overview 2025-2099

Core Assets

Road Network

Bridges & Culverts

Storm Network

Water Network

Sanitary Network

4. Road Network

The Town's road network comprises a large proportion of its infrastructure portfolio, with a current replacement cost of more than $133.9 million, primarily consisting of paved roads. The Town also owns and manages other supporting infrastructure and capital assets, including sidewalks, curbs, and streetlights.

4.1 Inventory & Valuation

Table 7 summarizes the quantity and current replacement cost of the Town's various road network assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Curbs	44.6	Kilometers	$12,361,000	Cost per Unit
Gravel Roads	47.8	Kilometers	Not Planned for Replacement[3]	
Paved Roads	50.9	Kilometers	$96,871,000	Cost per Unit
Sidewalks	42.1	Kilometers	$18,640,000	Cost per Unit
Streetlights	1	Asset (Pooled)	$1,278,000	CPI
Surface Treated Roads	31	Kilometers	$4,777,000	Cost per Unit
TOTAL			**$133,927,000**	

Table 7 Detailed Asset Inventory: Road Network

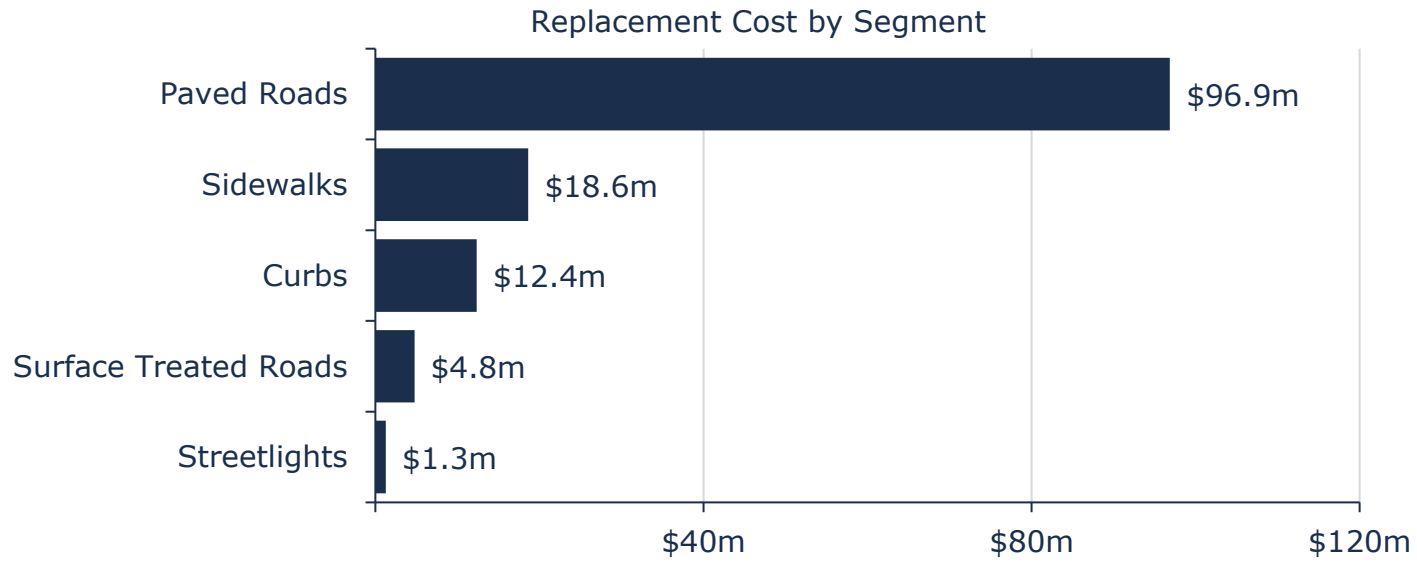

Figure 21 Portfolio Valuation: Road Network

[3] Gravel roads undergo perpetual operating and maintenance activities. If maintained properly, they can theoretically have a limitless service life.

4.2 Asset Condition

Figure 22 summarizes the replacement cost-weighted condition of the Town's road network. Based primarily on age based condition projections, 19% of assets are in fair or better condition; the remaining 81% of assets are in poor to very poor condition. Condition assessments were not available. This condition data was projected from inspection date or in service date to current year to estimate their condition today.

Assets in poor or worse condition may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition. As illustrated in Figure 22, the majority of the Town's road network assets are in poor or very poor condition.

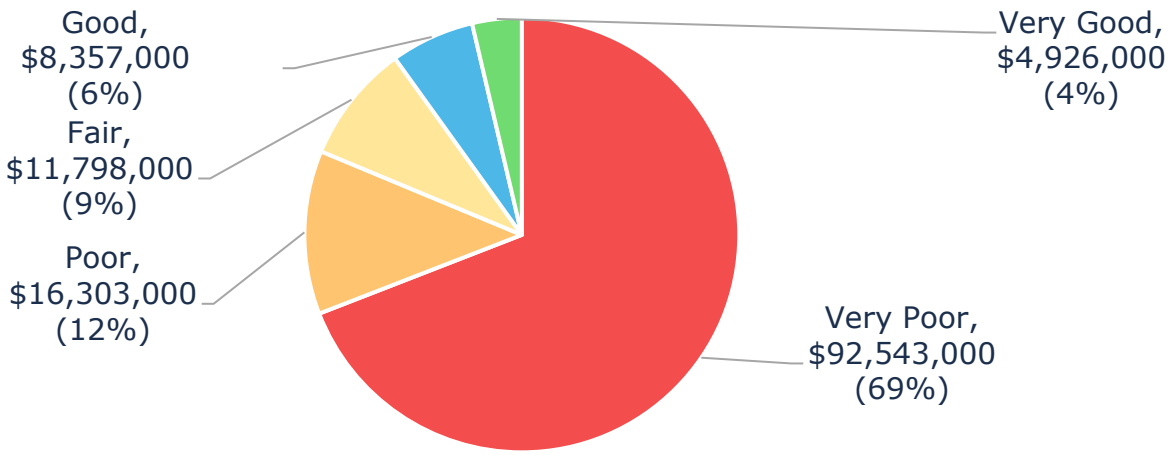

Figure 22 Asset Condition: Road Network Overall

As illustrated in Figure 23, based on age based condition projections, the majority of the Town's road network assets are considered to be in poor or worse condition based on aged based projections.

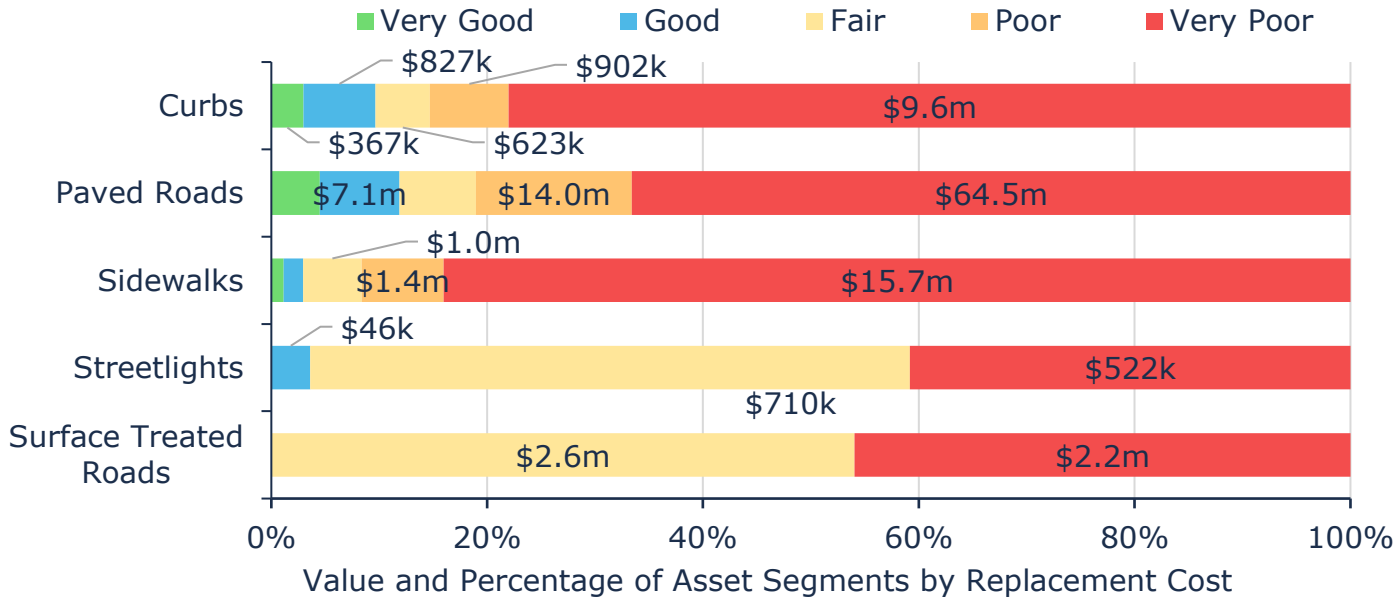

Figure 23 Asset Condition: Road Network by Segment

4.3 Age Profile

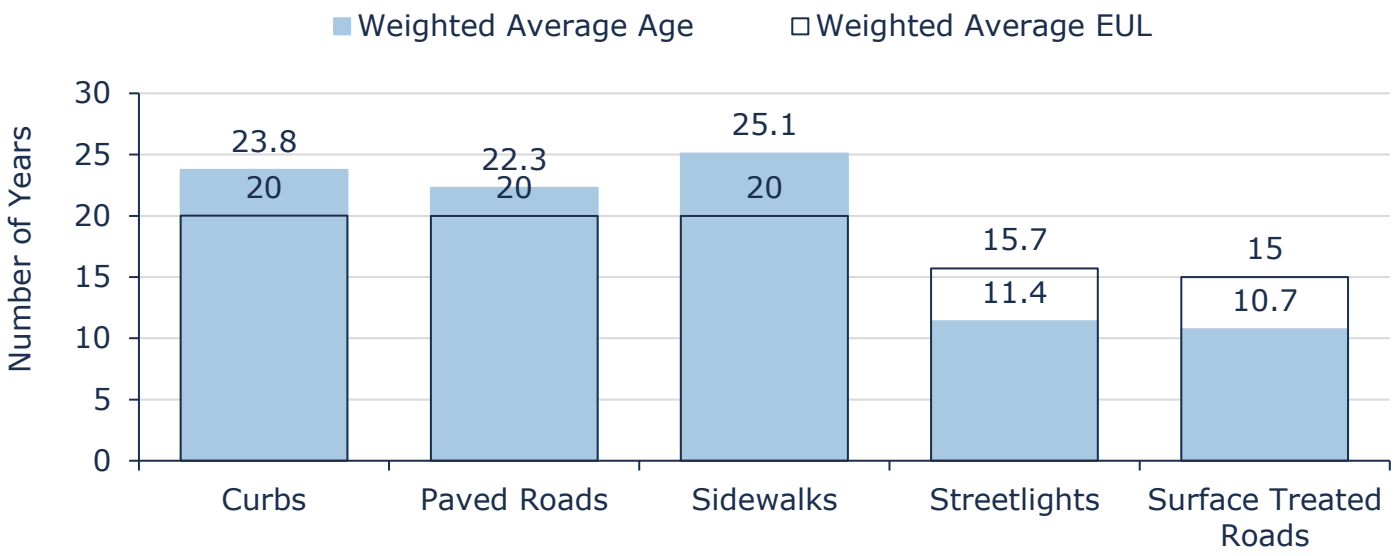

Figure 24 Estimated Useful Life vs. Asset Age: Road Network

Figure 24 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets. Age analysis shows that the majority of road network assets have reached and exceeded.

4.4 Current Approach to Lifecycle Management

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including asset characteristics, location, utilization, maintenance history and environment. Currently, Hearst's lifecycle management strategy is mostly reactive with the goal of replacing roads when they reach end-of-life. The following proposed lifecycle strategies have been developed as a proactive approach to managing Hearst's roads. Instead of allowing the roads to deteriorate until replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

The following lifecycle strategies have been developed to formalize the current approach to managing the lifecycle paved roads. Instead of allowing the roads to deteriorate until replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

Paved Roads		
Event Name	**Event Class**	**Event Trigger**
Crack Sealing	Preventative Maintenance	85 to 85 Condition
Mill & Pave	Rehabilitation	15 Years

Table 8 Lifecycle Strategy: Paved Roads

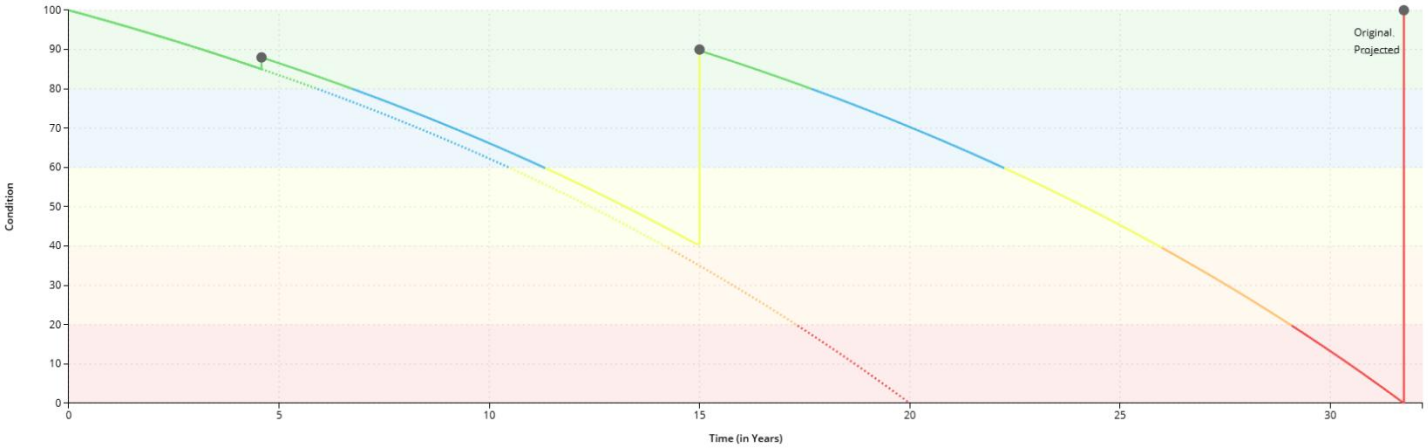

Figure 25 Lifecycle Strategy: Paved Roads

Surface Treated Roads		
Event Name	**Event Class**	**Event Trigger**
Single Lift Surface Treatment	Rehabilitation	25 to 40 Condition

Table 9 Lifecycle Strategy: Surface Treated Roads

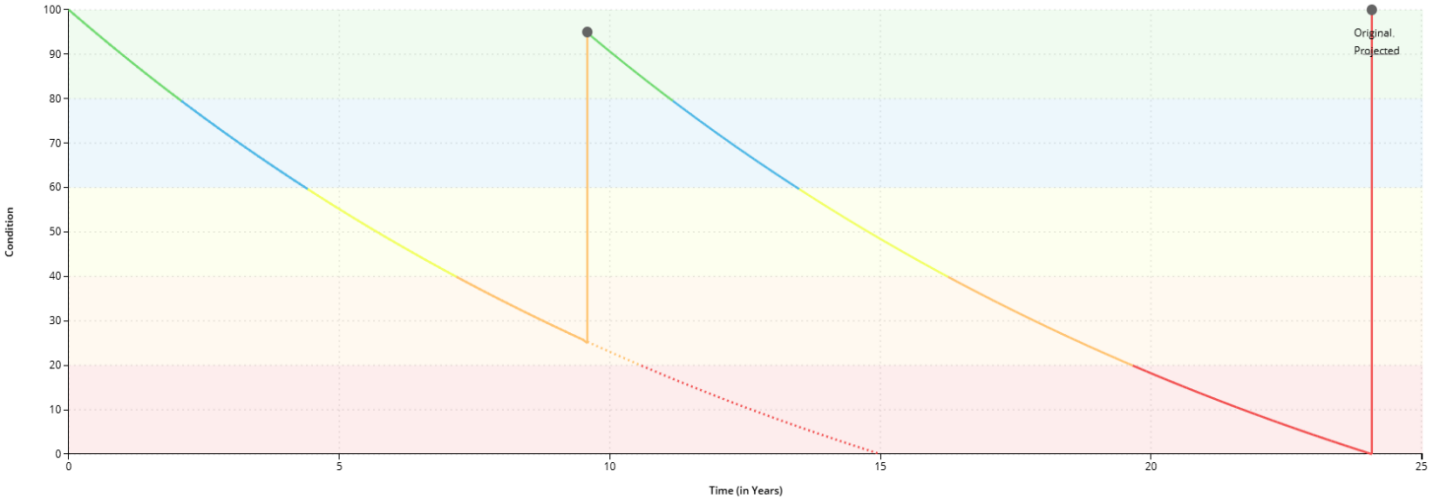

Figure 26 Lifecycle Strategy: Surface Treated Roads

Gravel Roads		
Event Name	**Event Class**	**Event Trigger**
Dust Suppressant	Maintenance	Repeats Every 2 Years
Grading	Rehabilitation	Repeats Every 2 Years
Gravelling	Maintenance	Repeats Every 5 Years

Table 10 Lifecycle Strategy: Gravel Roads

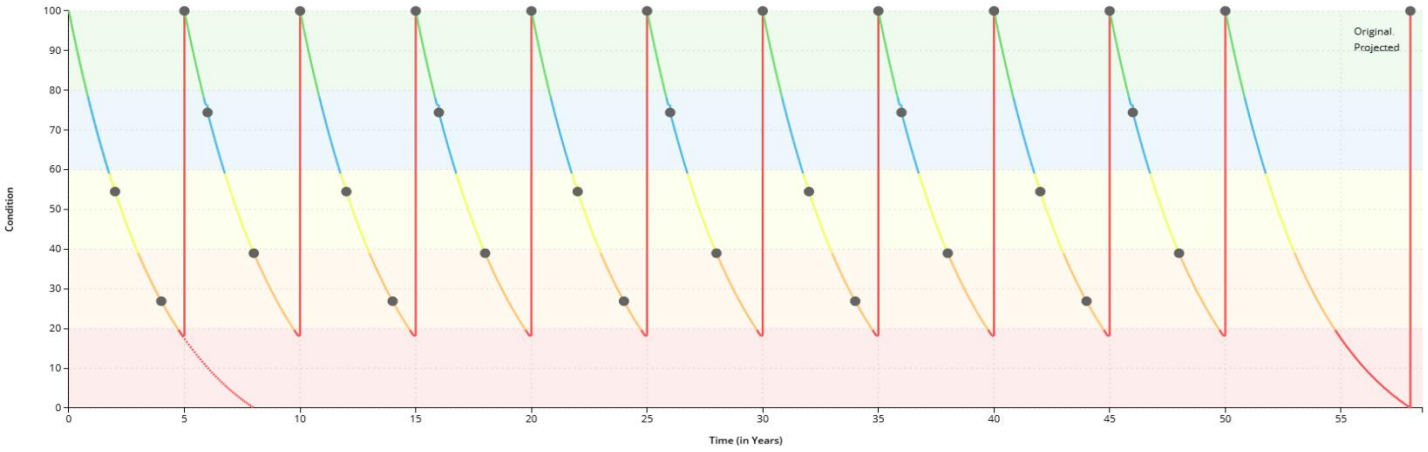

Figure 27 Lifecyle Strategy: Gravel Roads

4.5 Forecasted Long-Term Replacement Needs

Figure 28 illustrates the short-, medium-, and long-term rehabilitation and replacement needs for the Town's road network and extends to 2074 to capture a full replacement cycle for the longest-lived assets. The average annual capital requirement is approximately $5.3 million, which serves as a useful benchmark for annual capital funding or reserve contributions to avoid deferral of works. The forecast indicates sustained capital demand over the planning horizon and identifies an estimated $70 million backlog, primarily associated with paved roads. These results are based on replacement cost, age, available condition data, and lifecycle modeling (paved roads only) and are intended to support long-term, network-level financial planning. The backlog largely reflects paved roads that have exceeded their estimated useful life but remain in service.

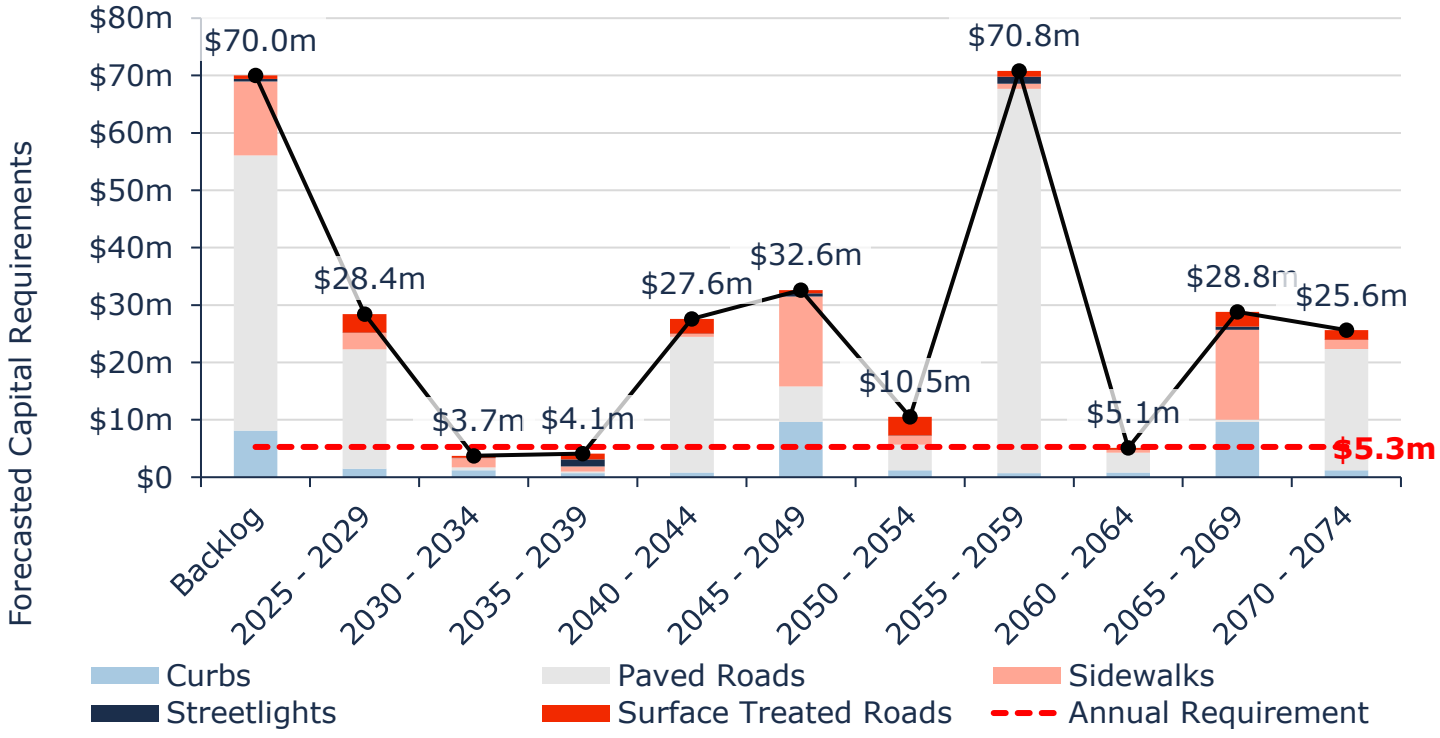

Figure 28 Forecasted Capital Replacement Needs: Road Network 2025-2074

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

4.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement cost.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

1 - 4 Very Low $5,669,000 (4%)	5 - 7 Low $6,586,000 (5%)	8 - 9 Moderate $10,460,000 (8%)	10 - 14 High $18,011,000 (13%)	15 - 25 Very High $93,202,000 (70%)

Figure 29 Risk Matrix: Road Network

4.7 Levels of Service

The tables that follow summarize the Town's current levels of service with respect to prescribed KPIs under Ontario Regulation 588/17, as well as any additional performance measures that the Town selected for this AMP.

4.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps of the road network in the municipality and its level of connectivity	See Appendix C
Quality	Description or images that illustrate the different levels of road class pavement condition	See Appendix C

Table 11 O. Reg. 588/17 Community Levels of Service: Road Network

4.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Scope	Lane-km of arterial roads (km/km^2)	37.4 / 98.06
	Lane-km of collector roads per land area (km/km^2)	24.4 / 98.06
	Lane-km of local roads per land area (km/km^2)	115 / 98.06
Quality	Average pavement condition index for paved roads in the Town	19% (Very Poor)
	Average surface condition for unpaved roads in the Town (e.g. excellent, good, fair, poor)	0.2% (Very Poor)
Performance	Average annual capital reinvestment rate vs. target reinvestment rate	1.38%/4.14%
	% assets in good / very good condition	9.7%
	% assets in poor / very poor condition	65%

Table 12 O. Reg. 588/17 Technical Levels of Service: Road Network

4.8 Recommendations

Asset Inventory

- The streetlight inventory includes several pooled assets that should be broken into discrete segments to allow for detailed planning and analysis.

Condition Assessment Strategies

- Consider commissioning a comprehensive road needs study and condition assessment to further strengthen asset data and improve reporting.

Lifecycle Management Strategies

- Implement the identified lifecycle management strategies for paved and surface treated roads to realize potential cost avoidance and maintain a high quality of road pavement condition and evaluate the efficacy of the management strategies at regular intervals to determine the impact to cost, condition and risk.

5. Bridges & Culverts

Bridges and Culverts (over 3m) represent a critical portion of the transportation services provided to the community. Hearst is responsible for the maintenance of all bridges and culverts, with the goal of keeping structures in an adequate state of repair and minimizing service disruptions. There are currently 4 bridge structures and 4 culverts, with a current replacement cost of almost $12.5 million.

5.1 Inventory & Valuation

Table 13 and Figure 30 summarize the quantity and current replacement cost of the Town's various bridge and culvert assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Bridges	4	Assets	$10,202,000	User-Defined
Culverts	4	Assets	$2,276,000	User-Defined
TOTAL			**$12,478,000**	

Table 13 Detailed Asset Inventory: Bridges & Culverts

Figure 30 Portfolio Valuation: Bridges & Culverts

5.2 Asset Condition

Figure 31 summarizes the replacement cost-weighted condition of the Town's bridges & culverts. Based solely on assessed condition 100% of assets are in fair or better condition; Condition assessments were available for all asset.

As illustrated in Figure 32, currently all of the Town's bridge & culverts are in fair or better condition. This is further illustrated in Figure 30, with the assets shown by value and percentage based on the segmentation.

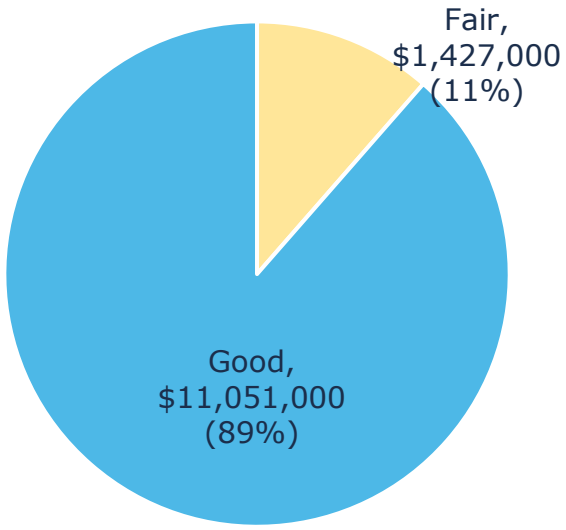

Figure 31 Asset Condition: Bridges & Culverts Overall

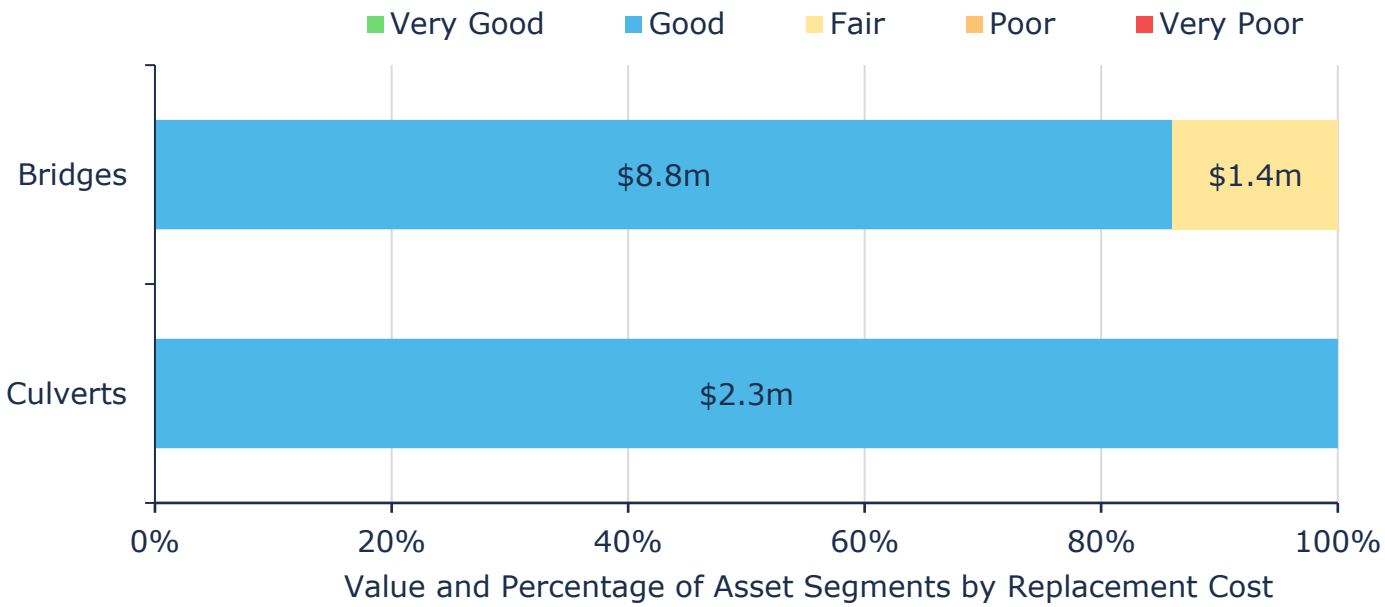

Figure 32 Asset Condition: Bridges & Culverts by Segment

5.3 Age Profile

Figure 33 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

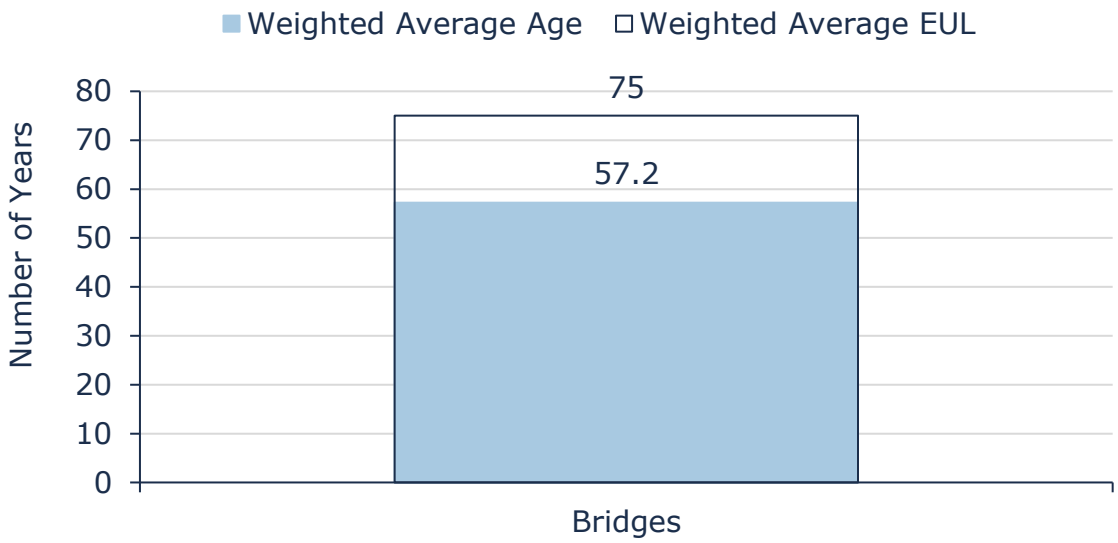

Figure 33 Estimated Useful Life vs. Asset Age: Bridges & Culverts

Age analysis reveals that on average, bridges have reached and surpassed the mid point of their estimated useful life. Culverts were excluded from this analysis as the in service dates were not available to calculate the current age.

5.4 Current Approach to Lifecycle Management

Activity Type	Description of Current Strategy
Maintenance/ Inspection	Condition assessments of all bridges and culverts with a span greater than or equal to 3 meters are completed in accordance with the Ontario Structure Inspection Manual (OSIM)
	The Town utilizes internal staff to conduct assessments. The most recent assessment were conducted in 2024 and 2025.
Rehabilitation/ Replacement	All lifecycle activities are driven by the results of mandated structural inspections competed according to the Ontario Structure Inspection Manual (OSIM)

Table 14 Lifecycle Management Strategy: Bridges & Culverts

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The table above outlines the Town's current lifecycle management strategy.

5.5 Forecasted Long-Term Replacement Needs

Figure 34 illustrates the cyclical short, medium and long-term infrastructure rehabilitation and replacement requirements for the Town's bridge and culvert assets. This analysis was run until 2089 to capture at least one iteration of replacement for the longest-lived asset in Citywide Assets, the Town's primary asset management system and asset register. The Town's average annual requirements (red dotted line) total $182 thousand for all assets in this category. Although actual spending may fluctuate substantially from year to year, this figure is a useful benchmark value for annual capital expenditure targets (or allocations to reserves) to ensure projects are not deferred and replacement needs are met as they arise.

The chart illustrates a long period of time before significant capital needs are required. These projections are based on asset replacement costs, age analysis, and condition data when available. They are designed to provide a long-term, portfolio-level overview of capital needs and should be used to support improved financial planning over several decades.

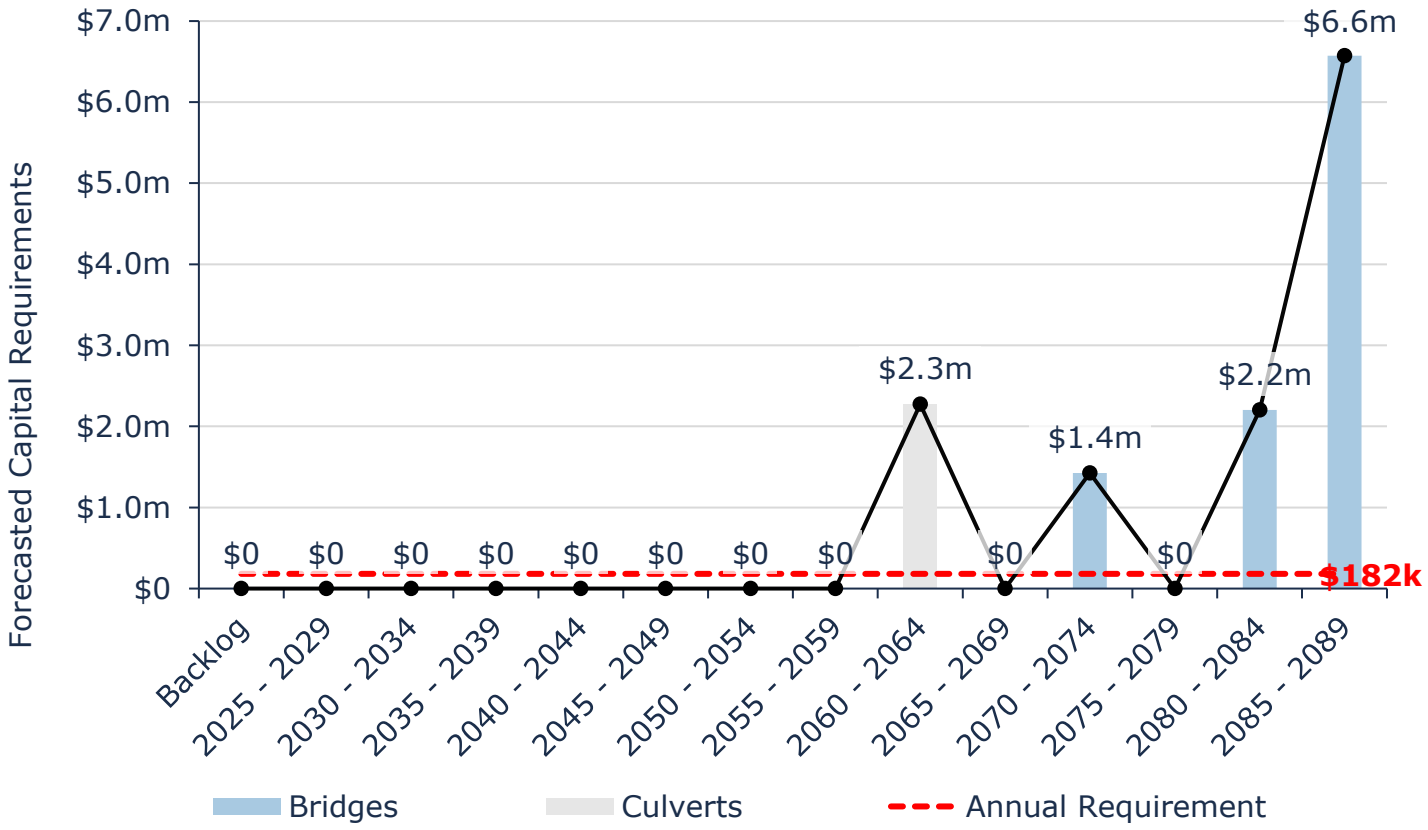

Figure 34 Forecasted Capital Replacement Needs: Bridges & Culverts 2025-2089

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

5.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement cost.

1 - 4	5 - 7	8 - 9	10 - 14	15 - 25
Very Low	Low	Moderate	High	Very High
$1,759,000	$843,000	$2,202,000	$7,674,000	-
(14%)	(7%)	(18%)	(61%)	(0%)

Figure 35 Risk Matrix: Bridges & Culverts

5.7 Levels of Service

The tables that follow summarize the Town's current levels of service with respect to prescribed KPIs under Ontario Regulation 588/17 as well as any additional performance measures that the Town has selected for this AMP.

5.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the traffic that is supported by municipal bridges (e.g. heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	The Town of Hearst bridges have been designed in accordance with the standard and requirements of the Bridge Design Code at the time of construction. The bridges have been designed to carry heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians and cyclists. Municipal bridges form a key component of the Town's transportation network. Traffic that is supported by municipal bridges and structural culverts includes heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians and cyclists.
Quality	Description or images of the condition of bridges and culverts and how this would affect use of the bridges and culverts	See Appendix C

Table 15 O. Reg. 588/17 Community Levels of Service: Bridges & Culverts

5.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Scope	% of bridges and structural culverts in the Town with loading or dimensional restrictions	0[4]
Quality	Average bridge condition index value for bridges in the Town	Good

[4] Currently the Town does not have data available that supports providing a value for this metric. The Town will consider the feasibility of commissioning an inspection to determine if there are any load or dimension restrictions recommended.

Service Attribute	Technical Metric	Current LOS
	Average bridge condition index value for structural culverts in the Town	Good
Performance	Average annual capital reinvestment rate vs. target reinvestment rate	0%/1.45%
	% assets in good / very good condition	89%
	% assets in poor / very poor condition	0%

Table 16 O. Reg. 588/17 Technical Levels of Service: Bridges & Culverts

5.8 Recommendations

Data Review/Validation

- Continue to review and validate inventory data and apply assessed conditions to all bridges and structural culverts upon the completion of OSIM inspections every 2 years.
- Verify in-service dates or estimated age for culverts, currently with unknown dates, indicated in Citywide with a '1900-01-01' date.

Lifecycle Management Strategies

- This AMP only includes capital costs associated with the reconstruction of bridges and culverts. The Town should work towards identifying projected capital rehabilitation and renewal events and integrating these potential events and costs into long-term planning.

6. Storm Network

The Town's Storm Network is comprised of storm mains, manholes and catch basins. The current replacement cost of assets accounted for within the asset management system totals approximately $25.3 million.

6.1 Inventory & Valuation

Table 17 summarizes the quantity and current replacement cost of the Town's various storm network assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Catch Basins	1,112	Assets	$5,877,000	Cost per Unit
Manholes	98	Assets	$1,411,000	Cost per Unit
Storm Mains	36	Kilometers	$18,002,000	Cost per Unit
TOTAL			**$25,290,000**	

Table 17 Detailed Asset Inventory: Storm Network

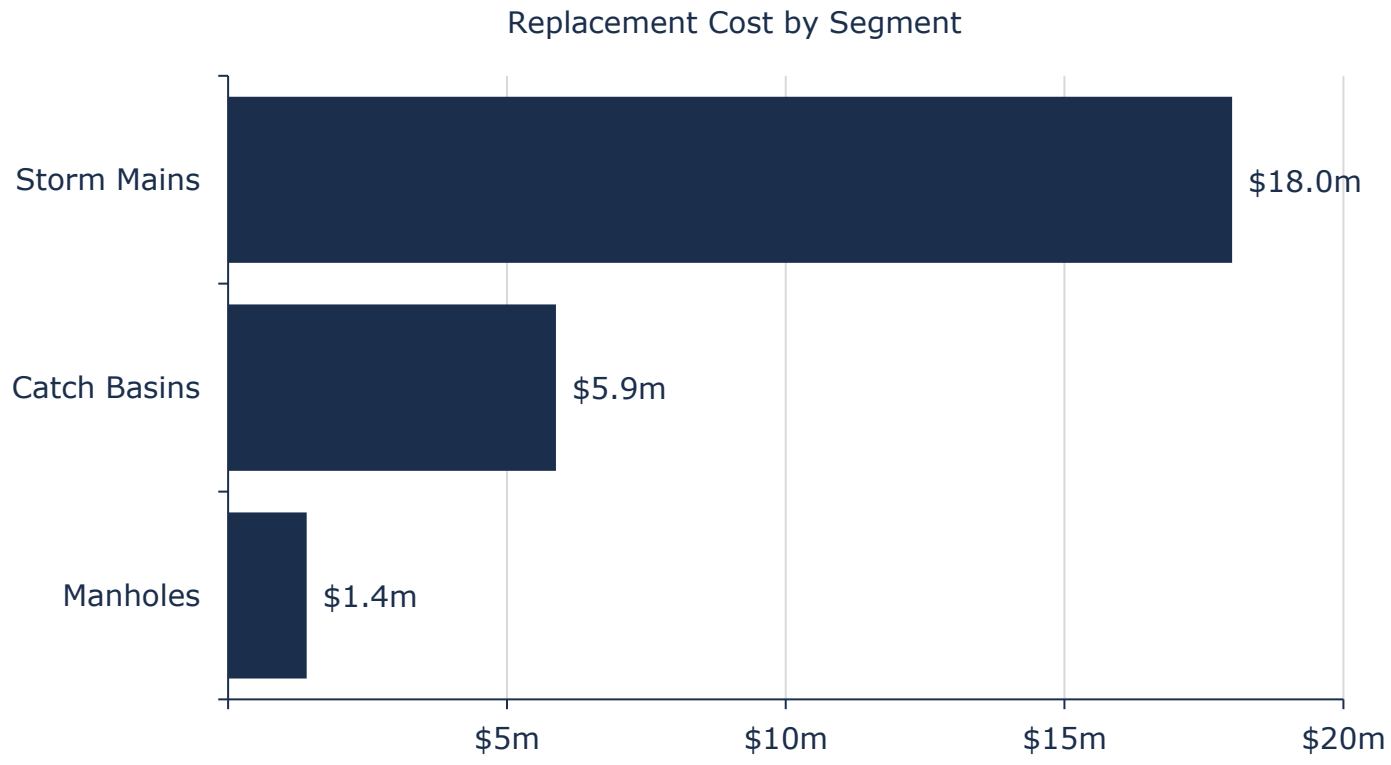

Figure 36 Portfolio Valuation: Storm Network

6.2 Asset Condition

Figure 37 summarizes the replacement cost-weighted condition of the Town's storm network assets. Based on primarily age data, approximately 36% of assets are in poor to very poor condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

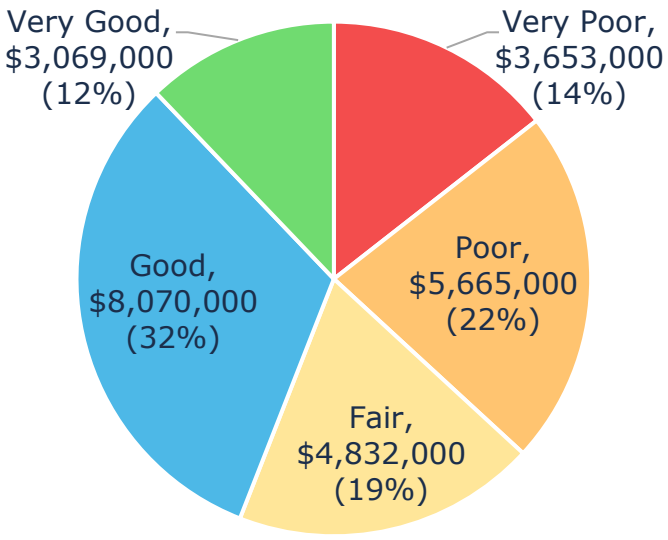

Figure 37 Asset Condition: Storm Network Overall

Figure 38 summarizes the mostly age-based condition of stormwater assets. The analysis illustrates that the majority of stormwater mains are in fair or better condition.

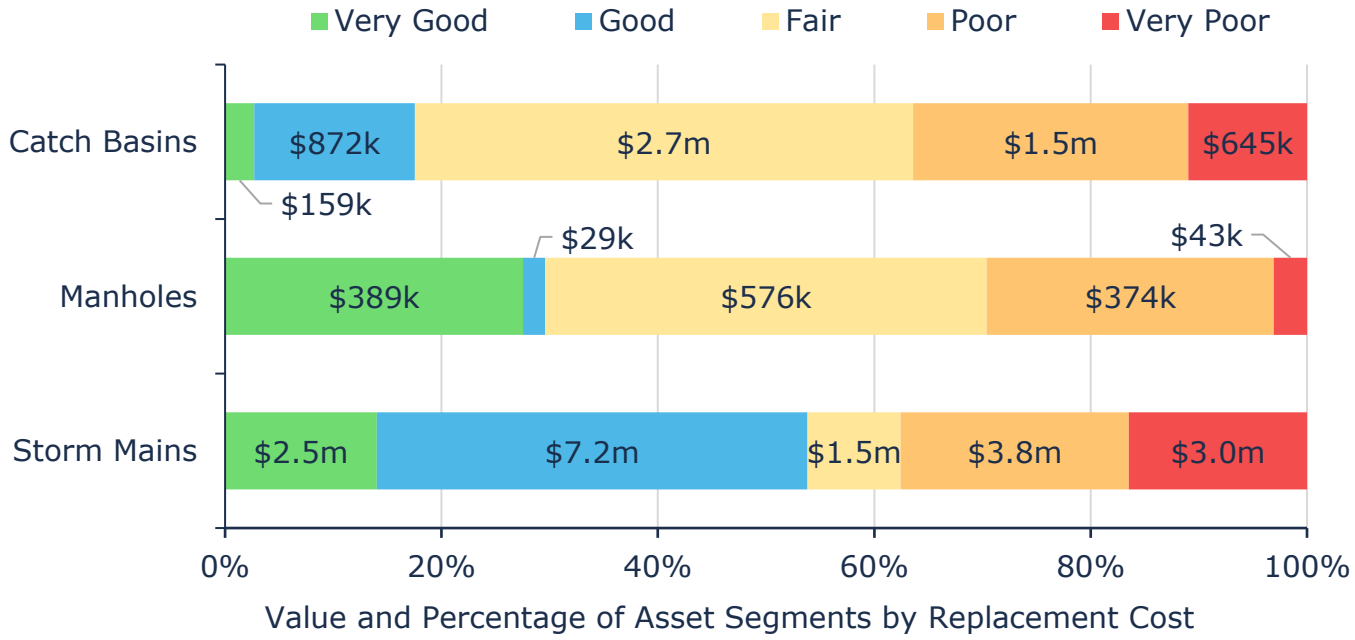

Figure 38 Asset Condition: Storm Network by Segment

6.3 Age Profile

Figure 39 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

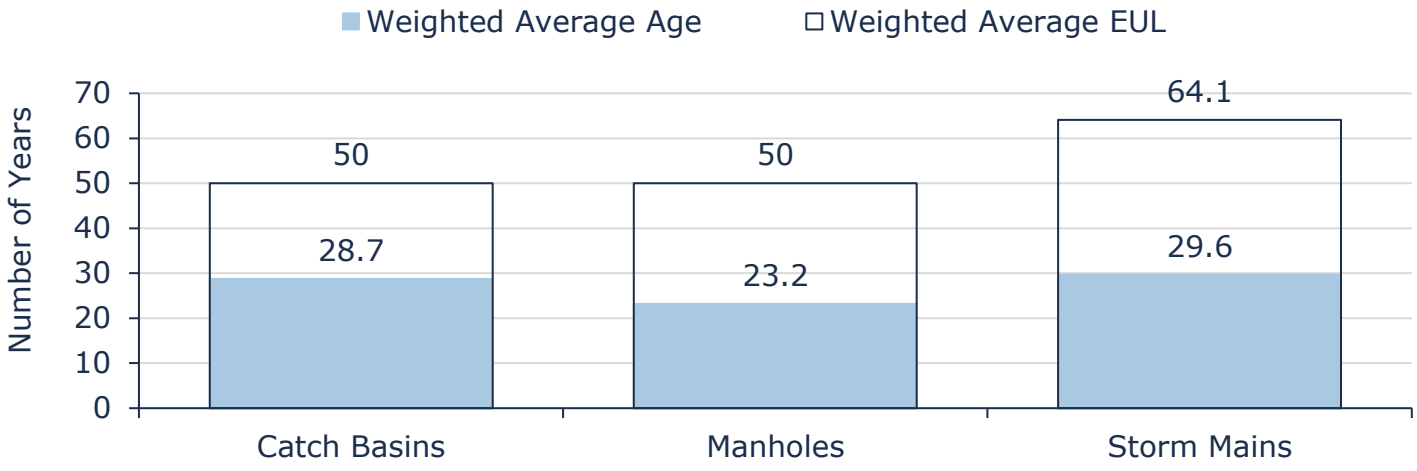

Figure 39 Estimated Useful Life vs. Asset Age: Storm Network

Age analysis reveals that on average, stormwater assets have consumed slightly more than half of their life expectancy. Age profiles and CCTV inspections will help to identify mains in need of replacements and/or upgrades. Extensions to EULs for mains may also be considered based on performance history to date.

6.4 Current Approach to Lifecycle Management

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance	Maintenance activities are completed to a lesser degree compared to other underground linear infrastructure
	Minor maintenance activities including frame and cover adjustments are conducted on an ad-hoc basis
	Repairs to structures, including restoration, is completed and is part of the Town's operational budget
Rehabilitation/Replacement	Replacement of storm network assets are done in conjunction with road and other underground assets projects
	Without the availability of up-to-date condition assessment information replacement activities are purely reactive in nature

Table 18 Lifecycle Management Strategy: Storm Network

6.5 Forecasted Long-Term Replacement Needs

Figure 40 illustrates the cyclical short, medium, and long-term replacement needs of the Town's storm network assets and extends to 2089 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. The average annual capital requirement is estimated at $438 thousand (red dotted line), providing a useful benchmark for annual funding targets or reserve contributions, recognizing that actual expenditures will vary year to year. The forecast identifies significant capital demands over the planning horizon, including an existing backlog of $353 thousand, largely related to aging storm mains. Notable peaks are during the 2040-2044 period, with a projected need of $3.9 million followed up in 2070-2074 with a replacement cost peak totaling approximately $6.5 million, as major assets reach the end of their service life. These projections are based on asset age and replacement cost assumptions and are intended to support long-term, portfolio-level financial planning

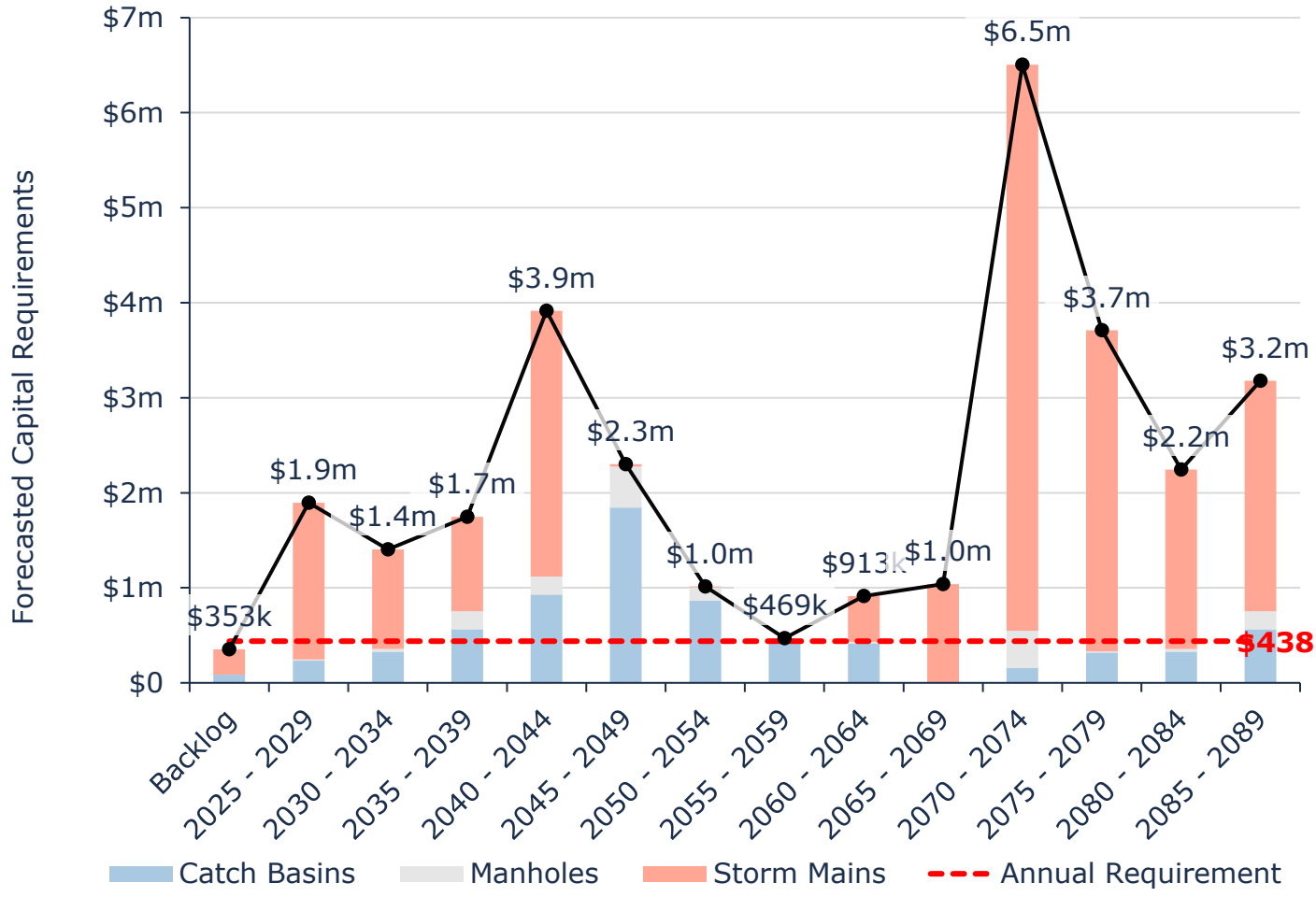

Figure 40 Forecasted Capital Replacement Needs Storm Network 2025-2089

CCTV inspections may reveal a higher or lower backlog. The inspections may also help reduce long-term projections by providing more accurate condition data for mains than age. In addition, a robust risk framework will ensure that high-criticality assets receive proper and timely lifecycle intervention, including replacements.

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

6.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition, pipe material, replacement costs and diameter. The risk ratings for assets without useful attribute data were calculated using only condition and their replacement costs.

1 - 4 Very Low $11,775,000 (47%)	5 - 7 Low $4,906,000 (19%)	8 - 9 Moderate $2,285,000 (9%)	10 - 14 High $3,639,000 (14%)	15 - 25 Very High $2,685,000 (11%)

Figure 41 Risk Matrix: Storm Network

6.7 Levels of Service

The tables that follow summarize the Town's current levels of service with respect to prescribed KPIs under Ontario Regulation 588/17 as well as any additional performance measures that the Town has selected for this AMP.

6.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include map, of the user groups or areas of the municipality that are protected from flooding, including the extent of protection provided by the municipal stormwater system.	See Appendix C

Table 19 O. Reg. 588/17 Community Levels of Service: Storm Network

6.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Scope	% of properties in municipality designed to be resilient to a 100-year storm	77%
	% of the municipal stormwater management system designed to be resilient to a 5-year storm	100%
Performance	Average annual capital reinvestment rate vs. target reinvestment rate	0 %: 1.73%
	% assets in good / very good condition	44%
	% assets in poor / very poor condition	36%

Table 20 O. Reg. 588/17 Technical Levels of Service: Storm Network

6.8 Recommendations

Asset Inventory

- With no available condition assessment data, reported condition is purely age-based. This causes a distortion of asset condition reporting and the resultant replacement strategy based on risk ratings. Conducting a formal condition assessment and the associated development of a comprehensive inventory would address this issue effectively.

Condition Assessment Strategies

- The development of a comprehensive inventory should be accompanied by a system-wide assessment of the condition of all assets in the stormwater network through CCTV inspections.

Risk Management Strategies

- Consider conducting evaluations of the existing infrastructure to assess whether the assets align with the criteria for 100-year and 5-year storm resiliency
- As assets undergo replacement over time, it is advisable to utilize materials such as HDPE and PVC, in addition to conducting a redesign that incorporates the updated IDF curves.

7. Water Network

The Town's water network includes water mains, hydrants, meters, valves and treatment facilities, with a current replacement cost of $59.6 million. Potable water represents a critical portion of the services provided to the community.

7.1 Inventory & Valuation

Table 21 and Figure 42 summarize the quantity and current replacement cost of the Town's various water network assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Hydrants	246	Assets	$4,862,000	Cost per Unit
Meters	1,922	Assets	$773,000	CPI
Treatment Plant	1	Assets	$24,914,000	User-Defined
Valves	370	Assets	$4,762,000	Cost per Unit
Water Tower	1	Assets	$2,625,000	User-Defined
Water Mains	47	Kilometers	$21,674,000	Cost per Unit
TOTAL			**$59,609,000**	

Table 21 Detailed Asset Inventory: Water Network

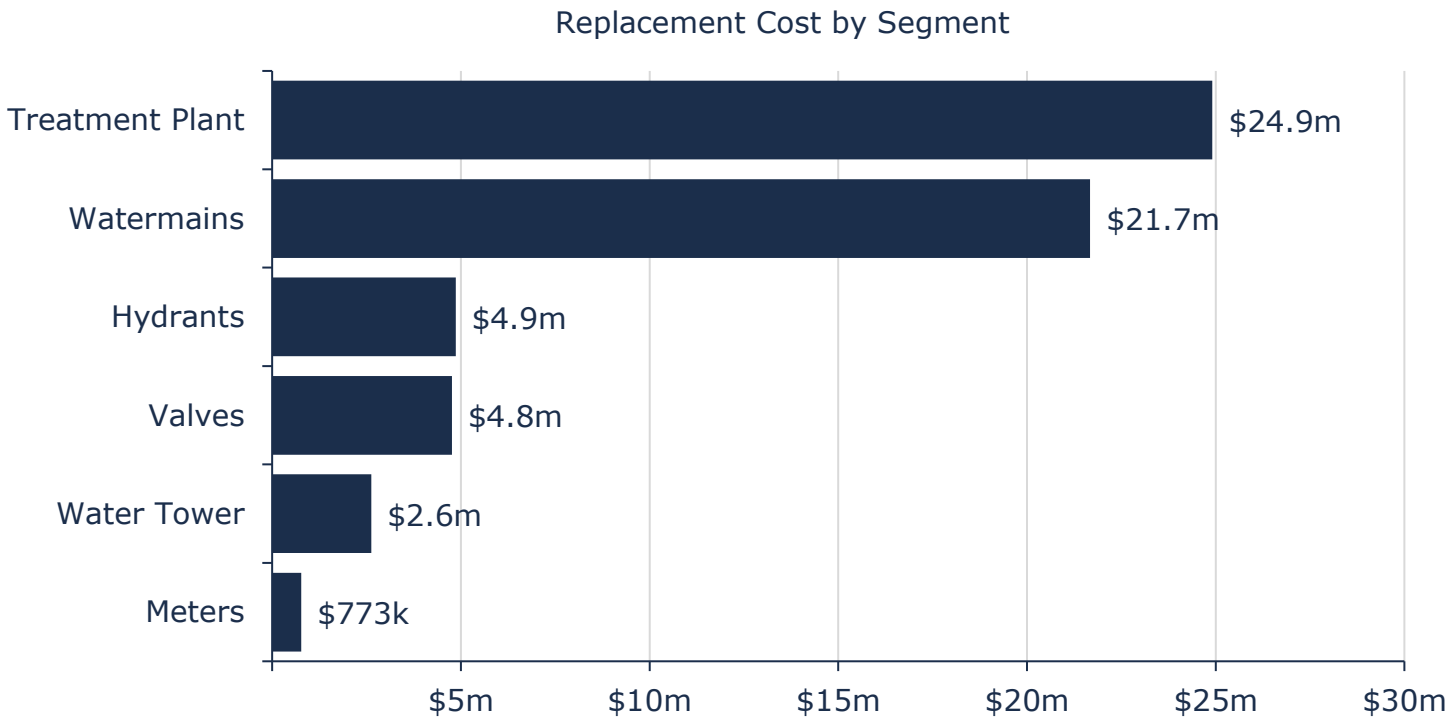

Figure 42 Portfolio Valuation: Water Network

7.2 Asset Condition

Figure 43 summarizes the replacement cost-weighted condition of the Town's water network. Based solely on age, 46% of assets are in fair or better condition; the remaining 54% of assets are in poor to very poor condition. Condition assessments were not available for the water network assets. This age based condition data was projected from installation date to current year to estimate their condition today.

Assets in poor or worse condition may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

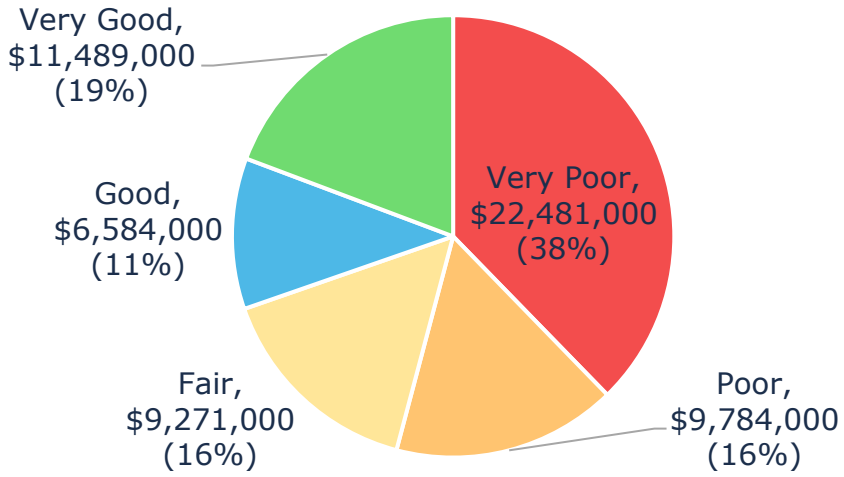

Figure 43 Asset Condition: Water Network Overall

As illustrated in Figure 44, based on age-based condition projection, just over 50% of the water network is considered to be in poor or worse condition. Water meter, treatment plan and water tower asset make up the majority of this value. A formal condition assessment, determine asset performance vs age, will likely reveal that the assets are performing better than indicated.

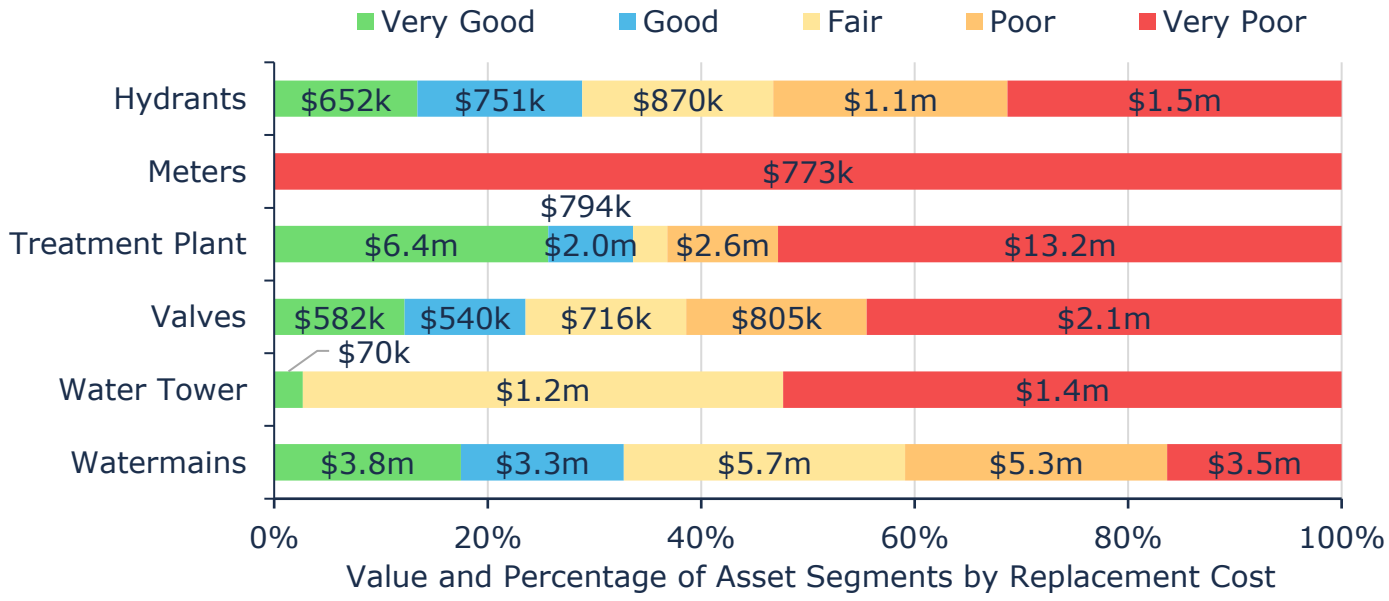

Figure 44 Asset Condition: Water Network by Segment

7.3 Age Profile

Figure 45 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

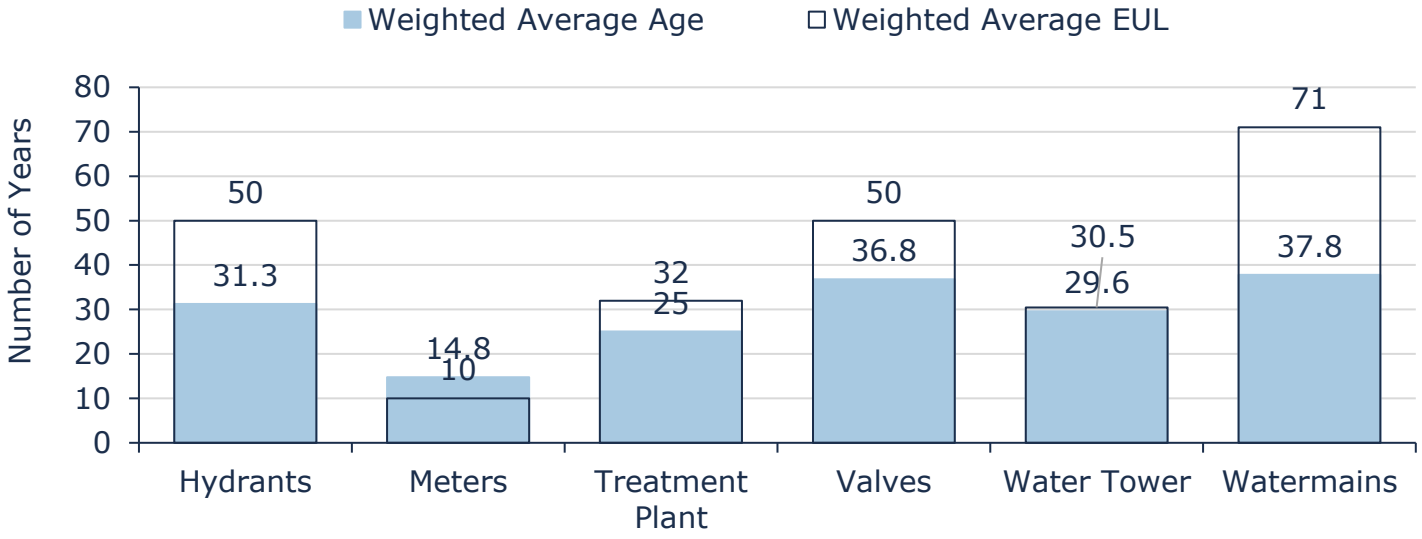

Figure 45 Estimated Useful Life vs. Asset Age: Water Network

Age analysis reveals that on average, all water network assets have reached of surpassed the midpoint of their estimated life expectancy remaining. Age profiles and condition assessments will help to identify mains in need of replacements and/or upgrades. Extensions to EULs for mains may also be considered based on performance history to date.

7.4 Current Approach to Lifecycle Management

Activity Type	Description of Current Strategy
Maintenance	Maintenance events are performed in accordance with industry best practices and manufacturer's specifications. An annual budget is allocated for repairs and maintenance to ensure compliance with provincial requirements. The objective is to ensure that all aspects of water treatment and distribution not only meet but also exceed the mandated standards whenever possible. Any repair and maintenance matters that arise are promptly addressed without delay.
	A scheduled inspection and maintenance program is implemented by OCWA.
Rehabilitation	Both pumps and hydrants (gaskets & seals) are rehabilitated; candidates for rehabilitation are identified by OCWA.
Replacement	In the absence of mid-lifecycle rehabilitative events, most mains are simply maintained with the goal of full replacement once it reaches its end-of-life.
	Replacement of mains, for the most part is reactive. However, the Town does consider age and performance.

Table 22 Lifecycle Management Strategy: Water Network

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The table above the Town's current lifecycle management strategy.

7.5 Forecasted Long-Term Replacement Needs

Figure 46 illustrates the short-, medium-, and long-term rehabilitation and replacement needs of the Town's water network, extending to 2094 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. Average annual capital requirements are estimated at $1.6 million (red dotted line), providing a benchmark for annual funding targets or reserve contributions, while recognizing that actual spending will vary year to year. The forecast identifies significant capital demand throughout the period, including a current backlog of $18.9 million, primarily related to treatment plant assets that have exceeded their estimated useful life. Projections are based on asset age, replacement cost, and condition data where available, offering a long-term, portfolio-level view to support strategic financial planning.

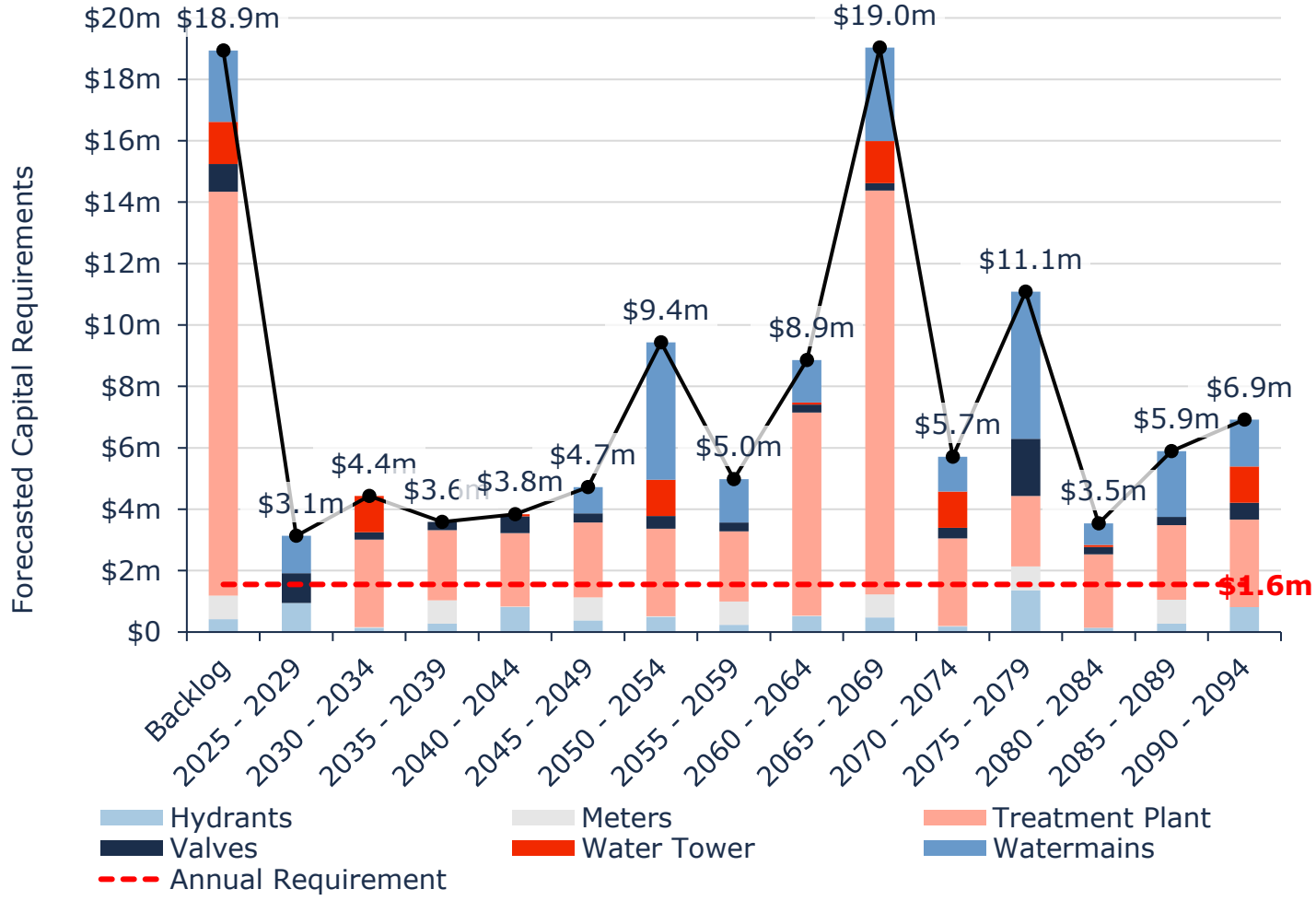

Figure 46 Forecasted Capital Replacement Needs: Water Network 2025-2094

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

7.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition, pipe material, replacement costs, asset type, and diameter. The risk ratings for assets without useful attribute data were calculated using only condition and their replacement costs.

1 - 4 Very Low $7,985,000 (13%)	5 - 7 Low $12,537,000 (21%)	8 - 9 Moderate $4,500,000 (8%)	10 - 14 High $12,860,000 (22%)	15 - 25 Very High $21,727,000 (36%)

Figure 47 Risk Matrix: Water Network

7.7 Levels of Service

The tables that follow summarize the Town's current levels of service with respect to prescribed KPIs under Ontario Regulation 588/17 as well as any additional performance measures that the Town has selected for this AMP.

7.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps of the user groups or areas of the municipality that are connected to the municipal water system	See Appendix C
	Description, which may include maps of the user groups or areas of the municipality that have fire flow	See Appendix C
Reliability	Description of boil water advisories and service interruptions	On occasion, water service interruptions may occur due to unexpected main breaks, maintenance activities, or water infrastructure replacement. Staff make every effort to keep service interruptions to a minimum.

Table 23 O. Reg. 588/17 Community Levels of Service: Water Network

7.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Scope	% of properties connected to the municipal water system	91%
	% of properties where fire flow is available	83%
Reliability	# of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system	0.002
	# of connection-days per year where water is not available due to water main breaks compared to the total number of properties connected to the municipal water system	0.002
Performance	Average annual capital reinvestment rate vs. target reinvestment rate	0.47%/2.6%
	% assets in good / very good condition	30%
	% assets in poor / very poor condition	54%

Table 24 O. Reg. 588/17 Technical Levels of Service: Water Network

7.8 Recommendations

Replacement Costs

- Gather accurate replacement costs and update on a regular basis to ensure the accuracy of capital projections.

Condition Assessment Strategies

- Identify condition assessment strategies for high value and high-risk water network assets.

8. Sanitary Network

The Sanitary network provides the essential service of wastewater collection, disposal, and treatment for the community, and has a current replacement value of $25.2 million.

8.1 Inventory & Valuation

Table 25 and Figure 48 summarize the quantity and current replacement cost of the Town's various sanitary network assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Lagoons	2	Assets	$220,00	CPI
Manholes	446	Assets	$5,352,000	Cost per Unit
Pumping Stations	7	Assets	$3,131,000	User-Defined
Sanitary Equipment	8	Assets	$511,000	CPI
Sanitary Mains	44	Kilometers	$15,955,000	Cost per Unit
TOTAL			**$25,170,000**	

Table 25 Detailed Asset Inventory: Sanitary Network

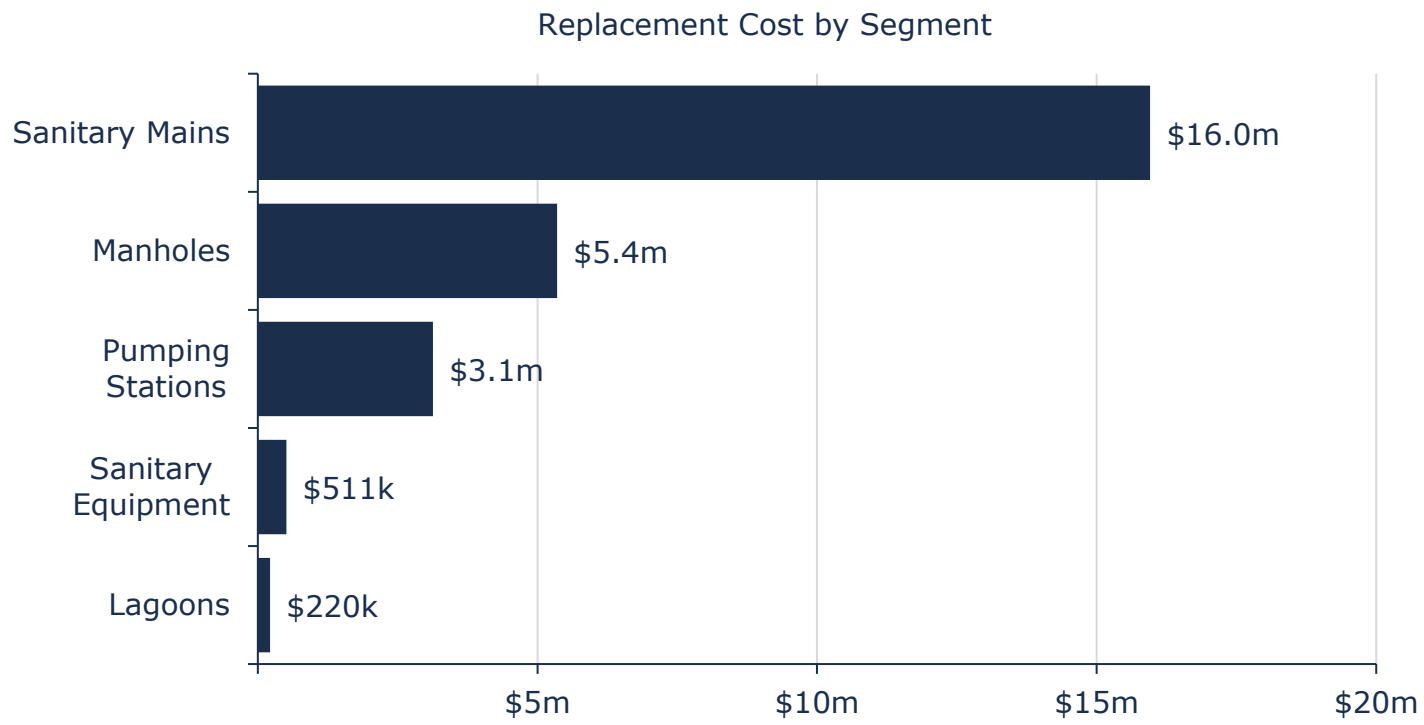

Figure 48 Portfolio Valuation: Sanitary Network

8.2 Asset Condition

Figure 49 summarizes the replacement cost-weighted condition of the Town's wastewater network. Based on age only, 41% of assets are in fair or better condition; the remaining 59% of assets are in poor to very poor condition. No condition assessments were available for the sanitary network. The age based condition data was projected from installation date to current year to estimate their condition today.

Assets in poor or worse condition may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition. As illustrated in Figure 49 the majority of the Town's sanitary network assets are in poor or worse condition based on age projections.

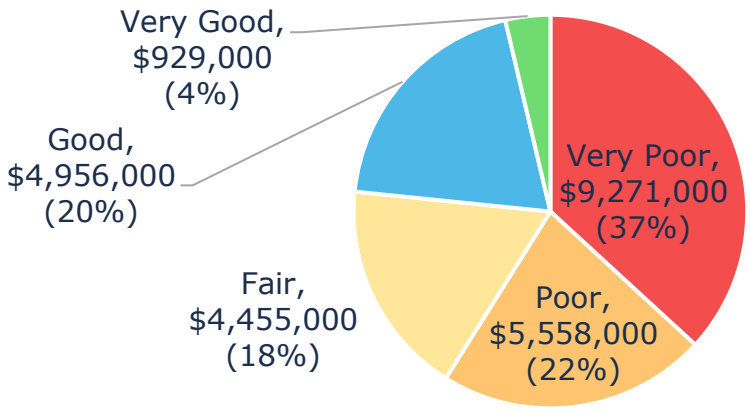

Figure 49 Asset Condition: Sanitary Network Overall

As illustrated in Figure 50, detailed by asset type and based on age-based conditions, the majority of the Town's sanitary network and facilities are considered to be in poor or worse condition.

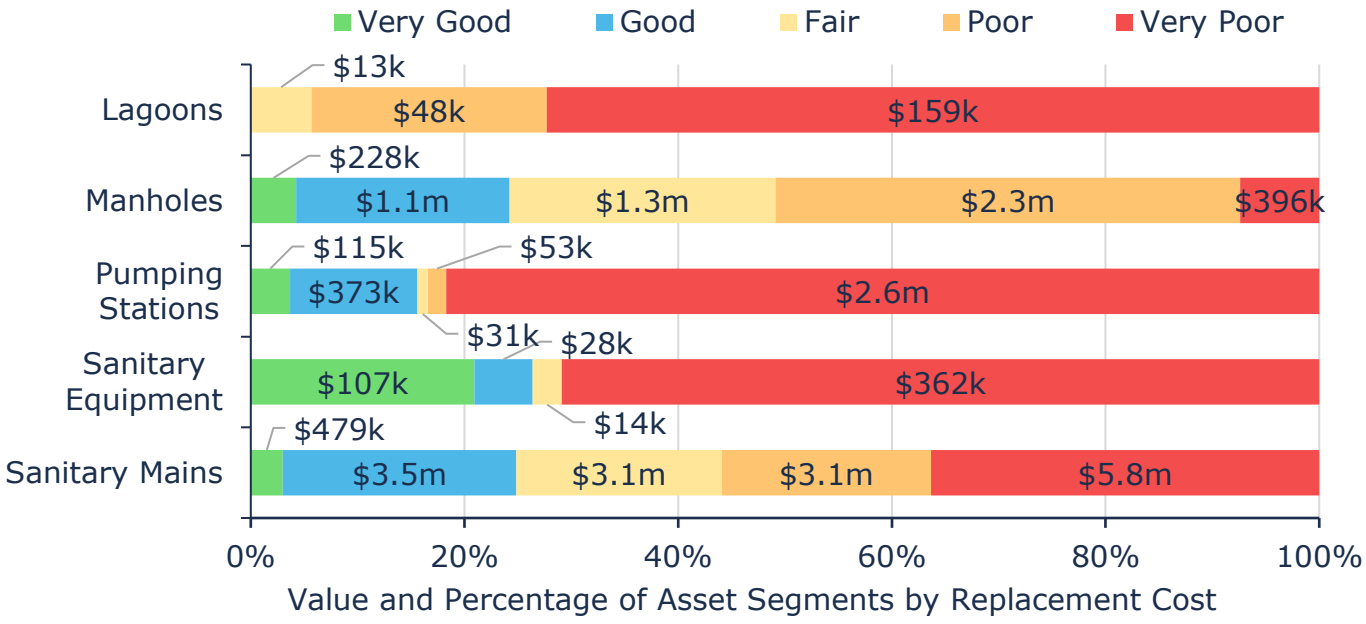

Figure 50 Asset Condition: Sanitary Network by Segment

8.3 Age Profile

Figure 51 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

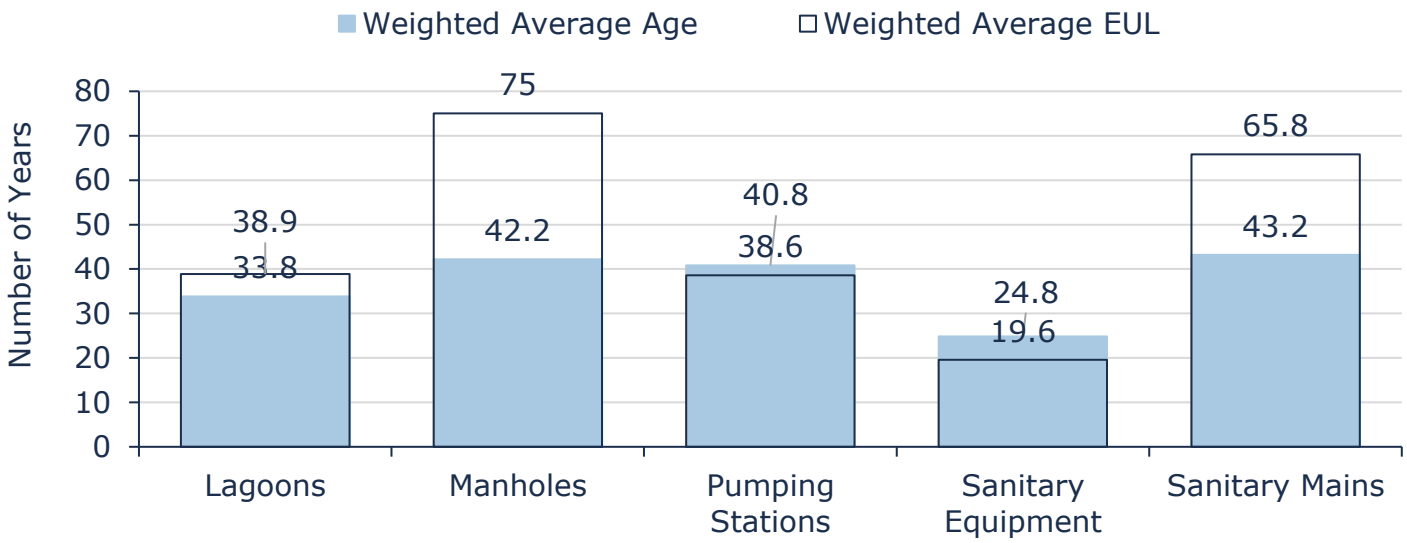

Figure 51 Estimated Useful Life vs. Asset Age: Sanitary Network

Age analysis reveals that on average, sanitary network assets have consumed more than half of their life expectancy. Age profiles and CCTV inspections will help to identify mains in need of replacements and/or upgrades. Extensions to EULs for mains may also be considered based on performance history to date.

8.4 Current Approach to Lifecycle Management

Activity Type	Description of Current Strategy
Maintenance	Main flushing is completed on 100% of the network annually.
	Annual manhole and sewer pipeline maintenance is conducted and accounts for much of the Town's operational budget.
	Periodic pressure testing may be employed to identify deficiencies and potential leaks.
Rehabilitation/ Replacement	Trenchless re-lining of specific forcemains.
	In the absence of mid-lifecycle rehabilitative events, most mains are simply maintained with the goal of full replacement once it reaches its end-of-life.
	The Town does consider age, performance and energy consumption when identifying candidates for replacement/reconstruction.

Table 26 Lifecycle Management Strategy: Sanitary Network

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The table above outlines the Town's current lifecycle management strategy.

8.5 Risk Analysis

The risk matrix below is generated using available asset data, including condition, pipe diameter, replacement costs and diameter. The risk ratings for assets without useful attribute data were calculated using only condition and their replacement costs.

1 - 4 Very Low $2,218,000 (9%)	5 - 7 Low $5,672,000 (12%)	8 - 9 Moderate $4,455,000 (0%)	10 - 14 High $4,487,000 (28%)	15 - 25 Very High $8,337,000 (0%)

Figure 52 Risk Matrix: Sanitary Network

8.6 Forecasted Long-Term Replacement Needs

Figure 53 illustrates the short-, medium-, and long-term rehabilitation and replacement needs of the Town's sanitary network, extending to 2094 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. Average annual capital requirements are estimated at $440 thousand (red dotted line), providing a benchmark for annual funding targets or reserve contributions, while acknowledging that actual expenditures will fluctuate. Capital needs increase notably from 2050, with a current backlog of $7.2 million, primarily due to sanitary mains likely exceeding their estimated useful life. Projections are based on asset age, replacement cost, and condition data where available, offering a long-term, portfolio-level perspective to support strategic financial planning.

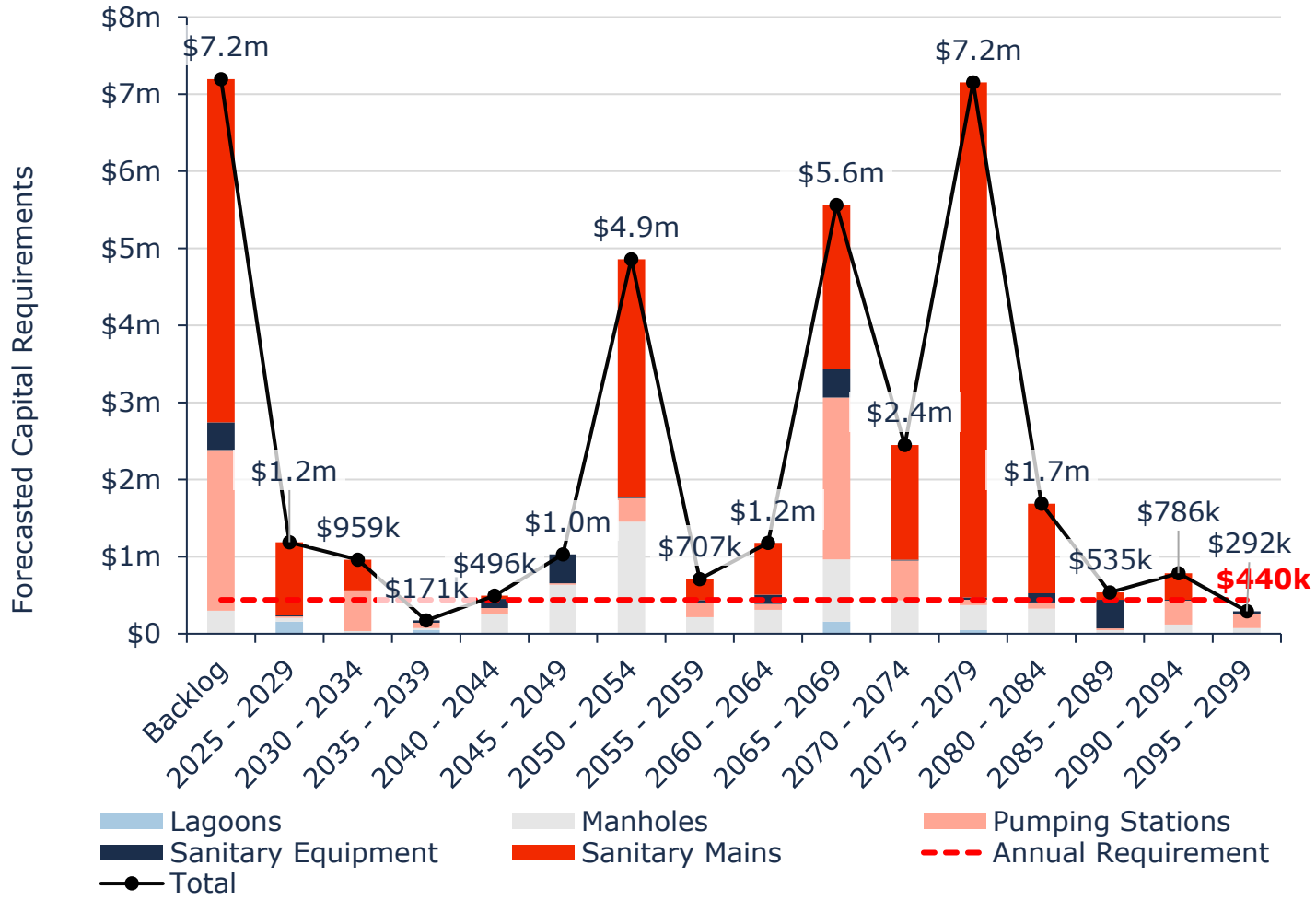

Figure 53 Forecasted Capital Replacement Needs: Sanitary Network 2025-2099

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

8.7 Levels of Service

The tables that follow summarize the Town's current levels of service with respect to prescribed KPIs under Ontario Regulation 588/17 as well as any additional performance measures that the Town has selected for this AMP.

8.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system	See Appendix C

Service Attribute	Qualitative Description	Current LOS
	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Town does not have any combined sewer assets in their inventory.
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches	The Town does not have any combined sewer assets in their inventory.
Reliability	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes	The largest contributor to ground water infiltration in the sanitary sewer system is the foundation sub-drain protecting every household from hydrostatic pressure. Spring saturation and heavy rainfall will impact sewer flows. Infiltration is also possible through manhole covers, manhole joints and pipe connection, although at a much reduced amount. There are currently six (6) sanitary overflows protecting the municipal system, all located at sewage pumping stations. Two (2) pumping stations are not equipped with overflows.
	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to stormwater infiltration	A yearly maintenance is performed to the sanitary collection system. Manholes are inspected and repaired when required. The majority of the current collection system is comprised of gasketed PVC pipe, thereby minimizing joint infiltration.

Service Attribute	Qualitative Description	Current LOS
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Effluent refers to the treated discharge from the wastewater treatment facility, and may include suspended solids, total phosphorous and biological oxygen demand. The Environmental Compliance Approval (ECA) for both the Cecile Sewage Treatment Lagoon and the Hearst Sewage Treatment Lagoons identifies the effluent criteria, the activities permitted and operational requirements for the municipal wastewater lagoons.

Table 27 O. Reg. 588/17 Community Levels of Service: Sanitary Network

8.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Scope	% of properties connected to the municipal wastewater system	90%
Reliability	# of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system	0
	# of connection-days per year having wastewater backups compared to the total number of properties connected to the municipal wastewater system	0
	# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	0.0015
Performance	Average annual capital reinvestment rate vs. target reinvestment rate	0.46%/1.75%
	% assets in good / very good condition	24%
	% assets in poor / very poor condition	59%

Table 28 O. Reg. 588/17 Technical Levels of Service: Sanitary Network

8.8 Recommendations

Condition Assessment Strategies

- Identify condition assessment strategies for high value and high-risk sanitary network assets.

Lifecycle Management Strategies

- A trenchless re-lining strategy is expected to extend the service life of sanitary mains at a lower total cost of ownership and should be considered for implementation to extend the life of infrastructure at the lowest total cost of ownership.
- Develop and implement strategic lifecycle strategies, rather than a replacement only strategy.

Non-Core Assets

Buildings

Land Improvements

Vehicles

Machinery & Equipment

9. Buildings

The Town's buildings portfolio consists of variety of buildings including, but not limited to, a fire hall, recreation centre, library, airport, public works garage and administration building. The current replacement cost of the building's portfolio is valued at $59.9 million.

9.1 Inventory & Valuation

Table 29 and Figure 54 summarize the quantity and current replacement cost of the Town's various buildings as managed in its primary asset management register, Citywide. Within the asset management database, building assets are not componentized. The quantity listed represents the number of asset records currently listed for each segment.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Airport	4	Assets	$1,441,000	User-Defined
Cemetery	10	Assets	$683,000	User-Defined
Fire	2	Assets	$1,958,000	User-Defined
General Government	1	Assets	$3,719,000	User-Defined
Parks & Recreation	5	Assets	$41,968,000	User-Defined
Public Works	6	Assets	$6,966,000	User-Defined
Social & Family Services	3	Assets	$3,154,700	User-Defined
TOTAL			**$59,989,000**	

Table 29 Detailed Asset Inventory: Buildings

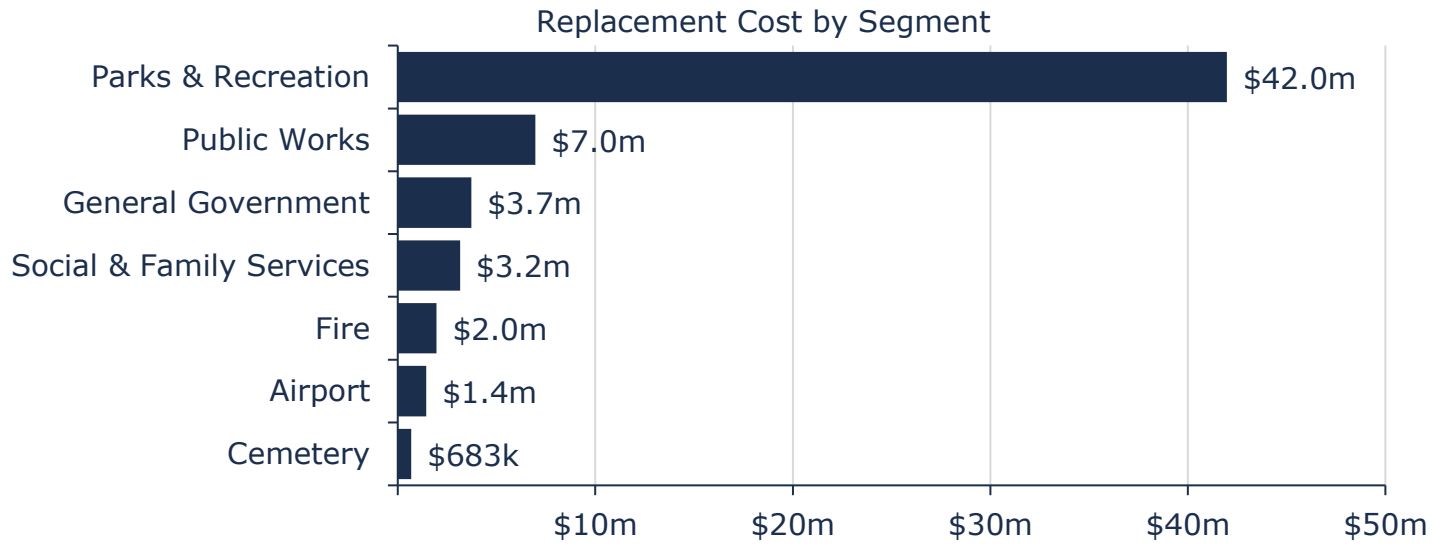

Figure 54 Portfolio Valuation: Buildings

9.2 Asset Condition

Figure 55 summarizes the replacement cost-weighted condition of the Town's buildings portfolio. Based primarily on age based condition projections, 41% of building assets are in fair or better condition. Assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition. As buildings are not componentized, condition data is presented only at the site level, rather than at the individual element or component level within each building.

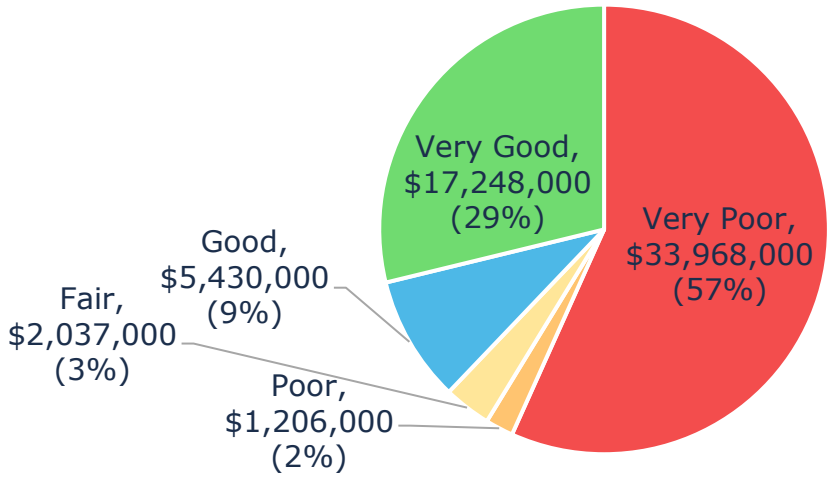

Figure 55 Asset Condition: Buildings Overall

Figure 56 summarizes the assessed condition of buildings by each segment. 41% of the assets are considered to be in fair or better condition, with the remaining 59% in poor or worse condition. However, in the absence of componentization and formal assessed condition values, this data has limited value. Componentization of assets and integration of condition assessments will provide a more accurate and reliable estimation of the condition of various facilities.

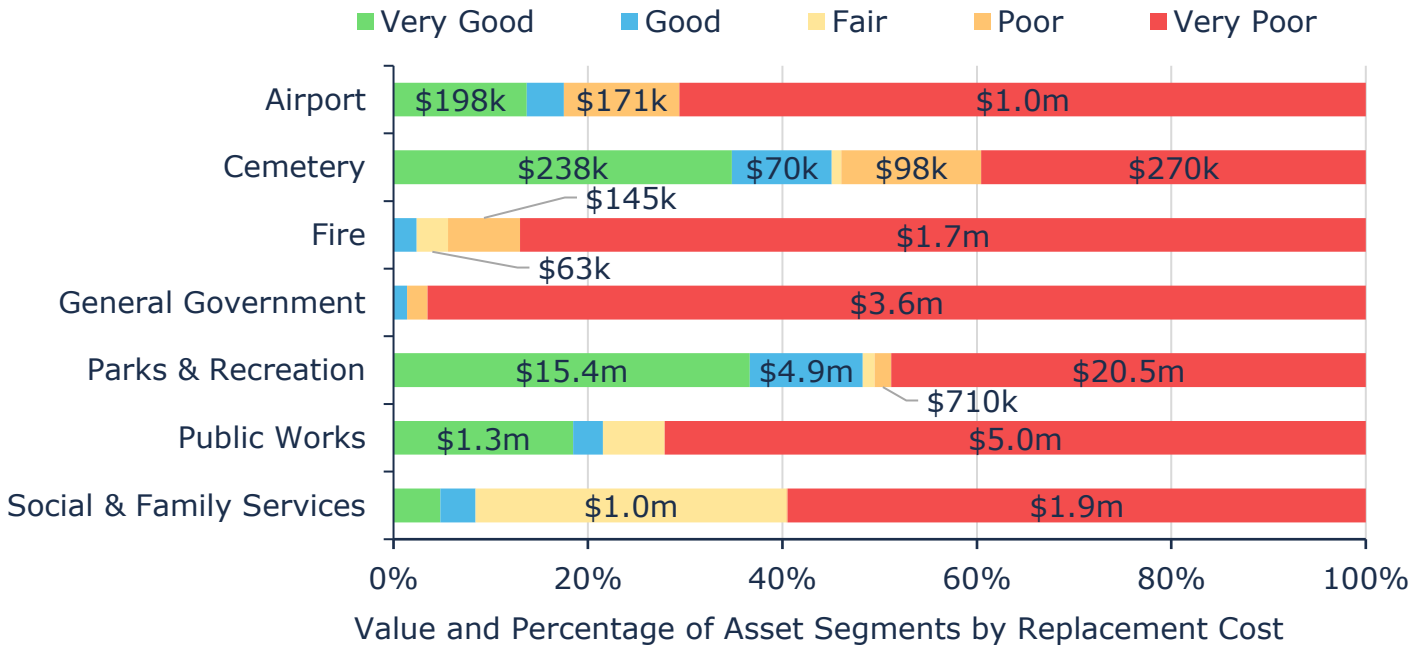

Figure 56 Asset Condition: Buildings by Segment

9.3 Age Profile

Figure 57 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

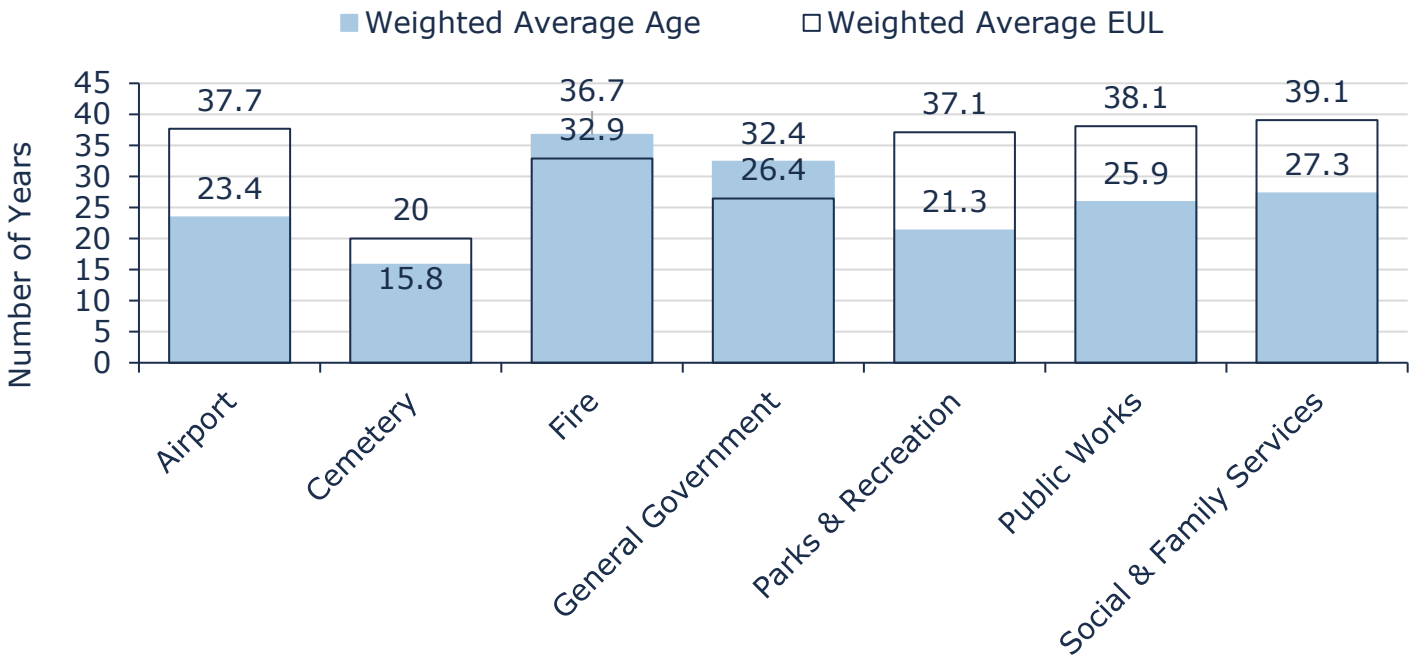

Figure 57 Estimated Useful Life vs. Asset Age: Buildings

Age analysis reveals that, on average, buildings assets are in the later stages of their serviceable life. while the fire hall and administration buildings have exceeded their established useful life and remain in service. Once again, this analysis presented only at the site level, rather than at the individual element or component level. Useful and meaningful age analysis for buildings is entirely predicated on effective componentization.

9.4 Current Approach to Lifecycle Management

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

Table 30 outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance/ Inspection	Monthly health and safety inspections. Any issues is reported to the maintenance manager for further investigation.
	Each building undergoes a monthly inspection for health and safety reasons. During these inspections, a visual assessment of the building is performed, and appropriate actions are taken when needed. The Town does not have an official building assessment program.
Rehabilitation/ Replacement	Yearly operational maintenance budget for each building. Capital replacement is brought to Council during capital budget considerations.

Table 30 Lifecycle Management Strategy: Buildings

9.5 Forecasted Long-Term Replacement Needs

Figure 58 illustrates the short-, medium-, and long-term replacement needs of the Town's buildings portfolio and extends to 2064 to capture at least one full replacement cycle for the longest-lived assets. Average annual capital requirements are estimated at $1.8 million, which serves as a benchmark for annual funding targets or reserve contributions, recognizing that actual expenditures will vary year to year. The forecast identifies significant replacement peaks within the next 10 years totaling approximately $13.8 million, as well as an existing backlog of $21.9 million. These projections are primarily based on age assumptions and would be refined through formal condition assessments. The analysis provides a long-term, portfolio-level view of capital needs to support improved financial planning. Given that replacement needs often exceed available funding and not all assets require immediate replacement, monitoring these peaks is critical for long-term financial planning and reserve strategies. Applying a robust risk framework and improved building componentization will further enhance lifecycle forecasting and ensure timely intervention for critical assets.

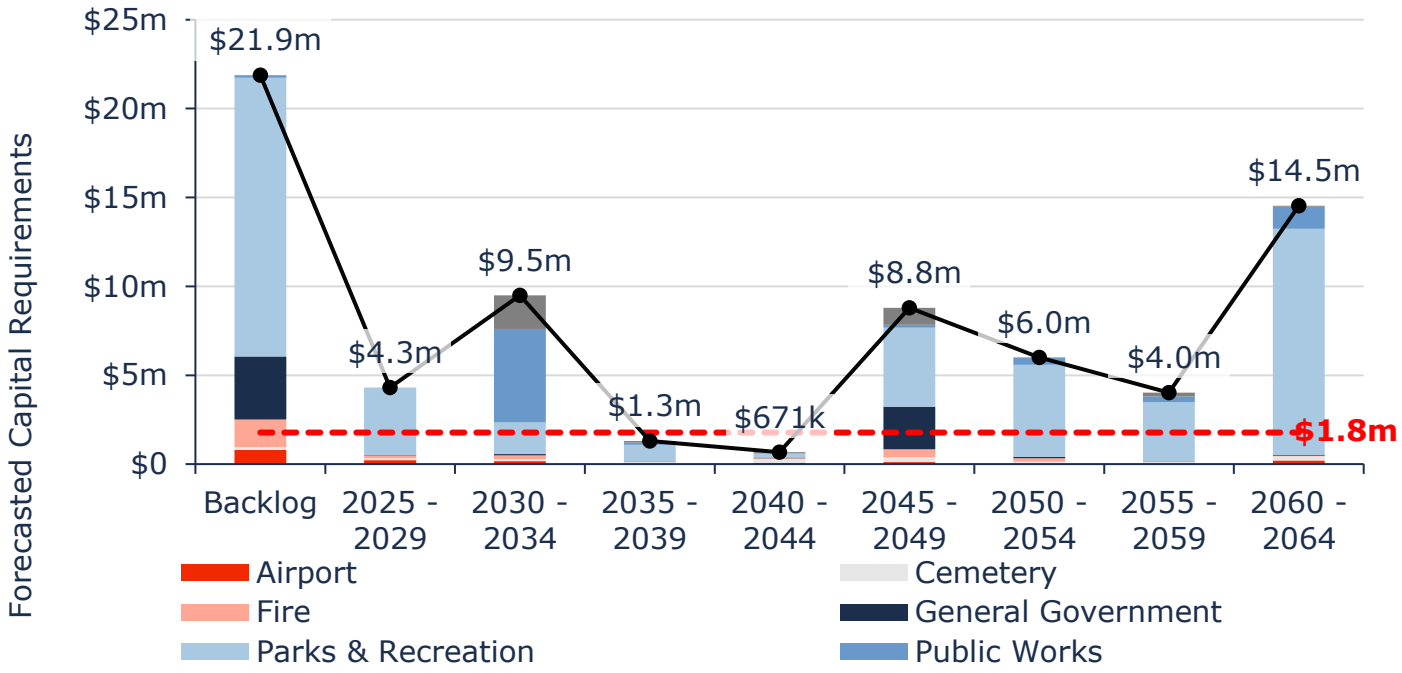

Figure 58 Forecasted Capital Replacement Needs: Buildings 2025-2064

9.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement costs. The matrix classifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

1 - 4 Very Low $1,353,000 (2%)	5 - 7 Low $16,576,000 (28%)	8 - 9 Moderate $776,000 (1%)	10 - 14 High $4,961,000 (8%)	15 - 25 Very High $36,223,000 (60%)

Figure 59 Risk Matrix: Buildings

9.7 Levels of Service

The tables that follow summarize the Town's current levels of service. There are no specifically prescribed KPIs under Ontario Regulation 588/17 for non-core assets, therefore the KPIs below represent performance measures that the Town has selected for this AMP.

9.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the types of facilities that the municipality operates and maintains	The general government building is responsible for hosting Council activities and overseeing financial and administrative operations for the municipality, along with its programs and services. The fire building houses the fire hall. Social and family buildings contain facilities for operational daycare services. Health assets cover cemetery management, including columbaria. Transportation service buildings consist of a public works garage and facilities supporting airport operations. Recreation and cultural service buildings include the Claude Larose Recreation Centre—featuring two ice pads and a municipal pool—as well as multiple park structures throughout the Town and the Town Pavilion. Planning and development service buildings comprise both the Tourism Center and the Sawmill Mill Museum. See Appendix C for supporting map of building locations

Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts	Buildings asset rehabilitation and replacement decisions are predominantly based on opportunities for accessibility improvement, risk to occupant health and safety, legislative compliance, and cost and construction feasibility. Currently, decisions to replace components of buildings through capital investment projects are planned during the yearly budget process.

Table 31 Community Levels of Service: Buildings

9.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Performance	Average condition of assets	38%
	% of assets in fair or better condition	41%
	% of assets in poor or lesser condition	59%

Table 32 Technical Levels of Service: Buildings

9.8 Recommendations

Asset Inventory

- Buildings consist of several separate capital components that have unique estimated useful lives and require asset-specific lifecycle strategies. Going forward, the Town should develop a consistent building componentization scheme, such as UNIFORMAT-II. This will allow the Town to document the needs of buildings at a component level.

Replacement Costs

- Replacement costs were updated based on insured values for these assets, the Town should compare these values against those provided from a formal assessment, should this be implemented and update these values in the asset management system to ensure the accuracy of capital projections.

Condition Assessment Strategies

- The Town should implement regular condition assessments for all facilities to better inform short- and long-term capital requirements and further consider conducting building condition assessments on a cyclical basis (5–10 year cycle).

10. Land Improvements

The Town's land improvements portfolio includes sports fields & courts, parking lots, play structures, and various landscaping related assets. The total current replacement of land improvements is estimated at approximately $11.6 million.

10.1 Inventory & Valuation

Table 33 and Figure 60 summarize the quantity and current replacement cost of the Town's various land improvement assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Airport	6	Assets	$8,671,000	CPI
Parking Lots	5	Assets	$309,000	CPI
Parks	29	Assets	$1,302,000	User-Defined
Sport Fields & Courts	9	Assets	$753,000	CPI
Structures	10	Assets	$539,000	CPI
TOTAL			**$11,573,000**	

Table 33 Detailed Asset Inventory: Land Improvements

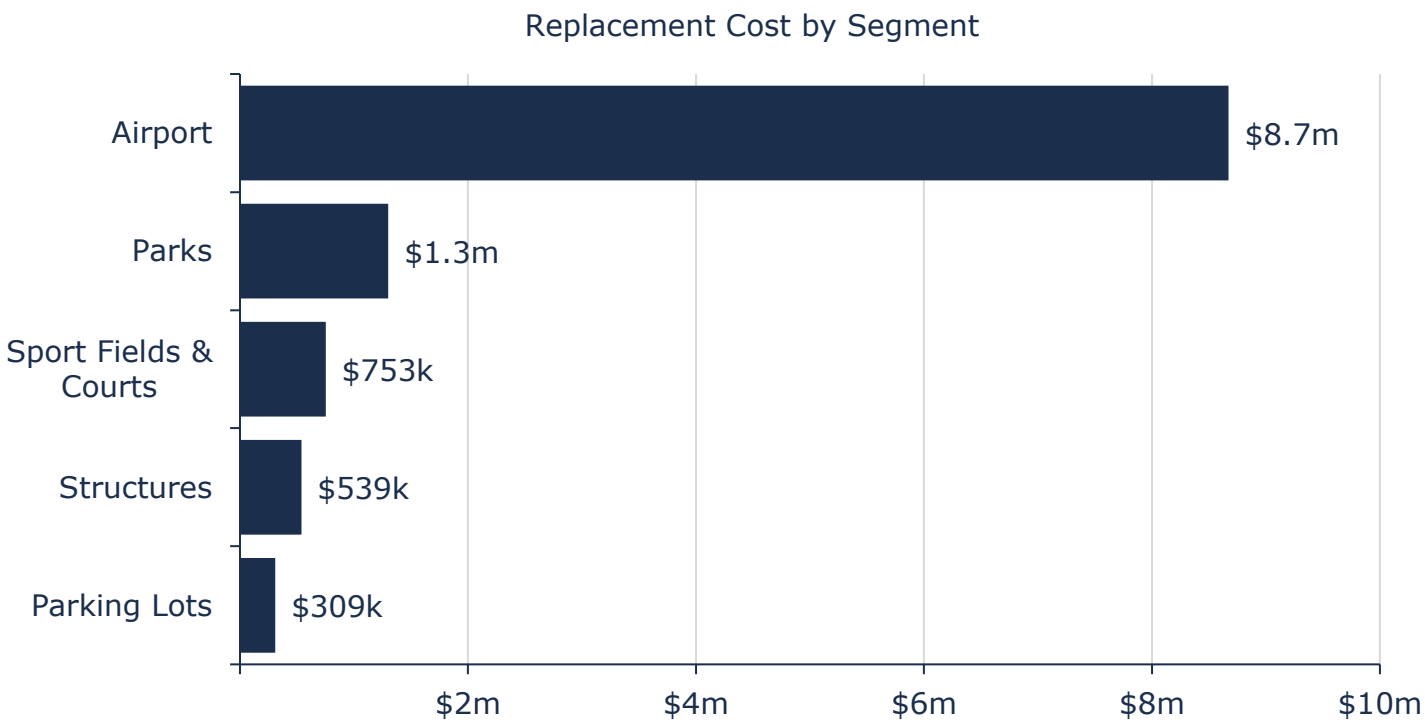

Figure 60 Portfolio Valuation: Land Improvements

10.2 Asset Condition

Figure 61 summarizes the replacement cost-weighted condition of the Town's land improvement portfolio. Based on age based projections, 94% of assets are projected to be in poor or worse condition, with only 6% considered to be in fair or better condition. This is primarily due to age based assumptions, highlighting the need to formal condition assessments to be carried out. As assets deteriorate into poor condition, they may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

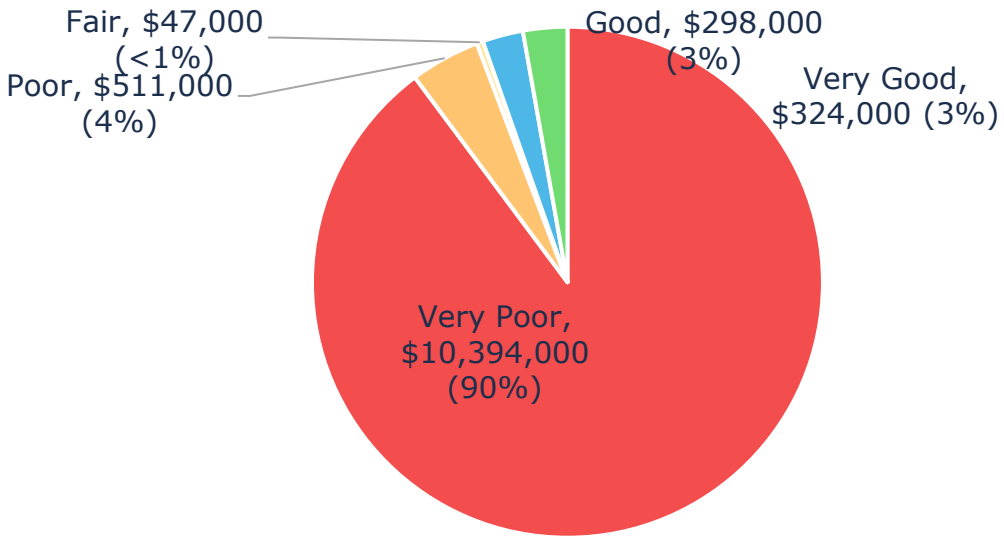

Figure 61 Asset Condition: Land Improvements Overall

Figure 62 summarizes the condition of land improvements by asset type.

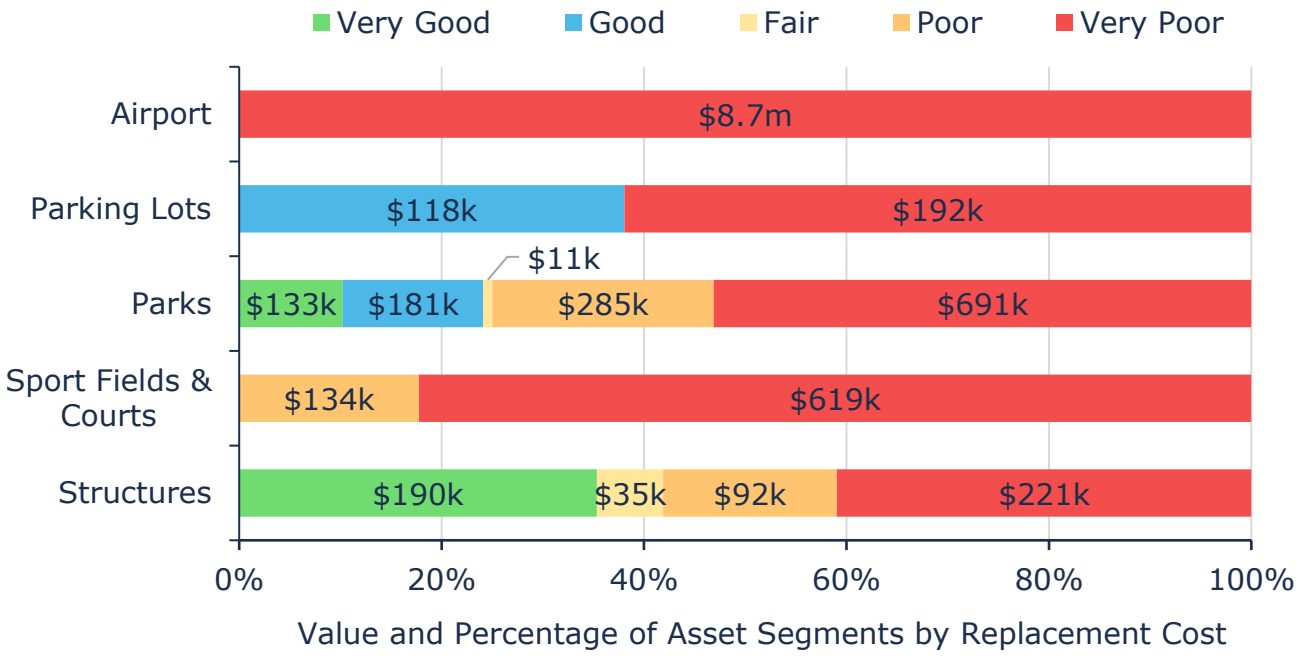

Figure 62 Asset Condition: Land Improvements by Segment

10.3 Age Profile

Figure 63 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

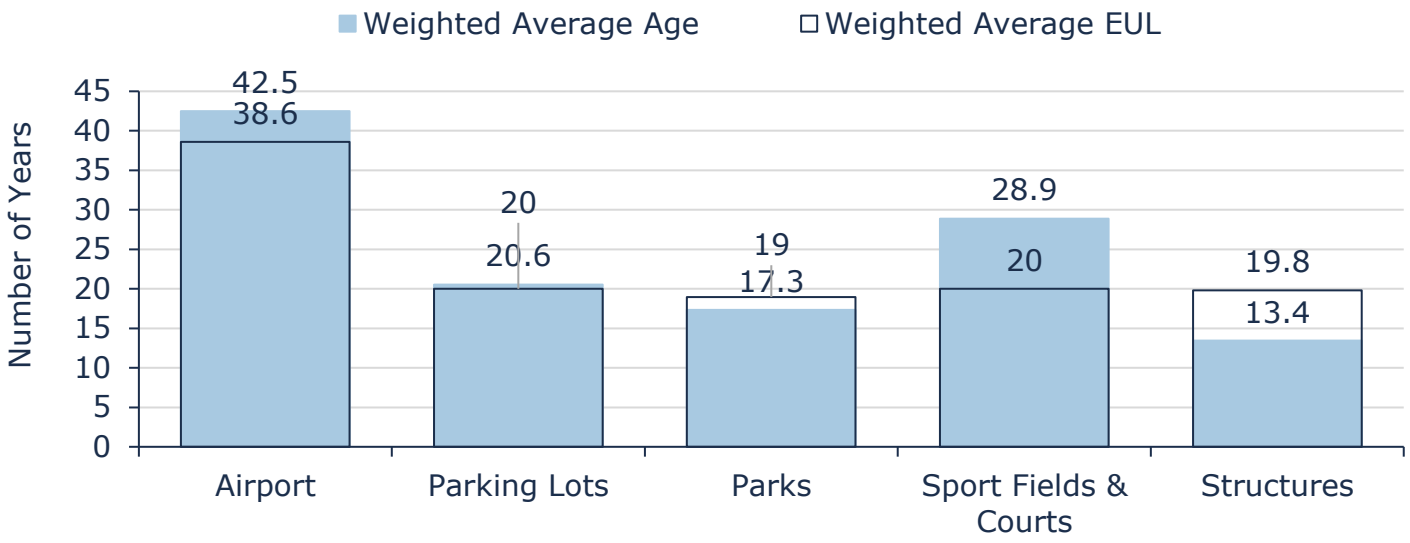

Figure 63 Estimated Useful Life vs. Asset Age: Land Improvements

Age analysis reveals that all assets in this category have reached or exceeded their estimated stablished useful life, except for structures, however this segment is also nearing end of life. Further analysis of performance of these assets and review of current life expectancy will work to refine these projections.

10.4 Current Approach to Lifecycle Management

Activity Type	Description of Current Strategy
Maintenance/ Inspection	Playgrounds undergo weekly visual inspections during the summer months, conducted by Town staff as part of our ongoing maintenance and safety program.
	Playgrounds are subject to weekly visual inspections during the summer Play structures are inspected internally, for CSA compliance Staff complete ad hoc visual inspections of the Town's sports fields, courts, and various structures
Rehabilitation/ Replacement	Yearly operational maintenance budget for repair and maintenance needs on land improvements. Capital replacement is brought to Council during capital budget considerations.

Table 34 Lifecycle Management Strategy: Land Improvements

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

Table 34 above outlines the Town's current lifecycle management strategy as it relates to the Land Improvements asset category.

10.5 Forecasted Long-Term Replacement Needs

Figure 64 illustrates the short-, medium-, and long-term replacement needs of the Town's land improvements portfolio and extends to 2044 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. Average annual capital requirements are estimated at $385 thousand (red dotted line), providing a benchmark for annual funding targets or reserve contributions, recognizing that actual expenditures will vary year to year. Replacement needs remain relatively stable over the 20-year horizon, with a projected peak of approximately $522 thousand between 2030 and 2034. A reported backlog of $10.3 million is noted and likely driven by asset age rather than observed performance, indicating that formal condition assessments should be undertaken as assets approach the end of their useful life to refine future projections. The analysis provides a long-term, portfolio-level view of capital needs to support improved financial planning.

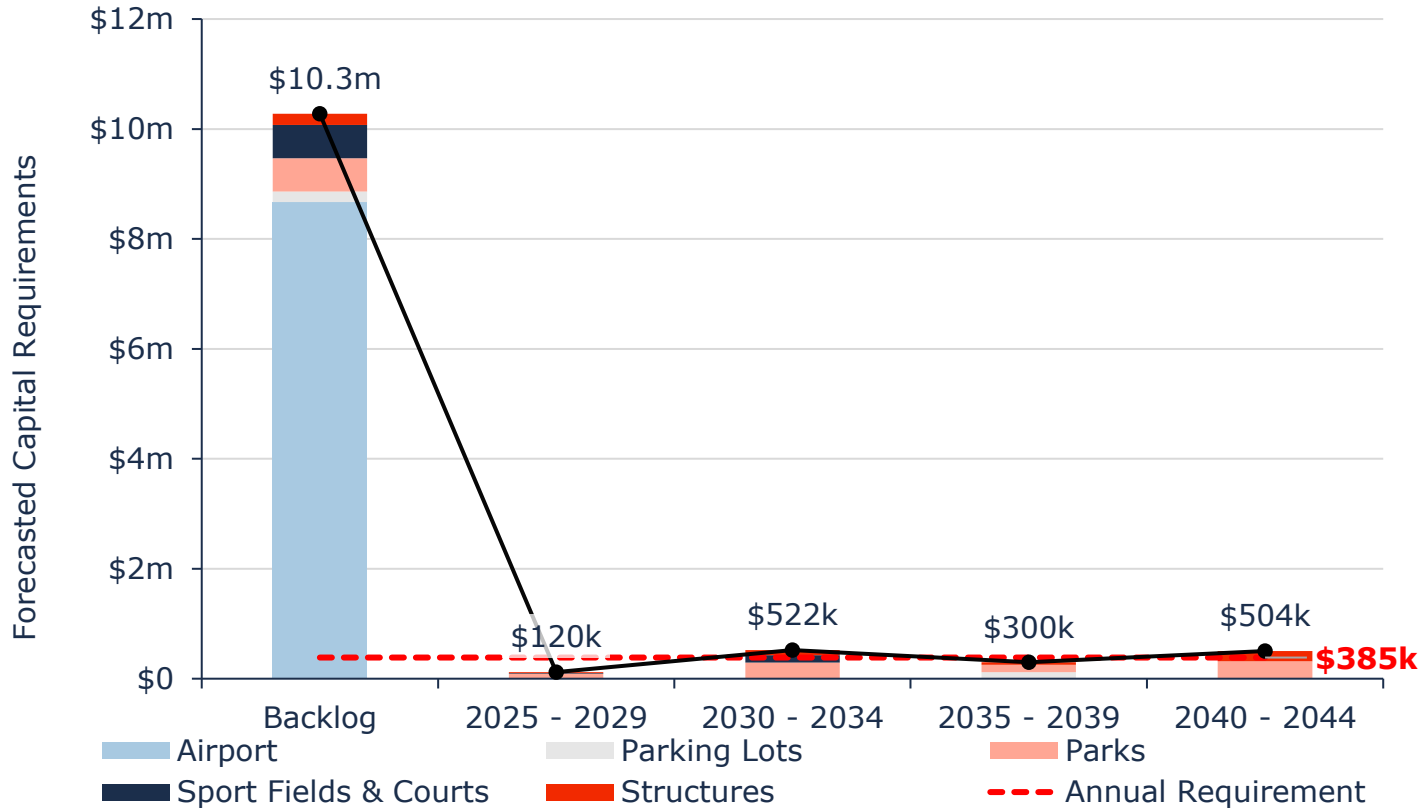

Figure 64 Forecasted Capital Replacement Needs: Land Improvements 2025-2044

Often, the magnitude of replacement needs is substantially higher than most municipalities can afford to fund. In addition, most assets may not need to be replaced. However, quantifying and monitoring these spikes is essential for long-term financial planning, including establishing dedicated reserves. In addition, a robust risk framework will ensure that high-criticality assets receive proper and timely lifecycle intervention, including replacements.

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

10.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement costs. The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

1 - 4 Very Low $339,000 (3%)	5 - 7 Low $28,000 (<1%)	8 - 9 Moderate $322,000 (3%)	10 - 14 High $278,000 (2%)	15 - 25 Very High $10,606,000 (92%)

Figure 65 Risk Matrix: Land Improvements

10.7 Levels of Service

The tables that follow summarize the Town's current levels of service. There are no specifically prescribed KPIs under Ontario Regulation 588/17 for non-core assets, therefore the KPIs below represent performance measures that the Town has selected for this AMP.

10.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the outdoor recreational facilities that the municipality operates and maintains	See Appendix C
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts	Land improvement asset investment decisions are predominantly based on asset conditions and expected future utility. Land improvement capital investment projects are formally and publicly presented for council approval one year in advance with budgets determined based on departmentally identified need.

Table 35 Community Levels of Service: Land Improvements

10.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Performance	Average condition of assets	6%
	% of assets in fair or better condition	6%
	% of assets in poor or lesser condition	94%

Table 36 Technical Levels of Service: Land Improvements

10.8 Recommendations

Replacement Costs

- Replacement costs used in this AMP were based on the primarily inflation of historical costs, likely undervaluing the asset. The Town should update these replacement costs according to the best available information on the cost to replace the asset in today's value and further strengthen the financial projections for this category.

Condition Assessment Strategies

- Identify condition assessment strategies for high value and high-risk assets within this category.
- Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

11. Vehicles

The Town's Vehicles portfolio includes 30 assets that support a variety of general and essential services, including public works, administration, recreation, and fire services. The total current replacement of vehicles is estimated at approximately $3.5 million.

11.1 Inventory & Valuation

Table 37 and Figure 66 summarize the quantity and current replacement cost of the Town's various vehicle assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Fire	8	Assets	$1,287,000	CPI
General Government	1	Assets	$40,000	CPI
Parks & Recreation	3	Assets	$91,000	CPI
Public Works	18	Assets	$2,068,000	CPI
TOTAL			**$3,486,000**	

Table 37 Detailed Asset Inventory: Vehicles

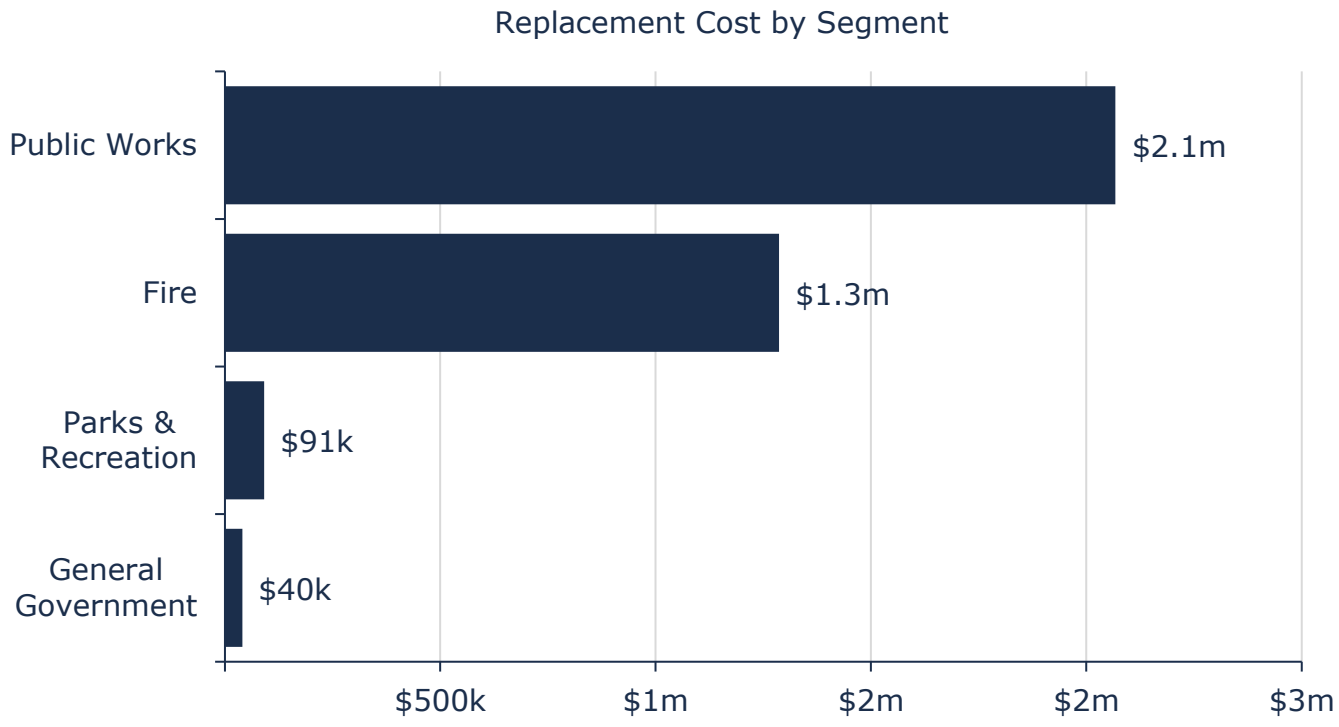

Figure 66 Portfolio Valuation: Vehicles

11.2 Asset Condition

Figure 67 summarizes the replacement cost-weighted condition of the Town's vehicles portfolio. Based primarily on age based projections, 36% of feet assets are in fair or better condition, with the remaining 64% are in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

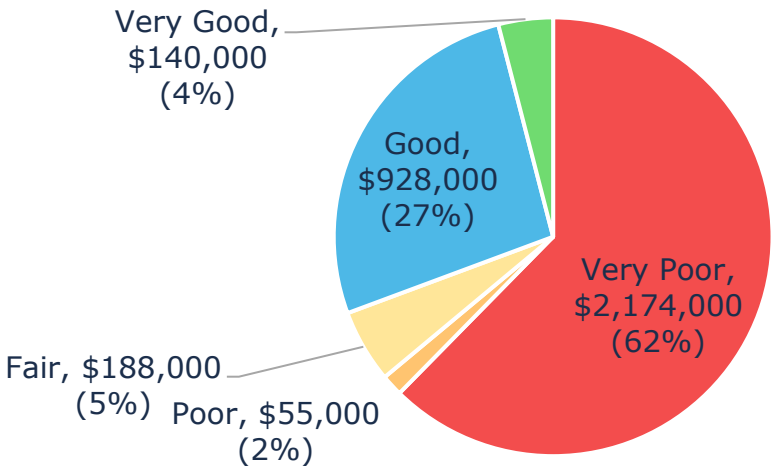

Figure 67 Asset Condition: Vehicles Overall

Figure 68 summarizes the condition of Vehicles assets by each department. The majority of Vehicles assets related to fire and public works services are considered to be in poor or worse condition, based solely on asset age based projections.

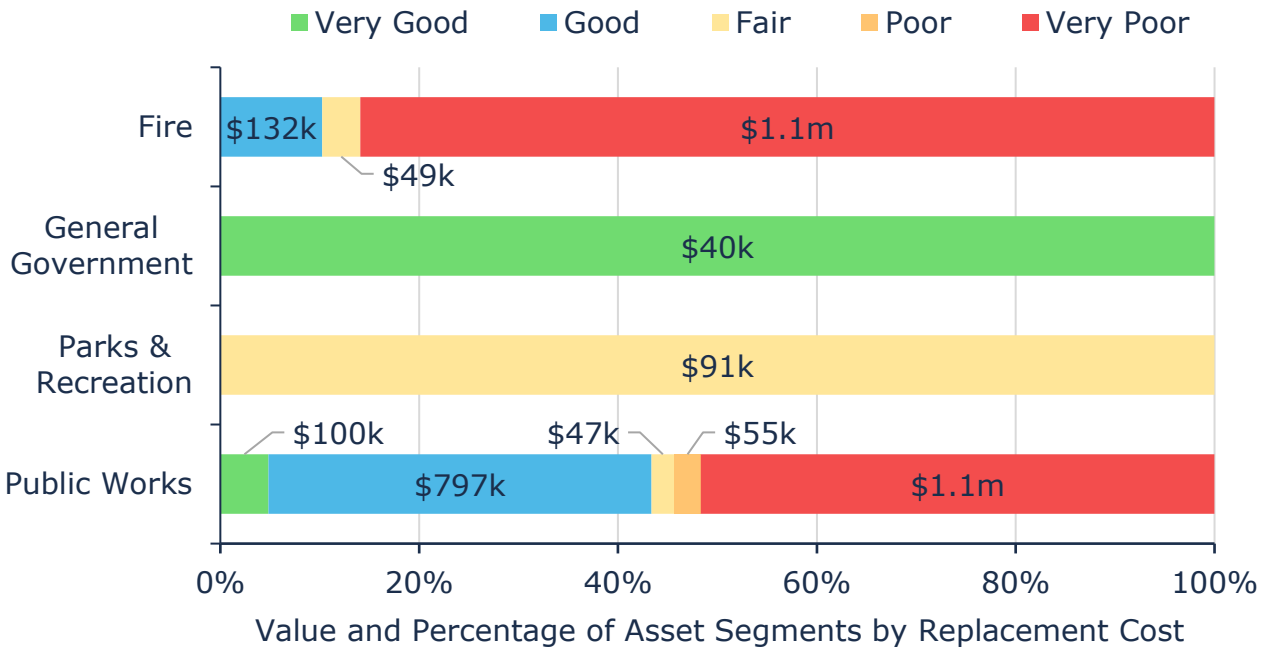

Figure 68 Asset Condition: Vehicles by Segment

11.3 Age Profile

Figure 69 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

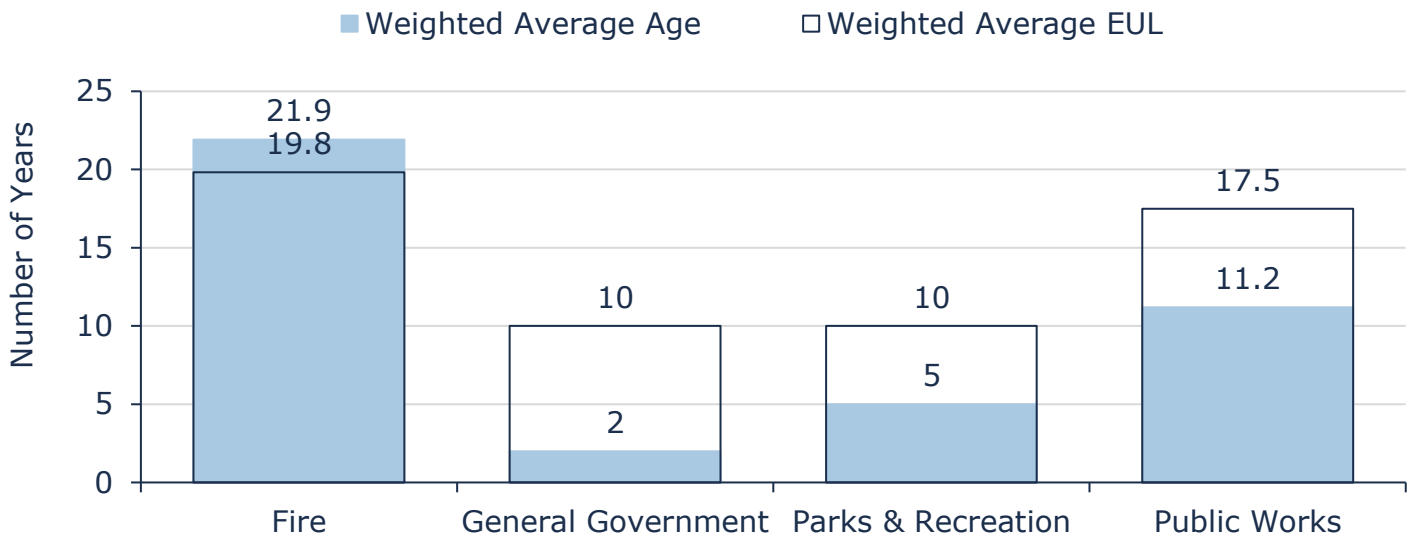

Figure 69 Estimated Useful Life vs. Asset Age: Vehicles

Age analysis reveals that, on average, most Vehicles assets have reached or surpassed the midpoint of their expected lives, with the exception of fire related vehicles that have exceed the estimate useful like. For these assets that remain in service beyond their estimated useful life, it is recommended to conduct a condition assessment and review the assigned useful lives of these assets.

11.4 Current Approach to Lifecycle Management

Activity Type	Description of Current Strategy
Maintenance/ Inspection	The Town utilizes internal resources to complete regular visual inspections of vehicles, ensuring they are in state of adequate repair prior to operation Users visually inspect vehicles before each use and report any issues to public works for further review. Annually, every vehicle receives preventive maintenance and a full inspection by a certified mechanic. CVOR vehicles are inspected daily
Rehabilitation/ Replacement	Yearly operational maintenance budget for repair and maintenance needs on vehicles. Capital replacement is brought to Council during capital budget considerations.

Table 38 Lifecycle Management Strategy: Vehicles

The condition or performance of most assets will deteriorate over time. Condition assessments are conducted on vehicles in accordance with regulations for health and safety regulations including National Fire Protection Association (NFPA) codes and standards for fire service-related vehicles

To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The table above outlines the Town's current lifecycle management strategy.

11.5 Forecasted Long-Term Replacement Needs

Figure 70 illustrates the short-, medium-, and long-term replacement needs of the Town's vehicles portfolio and extends to 2044 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. Average annual capital requirements are estimated at $209 thousand (red dotted line), providing a benchmark for annual funding targets or reserve contributions, while recognizing that actual expenditures will vary year to year. A significant replacement requirement of approximately $1.6 million is forecast between 2025 and 2029 as vehicle assets reach the end of their useful life. These projections are based on asset age and replacement cost assumptions and provide a long-term, portfolio-level view to support strategic financial planning.

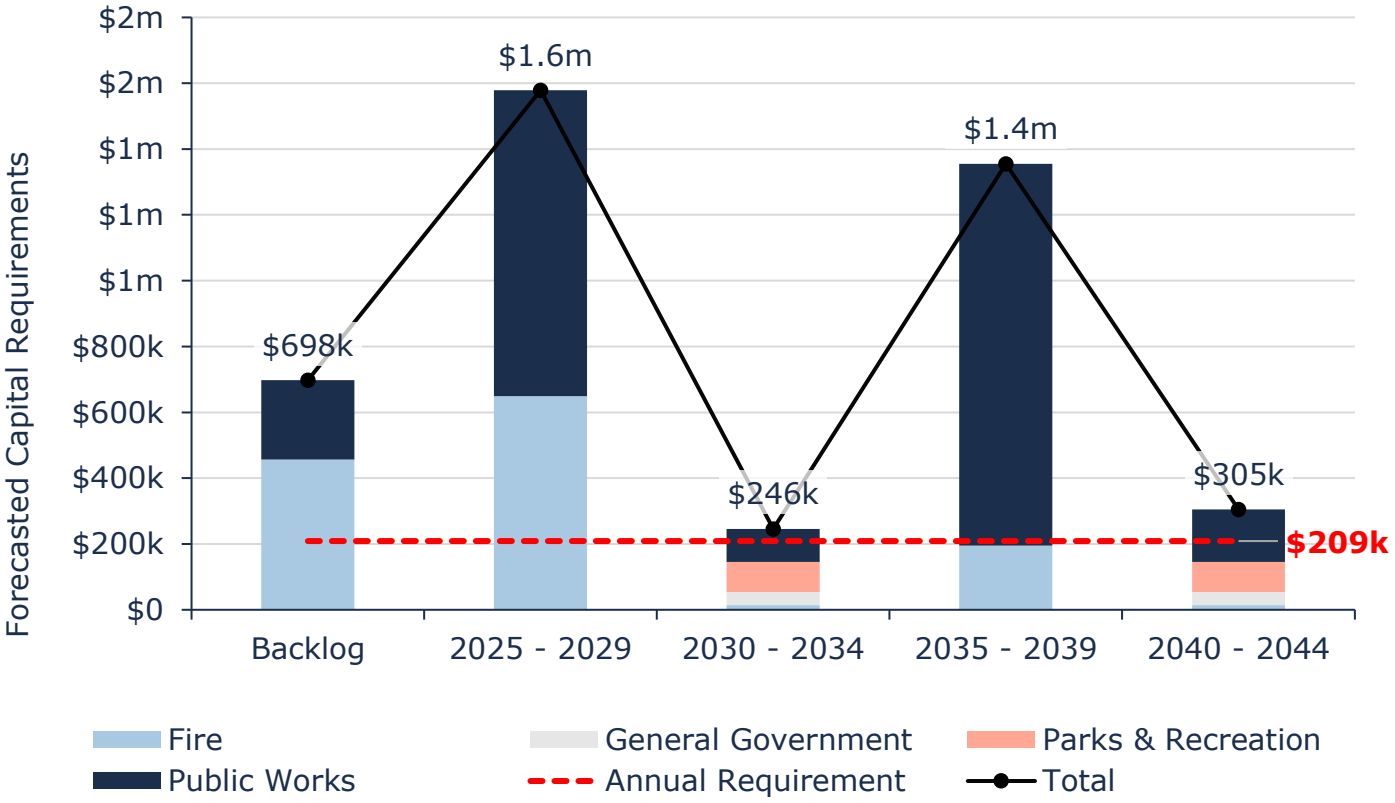

Figure 70 Forecasted Capital Replacement Needs: Vehicles 2025-2044

Often, the magnitude of replacement needs is substantially higher than most municipalities can afford to fund. In addition, most assets may not need to be replaced. However, quantifying and monitoring these spikes is essential for long-term financial planning, including establishing dedicated reserves. In addition, a robust risk framework will ensure that high-criticality assets

receive proper and timely lifecycle intervention, including replacements. Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

11.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality. These risk models have been built into the Town's Asset Management Database (Citywide Assets).

1 - 4 Very Low $146,000 (4%)	5 - 7 Low $- (0%)	8 - 9 Moderate $379,000 (11%)	10 - 14 High $801,000 (23%)	15 - 25 Very High $2,160,000 (62%)

Figure 71 Risk Matrix: Vehicles

11.7 Levels of Service

The tables that follow summarize the Town's current levels of service. There are no specifically prescribed KPIs under Ontario Regulation 588/17 for non-core assets, therefore the KPIs below represent performance measures that the Town has selected for this AMP.

11.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the types of vehicles that the municipality operates and the services that they help to provide to the community	Using assessed condition data as available, and age-based condition otherwise, vehicle assets range in condition from very poor (62%) to very good (4%). Vehicle assets include diverse assets that service the Town's fire, public works, parks and recreation and administration department. The Town utilizes a range of vehicles, from light-duty to heavy-duty models, selected according to operational requirements.

Service Attribute	Qualitative Description	Current LOS
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts	Vehicle investments are typically considered during the annual capital budget deliberations. In these discussions, factors such as the asset's age, condition, utility, and a cost-benefit analysis of replacement are thoroughly evaluated.

Table 39 Community Levels of Service: Vehicles

11.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Performance	Average condition of assets	30%
	% of assets in fair or better condition	36%
	% of assets in poor or lesser condition	64%

Table 40 Technical Levels of Service: Vehicles

11.8 Recommendations

Replacement Costs

- Current replacement costs for vehicles are based on inflation, it is recommended that the Town accurate replacement costs and update on a regular basis to ensure the accuracy of capital projections.

Condition Assessment Strategies

- Identify condition assessment strategies for high value and high-risk vehicles, such as key operational vehicles and those related to fire services.
- Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

12. Machinery & Equipment

The Town's Machinery & Equipment portfolio includes a variety of general and essential services, including recreation and fire. The total current replacement of machinery & equipment assets is estimated at approximately $6.7 million.

12.1 Inventory & Valuation

Table 41 and Figure 72 summarize the quantity and current replacement cost of the Town's various machinery and equipment assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Airport	1	Assets	$38,000	CPI
Fire	118	Assets	$484,000	CPI
General Government	275	Assets	$1,440,000	CPI
Parks & Recreation	13	Assets	$561,000	CPI
Public Works	107	Assets	$3,996,000	CPI
Social & Family Services	10	Assets	$154,000	CPI
TOTAL			**$6,674,000**	

Table 41 Detailed Asset Inventory: Machinery & Equipment

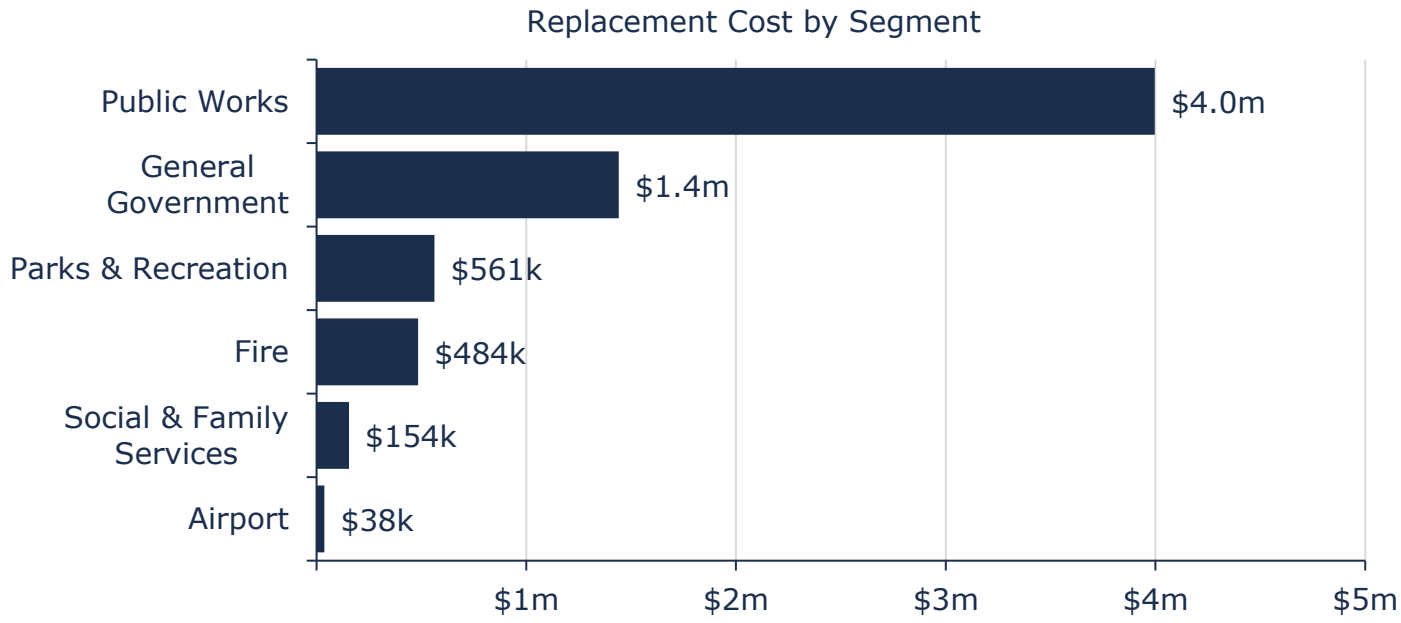

Figure 72 Portfolio Valuation: Machinery & Equipment

12.2 Asset Condition

Figure 73 summarizes the replacement cost-weighted condition of the Town's machinery and equipment portfolio. Based primarily on age data, 37% of assets are in fair or better condition; the remaining 63% are in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

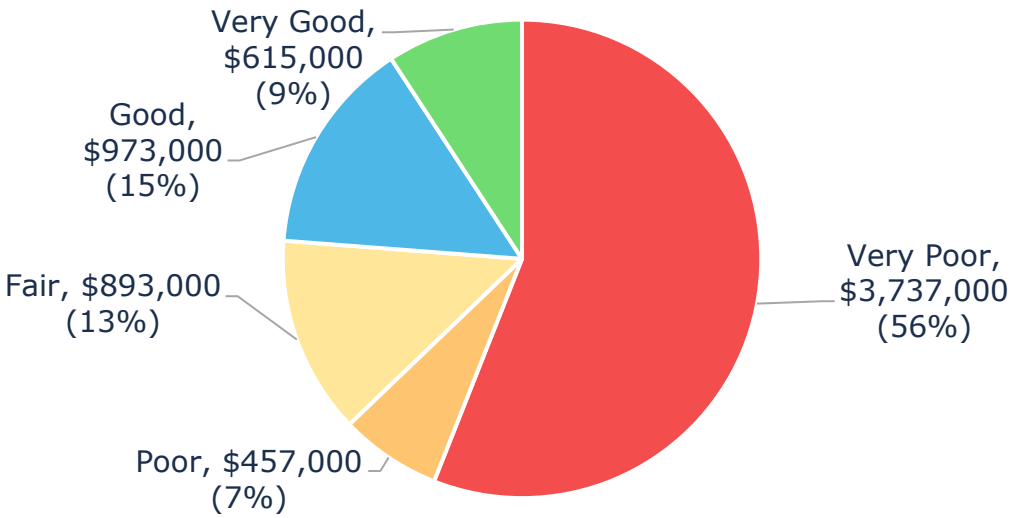

Figure 73 Asset Condition: Machinery & Equipment Overall

Figure 74 summarizes the age-based condition of machinery & equipment by each department. The majority of assets across all departments are considered to be in poor or worse condition.

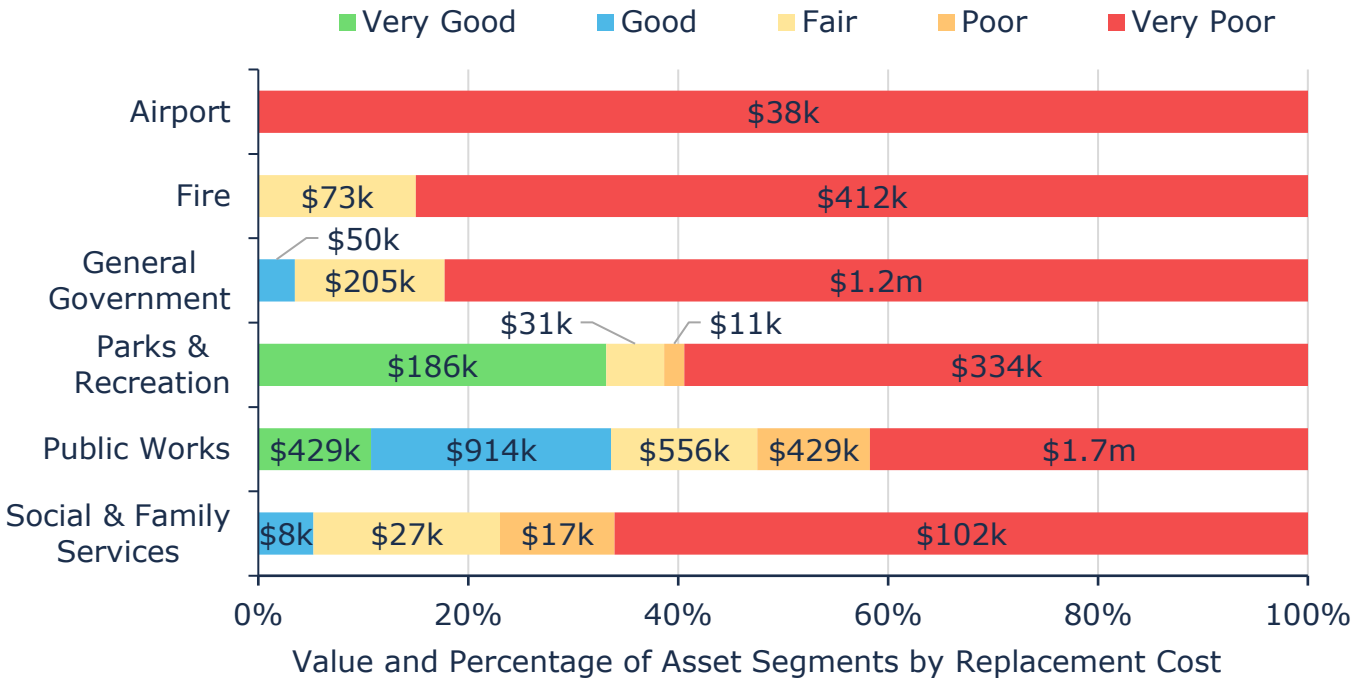

Figure 74 Asset Condition: Machinery & Equipment by Segment

12.3 Age Profile

Figure 75 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

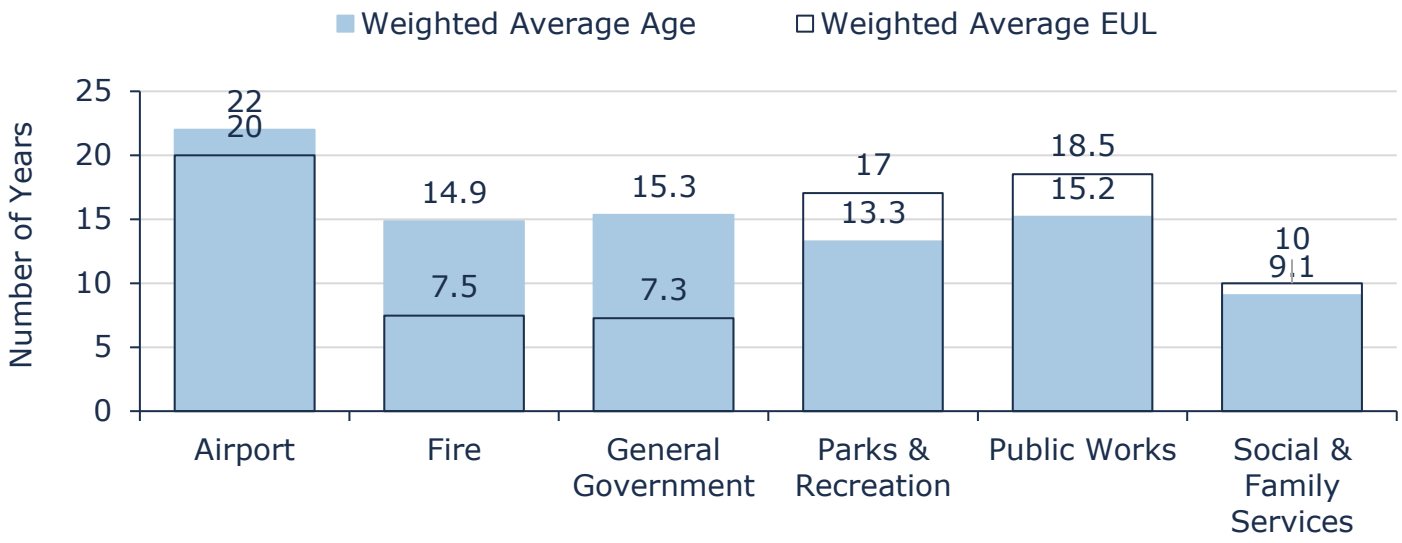

Figure 75 Estimated Useful Life vs. Asset Age: Machinery & Equipment

Age analysis reveals that, on average, most machinery and equipment assets are in the latter stages of or exceeded their expected life or life. This suggests that assets remain in service beyond their original estimated useful life and should be reviewed for current performance and the data revised accordingly.

12.4 Current Approach to Lifecycle Management

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

The following table outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance/ Inspection	Users visually inspect machinery and equipment before each use and report any issues to public works for further review. Some equipment received automatically preventive maintenance after a defined hours used in operation.
Rehabilitation/ Replacement	Yearly operational maintenance budget for repair and maintenance needs on machinery and equipment. Capital replacement is brought to Council during capital budget considerations.

Table 42 Lifecycle Management Strategy: Machinery & Equipment

12.5 Forecasted Long-Term Replacement Needs

Figure 76 illustrates the short-, medium-, and long-term replacement needs of the Town's machinery and equipment portfolio and extends to 2044 to capture at least one full replacement cycle for the longest-lived assets in the Town's asset management system. Average annual capital requirements are estimated at $598 thousand (red dotted line), providing a benchmark for annual funding targets or reserve contributions, while recognizing that actual expenditures will vary year to year. Replacement demands are significant over the next 15 years, with a projected peak of approximately $3.7 million between 2035 and 2039. A reported backlog of $3.2 million has also been identified and should be reviewed for accuracy. Projections are based on asset age and replacement cost assumptions and provide a long-term, portfolio-level perspective to support strategic financial planning.

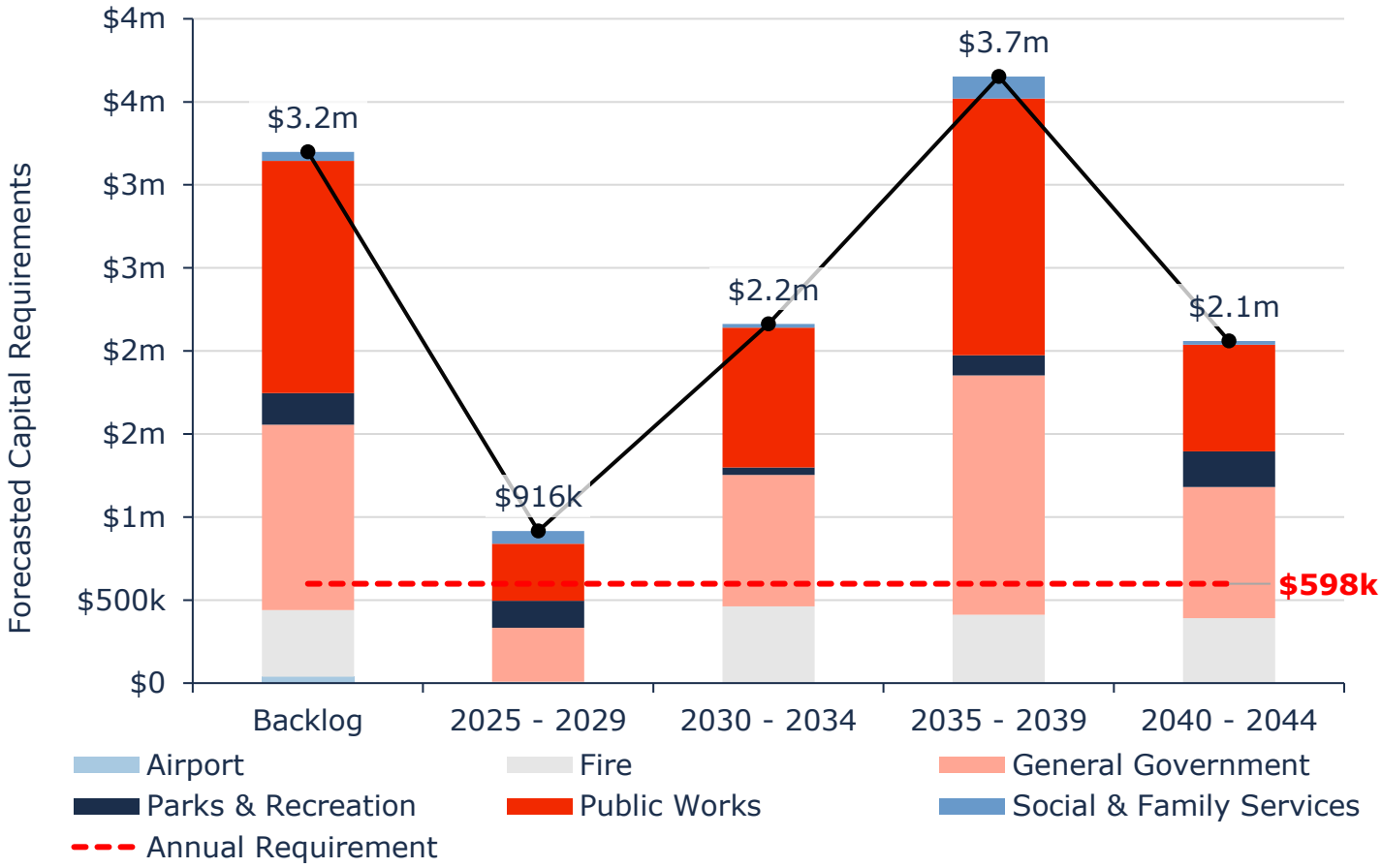

Figure 76 Forecasted Capital Replacement Needs: Machinery & Equipment 2025-2044

Often, the magnitude of replacement needs is substantially higher than most municipalities can afford to fund. In addition, most assets may not need to be replaced. However, quantifying and monitoring these spikes is essential for long-term financial planning, including establishing dedicated reserves. In addition, a robust risk framework will ensure that high-criticality assets receive proper and timely lifecycle intervention, including replacements.

Tables summarizing the projected lifecycle activities (rehabilitation and replacements) that may be undertaken in the next 10 years to support current levels of service can be found in Appendix B – 10-Year Capital Requirements.

12.6 Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality. These risk models have been built into the Town's Asset Management Database (Citywide Assets).

1 - 4 Very Low $334,000 (5%)	5 - 7 Low $1,021,000 (15%)	8 - 9 Moderate $461,000 (7%)	10 - 14 High $1,437,000 (22%)	15 - 25 Very High $3,420,000 (51%)

Figure 77 Risk Matrix: Machinery & Equipment

12.7 Levels of Service

The tables that follow summarize the Town's current levels of service. There are no specifically prescribed KPIs under Ontario Regulation 588/17 for non-core assets, therefore the KPIs below represent performance measures that the Town has selected for this AMP.

12.7.1 Community Levels of Service

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the types of equipment that the municipality operates and the services that they help to provide to the community	Using assessed condition data as available, and age-based condition otherwise, machinery & equipment assets range in condition from very poor (56%) to very good (9%). Machinery and equipment assets are diverse and service the needs of fire, parks and recreation, and public works.
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts	Machinery & equipment asset replacement decisions predominantly consider asset condition, criticality, and legislative compliance. Machinery & equipment investments are presented to council approval one-year in advance with budgets determined based on departmentally identified need.

Table 43 Community Levels of Service: Machinery & Equipment

12.7.2 Technical Levels of Service

Service Attribute	Technical Metric	Current LOS
Performance	Average condition of assets	27%
	% of assets in fair or better condition	37%
	% of assets in poor or lesser condition	63%

Table 44 Technical Levels of Service: Machinery & Equipment

12.8 Recommendations

Replacement Costs

- All replacement costs used in this AMP are based on the inflation of historical costs. Staff should continue to update replacement values whenever more accurate information is available every 1-2 years.

Condition Assessment Strategies

- Identify condition assessment strategies for high value and high-risk equipment such as those related to operations and public safety (i.e.. Fire Services).
- Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

Strategies

Growth

Financial Strategies

13. Growth

The demand for infrastructure and services in Hearst will continue to evolve in response to demographic, economic, social, and policy changes. Understanding these growth and demand drivers enables Hearst to plan more effectively for new infrastructure, and for the renewal, repurposing, or disposal of existing assets. Changes in demand will influence which assets are required, where they are needed, and what levels of service are appropriate for the community over time.

13.1 Official Plan of the Hearst Planning Area (2017)

The Official Plan of the Hearst Planning Area was initially approved by the Ministry of Municipal Affairs and Housing in 2007 and updated in 2017 to align with provincial requirements and evolving local conditions. It provides a long-term land use and growth management framework for the Town of Hearst, the Township of Mattice-Val Côté, and five surrounding unorganized townships. The Official Plan serves three primary functions:

1. Reflect changes and trends in the Hearst Planning Area, including demographic shifts, development patterns, and economic conditions.
2. Implement provincial policy directions, including the Growth Plan for Northern Ontario, 2011 and the Provincial Policy Statement, 2014 (as updated from time to time).
3. Set out the approaches of Hearst and Mattice-Val Côté Councils for building sustainable, diversified local economies and complete, resilient communities.

The Official Plan is intended to guide growth and development in the Planning Area to at least 2027, at which point the Planning Board and member Councils are expected to review and update the plan through a public process. That review will consider updated demographic, housing, employment, climate, and infrastructure information to ensure policy directions remain current and responsive.

Section 5.1.2.2 of the Official Plan identifies a 2036 population target of 5,960 persons for Hearst, while also recognizing that long-term projections indicate a net population decline of approximately 9.1%, to about 4,609 residents by 2036. This reflects historic out-migration and an aging population profile, which have direct implications for service demand and infrastructure planning.

Table 45 outlines the population trend as per Statistics Canada over the past few decades for Town of Hearst.

Year	2006	2011	2016	2021	Projected 2036
Population	5,620	5,090	5,070	4,794	4,609
Population Change	-	-9.9%	-0.4%	-5.6%	-3.9%

Table 45 Town of Hearst Historical Population Trend

With a declining and aging population, the Official Plan anticipates growing demand for affordable, accessible, and age-friendly housing options. The Town will need to continue working with partners such as the Cochrane District Social Services Administration Board (CDSSAB), senior levels of government, and community organizations to:

1. Support programs that help homeowners repair and retrofit dwellings for accessibility, energy efficiency, and aging in place.
2. Facilitate the creation of new housing options, including smaller units, supportive housing, and mixed-use developments that respond to the needs of seniors, low- to moderate-income households, and vulnerable residents.

These demographic and housing trends are key assumptions underpinning long-term infrastructure planning, particularly for water, wastewater, transportation, fire protection, and community facilities.

13.2 Economic Development Strategic Plan-Perspective 2020 InSight

Hearst's Economic Development Strategic Plan, originally prepared in 2003 and reviewed and updated in 2020, provides a strategic framework to strengthen and diversify the local economy. It is closely linked to land use, infrastructure, and community development policies, and therefore informs assumptions about future demand for municipal services and assets. The Economic Development Plan focuses on four main strategies:

1. Aligning Council's processes, policies, and municipal assets to support economic development objectives.
2. Collaborating through regional, Indigenous, and provincial partnerships to leverage shared opportunities and funding.
3. Supporting target business sectors (e.g., resource-based industries, value-added manufacturing, tourism, and services) that can sustain or grow employment.
4. Enhancing social infrastructure, including quality of life amenities, workforce development, and community services that help attract and retain residents and businesses.

Implementation of the Economic Development Plan is illustrated through tools such as the Community Improvement Plan (CIP). Hearst's CIP was adopted in January 2009 (By-law 04-09) and amended in July 2019 (By-law 48-19). The CIP is intended to address localized infrastructure needs and encourage private investment, particularly in:

1. The downtown area;
2. The highway commercial area (Front Street);
3. The highway industrial area (Highway 11)

Through financial incentives, urban design improvements, and infrastructure upgrades, the CIP seeks to:

1. Modernize and improve the appearance and functionality of commercial and industrial areas (e.g., signage, façade improvements, streetscaping).
2. Make Hearst more walkable and accessible and enhance public spaces and active transportation connections.
3. Promote local heritage and community brand identity.

These initiatives support the Economic Development Strategic Plan's goals by encouraging reinvestment in existing built-up areas, optimizing use of existing infrastructure, and gradually increasing the tax assessment base. Over time, this influences assumptions about infrastructure utilization, renewal timing, and targeted strategic upgrades rather than large greenfield expansions.

13.3 Hearst Ten-Year Housing Action Plan (2023)

The Hearst Ten-Year Housing Action Plan (final revised March 2023) provides a comprehensive housing needs assessment and implementation strategy for the Town. Prepared by the Hearst Economic Development Corporation, it analyzes local demand, supply gaps, and affordability challenges in the context of Northern Ontario's demographic trends.

Key Housing Demand Trends

- Population decline to 4,609 by 2036 (9.1% from 2021), with seniors (65+) rising from 25% to over 35% of residents.
- Steady drop in household size (2.4 to 2.2 persons/household), driving need for 1-2 bedroom units and single-person senior housing.
- Over 40% of households cost-burdened (>30% income on housing); low vacancy (2-3%) and aging stock (40+ years average).
- Minimal new construction (<10 units/year) amid acute renter shortages and affordability gaps.

Action Priorities (10-Year Targets)

- New Supply: 150+ affordable/supportive units (e.g., 50 senior apartments, 30 family townhomes) via incentives and density bonuses.
- Stock Renewal: Retrofit 200+ units for accessibility/energy efficiency using grants and CIP improvements.
- Policy Updates: Zoning for secondary suites/gentle density; provincial advocacy for Northern housing funds.
- Partnerships: CDSSAB, FedNor, Indigenous communities for shared projects.
- Monitoring: Annual reports tracking units built, vacancy, and affordability KPIs.

13.4 Impact of Growth on Lifecycle Activities

By July 1, 2025, Ontario Regulation 588/17 requires that municipal asset management plans include a clear description of how assumptions about future changes in population, economic activity, land use, and levels of service have informed lifecycle management and the financial strategy. For Hearst, this means explicitly connecting Official Plan and Economic Development Plan assumptions to capital planning, renewal schedules, and operating budgets across asset classes.

In a context of modest or declining population, growth will not necessarily drive large net expansions of the asset base but will influence where and how assets are managed. Key implications include:

1. Targeted expansion or upgrades in specific areas (e.g., downtown, highway commercial/industrial) to support reinvestment and economic development, even if total network length or capacity is relatively stable.
2. Increased emphasis on renewal, right-sizing, and repurposing existing infrastructure to match evolving demand, rather than building significant new capacity in greenfield areas.
3. Heightened focus on accessibility, age-friendly design, and housing-related infrastructure to respond to an aging demographic profile.

Lifecycle management strategies should therefore:

1. Incorporate new or upgraded growth-related assets into the AMP as they are constructed or assumed, including associated operation, maintenance, and eventual renewal obligations.
2. Distinguish clearly between costs associated with renewal/backlog, growth-related expansion, and service enhancements to ensure transparent decision-making and compliance with regulatory requirements.
3. Evaluate the full lifecycle costs of any growth-related infrastructure and ensure that long-term funding strategies (e.g., tax levy, user rates, development charges, grants, partnerships) are sufficient, at a minimum, to maintain current levels of service over time.

While new development and reinvestment can broaden the assessment base and help offset some infrastructure costs, the net effect of declining or stable population, aging assets, and evolving service expectations may still place upward pressure on lifecycle funding requirements. Regularly updating growth, demographic, and economic assumptions—and reflecting them in the AMP—will be critical to maintaining sustainable services in Hearst.

14. Financial Strategy

14.1 Financial Strategy Overview

For an asset management plan to be effective and meaningful, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Town of Hearst to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements. This report develops such a financial plan by presenting several scenarios for consideration and culminating with final recommendations. As outlined below, the scenarios presented model different combinations of the following components:

1. The financial requirements for:
    a. Existing assets
    b. Existing service levels
    c. Requirements of contemplated changes in service levels (none identified for this plan)
    d. Requirements of anticipated growth (none identified for this plan)
2. Use of traditional sources of municipal funds:
    a. Tax levies
    b. User fees
    c. Debt
    d. Development charges
3. Use of non-traditional sources of municipal funds:
    a. Reallocated budgets
    b. Partnerships
    c. Procurement methods
4. Use of Senior Government Funds:
    a. CCBF
    b. Annual grants

Note: Periodic grants are normally not included due to Provincial requirements for firm commitments. However, if moving a specific project forward is wholly dependent on receiving a one-time grant, the replacement cost included in the financial strategy is the net of such grant being received. If the financial plan component results in a funding shortfall, the Province requires the inclusion of a specific plan as to how the impact of the shortfall will be managed. In determining the legitimacy of a funding shortfall, the Province may evaluate a Town's approach to the following:

1. In order to reduce financial requirements, consideration has been given to revising service levels downward.
2. All asset management and financial strategies have been considered. For example:
    a. If a zero-debt policy is in place, is it warranted? If not the use of debt should be considered.

b. Do user fees reflect the cost of the applicable service? If not, increased user fees should be considered.

14.1.1 Annual Requirements & Capital Funding

Annual Requirements

The annual requirements represent the amount the Town should allocate annually to each asset category to meet replacement needs as they arise, prevent infrastructure backlogs and achieve long-term sustainability. In total, the Town must allocate approximately $10.9 million annually to address capital requirements for the assets included in this AMP.

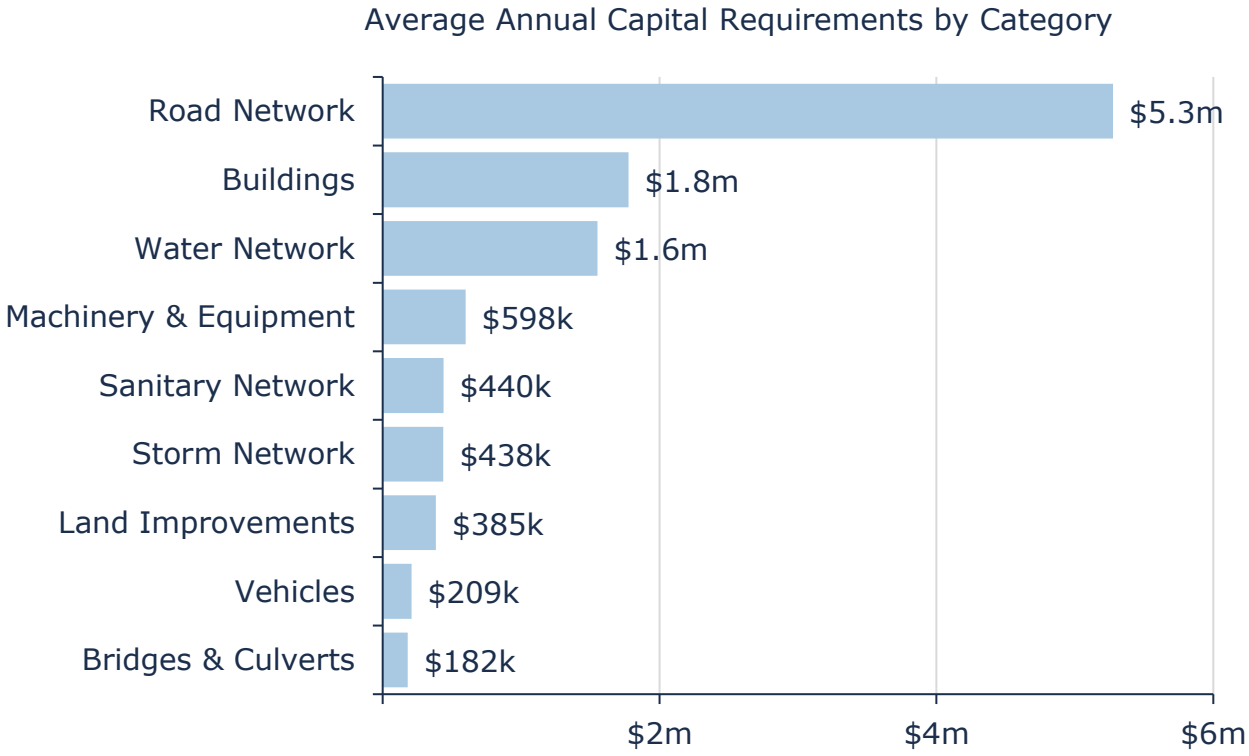

Figure 78 Average Annual Capital Requirements by Asset Category

For most asset categories the annual requirement has been calculated based on a "replacement only" scenario, in which capital costs are only incurred at the construction and replacement of each asset.

However, for the Road Network, lifecycle management strategies have been developed to identify capital costs that are realized through strategic rehabilitation and renewal of the Town's roads. The development of these strategies allows for a comparison of potential cost avoidance if the strategies were to be implemented. The following table compares two scenarios for the Road Network:

1. **Replacement Only Scenario**: Based on the assumption that assets deteriorate and – without regularly scheduled maintenance and rehabilitation – are replaced at the end of their service life.

2. **Lifecycle Strategy Scenario**: Based on the assumption that lifecycle activities are performed at strategic intervals to extend the service life of assets until replacement is required.

Asset Category	Annual Requirements (Replacement Only)	Annual Requirements (Lifecycle Strategy)	Difference
Road Network	$6,805,000	$5,275,000	$1,530,000

Table 46 Replacement Only vs. Lifecycle Strategies Cost Savings

The implementation of a proactive lifecycle strategy for roads leads to potential annual cost avoidance of about $1.5 million for the Road Network. This represents an overall reduction of the annual requirements of 21%. As the lifecycle strategy scenario represents the lowest cost option available to the Town, we have used these annual requirements in the development of the financial strategy.

Annual Funding Available

Based on a historical analysis of sustainable capital funding sources, the Town is committing approximately $3.3 million towards capital projects per year. Given the annual capital requirement of $10.9 million, there is currently a funding gap of $7.6 million annually.

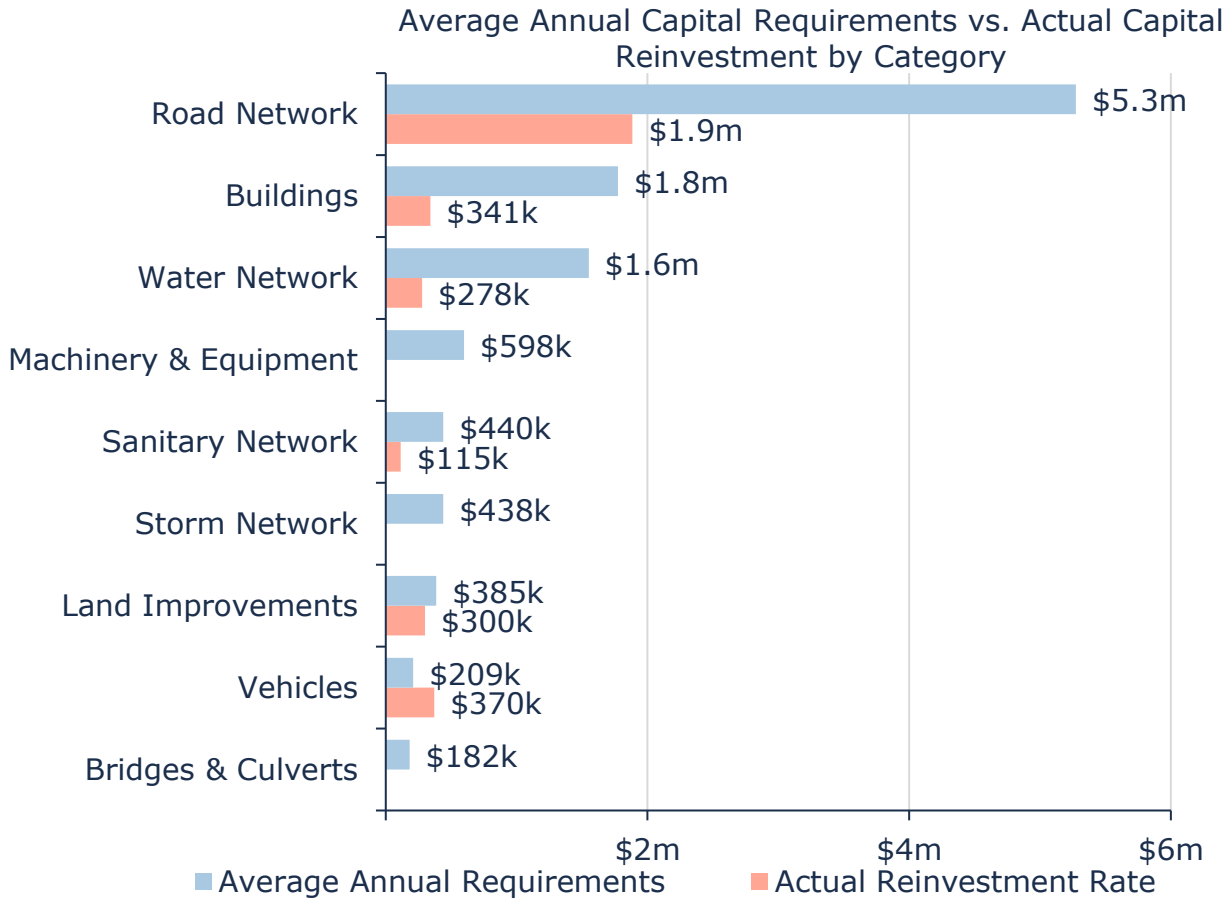

Figure 79 Annual Capital Requirements vs. Available Funding

14.2 Funding Objective

We have developed a scenario that would enable the Town of Hearst to achieve full funding within 1 to 20 years for the following assets:

1. **Tax Funded Assets:** Road Network, Bridges & Culverts, Storm Network, Buildings, Machinery & Equipment, Land Improvements, and Vehicles
2. **Rate-Funded Assets:** Water Network, Sanitary Network

For each scenario developed we have included strategies, where applicable, regarding the use of cost containment and funding opportunities.

14.3 Financial Profile: Tax Funded Assets

14.3.1 Current Funding Position

The following tables show, by asset category, the average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

Asset Category	Avg. Annual Req.	Annual Funding Available				
		Taxes	OCIF	CCBF	Total Available	Annual Deficit
Road Network	5,275,000	1,194,000	377,000	314,000	1,885,000	3,390,000
Bridges & Culverts	182,000	-	-	-	-	182,000
Stormwater Network	438,000	-	-	-	-	438,000
Buildings	1,775,000	341,000	-	-	341,000	1,434,000
Land Improvements	385,000	300,000	-	-	300,000	85,000
Vehicles	209,000	370,000	-	-	370,000	-161,000
Machinery & Equipment	598,000	-	-	-	-	598,000
Total	**8,861,000**	**2,205,000**	**377,000**	**314,000**	**2,895,000**	**5,966,000**

Table 47 Annual Funding Available for Tax Funded Assets

The average annual investment requirement for the above categories is $8.86 million. The annual revenue currently allocated to these assets for capital purposes is $2.9 million leaving an annual deficit of $5.97 million. Put differently, these infrastructure categories are currently funded at 32.7% of their long-term requirements.

14.3.2 Full Funding Requirements

In 2025, the Town of Hearst had budgeted annual tax revenues of $8.45 million. As illustrated in the following table, without consideration of any other sources of revenue or cost containment strategies, full funding would require the following tax change over time:

Asset Category	Tax Change Required for Full Funding
Road Network	40.1%
Storm Network	5.2%
Bridges & Culverts	2.1%
Buildings	17.0%
Land Improvements	1.0%
Vehicles	No Increase Required
Machinery & Equipment	7.1%
Total	**70.6%**

Table 48 Full Funding Tax Increases for Tax Funded Categories

Tax Increases Without Capturing Changes				
	5 Years	**10 Years**	**15 Years**	**20 Years**
Infrastructure Deficit:	**5,965,944**	**5,965,944**	**5,965,944**	**5,965,944**
Tax Increase Required	70.6%	70.6%	70.6%	70.6%
Annually:	11.3%	5.5%	3.7%	2.8%

Table 49 Annual Tax Increase Requirement with Debt Reallocation

14.4 Financial Profile: Rate Funded Assets

14.4.1 Current Funding Position

The following tables show, by asset category, Hearst's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by rates.

Asset Category	Avg. Annual Requirement	Annual Funding Available			Annual Deficit
		Rates	To Operations	Total Available	
Water Network	1,551,000	1,506,000	-1,229,000	278,000	1,273,000
Sanitary Network	440,000	850,000	-735,000	115,000	325,000
Total	**1,991,000**	**2,356,000**	**-1,963,000**	**393,000**	**1,598,000**

Table 50 Annual Funding Available for Rate Funded Assets

The average annual investment requirement for the above categories is $1.99 million. Annual revenue currently allocated to these assets for capital purposes is $393 thousand, with $1.96 million allocated to operations, creating an annual deficit of $1.6 million. Put differently, these infrastructure categories are currently funded at 19.7% of their long-term requirements.

14.4.2 Full Funding Requirements

In 2025, the Town of Hearst had budgeted annual water revenues of $1.5 million and budgeted annual sanitary revenues of $850 thousand. As illustrated in the table below, without consideration of any other sources of revenue, full funding would require the following changes over time:

Asset Category	Rate Change Required for Full Funding
Water Network	84.5%
Sanitary Network	38.2%

Table 51 Full Funding Rate Increases for Rate Funded Categories

In the following tables, we have expanded the above scenario to present multiple options to phase in the increase required. These options are presented in 5 year intervals.

Water Network Rate Increases				
	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	**1,273,000**	**1,273,000**	**1,273,000**	**1,273,000**
Rate Increase Required	84.5%	84.5%	84.5%	84.5%
Annually:	**13.1%**	**6.4%**	**4.2%**	**3.2%**

Table 52 Annual Rate Increase Requirements: Water Network

Sanitary Network Rate Increases				
	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	**325,000**	**325,000**	**325,000**	**325,000**
Rate Increase Required	38.2%	38.2%	38.2%	38.2%
Annually:	**6.7%**	**3.3%**	**2.2%**	**1.7%**

Table 53 Annual Rate Increase Requirements: Sanitary Network

14.5 Financial Strategy Recommendations

14.5.1 Tax Funded Assets

Considering all the above information, we recommend the 20-year option. This involves full funding being achieved over 20 years by:

a) increasing tax revenues by 2.8% each year for the next 20 years solely for the purpose of phasing in full funding to the asset categories covered in this section of the AMP.
b) allocating the current CCBF and OCIF contributions and revenue as outlined.
c) reallocating appropriate revenue from categories in a surplus position to those in a deficit position.
d) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

14.5.2 Rate-Funded Assets

Considering all of the above information, we recommend the 20-year option that includes debt cost reallocations. This involves full funding being achieved over 20 years by:

a) increasing rate revenues by 3.2% for water services and 1.7% for sanitary services each year for the next 20 years solely for the purpose of phasing in full funding to the asset categories covered in this section of the AMP.
b) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

1. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. This periodic funding should not be incorporated into an AMP unless there are firm commitments in place.
2. We realize that raising tax revenues and user rates for infrastructure purposes will be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.
3. Any increase in taxes and rates required for operations would be in addition to the above recommendations.

Although this option achieves full funding on an annual basis in 20 years and provides financial sustainability over the period modeled, the recommendations do require prioritizing capital projects to fit the resulting annual funding available.

Prioritizing future projects will require the current data to be replaced by condition-based data. Although our recommendations include no further use of debt, the results of the condition-based analysis may require otherwise.

14.6 Use of Reserves

14.6.1 Available Reserves

Reserves play a critical role in long-term financial planning. The benefits of having reserves available for infrastructure planning include:

a) the ability to stabilize tax rates when dealing with variable and sometimes uncontrollable factors
b) financing one-time or short-term investments
c) accumulating the funding for significant future infrastructure investments
d) managing the use of debt
e) normalizing infrastructure funding requirement

By asset category, the table below outlines the details of the capital reserves currently available to the Town of Hearst.

Asset Category	Balance at December 31, 2024
Road Network	-
Bridges & Culverts	-
Storm Network	-
Buildings	$383,000
Land Improvements	$558,000
Vehicles	$276,000
Machinery & Equipment	$1,631,000
Total Tax Funded:	**$2,848,000**
Water Network	$108,000
Sanitary Network	$158,000
Total Rate Funded:	**$266,000**

Table 54 Current Reserves Balances

There is considerable debate in the municipal sector as to the appropriate level of reserves that a municipality should have on hand. There is no clear guideline that has gained wide acceptance. Factors that municipalities should take into account when determining their capital reserve requirements include:

a) breadth of services provided
b) age and condition of infrastructure
c) use and level of debt
d) economic conditions and outlook
e) internal reserve and debt policies.

These reserves are available for use by applicable asset categories during the phase-in period to full funding. This coupled with the Town's judicious use of debt in the past, allows the scenarios to assume that, if required, available reserves and debt capacity can be used for high priority and emergency infrastructure investments in the short- to medium-term.

15. Recommendations and Key Considerations

15.1 General

- **Plan for Proposed Levels Service Integration under O. Reg. 588/17**
  By 2025, Ontario Regulation 588/17 will require the Town to integrate proposed levels of service for all asset categories into its asset management plan. Future planning should account for how these service levels will impact reserve balances and overall financial sustainability.

15.2 Strengthening Asset Management Through Better Asset Data

- **Asset Data and Inventory**
  Review the current inventory listing and determine where asset listing can be enhanced. Focus should be placed on identify line items that are project or improvement costs and those values applied to a single true asset.
- **Componentize Building and Facility Data**
  Consider applying the Uniformat II Code to the buildings assets as assessments are conducted. Utilize PSD data templates for efficient and consistent input into Citywide.
- **Refine Lifecycle and Risk Profiles**
  Continuously review lifecycle events, treatment triggers, and risk factors to ensure capital planning reflects actual asset performance and service demands.
- **Update Replacement Costs Regularly**
  Revise replacement costs using recent project data, invoices, and studies while accounting for market fluctuations. Priority should be placed on undervalued categories, with formal assessments considered for buildings and facilities.
- **Implement Repeatable Condition Assessment Protocols**
  Develop simple, consistent processes for conducting condition assessments on a regular frequency with established standards in place, enabling more reliable data and clearer insight into asset performance.
- **Align Useful Life Estimates with Actual Performance**
  Review and consider updating useful life assumptions in the TCA policy to reflect real-world asset performance, using Citywide's capabilities to support more accurate reporting

15.3 Lifecycle Planning

- **Dedicate Capital Funding for Condition Assessments**
  Establish consistent funding for condition assessment programs, with priority given to high-criticality assets across all categories. Reliable condition data is essential for accurately estimating annual investment needs and refining infrastructure backlog projections.
- **Broaden the Definition of Criticality**
  Assess asset criticality not only by financial value or replacement cost, but also by the asset's role in delivering essential services, supporting economic activity, and sustaining residents' quality of life.

- **Regularly Update Lifecycle Models**
  Continuously review lifecycle events, treatment timing, and costs, ensuring lifecycle models in Citywide remain current and aligned with actual asset performance.
- **Componentize Buildings for Accurate Forecasting**
  Break down buildings into major components to enable more accurate forecasting of future renewal requirements and long-term capital needs.

15.4 Risk Models and Levels of Service

- **Refine Risk Models with Updated Data**
  Leverage Citywide risk models across all asset groups, updating them as new attribute and condition data becomes available to improve accuracy in project prioritization.
- **Incorporate Climate Change and Vulnerability Attributes**
  Collect and integrate data on climate-related risks, including past asset failures, flooding proximity, and other vulnerabilities, to refine asset risk profiles and guide decision-making.
- **Centralize Performance Data for Service Level Calibration**
  Track and consolidate asset performance information to support the calibration of service levels in advance of O. Reg. 588/17 requirements. Continue to measure current levels of service in accordance with the metrics identified in O. Reg. 588/17 and those metrics that the Town believes to provide meaningful and reliable inputs into asset management planning.
- **Monitor Local, Regional, and Environmental Trends**
  Observe factors such as population growth, extreme weather events, economic conditions, and local tax base changes to anticipate infrastructure demand and adjust service level targets as needed

Appendices

Appendix A – Infrastructure Report Card

Appendix B – 10-Year Capital Requirements

Appendix C – Level of Service Images

Appendix A – Infrastructure Report Card

Asset Category	Replacement Cost	Asset Condition	Financial Capacity	
Road Network	**$136,570,000**	**Very Poor (17%)**	Annual Requirement:	$5,650,000
			Funding Available:	$1,885,000
			Annual Deficit:	**$3,765,000**
Bridges & Culverts	**$12,478,000**	**Good (76%)**	Annual Requirement:	$182,000
			Funding Available:	**-**
			Annual Deficit:	**$182,000**
Water Network	**$59,609,000**	**Poor (38%)**	Annual Requirement:	$1,551,000
			Funding Available:	$278,000
			Annual Deficit:	**$1,273,000**
Sanitary Network	**$25,170,000**	**Poor (34%)**	Annual Requirement:	$440,000
			Funding Available:	$115,000
			Annual Deficit:	**$325,000**
Storm Network	**$25,290,000**	**Fair% (49%)**	Annual Requirement:	$438,000
			Funding Available:	$-
			Annual Deficit:	**$438,000**
Buildings	**$59,889,000**	**Poor (38%)**	Annual Requirement:	$1,775,000
			Funding Available:	$341,000
			Annual Deficit:	**$1,434,000**
Land Improvements	**$11,573,000**	**Very Poor (6%)**	Annual Requirement:	$385,000
			Funding Available:	$300,000
			Annual Deficit:	**$85,000**
Vehicles	**$3,486,000**	**Poor (30%)**	Annual Requirement:	$209,000
			Funding Available:	$370,000
			Annual Deficit:	**$-161,000**
Machinery & Equipment	**$6,674,000**	**Poor (27%)**	Annual Requirement:	$598,000
			Funding Available:	$-
			Annual Deficit:	**$598,000**
Overall	**$340,738,000**	**Poor (30%)**	Annual Requirement:	$11,228,000
			Funding Available:	$3,288,000
			Annual Deficit:	**$7,940,000**

Table 55 Infrastructure Report Card

Appendix B – 10-Year Capital Requirements

The tables below summarize projected lifecycle costs for rehabilitation and replacement activities over a 10 year period to support current levels of service. Projections are generated in Citywide and are based on available asset register data. Condition assessments and replacement costs were used to forecast needs for bridges and culverts, while age-based assumptions were applied to all other asset classes. As a result, these projections may differ from actual capital forecasts. Ongoing updates to asset data, particularly condition information, replacement costs, and lifecycle models, will improve alignment between system-generated expenditure requirements and the Town's capital planning.

Road Network

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Curbs	$8.1m	$457k	-	$1.0m	-	-	$902k	-	-	$284k	-
Gravel Roads	$27k	$789k	-	$242k	$149k	$848k	$681k	-	$322k	$149k	$848k
Paved Roads	$48.0m	$3.3m	$303k	$14.2m	$82k	$3.0m	$147k	-	$307k	-	$94k
Sidewalks	$12.9m	$826k	$180k	$1.8m	-	-	$1.4m	-	$4k	$137k	$54k
Streetlights	$486k	$14k	$21k	-	-	$47k	$32k	-	-	-	-
Surface Treated Roads	$586k	-	$1.1m	$1.3m	$897k	-	-	-	-	-	$367k
Total	**$70.0m**	**$5.4m**	**$1.6m**	**$18.5m**	**$1.1m**	**$3.9m**	**$3.2m**	**-**	**$634k**	**$570k**	**$1.4m**

Table 56 System Generated 10-Year Capital Replacement Forecast: Road Network

Bridges & Culverts

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Bridges	-	-	-	-	-	-	-	-	-	-	-
Culverts	-	-	-	-	-	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table 57 System Generated 10-Year Capital Replacement Forecast: Bridges & Culverts

Water Network

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Hydrants	$415k	$40k	$553k	$40k	$79k	$237k	$79k	-	$59k	-	-
Meters	$773k	-	-	-	-	-	-	-	-	-	$19k
Treatment Plant	$13.2m	-	-	-	-	-	$925k	$1.1m	$536k	$105k	$158k
Valves	$905k	$74k	$527k	$73k	$141k	$150k	$103k	$61k	$75k	-	-
Water Tower	$1.4m	-	-	-	-	-	-	-	-	$1.2m	-
Watermains	$2.3m	$262k	$400k	-	$309k	$248k	-	-	-	-	-
Total	**$18.9m**	**$376k**	**$1.5m**	**$112k**	**$528k**	**$635k**	**$1.1m**	**$1.2m**	**$670k**	**$1.3m**	**$176k**

Table 58 System Generated 10-Year Capital Replacement Forecast: Water Network

Sanitary Network

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Lagoons	-	-	-	$159k	-	-	-	-	-	-	$13k
Manholes	$300k	$12k	-	-	-	$36k	-	-	-	-	$24k
Pumping Stations	$2.1m	-	-	-	$20k	-	-	$516k	-	-	-
Sanitary Equipment	$362k	-	-	-	-	$10k	-	$12k	-	-	-
Sanitary Mains	$4.5m	$49k	$167k	$52k	$230k	$452k	$395k	-	-	-	-
Total	**$7.2m**	**$61k**	**$167k**	**$211k**	**$250k**	**$499k**	**$395k**	**$528k**	**-**	**-**	**$37k**

Table 59 System Generated 10-Year Capital Replacement Forecast: Sanitary Network

Storm Network

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Catch Basins	$85k	$116k	-	-	$100k	$16k	$122k	-	-	-	$206k
Manholes	-	-	-	-	$14k	-	-	-	-	-	$29k
Storm Mains	$268k	$485k	-	-	$1.2m	$11k	$350k	-	-	-	$698k
Total	**$353k**	**$602k**	**-**	**-**	**$1.3m**	**$26k**	**$471k**	**-**	**-**	**-**	**$933k**

Table 60 System Generated 10-Year Capital Replacement Forecast: Storm Network

Buildings

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Airport	$794k	-	-	-	$223k	-	-	-	$20k	-	$151k
Cemetery	$159k	-	$111k	-	-	-	-	-	$98k	-	$6k
Fire	$1.5m	-	-	-	$128k	$29k	$18k	$127k	-	-	$63k
General Government	$3.6m	-	$32k	-	-	-	$7k	$70k	-	-	-
Parks & Recreation	$15.7m	$425k	$201k	$674k	$775k	$1.7m	$1.3m	$173k	$28k	-	$237k
Public Works	$153k	-	-	-	-	-	-	$4.9m	-	$388k	-
Social & Family Services	-	-	-	-	-	-	$1.9m	$10k	$8k	-	-
Total	**$21.9m**	**$425k**	**$343k**	**$674k**	**$1.1m**	**$1.7m**	**$3.2m**	**$5.3m**	**$154k**	**$388k**	**$457k**

Table 61 System Generated 10-Year Capital Replacement Forecast: Buildings

Land Improvements

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Airport	$8.7m	-	-	-	-	-	-	-	-	-	-
Parking Lots	$192k	-	-	-	-	-	-	-	-	-	-
Parks	$604k	$21k	$40k	-	$26k	-	$96k	$189k	-	-	$11k
Sport Fields & Courts	$603k	$16k	-	-	-	-	$117k	-	$17k	-	-
Structures	$204k	$11k	-	$6k	-	-	$92k	-	-	-	-
Total	**$10.3m**	**$48k**	**$40k**	**$6k**	**$26k**	**-**	**$305k**	**$189k**	**$17k**	**-**	**$11k**

Table 62 System Generated 10-Year Capital Replacement Forecast: Land Improvements

Vehicles

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Fire	$457k	-	$35k	$281k	-	$333k	-	$14k	-	-	-
General Government	-	-	-	-	-	-	-	-	-	$40k	-
Parks & Recreation	-	-	-	-	-	-	$91k	-	-	-	-
Public Works	$241k	$266k	$79k	-	$55k	$530k	-	-	-	$61k	$40k
Total	**$698k**	**$266k**	**$114k**	**$281k**	**$55k**	**$862k**	**$91k**	**$14k**	**-**	**$101k**	**$40k**

Table 63 System Generated 10-Year Capital Replacement Forecast: Vehicles

Machinery & Equipment

Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Airport	$38k	-	-	-	-	-	-	-	-	-	-
Fire	$403k	-	$9k	-	-	-	$381k	$9k	-	$41k	$32k
General Government	$1.1m	$34k	$36k	-	$50k	$205k	$704k	$36k	-	$50k	-
Parks & Recreation	$192k	$11k	$12k	-	$11k	$127k	$29k	-	-	$17k	-
Public Works	$1.4m	$6k	$26k	-	$278k	$34k	$79k	$200k	$118k	$402k	$41k
Social & Family Services	$54k	$13k	$15k	$20k	$17k	$13k	$15k	$8k	-	-	-
Total	**$3.2m**	**$64k**	**$97k**	**$20k**	**$356k**	**$380k**	**$1.2m**	**$253k**	**$118k**	**$510k**	**$73k**

Table 64 System Generated 10-Year Capital Replacement Forecast: Machinery & Equipment

Appendix C – Level of Service Maps

Road Network

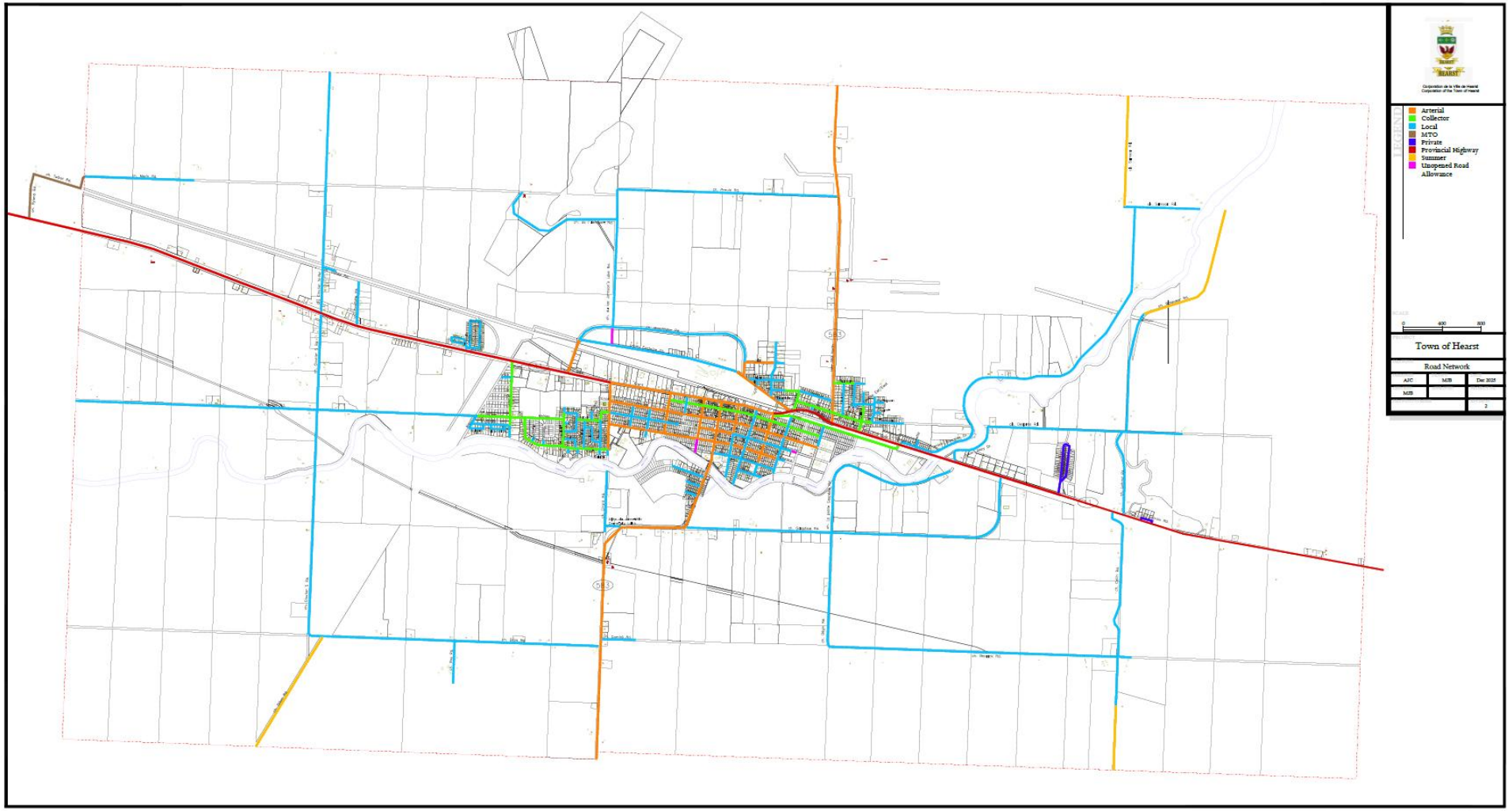

Figure 80: Road Network

Road Network – Road Class Pavement Condition

Condition	Images that illustrate the different Pavement Quality Index Levels			
	Local Roads	Collector	Primary Collector	Arterial
Very Good Condition 1 (PQI 80 – 100)	PQI = 80 	PQI = 80 	PQI = 80 	PQI = 80 
Good Condition 2 (PQI 60 – 79)	PQI = 60 	PQI = 60 	PQI = 60 	PQI = 60 
Fair Condition 3 (PQI 40 – 59)	PQI = 40 	PQI = 40 	PQI = 40 	PQI = 40 

Figure 81 Pavement Quality Index Description 1/2

Condition	Images that illustrate the different Pavement Quality Index Levels			
	Local Roads	**Collector**	**Collector**	**Arterial**
Poor Condition 4 (PQI 20 – 39)	PQI = 20 	PQI = 22 	PQI = 22 	PQI = 22 
Very Poor Condition 5 (PQI 0 – 19)	PQI = 18 	PQI = 18 	N/A	PQI = 19 

Figure 82 Pavement Quality Index Description 2/2

Bridges & Culverts – Bridge Condition

Condition	Images of the condition of bridges and how this would affect use of the bridges
Very Good Condition 1 (BMS RATING 10)	Overall Condition Rating - 9.0 
Good Condition 2 (BMS RATING 8.0–9.9)	Overall Condition Rating - 6.2 
Fair Condition 3 (BMS RATING 6.0-7.9)	Corrosion and flaking steel 

Condition	Images of the condition of bridges and how this would affect use of the bridges
Poor Condition 4 (BMS RATING 3.0-5.9)	Full perforation of wrought iron arch member 
Very Poor Condition 5 (BMS RATING 1.0-2.9)	Shear ties on reinforcing steel in columns severed due to corrosion. 

Figure 83 Bridge Condition Ratings and Examples.

Condition	Images of the condition of culverts and how this would affect use of the culverts
Very Good Condition 1 (BMS RATING 10)	Almost New Condition 
Good Condition 2 (BMS RATING 8.0–9.9)	No repairs required for the foreseeable future 
Fair Condition 3 (BMS RATING 6.0-7.9)	Acceptable Condition and components generally functioning as intended 

Condition	Images of the condition of culverts and how this would affect use of the culverts
Poor Condition 4 (BMS RATING 3.0-5.9)	Presence of distresses or significant deterioration with components not functioning as intended 
Very Poor Condition 5 (BMS RATING 1.0-2.9)	Danger and collapse. Replacement or repairs required as soon as possible 

Storm Network

Figure 84: Storm Network

Water Network

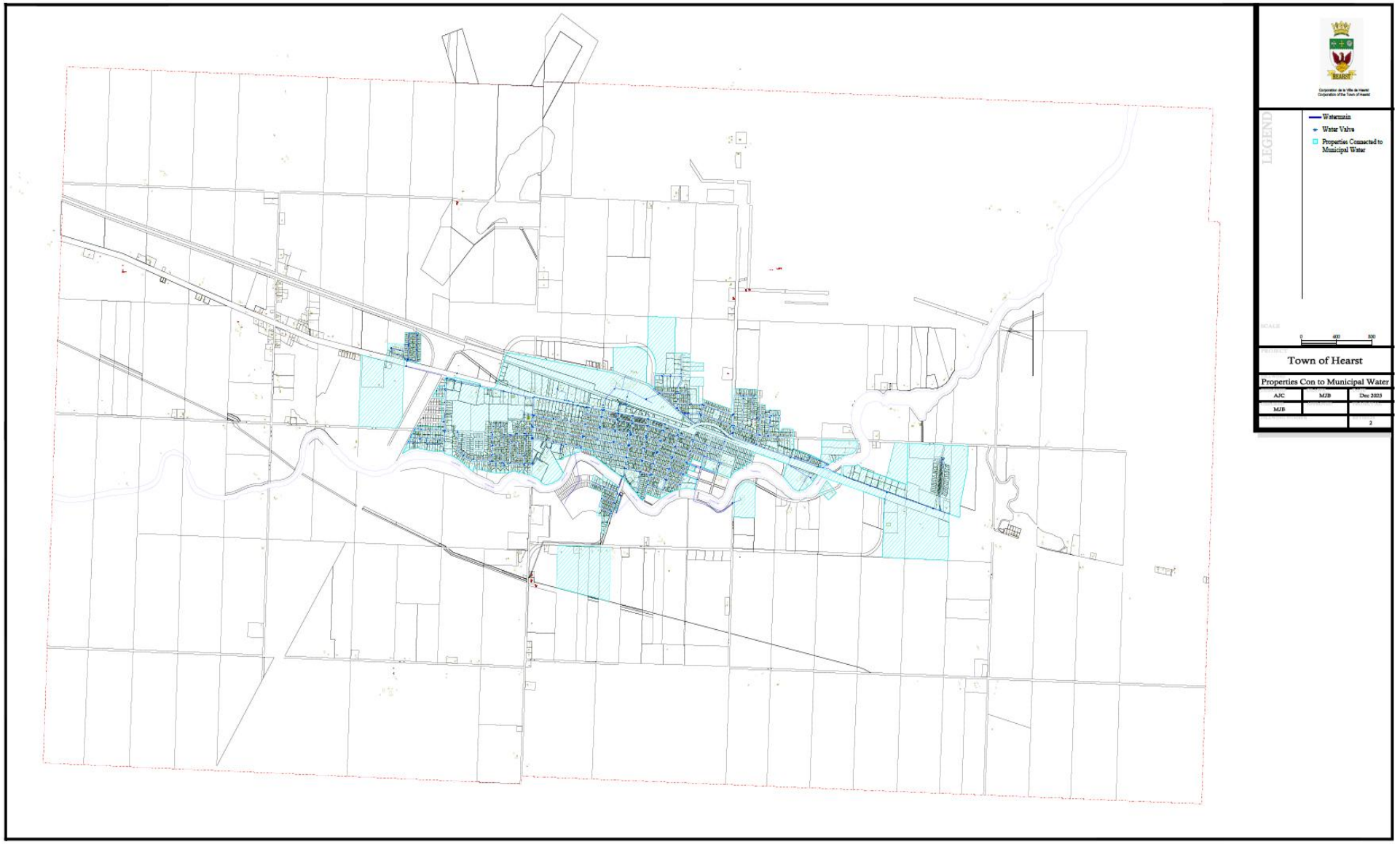

Figure 85 Water Network

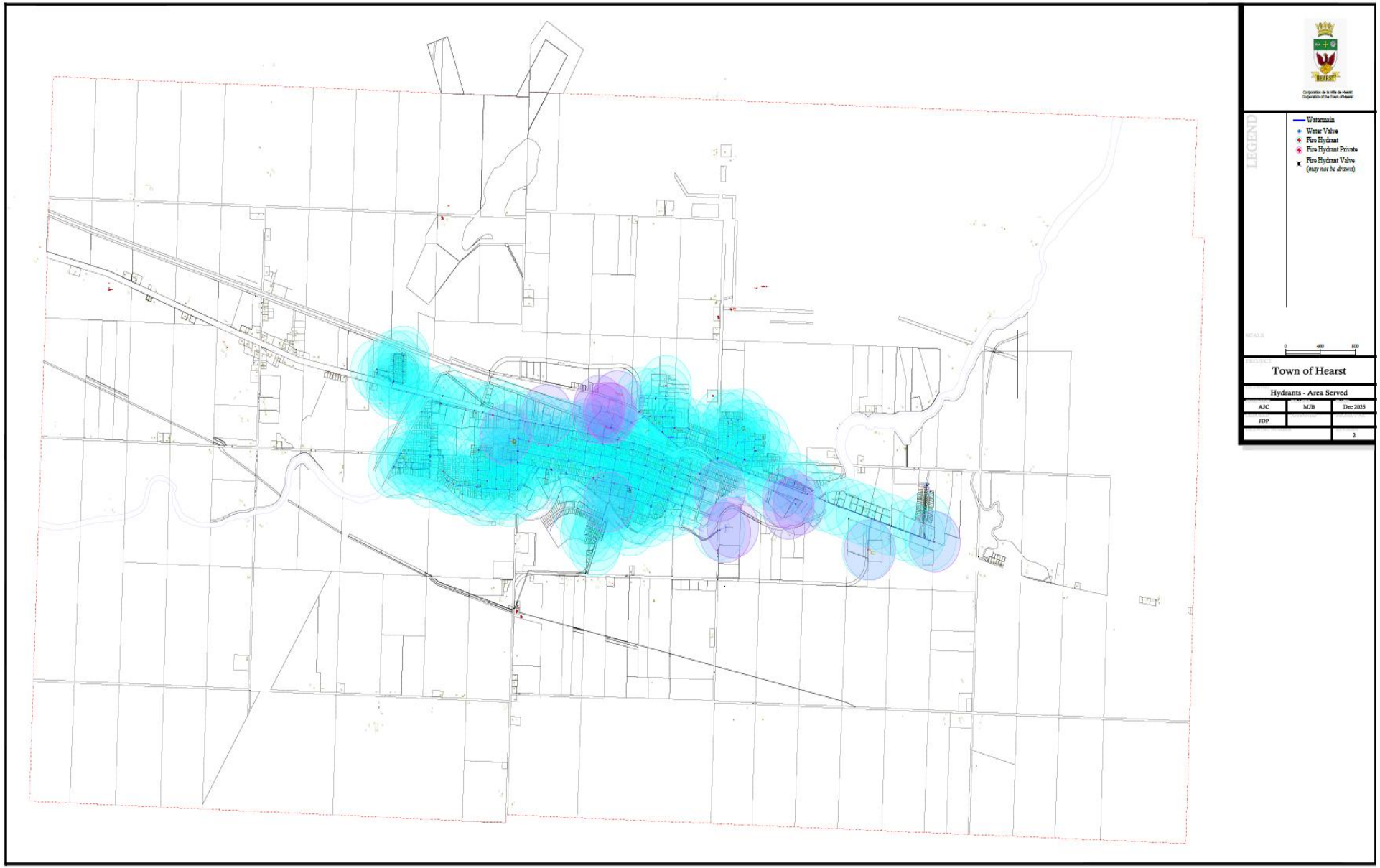

Figure 86 Water Network -Hydrant Service Area

Sanitary Network

Figure 87 Sanitary Network

Buildings

Figure 88 Municipal Buildings

Land Improvements

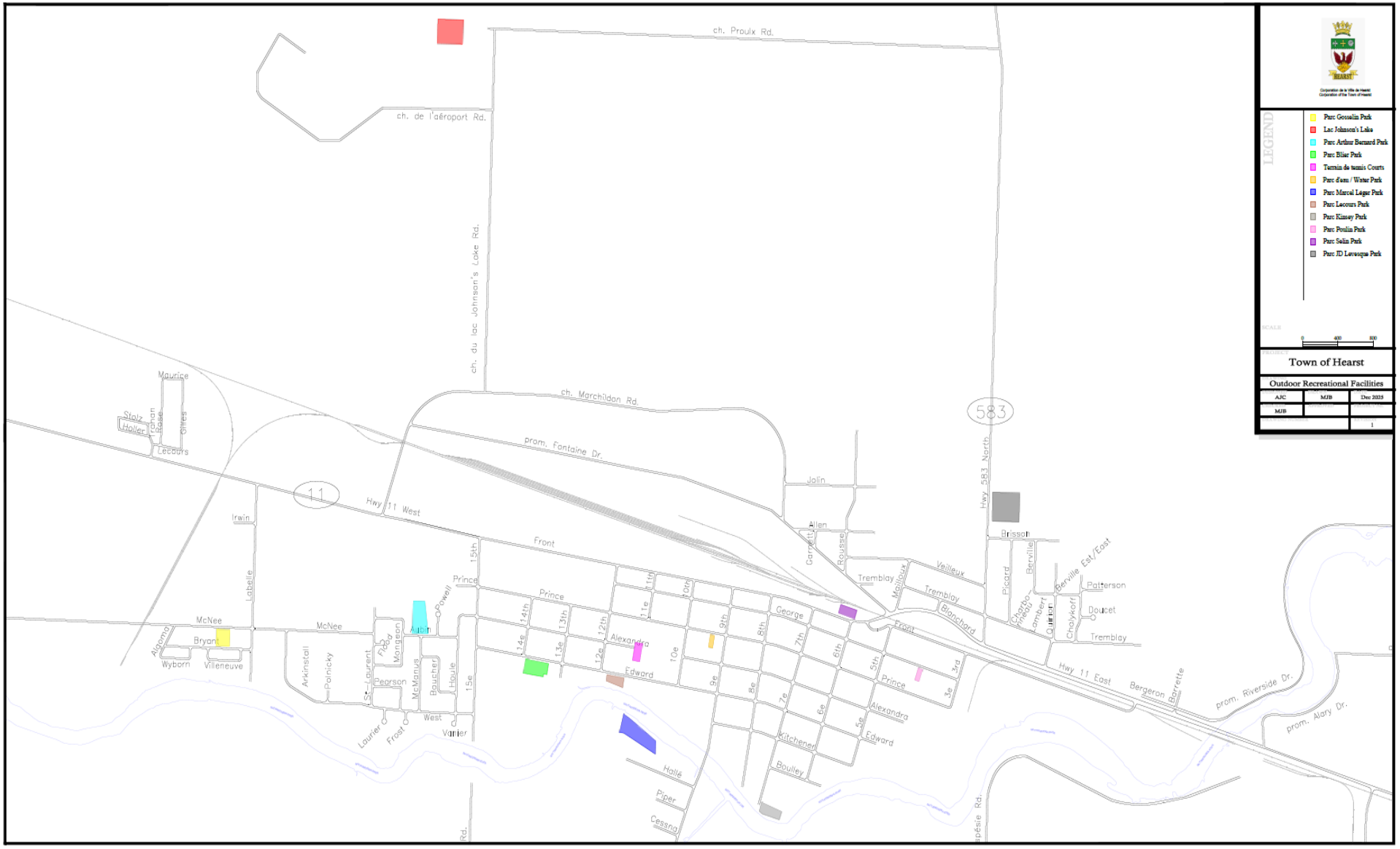

Figure 89 Municipal Parks