

FINAL REPORT

PREPARED BY HEMSON FOR THE MUNICIPALITY OF CENTRE HASTINGS

ASSET MANAGEMENT PLAN

June 26, 2025



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EXECUTIVE SUMMARY

The Asset Management Plan (2025 Plan) has been developed to be consistent with the requirements of *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure* (O Reg. 588/17) and meet the 2025 proposed level of service requirements. This 2025 Plan includes current level of service measures for all core and non-core infrastructure assets and defines proposed levels of service over a ten-year period in compliance with the regulation. A summary of the key results of the 2025 Asset Management Plan is noted below along with relevant reporting outputs provided in the summary dashboard. Note that all figures are in constant 2025 dollars.

- The Municipality's infrastructure has an estimated replacement value of \$162.1 million. The largest share is roads and accounts for about \$49.2 million (31%). The next highest share is bridges and culverts at \$33.0 million (21%) and is followed by buildings at \$31.3 million (19%). Sidewalks are valued at a total of \$13.4 million (8%), and water infrastructure is valued slightly lower at \$13.2 million (8%). Machinery and equipment have a replacement value of \$7.1 million (4%), vehicles have a replacement value of \$6.8 million (4%), and sewer infrastructure has a replacement value of \$5.6 million (4%). The other asset categories are made up of \$2.4 million (2%) for land improvements and stormwater infrastructure.
- Municipal assets are in fair condition overall. About \$104.8 million (65%) of the assets are in Good to Very Good condition while \$27.1 million (17%) of the assets are Fair condition. The remaining \$30.2 million (18%) are in Poor to Very Poor condition.
- The proposed level of service for the planning period (2025-2034) is generally an average weighted condition assessment of "Fair" for assets. However, there are some exceptions for certain assets:
 - Paved roads in the Municipality are on average in "Good" condition with an average Pavement Condition Index (PCI) of 77. Unpaved roads have an average PCI of 71. The Technical Metrics "Road lane-km as a proportion of the total land area in the Municipality" is required by O.Reg 588/17. The proposed level of service is to not let PCIs slip below 65 and otherwise maintain the current level of services.
 - Municipal bridges are on average in "Good" condition (64 Bridge Condition Index) with 9% of structures currently having loading or dimensional restrictions. Structural culverts are also in "Good" condition, with a slightly higher BCI of 66.9. The target

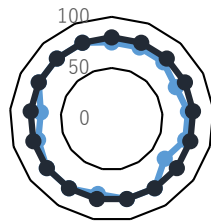
level of service is a BCI of 65 for bridges, 70 for culverts, and no structures with loading or dimensional restrictions.

- For vehicles an additional target level of service is to complete 100% of the MTO safety inspections. The Municipality is currently meeting this target.
- Water infrastructure service levels are tracked by four additional Technical Levels of Service metrics required by O.Reg 588/17. Discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- Wastewater infrastructure service levels are tracked by four additional Technical Levels of Service metrics required by O.Reg 588/17. Further discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- The service level of stormwater assets is monitored through two additional Technical Levels of Service metrics required by O.Reg 588/17. Further discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- The target level of service for the Municipality's library system is 1.5 square feet of library building space per resident. The Municipality is currently meeting this target.
- For Parks and Recreation vehicles, land improvements, and equipment the target level of service is "Good" condition. Further discussion of related metrics can be found in the Proposed Levels of Service section of this report.
- The total 10-year lifecycle costs to meet proposed levels of service amount to \$62.2 million (an average of \$6.2 million per year) for tax supported assets. To meet proposed levels of service for tax supported assets an average increase to contributions to capital reserves of approximately \$255,200 (\$2025) per year plus inflation would be required. This is equivalent to a 3.6% annual increase to the total tax levy in 2026.
- For rate supported assets, the total 10-year lifecycle costs to meet proposed levels of service amount to \$9.7 million (an average of \$969,000 per year). To meet proposed levels of service for rate supported assets an average increase to contributions to capital reserves of approximately \$97,400 (\$2025) per year plus inflation would be required. This is equivalent to a 9.9% annual increase to the rate revenues in 2026. Going forward, these amounts would need to be adjusted by inflation on an annual basis to ensure the Municipality's funding levels are sufficient to meet general market price increases.

Summary Dashboard of 2025 Asset Management Plan



Maturity Assessment



76/100

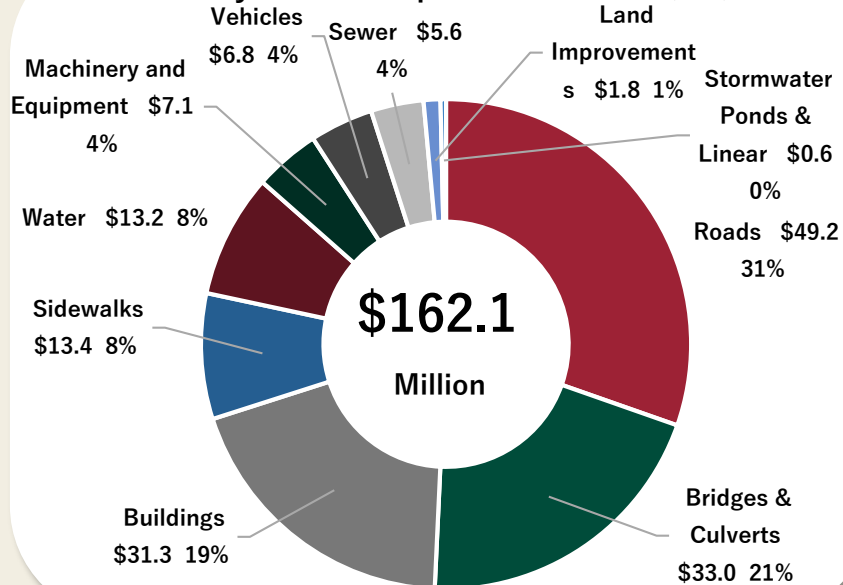
— Current Score
— Target Score

Total 10-Year Need to Meet PLOS

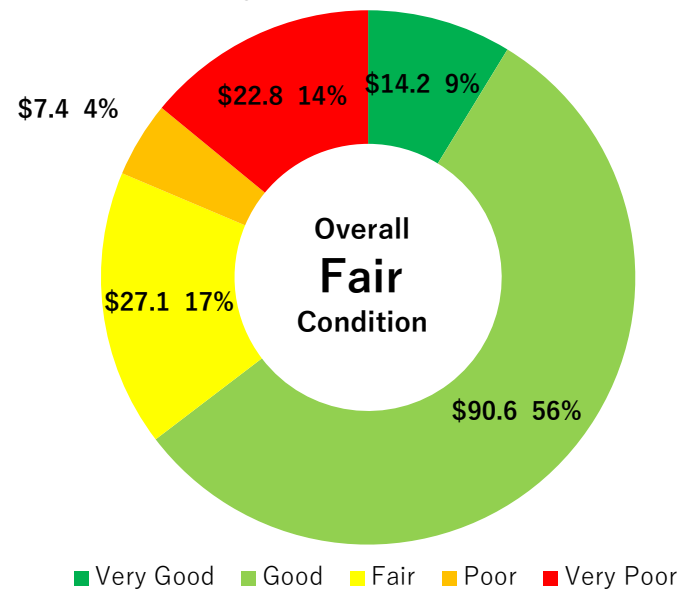
TAX
\$62.2
Million

RATE
\$9.7
Million

Summary of Total Replacement Value (\$M)



Summary of Asset Condition (\$M)



1. INTRODUCTION

The Municipality of Centre Hastings 2025 Asset Management Plan (2025 AMP) provides the Municipality with a tool to assist in asset management financing decisions. The AMP covers all Municipal-owned and operated assets and follows the format set out by the Ministry of Infrastructure through the *Building Together: Guide for Municipal Asset Management Plans*, the requirements of *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure* (O. Reg. 588/17) and the Municipality's Strategic Asset Management Policy.

An Excel based asset management financial model has been developed as part of the 2025 AMP. The model contains the Municipality's detailed asset inventory and financing strategy used to develop this AMP. The model is provided to municipal staff and is intended to be updated on a regular basis to inform future capital investment decisions.

A. PURPOSE OF THE ASSET MANAGEMENT PLAN

The main purpose of the 2025 AMP is to advance the Municipality's asset management practices by developing a set of asset management strategies to the specific needs of each service area. At the same time, these strategies align with the objectives of the requirements of *Ontario Regulation 588/17* (O. Reg. 588/17). This plan is focused on achieving several key objectives:

- **Ensuring Long-Term Sustainability** – management of the Municipality's assets is a long-term commitment that must be sustainable to ensure effective service delivery for future generations.
- **Lowest Cost of Ownership** – long-term sustainability is only possible by ensuring costs are minimized through efficient management of assets by developing service area and asset specific objectives.
- **Minimizing Risk** – risk is minimized through the assessment, management and long-term planning of assets at more focused levels and through consultation with service area staff.
- **Enhancing Service Delivery** – the Municipality strives for continual improvement in its asset management strategies as outlined in the Strategic Asset Management Policy and therefore tailored approaches to assessing long-term needs unique to each asset category is captured through this AMP.

- **Supporting Informed Decision-Making** – development of a set of asset management tools that help the decision-making process make evidence-based decisions. The Excel based financial model can be used in conjunction with the detailed tangible capital asset software that tracks inventory of assets to continually keep asset information up to date.

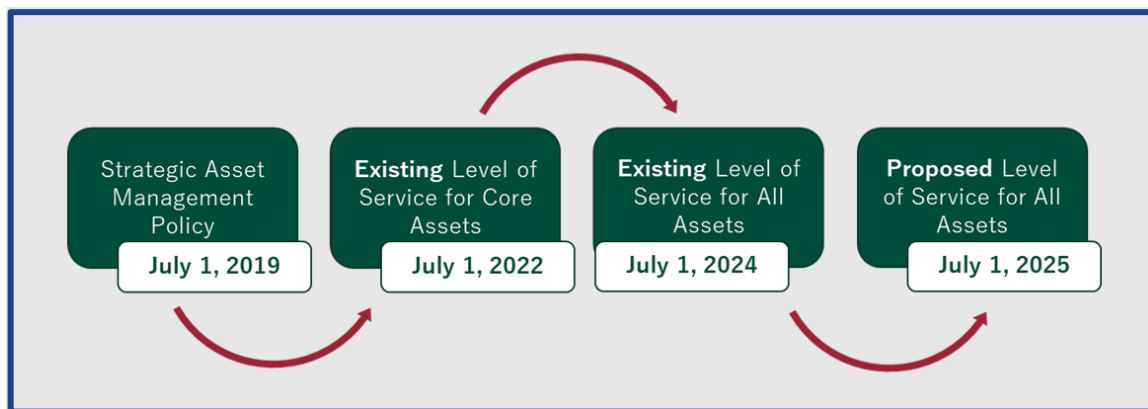
By following the key objectives above, the AMP establishes a “clear line of sight” from the service being provided to residents and businesses in the Municipality. Any investment requirements included in the AMP are clearly linked to a well-defined need. These needs over the 10-year period are set to meet the proposed level of service, which in the case of Centre Hastings, is largely related to maintaining levels of service as opposed to enhancing or expanding levels of service. Furthermore, the needs should be aligned with strategic objectives through capital and operating decisions made in the budget process.

B. REGULATORY CONTEXT

In 2015, the Province of Ontario established the *Infrastructure for Jobs and Prosperity Act*. The purpose of this Act is to establish mechanisms to encourage principled, evidence-based and strategic long-term infrastructure planning that supports job creation and training opportunities, economic growth, protection of the environment, and incorporate design excellence into infrastructure planning.

In December 2017, *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure* (O. Reg 588/17) was passed under the *Infrastructure for Jobs and Prosperity Act*. The regulation requires municipalities to develop a Strategic Asset Management Policy, which will help municipalities document the relationship between their Asset Management Plan and existing policies and practices as well as provide guidance for future capital investment decisions. The regulation also contains specific requirements on the type of analysis municipal asset management plans should contain, including policies, levels of service, lifecycle management and financing strategies. The aim is to provide guidance to municipalities so that asset management plans are more consistent across the Province. Furthermore, in March 2021 the Province amended the regulation to extend the regulatory timelines by one year. A summary timeline of the requirements of the regulation are outlined in Figure 1.

Figure 1 – Ontario Regulation 588/17 Requirements



A high-level summary of the technical requirements to be addressed for July 1, 2025, include¹:

- An AMP for all municipal infrastructure assets that builds upon the previous requirements for all asset categories (core and non-core).
- Identification of the proposed levels of service for each of the next 10-years (core and non-core).
- The lifecycle activities required to meet proposed levels of service.
- The risks associated with the lifecycle activities to meet proposed levels of service and their associated costs.

The 2025 AMP meets the requirements of the regulation as it includes the proposed levels of service requirement to meet the 2025 deadline for all assets considered in this AMP. The 2025 AMP builds on the work completed in the Municipality's 2023 Asset Management Plan which included all asset categories (core and non-core) and reported on the current level of service. Through this update, the Municipality has updated the current level of service utilizing more recent engineering reports, updated inventories and datasets compiled through consultation with Municipality staff.

¹ There are additional requirements of the regulation not explicitly stated here, however, this AMP meets all requirements needed. Only the most relevant reporting requirements are listed for simplicity. See

<https://www.ontario.ca/laws/regulation/r17588#BK7>.

C. ASSET MANAGEMENT PLAN STRUCTURE

The 2025 AMP is developed to be consistent with the structure recommended through the *2013 Building Together: Guide for Municipal Asset Management Plans*. At the same time, it has been developed to meet the requirements of O Reg. 588/17. Table 1 provides a guide to the sections of the 2025 AMP.

Table 1 – AMP Report Structure

Section	Requirement
Main Body	
Section 2 - State of Local Infrastructure	Summarizes the state of the Municipality's infrastructure with reference to infrastructure quantity and quality. Additional details are provided in Appendix A.
Section 3 - Level of Service	A summary of the current and proposed levels of service summarized for each asset category. This section is consistent with the reporting requirements of O. Reg. 588/17.
Section 4 - Asset Management Strategy	Sets out several strategies and lifecycle costs that will assist the Municipality in maintaining assets so that proposed levels of service can be met. This section also includes a risk analysis of Municipality assets.
Section 5 - Financing Strategy	Establishes how asset management can be delivered in a financially sustainable way for all services. Outlines the lifecycle costs and funding strategy to meet proposed levels of service. Additional detailed calculations are provided in Appendix B.
Section 6 – Monitoring and Improvement Plan	Provides key recommendations on how to improve the asset management plan and related practices over the long-term.
Appendices	
Appendix A – State of Local Infrastructure Report Cards	Detailed reports on the state of local infrastructure by asset category including the asset portfolio, replacement values, age and condition.
Appendix B – Detailed Financing Strategy Tables	Additional detailed tables related to the lifecycle cost and financing strategy.

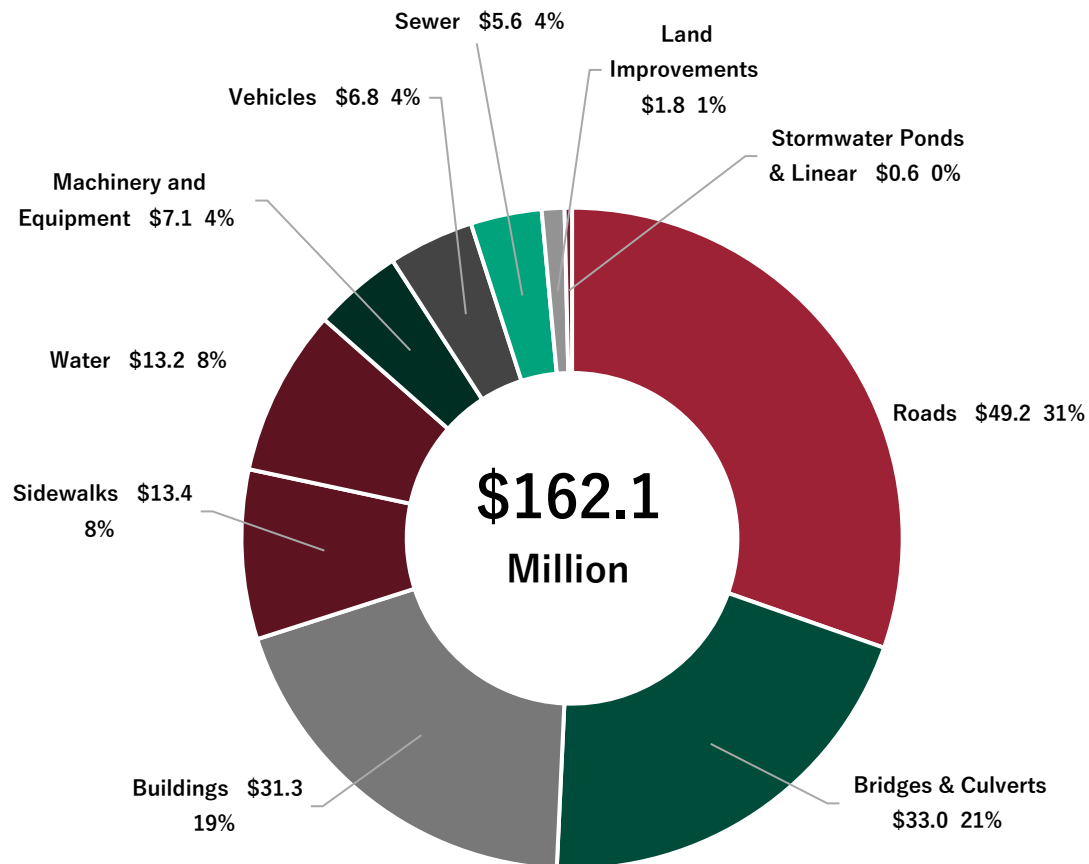
2. STATE OF LOCAL INFRASTRUCTURE

This section provides a summary of the Municipality's assets with reference to asset quantity and quality. Some assets have condition assessments based on engineering inspections, while some asset conditions are based on the useful life of the asset relative to its age, or a high-level condition assessment developed in consultation with Municipality staff. Detailed technical information on the asset inventory, remaining useful life and conditions for each asset category is provided in Appendix A.

A. REPLACEMENT COST OF INFRASTRUCTURE

The Municipality's infrastructure has an estimated replacement value of \$162.1 million. The largest share is roads and accounts for about \$49.2 million (31%). The next highest share is bridges and culverts at \$33.0 million (21%) and is followed by buildings at \$31.3 million (19%). Sidewalks are valued at a total of \$13.4 million (8%), and water infrastructure is valued slightly lower at \$13.2 million (8%). Machinery and equipment have a replacement value of \$7.1 million (4%), vehicles have a replacement value of \$6.8 million (4%), and sewer infrastructure has a replacement value of \$5.6 million (4%). The other asset categories are made up of \$2.4 million (2%) for land improvements and stormwater infrastructure.

Figure 2 - Summary of Assets by Total Replacement Value (\$2025 millions)



Replacement values are used to estimate the cost of replacing an asset when it reaches the end of its engineered design life. For this reason, the replacement values represent an important input into the lifecycle cost analysis. The total replacement cost of assets of \$162.1 million has been determined utilizing different methods that are appropriate for each asset category and dependent on data available at the time of developing this AMP.

Table 2 – Methodology Used for Replacement Values

Asset Category	Methodology
Roads	<ul style="list-style-type: none"> Based on indexed values from the Municipality's 2021 Roads Needs Study
Bridges and Culverts	<ul style="list-style-type: none"> Based on average replacement cost per square metre of deck area for bridges in the OSIM Reports that were recommended to be fully replaced

Asset Category	Methodology
Buildings	<ul style="list-style-type: none"> Some building asset values are indexed from the Municipality's 2021 Development Charge Background Study. Where the asset was not listed in the DC Study inventory, the acquisition costs are adjusted to 2025 dollars based on the average Non-residential Building Construction Price Index (NRBCPI), which is 3% annually.
Sidewalks	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Water	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Vehicles	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Machinery and Equipment	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Sewer	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Land Improvements	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)
Stormwater Ponds & Linear	<ul style="list-style-type: none"> Adjust acquisition costs to 2025 dollars based on average NRBCPI (3% annual)

B. REMAINING USEFUL LIFE OF THE INFRASTRUCTURE

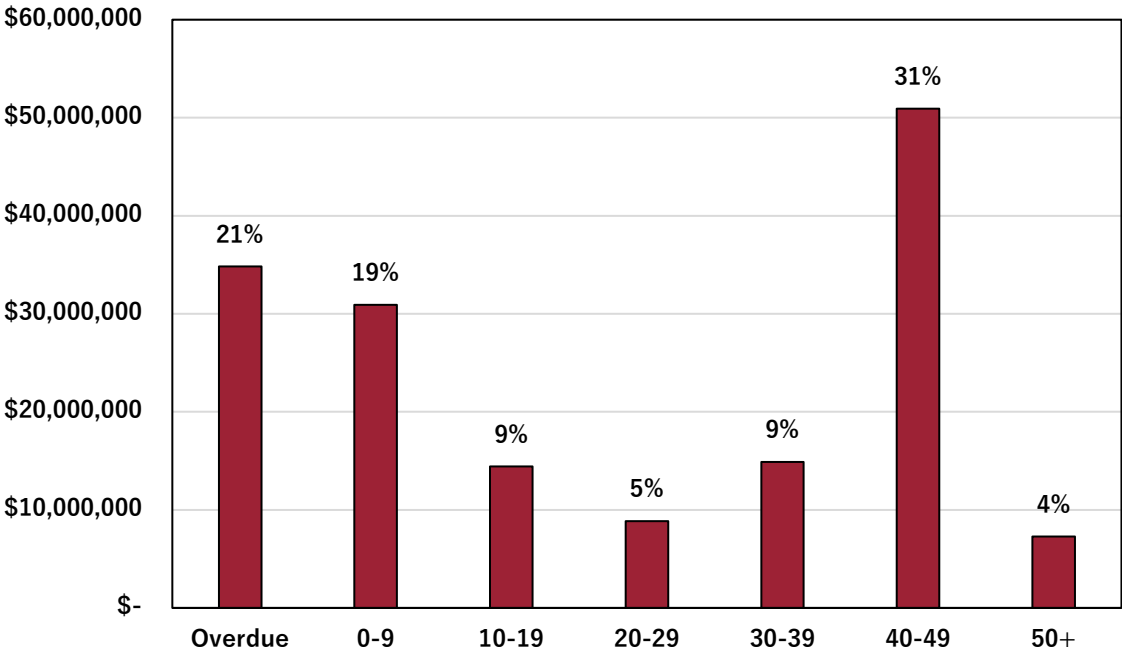
Figure 3 provides a summary of the assets by replacement value shown by their remaining useful life (years).² About \$7.3 million (4%) of the infrastructure has greater than 50 years of remaining useful life. About \$89.1 million (55%) has between 10 and 49 years of remaining useful life while about \$30.9 million (19%) has 0 to 9 years of remaining useful life.

The remaining \$34.8 million (21%) is considered overdue and past its design life. This is largely related to sidewalks, bridges, and culverts, which routinely outlive their expected useful life as a result of the maintenance and renewal activities undertaken by the

² The summary shows infrastructure totalling about \$520.0 million of the total Municipality replacement value of \$950.4 million as roads have been excluded from the summary. Roads are excluded as no acquisition date or useful life information is available as the Municipality maintains the roads based on its condition and not on age.

Municipality. Although this infrastructure is considered past its design life, the infrastructure continues to be maintained and is in good working order.

Figure 3 - Summary of Assets by Remaining Useful Life (\$2025)



C. CONDITION OF THE INFRASTRUCTURE

Consistent with the Canadian National Infrastructure Report Card, as well as other major organization and institution reporting formats, a five-point rating scale was used to assign a condition to all assets. This methodology provides a standard and easy to understand way of reporting on the condition of assets. Table 3 summarizes the assumed parameters.

Table 3 - Condition Assessment Parameters

Condition Rating	Definition
Very Good	<ul style="list-style-type: none">Well maintained, good condition, new or recently rehabilitated asset.
Good	<ul style="list-style-type: none">Good condition, few elements exhibit existing deficiencies.
Fair	<ul style="list-style-type: none">Some elements exhibit significant deficiencies. Asset requires attention.
Poor	<ul style="list-style-type: none">A large portion of the system exhibits significant deficiencies. Asset mostly below standard and approaching end of service life.

Condition Rating	Definition
Very Poor	<ul style="list-style-type: none"> Widespread signs of deterioration, some assets may be unusable. Service is affected.

Assets were categorized in the 5-tier rating system on an asset-by-asset basis. Three approaches have been utilized for the assets considered in this AMP. The approaches for each of these methods is outlined.

1. Engineered Conditions

Condition rating systems based on engineered and professional standards. These measures can then be translated into a 5-tier rating system. The Municipality aims to continually update the asset inventory to reflect changes in conditions or when assets are replaced.

Condition assessments for the roads are based on the engineered assessments developed through the Road Needs Study (RNS), with the records being updated annually through the Municipality's Road Management Software. The RNS rates the roads utilizing a 100-point scale for surface condition (PCI). The PCI of the roads has been translated to a condition rating based on the scale in Table 4.

*Table 4 – Road Surface Condition Parameters**

Condition Rating	PCI Range
Very Good	90 – 100
Good	70 – 90
Fair	60 – 70
Poor	50 - 60
Very Poor	Less than 50

Condition assessments for the bridges and culverts are based on the engineered assessments developed through the Municipality's OSIM Report (Ontario Structure Inspection Manual). The OSIM report rates the culverts utilizing a 100-point Bridge Condition Index scale (BCI). The condition of the culverts has been translated to the 5-point scale based on the scale in Table 5 below.

Table 5 – Bridges and Culverts Condition Parameters

Condition Rating	BCI Range
Very Good	90 – 100
Good	70 – 90
Fair	60 – 70

Condition Rating	BCI Range
Poor	50 - 60
Very Poor	Less than 50

2. Age Based Approach

For some asset types where the Municipality was not able to provide a condition assessment based on existing knowledge or inspection, the condition is estimated based on age and the remaining useful life of the asset. It is the intention that the Municipality move towards a condition assessment methodology using approach 1 and 2 wherever possible. The age-based condition methodology is more appropriate for lower valued assets that have a shorter useful life. Table 6 shows the methodology where the condition is assigned based on the remaining useful life of the assets.

Table 6 – Age Based Condition Parameters

Condition Rating	Percentage of Remaining Useful
Very Good	80% - 100%
Good	60% - 80%
Fair	40% - 60%
Poor	20% - 40%
Very Poor	Less than 20%

Summary of the Condition of Assets

Figure 4 summarizes the condition of Municipality assets which are determined to be in Fair condition on average. About \$104.8 million (65%) of the assets are in Good to Very Good condition while \$27.1 million (17%) of the assets are Fair condition. The remaining \$30.2 million (18%) are in Poor to Very Poor condition.

Figure 4 - Summary of Asset Condition (\$2025 - in millions)

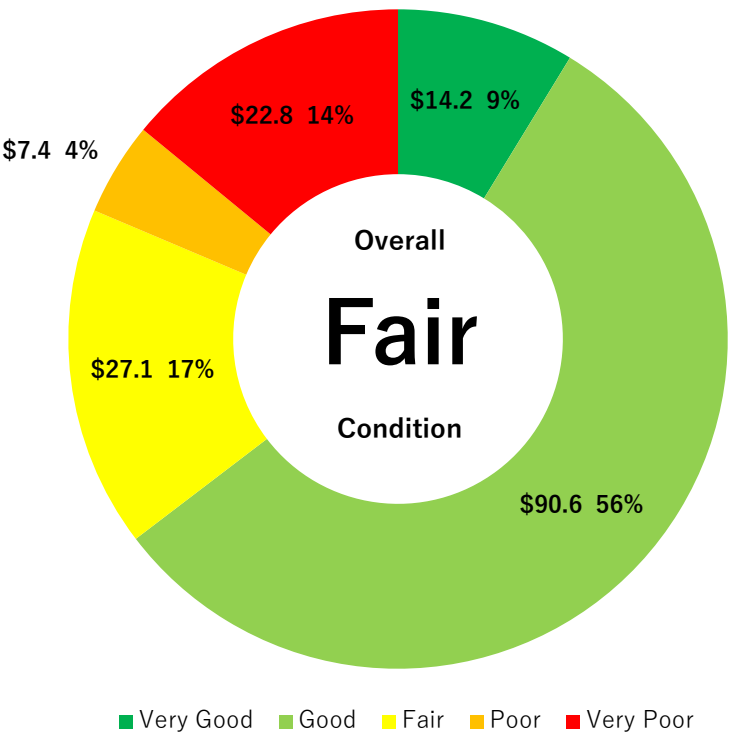
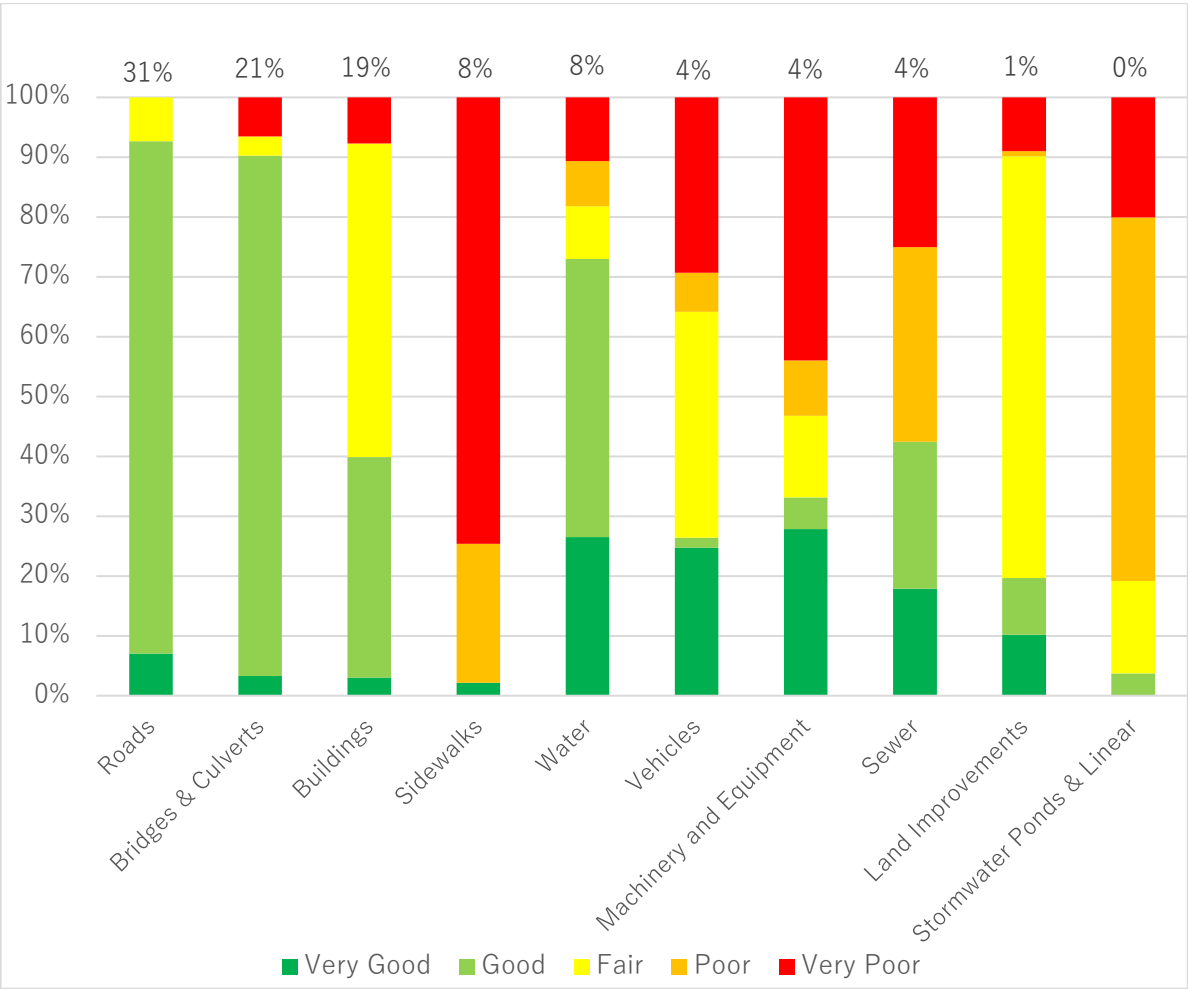


Figure 5 shows the condition of assets delineated by each asset category. Figure 5 shows the following:

- The Municipality’s largest component in the asset portfolio is roads, making up 30% of the replacement value. About \$45.6 million (93%) of the roads are in Good to Very Good condition as these assets were assessed through the Road Needs Study.
- About \$29.8 million (90%) of the bridges and culverts are in Good to Very Good condition. These assets were assessed through the OSIM Report. A small share of about \$2.2 million (7%) of the bridges and culverts are in Poor or Very Poor condition and will need significant rehabilitation or replacement over the next 10 years.

Figure 5 - Summary of Asset Condition by Asset Category



Note: The percentages above the bars represent the shares of replacement value relative to the total replacement value of Municipality assets at \$162.1 million.

3. LEVEL OF SERVICE

Levels of service (LOS) describe the outputs or objectives the Municipality intends to deliver to its residents, which includes measures from a customer, technical and community perspective. LOS provides a description of a particular activity or asset metric where performance may be measured to benchmark the current state and set targets to ensure resident's needs are met.

Levels of service measure how well the Municipality is meeting business needs, and this information can be utilized as key drivers to inform future investment decisions. Having well-defined service levels will allow the Municipality to be transparent with its stakeholders to find the appropriate balance between affordability and service expectations.

A. THE MUNICIPALITY'S LEVEL OF SERVICE GOALS

The LOS Framework helps support and achieve key asset management goals:

- Develop and continuously improve asset management related documentation to provide evidence-based level of service linkages between the customer and technical levels with integration directly into service-based activities as it relates to both the operational and capital expenditures. This objective is achieved through development of the AMP financial model, and the Municipality expects to continue to make improvements to its available asset data over the longer-term.
- Develop a clear relationship between the level of service and the costs associated to meeting level of service objectives by integrating the AMP LOS framework into the budget process. This integration is expected to be achieved over the longer-term however, the financing strategy makes recommendations on the financial needs to meet the proposed level of service which can be utilized to help inform the budget process.
- Meet the requirements of O. Reg. 588/17 for 2025 to define the proposed level of service, identify costs to meet the proposed level of service and identify any risks of not meeting these targets.

B. CUSTOMER LEVELS OF SERVICE (CLOS)

Customer Levels of Service are specific parameters that describe the extent and quality of services that the Municipality provides to residents from the resident's perspective. CLOS is comprised of qualitative measures such as the description of assets or the related service

provided. CLOS can be evaluated through an understanding of the wants and needs of residents while understanding the assets the Municipality owns and operates. The CLOS are documented as high-level qualitative statements that capture these characteristics. Consistent with the requirements of the Regulation 588/17, the Community Levels of Service are included under the CLOS.

C. TECHNICAL LEVELS OF SERVICE (TLOS)

Technical Levels of Service are specific parameters that measure asset performance. TLOS is comprised of quantitative measures such as asset age/condition or service performance. Part of the TLOS is to consider both the individual asset capability and how the assets are scheduled to be utilized as part of a system of service delivery. These measures are developed through a review of the Municipality's asset data, engineering reports and in consultation with staff.

The technical levels of service have been defined to meet the following criteria:

- TLOS measures are relevant to the operation of municipal services;
- TLOS are feasible to track and the data to inform the technical measures are readily available or will be tracked for future iterations of the AMP; and
- TLOS are developed recognizing the public as the main driver of service, they are designed to track internal asset specific performance, but the resulting quality of service will continue to be based on public input.

TLOS measures are crucial for tracking levels of service as they provide quantifiable measures to evaluate the effectiveness and efficiency of service delivery. By systematically monitoring these measures, the Municipality can assess whether service standards are being met, identify areas for improvement, and allocate resources effectively. An iterative consultation process with staff helped in developing an internal tracking tool to capture the necessary data for calculating the current and proposed levels of service and monitoring the trends moving forward.

D. OVERVIEW OF THE MUNICIPALITY'S LEVEL OF SERVICE

The Municipality's 2023 Asset Management Plan was prepared for all Municipal infrastructure assets under the "current level of service" framework as required by O. Reg. 588/17. The Municipality defined its current levels of service in accordance with qualitative and technical metrics that have been established through the regulation and in consultation

with staff. In general, the measures were derived from data collected in 2022 and updated in 2025 and the process ensured that the current level of service accurately reflected the performance and condition of infrastructure assets given the available data of the day.

Current Level of Service

For the purposes of this 2025 Asset Management Plan, some customer and technical level of service reporting measures remain consistent with those established through the development of the 2023 AMP. However, the “current” baseline data has been updated with information that has been made available since 2023. In other instances, metrics have been added to help capture the progress of initiatives already underway by staff and council. Furthermore, improvements have been made to streamline the measures to focus in areas that are relevant and useful for service level monitoring and meeting the regulatory reporting requirements.

Proposed Level of Service

O. Reg 588/17 requires municipalities to define its proposed levels of service by July 1st, 2025. These proposed levels of service (PLOS) are intended to provide the Municipality with a measurable future target state for the services it provides. The proposed level of service focuses on asset specific measures that capture the performance of infrastructure which forms part of the services provided by the Municipality. Best efforts have been made to maintain the focus of the proposed level of service to infrastructure assets that support the service rather than the overall services provided by any specific service area. However, it is noted that in general the proposed level of service outlined in this AMP are required to continue to provide the overall level of service objectives of the Municipality.

For every level of service that the Municipality measures, a corresponding set of PLOS measures have been developed. Consultation with Municipal staff was conducted to develop the proposed levels of service based on the needs of the community, existing data and assessing their appropriateness for the Municipality. Overall, the proposed levels of service outlined in this report have been carefully evaluated based on the following criteria:

- **Options & Associated Risk** - Staff assess various options for the proposed levels of service and analyze the risks associated with each option to the long-term sustainability of the Municipality. This assessment considers factors such as service quality, operational efficiency, and financial sustainability.
- **Differences from Current Levels of Service** – The analysis looks at a comparison of the proposed levels of service with the current levels to identify areas where adjustments or enhancements are necessary. While some proposed levels of service may mirror the

current levels outlined in this AMP, adjustments or enhancements to the current procedures may still be necessary to ensure alignment with longer-term goals.

- **Achievability** - The feasibility of achieving the proposed levels of service considering factors such as available resources, technological capabilities, and operational constraints have been evaluated. Efforts have been made to ensure that the proposed targets are realistic and attainable within the Municipality's operational capacity. Notwithstanding the Municipality's intended ability to achieve the targets, it is expected that the proposed levels of service continue to be reviewed and monitored - further adjustments may be warranted moving forward.
- **Affordability** - The affordability of the proposed levels of service is conducted in conjunction with the budget process, ensuring alignment with the financial resources and fiscal capacity available. This process involves approval by Council and the organization, with affordability considerations integrated into budgetary decisions.

Summary of the Level of Service

Table 7 summarizes the customer levels of service while Table 8 shows the technical levels of service. Table 8 shows:

- The proposed level of service for the planning period (2025-2034) is generally an average weighted condition assessment of "Fair" with some exceptions for certain assets:
- Paved roads in the Municipality are on average in "Good" condition with an average Pavement Condition Index (PCI) of 77. Unpaved roads have an average PCI of 71. The Technical Metrics "Road lane-km as a proportion of the total land area in the Municipality" is required by O.Reg 588/17. The proposed level of service is to not let PCIs slip below 65 and otherwise maintain the current level of services.
- Municipal bridges are on average in "Good" condition (64 Bridge Condition Index) with 9% of structures currently having loading or dimensional restrictions. Structural culverts are also in "Good" condition, with a slightly higher BCI of 67. The target level of service is a BCI of 65 for bridges, 70 for culverts, and no structures with loading or dimensional restrictions.
- For vehicles an additional target level of service is to complete 100% of the MTO safety inspections. The Municipality is currently meeting this target.

- Water infrastructure service levels are tracked by four additional Technical Levels of Service metrics required by O.Reg 588/17. Discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- Wastewater infrastructure service levels are tracked by four additional Technical Levels of Service metrics required by O.Reg 588/17. Further discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- The service level of stormwater assets is monitored through two additional Technical Levels of Service metrics required by O.Reg 588/17. Further discussion of these metrics can be found in the Proposed Levels of Service section of this report.
- The target level of service for the Municipality's library system is 1.5 square feet of library building space per resident. The Municipality is currently meeting this target.
- For Parks and Recreation vehicles, land improvements, and equipment the target level of service is "Good" condition. Additional level of service measures for Parks and Recreation assets includes whether there is a park within 400m to 800m for urban area residents, sports fields/diamond safety conditions, the number of playgrounds per 1,000 population, the number of splashpads per 1,000 population, and the ratio of indoor ice pads to resident.

Table 7 – Customer Levels of Service

Asset Category	Customer LOS	Community Level of Service	
Roads	Maintain safe and reliable roads and to meet reporting requirements of (O. Reg. 588/17)	Description, which may include maps, of the road network in the municipality and its level of connectivity.	The connectivity of Municipal roads is discussed at length in the 2021 Roads Needs Study.
		Description or images that illustrate the different levels of road class pavement condition.	The Municipality maintains surface condition ratings of the road system condition by roads segments on a scale from 0-100. Descriptions of the condition of the road network can be found in the 2021 Roads Needs Study
Bridges and Culverts	Maintain safe and reliable culverts and to meet reporting requirements of (O. Reg. 588/17)	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Bridges and culverts support all local traffic. Information about Load Restrictions can be found in the TLOS (Table 10).
		Description or images of the condition of culverts and how this would affect use of the culverts.	Details on engineered bridges and culverts conditions including images and technical specifications are included in the Municipality's 2024 OSIM Bridge Inspections and Needs Study.
Buildings	Maintain safe and functional buildings with sufficient capacity for residents and staff.	The Municipality owns and operates 30 buildings and structures which includes various pavilions, a medical centre, fire stations, storage sheds, arenas, community centres, recreation facilities, a landfill depot, a town hall, public works garages and facilities, public washrooms, and a library.	
Fleet	Maintain safe and functional motor vehicles and machinery available to respond to service needs when required.	The Municipality currently owns and maintains 31 different fleet assets. Most of the replacement value for these assets is under Fire. This is because Fire equipment tends to have a higher replacement cost than the fleet of the Public Works, Water/Wastewater, Waste Collection, and Building Departments.	
Water	Maintain reliable water network and to meet reporting requirements of (O. Reg. 588/17)	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system.	Centre Hastings owns, generates and maintains one water system that serves residents in Madoc. A map of the system can be found in the Municipality's 2024 Madoc Water, Wastewater and Stormwater Master Plan. The Municipality

Asset Category	Customer LOS	Community Level of Service	
		Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	is committed to maintaining a safe supply of high-quality drinking water that meets all applicable regulations and legislation.
		Description of boil water advisories and service interruptions.	<p>Fire flow is available in the serviced areas. Although the rural areas do not have hydrants, the Fire Underwriters Survey has confirmed fire flow is also available rurally.</p> <p>The Municipality had one boil water advisory in 2024. Service interruptions due to water main breaks averaged 3.5 per year in recent years.</p>
Sewer Infrastructure and Equipment	Maintain reliable sewer network and to meet reporting requirements of (O. Reg. 588/17)	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	Centre Hastings provides wastewater services to residents in Madoc. A map of the system can be found in the Municipality's 2024 Madoc Water, Wastewater and Stormwater Master Plan. The Municipality is responsible for all monitoring, quality assurance, quality control, reporting, inspecting, collection and maintenance of the facility.
		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 Municipality maintains all reporting on wastewater system performance through annual wastewater reports on the Madoc Sewage Lagoons. This report is update on an annual basis.
		Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	In addition, the Municipality maintains information on wastewater capacity and planned flow in the 2024 Madoc Water, Wastewater and Stormwater Master Plan,
		Description of how stormwater can get into sanitary sewers in the municipal	

Asset Category	Customer LOS	Community Level of Service	
		wastewater system, causing sewage to overflow into streets or backup into homes.	
		Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described above.	
		Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	
Stormwater Infrastructure	Maintain reliable stormwater management network and to meet reporting requirements of (O. Reg. 588/17)	Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	<p>Storm sewers collect rain and run - off from melting snow on properties to help prevent flooding and redirect this stormwater to nearby management ponds and waterways.</p> <p>A stormwater management pond is an engineered structure constructed to gather rainfall and surface water runoff. The pond temporarily stores water and then releases it at a controlled rate. A single pond can provide erosion and flooding control while enhancing water quality.</p> <p>Through a combination of landscape and structural features, stormwater management ponds allow sediment and contaminants to settle out of runoff before it is released into a natural watercourse. Stormwater ponds also hold back water in order to release it at a controlled rate during large storms. Controlling the flow of stormwater protects downstream lands from erosion and flooding.</p>

Asset Category	Customer LOS	Community Level of Service	
			<p>Stormwater ponds are also constructed to be an attractive feature with an environmental benefit. Ponds are designed to be surrounded by vegetation and to provide a habitat for birds and animals.</p> <p>The Municipality recently completed the Municipality's 2024 Madoc Water, Wastewater and Stormwater Master Plan. Maps of the Municipal Drainage system are available on the Municipality's website.</p>
Machinery and Equipment	Maintain safe and functional machine equipment that is reliable and available for use when needed.	The Municipality maintains and operates many pieces of machinery and equipment that are critical to the operations of their arenas, parks, roads, library, fire, administration, and other functions,	
Sidewalks	Maintain a safe and functional sidewalk and active transportation network that is available for use by residents.	Description, which may include maps, of the sidewalk network in the municipality and its level of connectivity.	Maps showing the connectivity of the Sidewalk network can be found upon request to the Municipality.

Table 8 – Technical Levels of Service

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
Roads	Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality (O. Reg. 588/17)	Roads Needs Study	Arterial: 0.12 Collector: 0.17 Local: 1.38	Maintain CLOS
	For paved roads in the municipality, the average pavement condition index value (O. Reg. 588/17)	Roads Needs Study	77 out of 100 (Good)	Minimum of 65 (Fair)
	For unpaved roads in the municipality, the average surface condition (O. Reg. 588/17)	Roads Needs Study	71 out of 100 (Good)	Minimum of 65 (Fair)
Bridges and Culverts	Percentage of bridges in the municipality with loading or dimensional restrictions (O. Reg. 588/17)	OSIM Report	9%	0%
	For bridges in the municipality, the average bridge condition index value (O. Reg. 588/17)	OSIM Report	64 out of 100 (Fair)	Minimum of 65 (Fair)
	For structural culverts in the municipality, the average bridge condition index value (O. Reg. 588/17)	OSIM Report	67 out of 100 (Fair)	Minimum of 70 (Good)
Stormwater Infrastructure	Percentage of properties in municipality resilient to a 100-year storm (O. Reg. 588/17)	AMP Model & Municipal Staff	65%	Minimum of 65%
	Percentage of the municipal stormwater management system resilient to a 5-year storm (O. Reg. 588/17)	AMP Model & Municipal Staff	100%	100%
	Routine inspections on Storm Water Management Facilities annually	Municipal Staff	No	Yes
	% Of Total Catch basins cleaned annually (3-year Avg)	Municipal Staff	100%	100%
	Average weighted condition assessment ("Very Poor" to "Very good")	AMP Model	Poor	Fair
Sidewalks	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Very Poor	Fair
Buildings	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Fair	Fair

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
Machinery and Equipment	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Fair	Fair
Vehicles	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Fair	Fair
	% of legislated MTO safety inspections completed	Municipal Staff	100%	100%
Library	Square footage of library space per resident	DC Study and Census	1.50	1.50
Water	Percentage of properties connected to the municipal water system (O. Reg. 588/17).	FIR and Census	28%	Maintain existing (28%) plus new growth
	Percentage of properties where fire flow is available (O. Reg. 588/17).	Municipal Staff	100% in serviced areas	100% in serviced areas
	The number 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 (O. Reg. 588/17).	Municipal Staff	1	0
	The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system (O. Reg. 588/17).	Municipal Staff	3.5	0
	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Good	Fair
Sewer	Percentage of properties connected to the municipal wastewater system (O. Reg. 588/17).	assumed to be same as water	28%	Maintain existing (28%) plus new growth
	The number 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 (O. Reg. 588/17).	FIR	0	0

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system (O. Reg. 588/17).	FIR	0	0
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system (O. Reg. 588/17).	FIR	0	0
	Average weighted condition assessment ("Very Poor" to "Very Good")	AMP Model	Fair	Fair
Parks and Recreation	In urban areas, is there a park within 400m to 800m	Parks and Recreation Master Plan	No	Yes
	Sports fields/diamond conditions meet Municipal standards to ensure proper performance and safety (grass cutting)	Municipal Staff	Yes	Yes
	Number of playgrounds per 1,000 population	AMP Model	0.62	0.62
	Number of splashpads per 1,000 population	AMP Model	0.21	0.21
	Ratio of indoor ice pads to resident	AMP Model	0.21	0.21
	Average weighted condition assessment of Parks & Recreation equipment and vehicles	AMP	Poor	Good
	Average weighted condition assessment of Parks & Recreation land improvements and facilities	AMP	Fair	Good

4. ASSET MANAGEMENT STRATEGY

This section sets out an action plan that will assist the Municipality in maintaining assets to meet proposed level of service objectives. The asset management strategy includes current practices and potential future practices related to non-infrastructure solutions, maintenance activities, renewal/rehabilitation, disposal, and expansion activities. It outlines the lifecycle costs needed to meet proposed levels of service over the next 10-years for each lifecycle activity and the methodology used to develop the costs. The final component of this section includes a risk analysis, which outlines a summary of assets that can be prioritized for repair/replacement if needed.

A. OVERVIEW OF FULL LIFECYCLE COST MODEL

As part of the Asset Management Plan, the Municipality, along with Hemson, have identified the total full lifecycle costs that corresponds to the requirements of the regulation. This would entail a cost estimation throughout the asset's life including planning, design, construction, acquisition, operation, maintenance, renewal (and disposal). In addition, the analysis also takes into consideration the inclusion of expansion related infrastructure into the lifecycle management strategy. This approach ensures that the additional lifecycle costs associated with newly constructed/acquired assets are accounted for in the long-term forecast, if any.

A “lifecycle management approach” in asset management planning not only includes estimating future lifecycle costs based on a set of lifecycle activities. These lifecycle activities can be segmented into six (6) categories: non-infrastructure solutions, operations/maintenance, renewal/rehabilitation, replacement, disposal, and expansion activities. Table 9 provides a description of each lifecycle category. The Municipality undertakes all the activities described in Table 9, however, the Municipality's budget generally accounts for these expenditures in different categories.

Table 9 - Overview of the Full Life Cycle Activities

Category	Description
Non-Infrastructure Solutions	Actions or policies that can lower costs or extend asset life (e.g., better integrated infrastructure planning and land use planning, demand management, insurance, process optimization, etc.). Associated to work needed to manage assets but not necessarily direct work on those assets.

Category	Description
Maintenance Activities	Servicing assets on a regular basis to fully realize the original service potential. Maintenance will not extend the life of an asset or add to its value. Not performing regular maintenance may reduce an asset's useful life.
Renewal/ Rehabilitation Activities	Mostly associated to significant repairs designed to extend the useful life of an asset. These types of activities are typically done at key points in the lifecycle of an asset to ensure the asset reaches its designed useful life.
Replacement Activities	Activities that are expected to occur once an asset has reached the end of its useful life and renewal/ rehabilitation is no longer an option.
Disposal Activities	The activities associated with disposing of an asset once it has reached the end of its useful life or is otherwise no longer needed.
Expansion Activities	Planned activities required to extend or expand municipal services to accommodate the demands of growth.

As the Municipality's infrastructure assets are long-lived, the starting point for the lifecycle costs analysis covers a 40-year planning period. However, consistent with O. Reg. 588/17, the planning period focuses on the first 10-years to meet proposed levels of service. In this period, various methodologies have been utilized to determine the long-term lifecycle costs to maintain, repair and replace assets under an "ideal" investment scenario.

This means that all assets are planned for replacement at the end of their useful life. For engineered assets (roads and bridges), an annual provision for full asset replacement has been calculated by dividing the total replacement cost of assets by the average useful life of each asset category. No adjustments were made in consideration for existing municipal asset practices or relationship to the target level of service set. These costs are referred to as the "benchmark" lifecycle costs.

Table 12 outlines the methodologies and costs from 2025-2034 to meet this ideal scenario. Over the planning period, the total costs needed to undertake the lifecycle activities is estimated at \$125.9 million for tax supported assets and \$13.8 million for rate supported assets.

Of the total lifecycle costs, most costs can be attributed to saving for the renewal, rehabilitation or replacement of infrastructure, making up about 75% of the lifecycle costs for tax supported assets and 60% of the total lifecycle costs for rate supported assets. The average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about \$9.4 million per year for tax supported assets and \$829,000 for rate supported assets (see Table 10 and 13). The difference between the total need, and the need for

renewal, rehabilitation or replacement is an average of \$2.5 million per year for tax supported assets and \$554,600 for rate supported assets. These figures represent the average annual operating, maintenance, expansion, and non-infrastructure solution costs. While Table 10 and 11 show the capital investment under both the Benchmark and PLOS need scenarios, the PLOS investment needs is more fully described in Table 12.

Table 10 – Average Annual Renewal/Rehabilitation/Replacement/Service Need by Asset Category for Tax-Funded Assets

Asset Category *	Benchmark Average Annual Requirement	PLOS Average Annual Requirement
Stormwater Ponds & Linear	\$21,000	\$10,500
Bridges & Culverts	\$846,000	\$846,000
Roads	\$2,131,000	\$935,200
Sidewalks	\$1,412,000	\$353,000
Land Improvements	\$262,000	\$183,400
Buildings	\$2,767,000	\$283,800
Machinery and Equipment	\$1,062,000	\$424,800
Vehicles	\$905,000	\$362,000
Total *	\$9,406,000	\$3,398,700

* Note: Figures may not sum due to rounding.

Table 11 - Average Annual Renewal/Rehabilitation/Replacement Need by Asset Category for Rate-Funded Assets

Asset Category *	Benchmark Average Annual Requirement	PLOS Average Annual Requirement
Water	\$227,000	\$113,500
Wastewater	\$602,000	\$301,000
Total *	\$829,000	\$414,500

* Note: Figures may not sum due to rounding.

To determine the total lifecycle costs to meet proposed levels of service over the 2025-2034 period, consultations with Municipal staff were undertaken to determine the best approach. Tables 12 and 13 outlines the lifecycle costs needed to meet the proposed level of service. Over the 2025-2034 period, a total lifecycle need of about \$62.2 million is identified for tax supported services and \$9.7 million is identified for rate supported services. The average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about \$3.8 million per year for tax supported services and \$414,500 per year for rate supported services (see Table 10 and 11).

Table 12 - Overview of the Full Life Cycle Activities and AMP Approach for Tax Supported Assets

Category	Lifecycle Cost Approach to Meet PLOS	2025-2034 Cumulative Benchmark Lifecycle Costs	2025-2034 Cumulative Lifecycle Costs to Meet PLOS
Non-Infrastructure Solutions	<ul style="list-style-type: none"> Provision of \$50,000 per year to undertake activities to manage assets. 	\$500,000	\$500,000
Operations and Maintenance Activities	<ul style="list-style-type: none"> Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific maintenance – estimated at \$2.4 million per annum (based on 2025 budget) In most instances, does not include general operating costs associated to staffing, with the exception of staff and contracted services that carry out specific lifecycle activities 	\$23.6 million	\$23.6 million
Replacement and Rehabilitation Activities	<ul style="list-style-type: none"> Benchmark lifecycle costs were determined using risk-based replacement schedule for all asset categories except for Bridges and Culverts. There are additional lifecycle costs for the following categories: <ul style="list-style-type: none"> \$1.2 million of Roads Needs Study Backlog Bridges & Culverts: 2024 OSIM Inventory and Inspection Report identifies 10-year renewal and replacement activities that average of \$846,000 per annum Buildings: the 2022 BCA has average yearly costs of \$283,800 Adjustments made to determine the lifecycle needs to meet PLOS are listed below: <ul style="list-style-type: none"> For Buildings and Bridges & Culverts the risk based annual provision was eliminated in favour of the provisions in the OSIM and BCA Studies. The roads backlog was adjusted to 80% of the \$1.2 million requirement ultimately planning for the works to be undertake over a longer period. 	\$94.1 million	\$34.0 million

Category	Lifecycle Cost Approach to Meet PLOS	2025-2034 Cumulative Benchmark Lifecycle Costs	2025-2034 Cumulative Lifecycle Costs to Meet PLOS
	<ul style="list-style-type: none"> The PLOS for Stormwater Ponds and Linear was calculated at 50% of the total benchmark lifecycle cost. The PLOS need for Machinery & Equipment and Vehicles was calculated as 40% of the total benchmark lifecycle costs. The PLOS for Sidewalks was calculated at 25% of the total benchmark lifecycle cost. The PLOS for land improvements was calculated at 70% of the total benchmark lifecycle cost. 		
Road O&M service level increase	<ul style="list-style-type: none"> The PLOS for service level increases was calculated at 50% of the total benchmark. 	\$7.2 million	\$3.5 million
Disposal Activities	<ul style="list-style-type: none"> No disposal activities have been explicitly identified, but costs for disposal have been assumed to be included in renewal/rehabilitation/replacement activities 	\$ -	\$ -
Expansion Activities	<ul style="list-style-type: none"> The approximate capital and operations and maintenance costs of expansion assets have been accounted for in the lifecycle costs for future years. 	\$647,000	\$647,000
Cumulative Total		\$125.9 million	\$62.2 million
Average per Year (Total)		\$9.4 million	\$6.2 million
Average per Year (for Renewal, Rehabilitation, and Replacement Activities)		\$9.4 million	\$3.8 million

Note: All costs expressed in constant 2025 dollars.

Table 133 - Overview of the Full Life Cycle Activities and AMP Approach for Rate Supported Assets

Category	Lifecycle Cost Approach to Meet PLOS	2025-2034 Cumulative Benchmark Lifecycle Costs	2025-2034 Cumulative Lifecycle Costs to Meet PLOS
Operations and Maintenance Activities	<ul style="list-style-type: none"> Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific maintenance – estimated at \$399,600 per annum (based on 2025 budget) In most instances, does not include general operating costs associated to staffing, with the exception of staff and contracted services that carry out specific lifecycle activities 	\$4.0 million	\$4.0 million
Replacement and Rehabilitation Activities	<ul style="list-style-type: none"> Benchmark lifecycle costs were determined using risk-based replacement schedule for all asset categories. The PLOS need for Water and Sewer was calculated as 50% of the total benchmark lifecycle costs. 	\$8.3 million	\$4.1 million
Disposal Activities	<ul style="list-style-type: none"> No disposal activities have been explicitly identified, but costs for disposal have been assumed to be included in renewal/rehabilitation/replacement activities 	\$ -	\$ -
Expansion Activities	<ul style="list-style-type: none"> The approximate capital and operations and maintenance costs of expansion assets have been accounted for in the lifecycle costs for future years. 	\$1.6 million	\$1.6 million
Cumulative Total		\$13.8 million	\$9.7 million
Average per Year (Total)		\$1.4 million	\$969,100
Average per Year (for Renewal, Rehabilitation, and Replacement Activities)		\$829,000	\$414,500

B. RISK ANALYSIS

It is important to assess the risk associated with each asset and the likelihood of asset failure. Asset failure can occur as the asset reaches its limits and can affect the level of service. In addition, certain assets have a greater consequence of failure than others. A risk matrix can help prioritize which assets should be repaired/replaced, even those which the Municipality has already identified to be in Poor or Very Poor condition. The evaluation rating is then linked to the condition assessment parameter discussed in Section 2. The formula to determine asset risk is as follows:

$$(\text{Likelihood of Failure}) \times (\text{Consequence of Failure}) = (\text{Risk Rating})$$

Each of the components of the Risk Rating methodology is defined as follows:

Likelihood of Failure: is directly linked to the condition of an asset. For example, an asset in Very Poor condition would have a high probability of asset failure in the short-term. This type of asset would be assumed to have deteriorated significantly or may be near the end of its useful life. Conversely, it would be considered rare for an asset to fail in the short-term if it is in Good or Very Good condition. Table 14 outlines the definition of likelihood of failure used for the Municipality's assets.

Table 14 - Probability of Failure

Condition	Probability of Failure	Description
Very Good	1	Rare
Good	2	Unlikely
Fair	3	Possible
Poor	4	Likely
Very Poor	5	Almost Certain

Note: Definitions are based on the MFOA Asset Management Framework.

Consequence of Failure: refers to the impact on the Municipality if an asset were to fail to provide the desired level of service. The consequence of failure has been determined separately for each asset category, as the impact to the Municipality differs greatly by asset type. For example, if a fire emergency vehicle was not available for service, the potential impact could be more severe compared to a vehicle used for administrative purposes. For the purposes of this analysis, assets were assigned a consequence of failure based on a review of the assets and the service area they are attributed to. Table 15 below outlines the definition of consequence of failure used for the Municipality's assets. The consequence of failure, rated on a 1-5 scale, was weighted relative to each category in Table 15 depending on how impactful the consequence may be to the Municipality.

Table 15 - Consequence of Failure

Consequence of Failure	Description
1 - Insignificant	No impact to operations.
2 - Minor	Minor impact to operations, all major operations can continue to function.
3 - Moderate	Moderate impact to operations some critical operations may need to stop functioning temporarily.
4 - Major	Major operations seize and some damage control necessary.
5 - Significant	All operations seize to function and major damage control is necessary.

Risk Rating: categorizes assets based on the level of risk to the Municipality. The risk rating provides a guide to prioritize assets by determining which assets require attention first and which capital works can be deferred. Higher risk assets should be prioritized for attention in the short term by determining which of the lifecycle actions is required to be performed on the asset. Table 16 below provides a summary of the risk matrix.

Table 146 - Risk Matrix

Evaluation Rating		Consequence of failure					Color Code
		1	2	3	4	5	
Likelihood of Failure	1	1	2	3	4	5	Very Low Risk
	2	2	4	6	8	10	Low Risk
	3	3	6	9	12	15	Moderate Risk
	4	4	8	12	16	20	High Risk
	5	5	10	15	20	25	Very High Risk

Table 17 presents the findings of the risk analysis and illustrates the Municipality's asset risk rating. Most of the Municipality's assets continue to have relatively low risk, an indication of good maintenance practices overall.

The risk of each asset and asset category has been determined with reference to the parameters outlined in Table 16. It is important to note, that the Municipality will need to continue regular maintenance activities and capital works to ensure that the proposed level of service can be met, or otherwise additional risk can be expected. Please note roads and culverts have been excluded from the risk analysis in Table 17 as the infrastructure needs and timing of repair and replacement has been informed based on detailed engineered assessments outlined through the 2021 Road Needs Study and 2024 OSIM reports, respectively.

Table 157 - Summary Risk Assessment

Asset Type	Replacement Cost (\$2025)	Risk (Weighted Average)
Stormwater Ponds & Linear	\$585,731	Low
Bridges & Culverts	\$33,018,662	Based on Engineering Studies
Roads	\$49,234,555	Based on Engineering Studies
Sidewalks	\$13,436,966	Moderate
Land Improvements	\$1,799,232	Very Low
Buildings	\$31,335,332	Moderate
Machinery and Equipment	\$7,059,390	Low
Vehicles	\$6,782,984	Moderate
Water	\$13,226,796	Very Low
Sewer	\$5,636,004	Very Low
Total	\$162,115,654	Very Low

Note: Roads, Bridges, and Culverts are excluded from the risk analysis as risk factors and prioritization have been addressed through the Road Needs Study and OSIM Reports.

Further to Table 17, this 2025 AMP includes an estimate of the timing for replacement of all assets. Using the risk assessment, a schedule for the replacement of assets has been developed on an asset-by-asset basis. Assets with a higher risk rating are prioritized earlier in the schedule to reflect a higher priority, while assets with lower risk ratings are moved further out into the future forecast to reflect a more “smoothed” expenditure outlook. The timing is based on a percentage of the useful life of the asset. Table 18 below provides a summary of the risk thresholds used to calculate timing of replacement needs. Section 5 discusses the results of the lifecycle cost analysis and financing strategy.

Table 168 - Risk Threshold for Asset Life Extension

Percentage of Useful Life Added					Color Code
100%	80%	60%	40%	20%	Very Low Risk
80%	65%	50%	30%	16%	Low Risk
60%	50%	35%	25%	10%	Moderate Risk
40%	30%	25%	15%	2%	High Risk
20%	16%	10%	2%	0%	Very High Risk

C. MANAGING RISK

It is important to recognize the risk associated with the Municipality’s ability to deliver the plan while recognizing that any deviation may affect the overall ability to deliver service.

Table 19 below provides a summary of the identified risks, potential impacts and mitigating actions associated with the asset management program. Table 19 is intended to provide the

Municipality with a framework that can be continually updated to track potential asset related risks and document mitigation actions so that they can be implemented into the Municipality's asset management practices.

Table 179 -Risk Associated to the Plan

Risk Associated to the Plan		
Identified Risk	Potential Impact	Mitigating Action
Failed Infrastructure	<ul style="list-style-type: none"> • Delivery of service • Asset and equipment damage 	<ul style="list-style-type: none"> • Repair and rehabilitate as necessary • Increase investment
Inadequate Funding	<ul style="list-style-type: none"> • Delivery of service • Increased risk of failure • Shorten asset life • Defer funding to future generations 	<ul style="list-style-type: none"> • Reductions of service by reviewing the current level of service • Find additional revenue sources
Regulatory Requirements	<ul style="list-style-type: none"> • Non-compliance • Mandatory investments • Increased costs 	<ul style="list-style-type: none"> • Find additional revenue sources • Lobby actions
Plan is not followed or not undertaking required lifecycle activities	<ul style="list-style-type: none"> • Shorten asset life • Inefficient investments • Prioritization process failure • Failure to deliver service 	<ul style="list-style-type: none"> • Monitor and review levels of service • Implement process to implement AMP • Investigate alternative lifecycle management options

D. FUTURE DEMAND

This 2025 Plan reflects the assets that the Municipality currently owns and operates. According to the Statistics Canada Census, over five years (2016-2021) the Municipality's population increased by 27 people from 4,775 to 4,801 people.

The Municipality should monitor growth moving forward and ensure its asset management practices keep up with any projected growth.

E. CLIMATE CHANGE INTEGRATION

The management of a municipal assets plays a fundamental role in the delivery of services, which depends on the infrastructure available to deliver the service. Corporate asset management in municipalities largely relates to the management of existing assets to keep them in a state of good repair while planning for future repair and/or replacement of their assets across all service areas. Impacts of climate change are already being experienced around the world, including Canada. It is important for municipalities to begin considering and planning for future climates to ensure the delivery of services, especially as it pertains to the maintenance of key municipal infrastructure. As per *Ontario Regulation 588/17* s3(5), municipalities must include a commitment in their asset management planning to address the vulnerabilities of climate change with respect to operations, levels of service and lifecycle management. There must also be consideration for anticipated costs, mitigation and adaptation approaches and disaster planning to meet all regulatory requirements in Ontario municipal asset management.

Expected climate change impacts include hotter, drier summers, warmer winters with increased precipitation, increased frequency and intensity of storms and increased intensity of extreme winds. These changes in climate will likely lead to increased risks associated with flooding, heatwaves, risk of infrastructure damage, health and safety of residents, the alteration or loss of habitats, etc.

Many of these risks are associated with municipal assets and may impact the levels of service. Climate change mitigation and adaptation planning is an important step for municipalities to take to begin managing risks associated with climate change. Therefore, the Municipality is taking steps towards the integration of climate change considerations into their asset management planning framework moving forward.

The table below considers municipal owned and operated assets, although, regional critical infrastructure related to roads or public health may also be impacted by the noted hazards. Table 20 provides a risk summary at this time for information purposes to help further propel climate change integration with asset management, although, recognizing the full utilization would still need to be applied and understood at the staff level. In asset management terms, this table shows the big picture effects that climate change hazards may have on the level of service for various service areas. The specific climate change impacts on levels of service could vary considerably and will need to be monitored over a longer time period.

Through further understanding of the anticipated extent of climate change events, climate change adaptation projects at the Municipality will provide additional parameters as to the likelihood and severity of events. At its most simplistic form, the table below provides a

range from a “rare” occurrence to “almost certain.” A rare occurrence could be correlated to falling into the tenth percentile of probability, with an almost certain occurrence falling into the ninetieth percentile of probability.

Table 20 - Framework for Climate Change Integration with Risk

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Freezing Rain / Ice Storm	Rare to almost certain	<ul style="list-style-type: none"> • Roads • Bridges and Culverts • Buildings • Stormwater • Water • Wastewater 	<ul style="list-style-type: none"> • Reduced road and culvert conditions, potential for closures • Potential impact to access to facilities or closures
Extreme Temperatures – Cold Wave	Rare to almost certain	<ul style="list-style-type: none"> • Roads • Bridges and Culverts • Buildings • Stormwater • Land Improvements • Water • Wastewater 	<ul style="list-style-type: none"> • Closures of outdoor amenities due to extreme weather conditions • Increased strain on indoor heating systems leading to reduced service life and functionality of components and systems
Tornado	Rare to almost certain	<ul style="list-style-type: none"> • All Services 	<ul style="list-style-type: none"> • Potential damage to various municipal assets due to high winds
Intense Rain	Rare to almost certain	<ul style="list-style-type: none"> • Roads • Bridges and Culverts • Buildings • Stormwater 	<ul style="list-style-type: none"> • Flooding of bridges and roadways leading to closures • Disruptions to service due to flooding of roads, leading to decreased levels of service • Potential impact to access to facilities or closures
Flood – Urban	Rare to almost certain	<ul style="list-style-type: none"> • Roads • Bridges and Culverts • Buildings • Land Improvements • Water • Sewer Infrastructure and Equipment • Stormwater 	<ul style="list-style-type: none"> • Flooding of culverts and roadways leading to closures • Disruptions to service due to flooding of roads, leading to decreased levels of service • Potential impact to access to facilities or closures • Flooding of parks leading to closures and reduced levels of service

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Extreme Temperatures – Heat Wave	Rare to almost certain	<ul style="list-style-type: none"> • Buildings • Land Improvements 	<ul style="list-style-type: none"> • Potential closure/reduce used of outdoor amenities due to high temperatures (reduced levels of service). • Lost habitats leading to reduced environmental diversity. • Increased strain on indoor cooling systems leading to reduced service life and functionality of components and systems
Windstorm	Rare to almost certain	<ul style="list-style-type: none"> • Buildings • Land Improvements • Stormwater 	<ul style="list-style-type: none"> • Closure of outdoor assets due to potential hazards for residents • Increased strain on facility assets leading to potential damages and reduced service life and functionality of components and systems

Source: <https://www.assetmanagementbc.ca/wp-content/uploads/Climate-Change-and-Asset-Management.pdf>

5. FINANCING STRATEGY

The Municipality has continually undertaken both operating and capital expenditures necessary to maintain tax funded services, however, the investments made fall short of the required need to meet the proposed levels of services. The Municipality will need to monitor funding levels over the next few years in relationship to the levels of service. This section of the 2025 Plan is intended to help the Municipality build on existing asset management practices already in place. The financing strategies presented provides the Municipality with feasible options to increase capital funding in a sustainable manner to meet proposed levels of service. It is noted that all values are presented in constant 2025 dollars.

A. ANALYSIS OF AVAILABLE REVENUES

The municipal revenue sources available to address the identified full lifecycle cost requirements outlined in Section 4 are limited. Generally, the type of capital project aligns to its funding source. In this regard, growth-related projects receive most of their funding through development charges in communities that impose DCs; replacement projects are predominantly funded through tax-based contributions for tax supported assets and water and wastewater rates for rate-based services.

When assets require rehabilitation or are due for replacement, the source of funds are essentially limited to reserves or contributions from the operating budget regardless of how the initial first round capital asset was funded. The table below provides a summary of the revenues assumed in this analysis for tax supported assets.

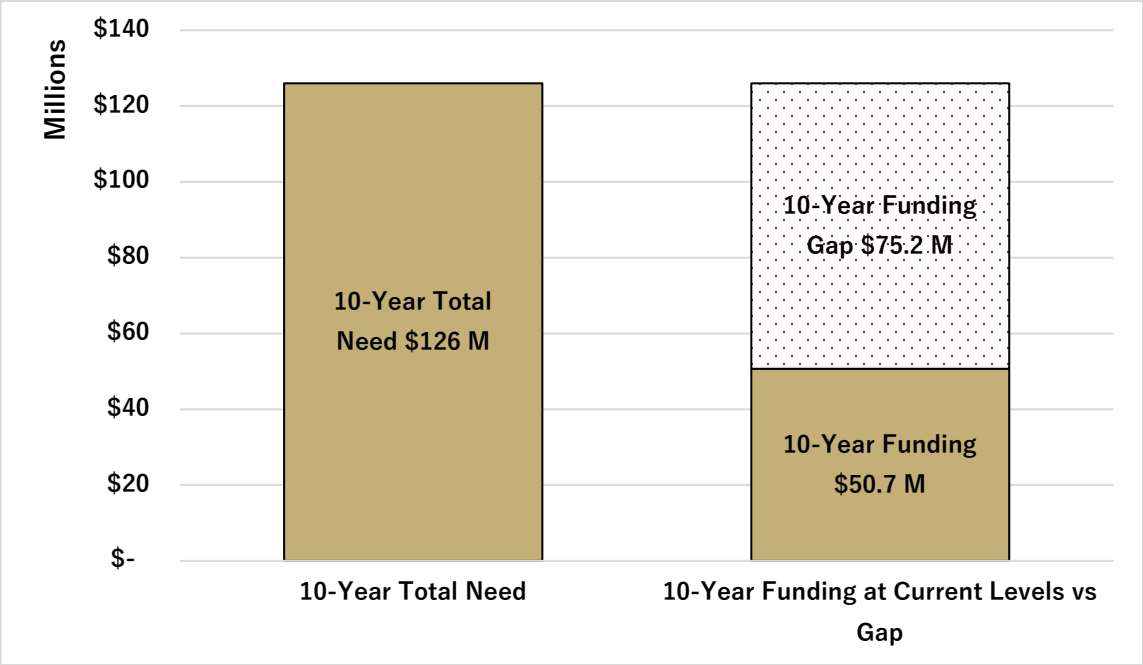
Table 181 - Financing Strategy Key Revenue Assumptions for Tax and Rate Supported Assets

Category	Assumptions	10-Year Revenue for Tax-Funded Assets	10-Year Revenue for Rate-Funded Assets
Operations and Maintenance from Taxation and User Fees	<ul style="list-style-type: none"> The Municipality prioritizes operating costs associated to providing services and it has been assumed that revenue from taxation will fully fund operating needs as they arise. 	\$23.6 million	\$4.0 million
Capital from Taxation and User Fees (Including Transfers to Reserves)	<ul style="list-style-type: none"> Funded from taxes/utility rates to fund long-term asset management needs (based on historical cost) 	\$15.1 million	\$9.2 million
Canada Community Building Fund (CCBF)	<ul style="list-style-type: none"> Gas tax funding for 2025 is estimated at approximately \$1,000,000. It is assumed that CCBF funding will level to \$327,000 per year in 2027 and will stay at that level over the planning horizon. The allocations to 2028 are based on those identified from AMO. 	\$3.9 million	N/A
Existing Capital Capacity - Debt Payments from existing debt	<ul style="list-style-type: none"> Future and current debt related to asset management 	\$2.9 million	N/A
Existing Reserves and Unfinanced Capital Commitments	<ul style="list-style-type: none"> Existing asset management related reserves have been accounted for and are applied against the lifecycle cost expenditures over a 10-year period for the purposes of the analysis. The reserves included for in the analysis only captures funds available for capital repair and replacement. Excludes obligatory DC reserve funds. Unfinanced capital is increased by 4% per annum for tax supported assets 	\$5.2 million	\$663,700
Total		\$50.7 million	\$5.3 million

B. BENCHMARK INFRASTRUCTURE FUNDING GAP – TAX SUPPORTED INFRASTRUCTURE

To implement sustainable asset management practices the Municipality needs to understand the current “benchmark infrastructure funding gap” that would arise should the required full lifecycle costs related to capital be delayed. The funding gap shown in Figure 6 represents the difference between the benchmark lifecycle costs and the funding available for tax supported assets over the 10-year period from 2025 to 2034. The benchmark funding gap represents a measure of the “ideal” spending that would need to be undertaken if all assets were repaired or replaced as outlined in the engineered reports or on their design life schedule as shown in Section 4 versus the case if funding levels were maintained at current levels (see Table 21). Figure 6 indicates that existing funding levels are insufficient to cover projected costs over the ten-year planning period, as a result, a notional gap of \$75.2 million exists over the same period.

Figure 6 – 10-Year Need vs Funding (Benchmark Funding Gap for Tax Supported Assets)



If the Municipality were to implement a funding strategy to eliminate the benchmark funding gap, the Municipality would be required to increase capital contributions by \$1.7 million per year (24.3% of 2025 tax levy) in each of the next 10 years. For 2026, the increase would be in addition to the funding sources already identified in Table 21.

It is unrealistic to expect the Municipality to address the total benchmark funding gap in the short-term. Eliminating the gap by 2034 is an aggressive objective for the following reasons:

- The required capital contributions (to eliminate the gap) will necessitate an increase to property taxes beyond a reasonable measure;
- The Municipality would need to decrease or limit funding of other key services or initiatives in lieu of capital repair and replacement activity;
- Importantly, closing the benchmark funding gap would ultimately result in a service level increase beyond those targeted in this report over the long-term;
- Assets can remain in use past their engineered design life and can perform to meet the Municipality's level of service under these circumstances. Therefore, in such instances, the asset does not necessarily need to be replaced by virtue of exceeding their design life; and
- Prudent asset management strategies, which are currently employed by the Municipality can often extend the requirement of major repair or replacement of capital assets and may prolong the life of the asset.

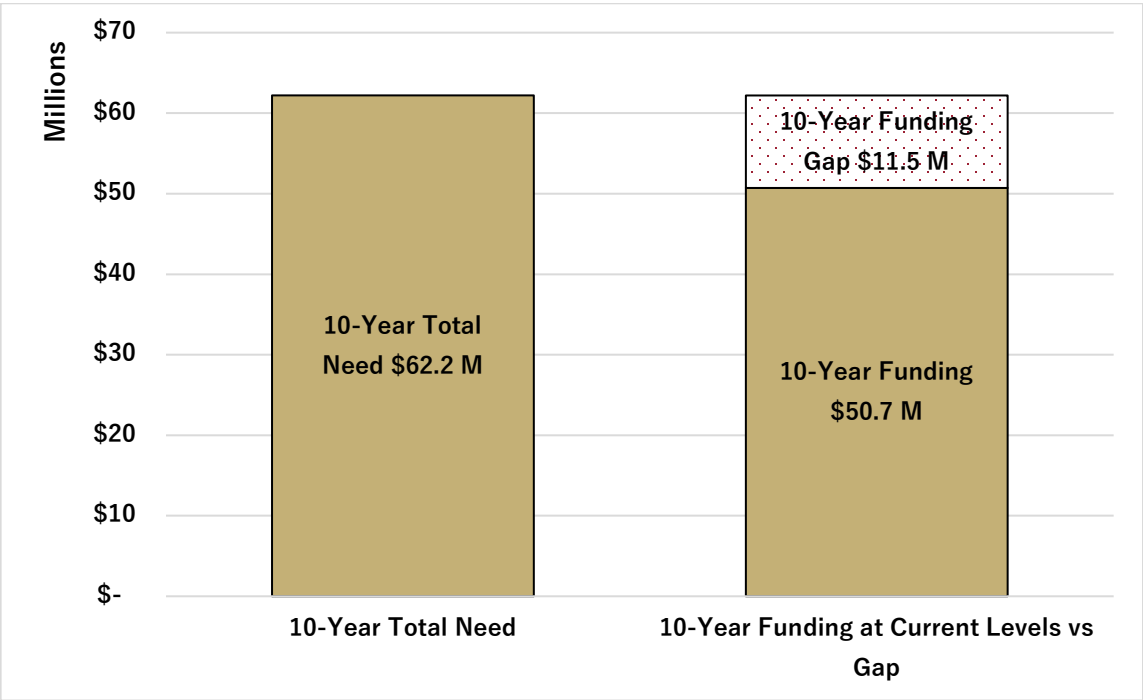
Therefore, a long-term lifecycle cost and funding strategy that reflects the proposed level of service shown in Section 4 would need to be developed.

C. PROPOSED LEVEL OF SERVICE INFRASTRUCTURE FUNDING GAP – TAX SUPPORTED INFRASTRUCTURE

This 2025 AMP combines the analysis on proposed levels of service developed in Section 3 with the corresponding lifecycle costs in Section 4. This is to develop a 10-year adjusted funding gap analysis that considers a more manageable set of costs to meet proposed levels of service (PLOS funding gap). The funding gap shown in Figure 7 represents the difference between the lifecycle costs needed to meet proposed levels of service and the funding available for tax supported assets over the planning period from 2025 to 2034.

The PLOS funding gap represents a measure of the spending that would need to be undertaken to meet proposed levels of service as shown in Section 4 versus the case if funding levels were maintained at current levels (see Table 20). Figure 7 still indicates that existing funding levels are insufficient to cover projected costs over the planning period. As a result, a funding gap of \$11.5 million exists over the same period. Notably, the funding gap under the proposed level of service target is significantly reduced from the benchmark gap of \$75.2 million over the planning period.

Figure 7 – 10-Year Need vs Funding (Proposed Level of Service Funding Gap for Tax Supported Assets)

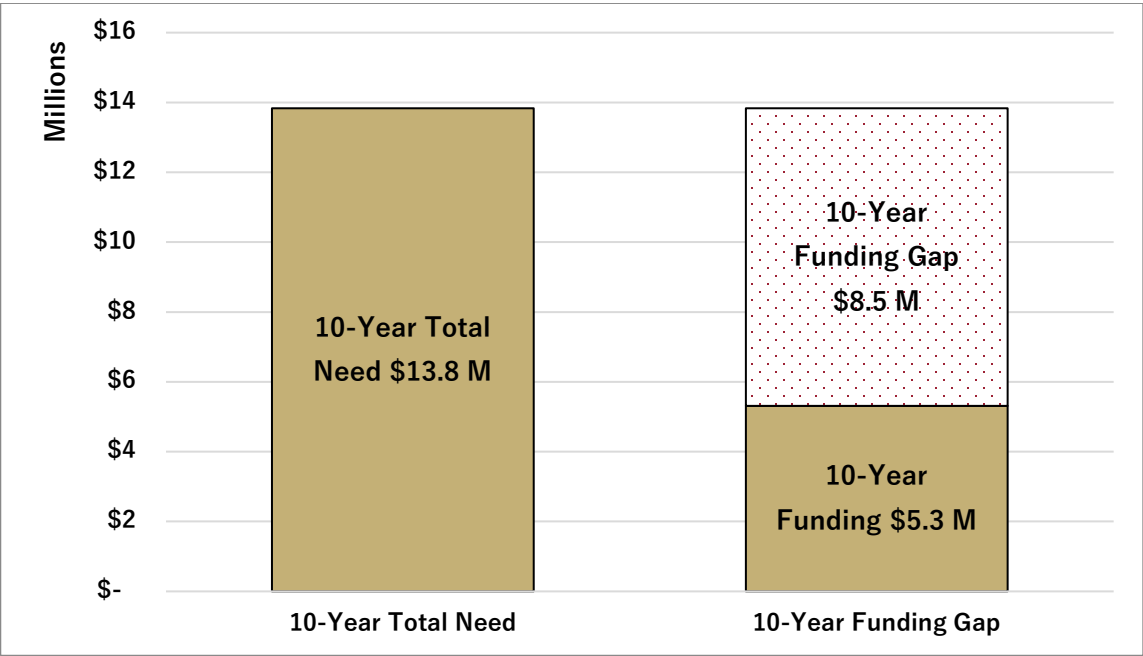


To fund this \$11.5 million infrastructure gap over the 2025-2034 planning period, the Municipality would have to increase capital contributions by approximately \$255,200 per year (3.6% of 2025 tax levy) in each of the next 10 years (plus inflation). An annual increase in capital investment of \$255,200 (plus inflation) would need to be maintained for each of the next 10 years.

D. INFRASTRUCTURE FUNDING GAP – RATE SUPPORTED INFRASTRUCTURE

The funding gap shown in Figure 8 represents the difference between the lifecycle costs and the funding available for rate supported assets over the 10-year period from 2025 to 2034. The funding gap represents a measure of the “ideal” spending that would need to be undertaken if all assets were repaired or replaced on their design life schedule versus the case if funding levels were maintained at current levels (see Table 21). Figure 8 indicates that existing funding levels are insufficient to cover projected costs over the planning period, as a result, a notional gap of \$8.5 million exists over the same period.

Figure 8 – 10-Year Need vs Funding (Proposed Level of Service Funding Gap for Rate Supported Assets)



If the Municipality were to implement a funding strategy to eliminate the gap, the Municipality would be required to increase capital contributions on an annual basis by an average of about \$189,500 from 2026-2034 (plus annual inflation). For 2026, the increase would be in addition to the funding sources already identified in Table 21. The yearly revenue requirement is equivalent to about 19% of the Municipality’s 2025 rate revenues of about \$984,000. A detailed table of this strategy can be found in Appendix A.

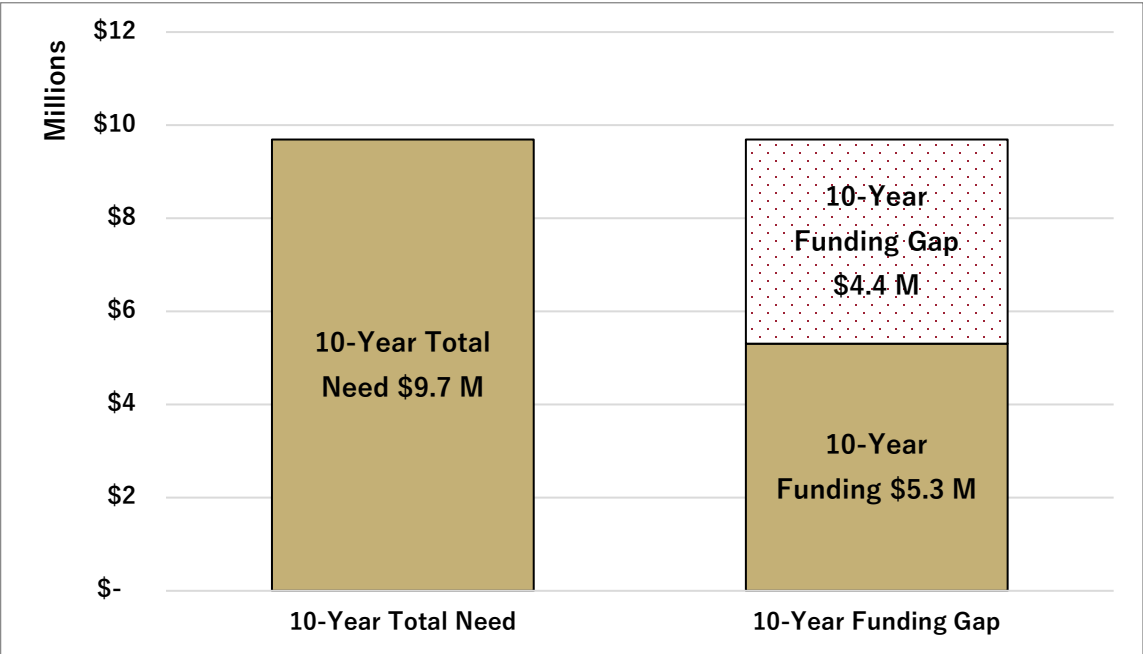
E. PROPOSED LEVEL OF SERVICE INFRASTRUCTURE FUNDING GAP – RATE SUPPORTED INFRASTRUCTURE

This 2025 AMP combines the analysis on proposed levels of service developed in Section 3 with the corresponding lifecycle costs in Section 4. This is to develop a 10-year adjusted funding gap analysis that considers a more manageable set of costs to meet proposed levels of service (PLOS funding gap). The funding gap shown in Figure 9 represents the difference between the lifecycle costs needed to meet proposed levels of service and the funding available for rate supported assets over the planning period (2025-2034).

The PLOS funding gap represents a measure of the spending that would need to be undertaken to meet proposed levels of service as shown in Section 4 versus the case if funding levels were maintained at current levels (see Table 20). Figure 9 still indicates that

existing funding levels are insufficient to cover projected costs over the planning period. As a result, a funding gap of \$4.4 million exists over the same period. Notably, the funding gap under the proposed level of service target is significantly reduced from the benchmark gap of \$8.5 million over the planning period.

Figure 9 – 10-Year Need vs Funding (Proposed Level of Service Funding Gap for Rate Supported Assets)



To fund this \$4.4 million infrastructure gap over the 2025-2034 planning period the Municipality would be required to increase capital contributions by approximately \$97,400 per year (9.9% of 2025 rate revenues) in each of the next 10 years, plus inflation. An annual increase in capital investment of \$97,400 (plus inflation) would need to be maintained for each of the next 10 years.

F. THE RELATIONSHIP TO THE PROPOSED LEVEL OF SERVICE

The information illustrated emphasizes the need for the Municipality to continue the utilization of these funding programs to meet service levels over the long-term. However, as the Municipality's asset management program further advances, it can be expected that the costs analysis be improved to better reflect asset risks, levels of service and a better understanding of the condition of the infrastructure.

Overall, the infrastructure gaps depicted in Figures 7 and 9 are required to ensure the Municipality delivers the proposed levels of service identified in Section 3 of the AMP, which

represents the lifecycle activities outlined in Section 4. Given the adoption of this strategy, which does not align with the funding needed to meet the proposed level of services, other qualitative improvements and other financial solutions need to be explored. Table 22 outlines several approaches to closing the revised funding gap.

Table 192 – Approaches to Closing the Funding Gap

Category	Description
Improved Data Quality	As the Municipality matures its asset management practices, improving data quality across service areas will help to achieve a proper assessment of the condition of assets. Improved lifecycle cost data will facilitate evidence-based decision making and support in achieving lowest lifecycle costing through prioritization of repair and replacement activities.
Levels of Service Measures	As part of the 2025 AMP, levels of services measures by asset category have been established. Tracking LOS measures may identify areas where funding needs could be recalibrated based on performance.
Assessing Risk Tolerance	Further detailed risk analysis including defining risk tolerance level for individual asset classes will help to further refine prioritization of the investment needs and levels of service. Although not always desirable, it may be possible to accept a higher degree of asset risk to help lower ongoing asset costs.
Seek Funding Support from Upper Levels of Government	The Municipality continues to demonstrate a significant commitment to asset management and developing a set of renewal practices to ensure that services are delivered in the most cost-efficient manner. Despite the efforts, upper level of government support is required to supplement the Municipality's practices to balance affordability. For long-term financial planning and accurately assessing the infrastructure gap, it is equally important that upper-level government funding is stable and predictable.
Continued Project Co-ordination with the County on Infrastructure Projects	In exploring opportunities with the County, overall cost efficiencies may be achieved during linear asset rehabilitation and replacement (e.g. storm sewers, roads, bridges, culverts) by better aligning capital ventures (if applicable).

6. MONITORING AND IMPROVEMENT PLAN

The major premise of a comprehensive asset management plan is that a municipality will seldom have perfect processes and data to manage the asset portfolio. Instead, the underlying culture of continuous improvement and reliability is its key to success. The monitoring and improvement plan forms part of the Municipality's evolving asset management planning moving forward. It has been developed using an asset management maturity scale to assess areas for improvement.

A. ASSET MANAGEMENT MATURITY ASSESSMENT

The purpose of an asset management maturity assessment is to identify a municipality's current maturity and to establish a target maturity that can be achieved in the near future. Using the International Infrastructure Management Manual (IIMM) tool, information on asset maturity was assessed under three categories:

1. Understanding and Defining the Requirements
2. Development of Asset Management Lifecycle Strategies
3. Asset Management Enablers

The three maturity categories are broken down into 16 elements that are assessed in the individual Asset Maturity Radar Graph in Figure 10. The elements in each maturity category are outlined in Table 23.

Table 203 – Asset Management Maturity Assessment Elements

Category	AM Element
Understanding and Defining the Requirements	Analysing the Strategic Direction (AM Policy and Objectives)
	Levels of Service Framework
	Demand Forecasting and Management
	Resilience to Climate Change
	Asset Condition and Performance
	The Strategic Asset Management Plan
Developing Asset Management Lifecycle Strategies	Managing Risk and Resilience
	Operational Planning
	Capital Planning & Prioritization
	Asset Financial Planning and Management
	Asset Specific Plans

Category	AM Element
Asset Management Enablers	AM People and Leaders
	Asset Data and Information
	Asset Management Information Systems (AMIS)
	AM Process Management
	Outsourcing and Procurement
	Continuous Improvement

Each element is assessed independently and assigned a score based on criteria outlined in Table 24 which scores each criterion between 0 and 100 for each element. In general, a municipality in the “Aware” category recognizes that there are regulatory or service requirements that need to be met to maintain levels of service. However, no formal plans are in place to meet these objectives and asset management planning may be done on an ad hoc basis. A municipality in the “Advanced” category has integrated the asset management plan into its budget process and budget planning is well informed by the asset management plan. In general, most municipalities would fall in the “Core” or better category, for this reason the target score would be to achieve an “Intermediate” score over the longer-term.

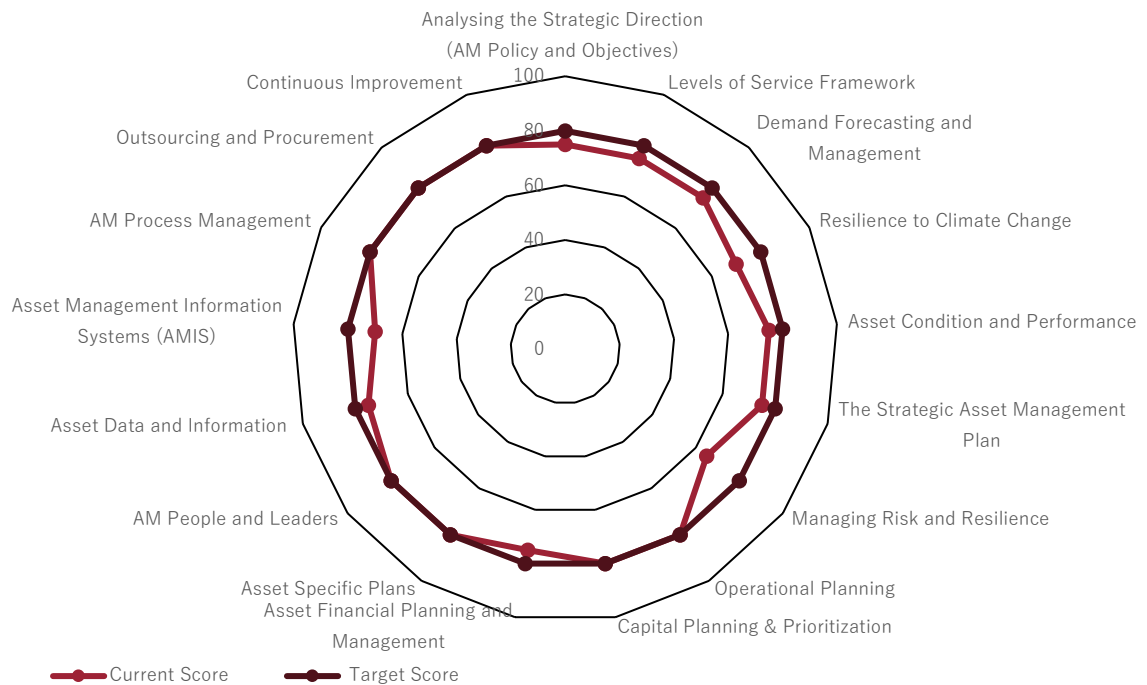
Table 214 – Maturity Assessment Scoring Scale

Maturity Level	Score
Aware	0-20
Basic	21-40
Core	41-60
Intermediate	61-80
Advanced	81-100

Figure 10 outlines the results of the Asset Maturity Rating. The Current Score accounts for all advancements in individual maturity as part of this 2025 AMP. Overall, the following were achieved:

- Understanding of levels of service focused on the condition of assets which is appropriate for the size and services provided by the Municipality;
- Enhancement in understanding the Municipality’s asset management practices and general alignment with other key planning documents like the 2021 Roads Needs Study and OSIM reports; and
- General understanding of the Municipality’s assets and the data available through consolidation of various data sources into the AMP financial model.

Figure 10 – Asset Maturity Rating



B. IMPROVEMENT PLAN

Continuous improvement is a fundamental aspect of municipal asset management. This process involves systematically identifying areas for enhancement, implementing changes, monitoring outcomes, and adjusting strategies based on feedback and new insights. The goal of the municipal asset management planning regulation (O. Reg. 588/17) is to promote municipalities to take incremental steps to maximize benefits, manage risk and provide satisfactory levels of service to the public in a cost-effective manner.

Improvement initiatives have been identified that will enhance the effectiveness of the Municipality’s asset management program. The following table provides recommended improvement initiatives with associated priorities and timelines. While some areas for improvement can be addressed more immediately, others could be undertaken over the long-term.

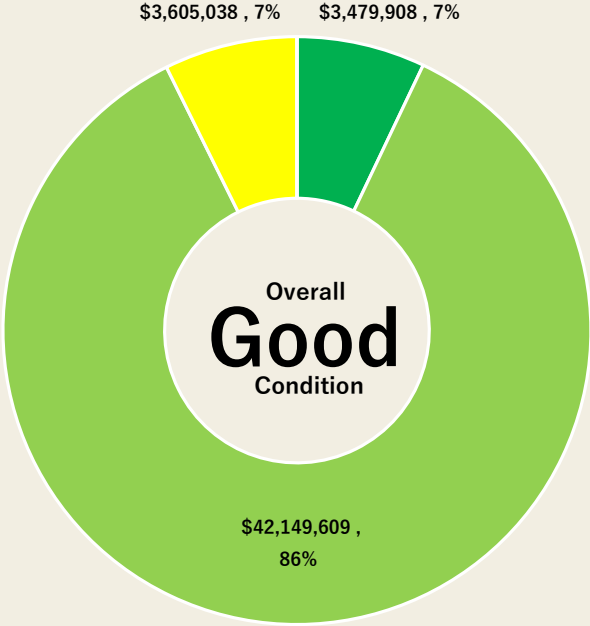
Table 225 – Improvement Plan Initiatives

Area of Improvement	Action	Outcome	Timeline	Priority	Comments
Levels of Service	Align AMP with budget process	Determine capital contributions	Medium	Medium	Ensuring that the AMP remains up today will help guide tax funded capital contributions needs to meet long-term asset management needs
Climate Change Integration	Further development of mitigation and adaptation strategies into asset management	Further understanding of climate change risks on Municipality's delivery of services and support informed prioritization of strategies.	Long	Medium	The Strategic Asset Management Policy requires a commitment to integrate climate change considerations through capital planning.
Asset Data	Continually update the asset inventory	More informed decision making for capital budget purposes	Medium	Medium	The AMP needs to be updated every 5-years as per regulation after 2025, this is an opportunity to ensure asset data including conditions remains up to date.
Financing Strategy	Continue to monitor infrastructure gap	Continue to monitor funding needs to meet proposed level of service	Medium	Medium	While infrastructure gap has been monitored as part of this plan, it will need to be updated along with regular reviews of the AMP in the future.
	Seek funding support from upper levels of government	Continue bridging of funding gap for improved financial sustainability.	Long	High	The Municipality expects to continue to rely on grant funding for capital projects.

APPENDIX A

STATE OF LOCAL INFRASTRUCTURE

Roads



Very Good Good Fair Poor Very Poor

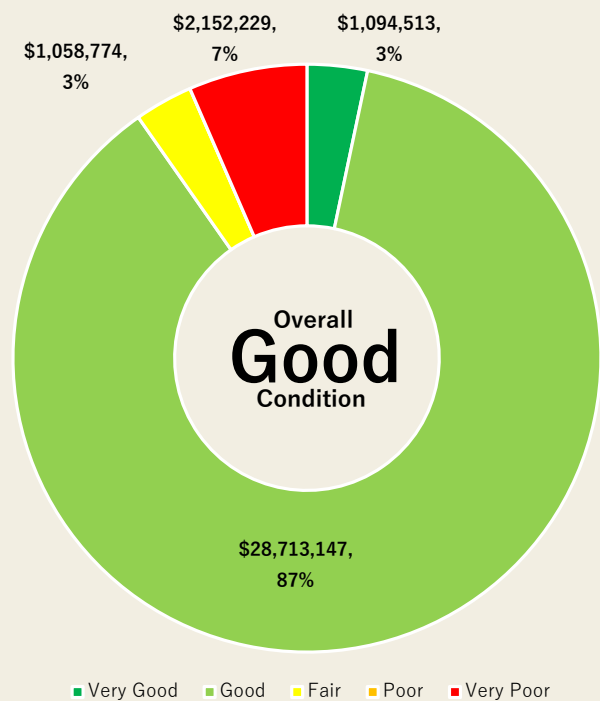


Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Bridges & Culverts



Current Replacement Value
\$33.0
Million

Asset Inventory
21
Units

Average Remaining Useful Life
1
Years

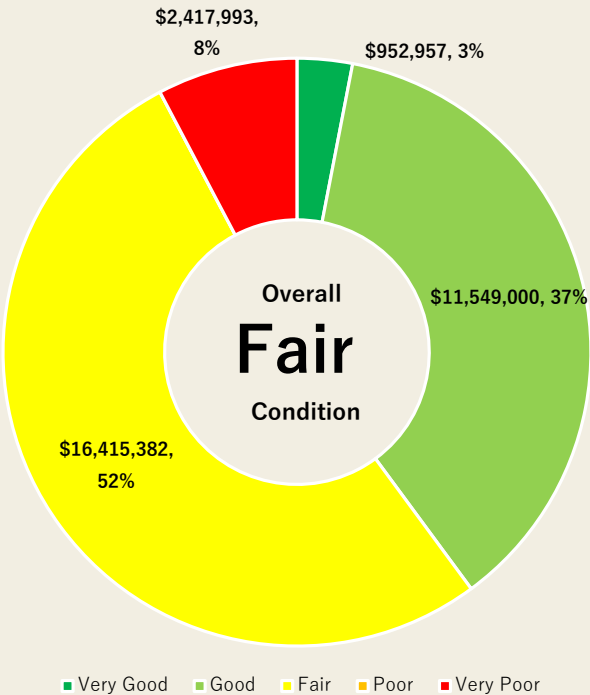
Estimated Useful Life
50
Years

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Buildings



Current Replacement
Value
\$31.3
Million

Asset Inventory
Pooled
Assets

Data Confidence
& Reliability

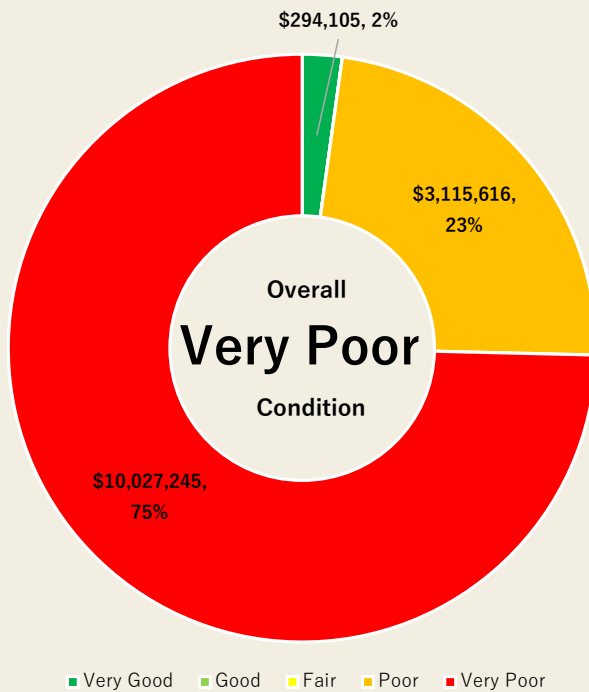
Level 4 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

Average Remaining
Useful Life
15
Years

Estimated
Useful Life
50
Years

Sidewalks



Current Replacement
Value

\$13.4
Million

Asset Inventory
Pooled
Assets

Data Confidence
& Reliability

Level 3 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

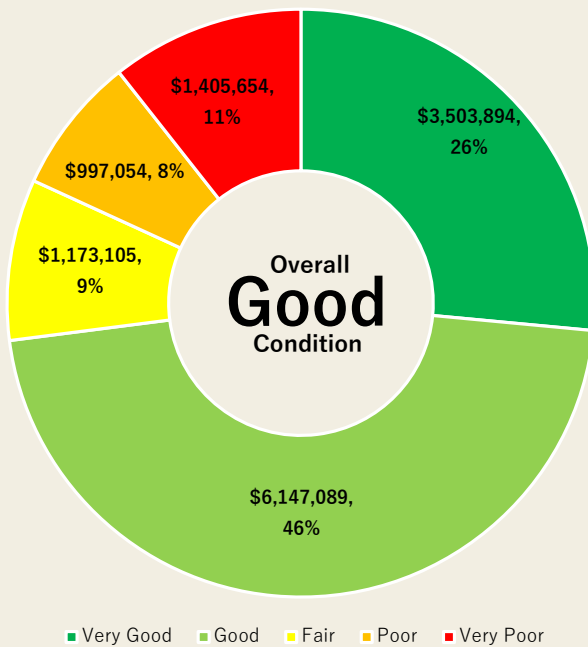
Average Remaining
Useful Life

-52
Years

Estimated
Useful Life

50
Years

Water



Current
Replacement Value
\$13.2
Million

Asset Inventory
Pooled
Assets

Average Remaining
Useful Life
28
Years

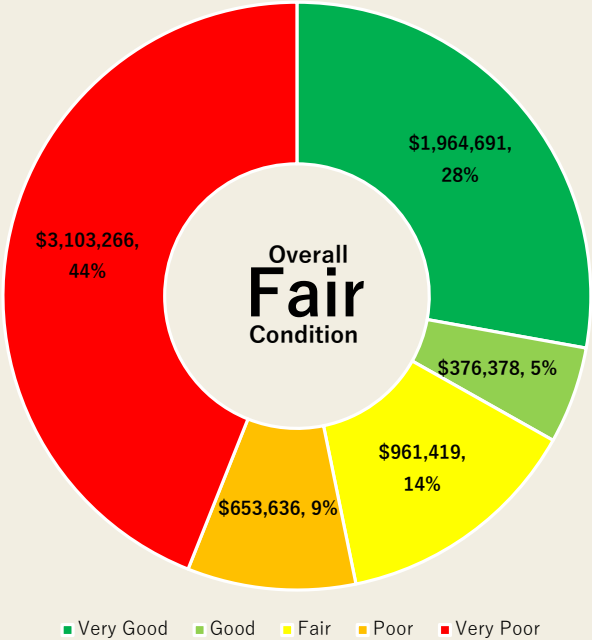
Estimated
Useful Life
40-60
Years

Data Confidence & Reliability

Level 3 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

Machinery and Equipment



Current Replacement Value
\$7.1
Million

Asset Inventory
95
Units

Data Confidence & Reliability

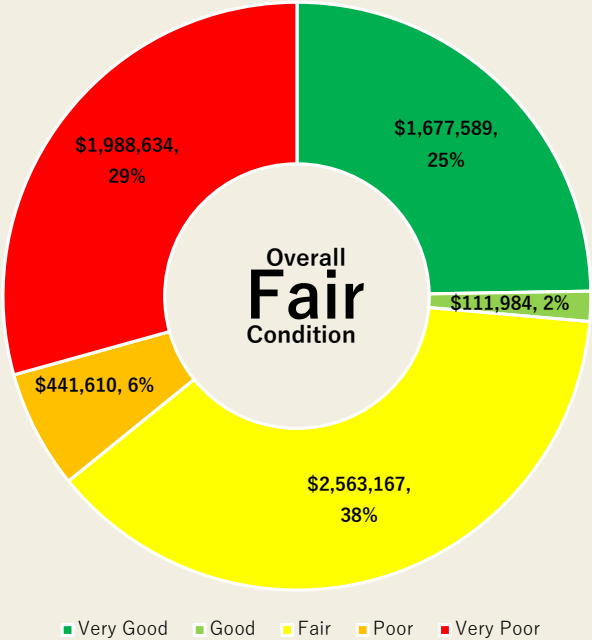
Level 3 (Reliable)

Dataset is complete and estimated to be accurate
+/- 10%

Average Remaining Useful Life
2
Years

Estimated Useful Life
3-30
Years

Vehicles



Current Replacement Value
\$6.8
Million

Asset Inventory
31
Units

Data Confidence & Reliability

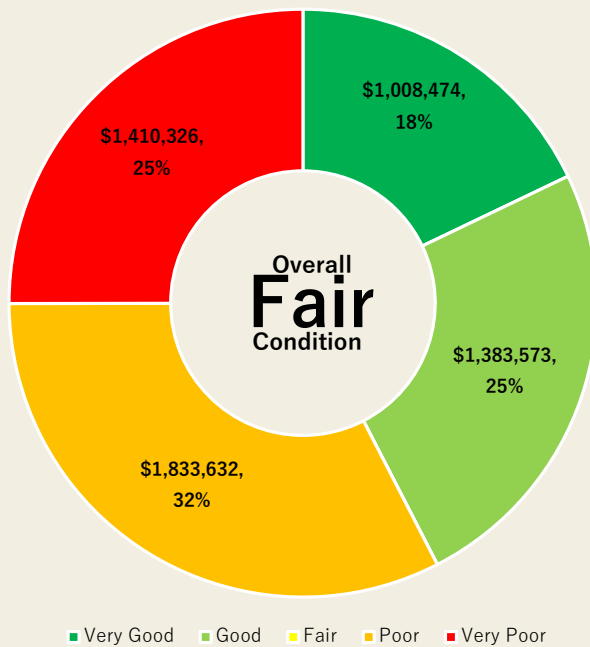
Level 3 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Average Remaining Useful Life
3
Years

Estimated Useful Life
10-15
Years

Sewer



Current Replacement
Value
\$5.6
Million

Asset Inventory
Pooled
Units

Average Remaining
Useful Life
22
Years

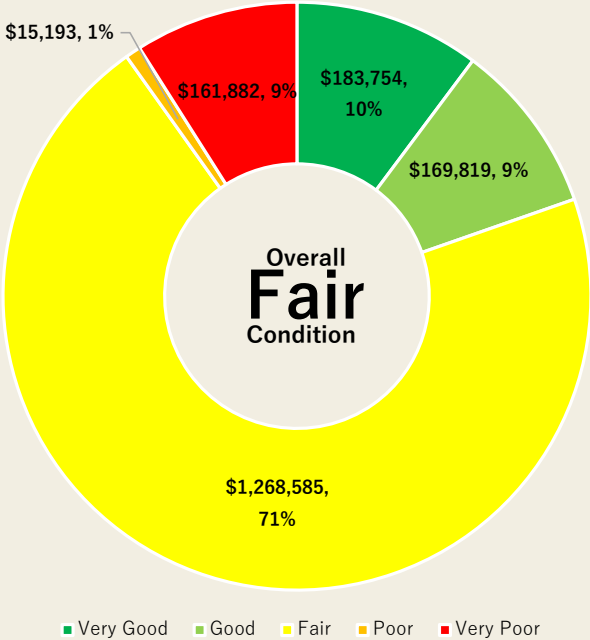
Estimated
Useful Life
60
Years

**Data Confidence
& Reliability**

Level 3 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

Land Improvements



Current
Replacement Value
\$1.8
Million

Asset Inventory
13
Units

Data Confidence
& Reliability

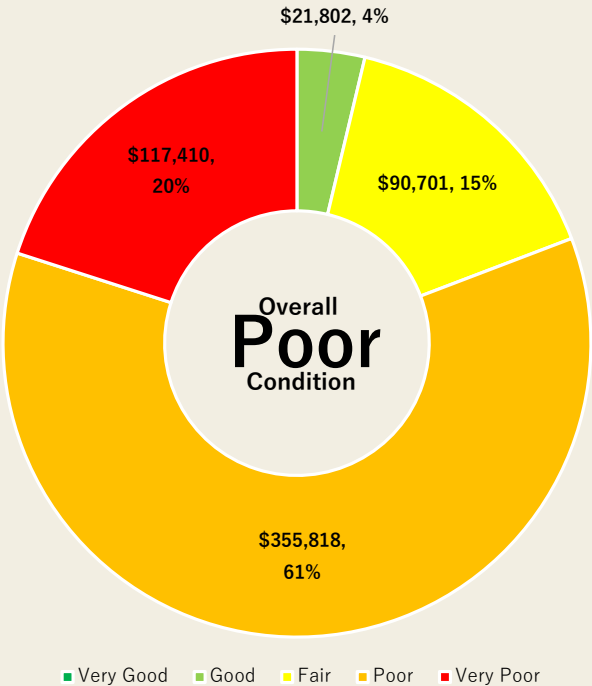
Level 3 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

Average Remaining
Useful Life
1
Years

Estimated
Useful Life
15
Years

Stormwater Ponds & Linear



Current Replacement
Value
\$0.6
Million

Asset Inventory
242
Units

Data Confidence
& Reliability

Level 3 (Reliable)

Dataset is complete and
estimated to be accurate
+/- 10%

Average Remaining
Useful Life
23
Years

Estimated
Useful Life
75
Years

APPENDIX B

DETAILED FINANCING STRATEGY TABLES

Table 1
Municipality of Centre Hastings
2025 Asset Management Plan
Benchmark: Close Cumulative Infrastructure Deficit by 2034 Tax Supported (10-Years)

Legend	1. Lifecycle Costs						2. Forecast of Revenues							3. Funding Gap Calculation		
Year	Non-Infrastructure Solutions	Operations & Maintenance	Bridge and Road O&M service level increase	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund CCBF (formerly Gas Tax)	Add: Existing Unfinanced Capital Commitment	Add: Existing Capital Capacity - Debt Payments from existing debt	Existing Reserves (for Capital)	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 9,643,520	\$ 64,700	\$ 12,833,830	\$ 2,355,610	\$ 1,508,751		\$ 1,000,000	\$ 256,310	\$ 149,142	\$ 2,129,905	\$ 7,399,718	\$ 5,434,112	\$ 5,434,112
2026	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 10,896,670	\$ 64,700	\$ 14,086,980	\$ 2,355,610	\$ 3,222,869	\$ 1,714,118	\$ 314,467	\$ 266,562	\$ 310,000		\$ 6,469,508	\$ 7,617,472	\$ 13,051,584
2027	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 9,633,880	\$ 64,700	\$ 12,824,190	\$ 2,355,610	\$ 4,936,986	\$ 1,714,118	\$ 327,045	\$ 277,225	\$ 310,000		\$ 8,206,867	\$ 4,617,323	\$ 17,668,907
2028	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 9,362,310	\$ 64,700	\$ 12,552,620	\$ 2,355,610	\$ 6,651,104	\$ 1,714,118	\$ 327,045	\$ 288,314	\$ 310,000		\$ 9,932,073	\$ 2,620,547	\$ 20,289,454
2029	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 8,983,490	\$ 64,700	\$ 12,173,800	\$ 2,355,610	\$ 8,365,222	\$ 1,714,118	\$ 327,045	\$ 299,846	\$ 310,000		\$ 11,657,723	\$ 516,077	\$ 20,805,531
2030	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 8,954,710	\$ 64,700	\$ 12,145,020	\$ 2,355,610	\$ 10,079,339	\$ 1,714,118	\$ 327,045	\$ 311,840	\$ 310,000		\$ 13,383,835	\$ (1,238,815)	\$ 19,566,716
2031	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 8,813,800	\$ 64,700	\$ 12,004,110	\$ 2,355,610	\$ 11,793,457	\$ 1,714,118	\$ 327,045	\$ 324,314	\$ 310,000		\$ 15,110,426	\$ (3,106,316)	\$ 16,460,399
2032	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 8,536,160	\$ 64,700	\$ 11,726,470	\$ 2,355,610	\$ 13,507,575	\$ 1,714,118	\$ 327,045	\$ 337,286	\$ 310,000		\$ 16,837,516	\$ (5,111,046)	\$ 11,349,353
2033	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 8,906,030	\$ 64,700	\$ 12,096,340	\$ 2,355,610	\$ 15,221,692	\$ 1,714,118	\$ 327,045	\$ 350,778	\$ 310,000		\$ 18,565,126	\$ (6,468,786)	\$ 4,880,568
2034	\$ 50,000	\$ 2,355,610	\$ 720,000	\$ 10,327,250	\$ 64,700	\$ 13,517,560	\$ 2,355,610	\$ 16,935,810	\$ 1,714,118	\$ 327,045	\$ 364,809	\$ 310,000		\$ 20,293,274	\$ (6,775,714)	\$ (1,895,147)
Total	\$ 500,000	\$ 23,556,100	\$ 7,200,000	\$ 94,057,820	\$ 647,000	\$ 125,960,920	\$ 23,556,100	\$ 92,222,804	\$ 15,427,059	\$ 3,930,830	\$ 3,077,285	\$ 2,939,142	\$ 2,129,905	\$ 127,856,067	\$ (1,895,147)	\$ 127,611,476

Annual Increase	\$ 1,714,118
2025 Total Tax Levy	\$ 7,049,630
Inc. as % of Tax Levy	24.32%

Table 2
Municipality of Centre Hastings
2025 Asset Management Plan
PLOS: Close Cumulative Infrastructure Deficit by 2034 (10-Years)

Legend	1. Lifecycle Costs						2. Forecast of Revenues							3. Funding Gap Calculation		
Year	Non-Infrastructure Solutions	Operations & Maintenance	Bridge and Road O&M service level increase	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund CCBF (formerly Gas Tax)	Add: Existing Unfinanced Capital Commitment	Add: Existing Capital Capacity - Debt Payments from existing debt	Existing Reserves (for Capital)	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 3,636,420	\$ 64,700	\$ 6,458,230	\$ 2,355,610	\$ 1,508,751		\$ 1,000,000	\$ 256,310	\$ 149,142	\$ 2,129,905	\$ 7,399,718	\$ (941,488)	\$ (941,488)
2026	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 4,889,570	\$ 64,700	\$ 7,711,380	\$ 2,355,610	\$ 1,763,954	\$ 255,203	\$ 314,467	\$ 266,562	\$ 310,000		\$ 5,010,593	\$ 2,700,787	\$ 1,759,298
2027	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 3,626,780	\$ 64,700	\$ 6,448,590	\$ 2,355,610	\$ 2,019,158	\$ 255,203	\$ 327,045	\$ 277,225	\$ 310,000		\$ 5,289,038	\$ 1,159,552	\$ 2,918,850
2028	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 3,355,210	\$ 64,700	\$ 6,177,020	\$ 2,355,610	\$ 2,274,361	\$ 255,203	\$ 327,045	\$ 288,314	\$ 310,000		\$ 5,555,330	\$ 621,690	\$ 3,540,540
2029	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 2,976,390	\$ 64,700	\$ 5,798,200	\$ 2,355,610	\$ 2,529,564	\$ 255,203	\$ 327,045	\$ 299,846	\$ 310,000		\$ 5,822,066	\$ (23,866)	\$ 3,516,674
2030	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 2,947,610	\$ 64,700	\$ 5,769,420	\$ 2,355,610	\$ 2,784,767	\$ 255,203	\$ 327,045	\$ 311,840	\$ 310,000		\$ 6,089,263	\$ (319,843)	\$ 3,196,831
2031	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 2,806,700	\$ 64,700	\$ 5,628,510	\$ 2,355,610	\$ 3,039,971	\$ 255,203	\$ 327,045	\$ 324,314	\$ 310,000		\$ 6,356,940	\$ (728,430)	\$ 2,468,401
2032	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 2,529,060	\$ 64,700	\$ 5,350,870	\$ 2,355,610	\$ 3,295,174	\$ 255,203	\$ 327,045	\$ 337,286	\$ 310,000		\$ 6,625,116	\$ (1,274,246)	\$ 1,194,155
2033	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 2,898,930	\$ 64,700	\$ 5,720,740	\$ 2,355,610	\$ 3,550,377	\$ 255,203	\$ 327,045	\$ 350,778	\$ 310,000		\$ 6,893,811	\$ (1,173,071)	\$ 21,085
2034	\$ 50,000	\$ 2,355,610	\$ 351,500	\$ 4,320,150	\$ 64,700	\$ 7,141,960	\$ 2,355,610	\$ 3,805,581	\$ 255,203	\$ 327,045	\$ 364,809	\$ 310,000		\$ 7,163,045	\$ (21,085)	\$ (0)
Total	\$ 500,000	\$ 23,556,100	\$ 3,515,000	\$ 33,986,820	\$ 647,000	\$ 62,204,920	\$ 23,556,100	\$ 26,571,658	\$ 2,296,830	\$ 3,930,830	\$ 3,077,285	\$ 2,939,142	\$ 2,129,905	\$ 62,204,920	\$ (0)	\$ 17,674,348

Annual Increase	\$ 255,203
2025 Total Tax Levy	\$ 7,049,630
Inc. as % of Tax Levy	3.62%

Table 3
Municipality of Centre Hastings
2025 Asset Management Plan
Benchmark: Close Cumulative Infrastructure Deficit by 2034 Rate-Supported (10-Years)

Legend	2. Forecast of Revenues										3. Funding Gap Calculation		
Year	Operations & Maintenance	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from User Fees	Capital from User Fees (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Yearly Increase in Rate Funding (%)	Add: Existing Unfinanced Capital Commitment	Existing Reserves (for Capital)	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 65,000			\$ 26,690	\$ 396,780	\$ 888,080	\$ 495,530	\$ 495,530
2026	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 254,474	\$ 189,474	291.5%	\$ 26,690		\$ 680,774	\$ 702,836	\$ 1,198,366
2027	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 443,948	\$ 189,474	74.5%	\$ 26,690		\$ 870,248	\$ 513,362	\$ 1,711,728
2028	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 633,421	\$ 189,474	42.7%	\$ 26,690		\$ 1,059,721	\$ 323,889	\$ 2,035,617
2029	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 822,895	\$ 189,474	29.9%	\$ 26,690		\$ 1,249,195	\$ 134,415	\$ 2,170,032
2030	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 1,012,369	\$ 189,474	23.0%	\$ 26,690		\$ 1,438,669	\$ (55,059)	\$ 2,114,973
2031	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 1,201,843	\$ 189,474	18.7%	\$ 26,690		\$ 1,628,143	\$ (244,533)	\$ 1,870,440
2032	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 1,391,316	\$ 189,474	15.8%	\$ 26,690		\$ 1,817,616	\$ (434,006)	\$ 1,436,434
2033	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 1,580,790	\$ 189,474	13.6%	\$ 26,690		\$ 2,007,090	\$ (623,480)	\$ 812,954
2034	\$ 399,610	\$ 829,000	\$ 155,000	\$ 1,383,610	\$ 399,610	\$ 1,770,264	\$ 189,474	12.0%	\$ 26,690		\$ 2,196,564	\$ (812,954)	\$ 0
Total	\$ 3,996,100	\$ 8,290,000	\$ 1,550,000	\$ 13,836,100	\$ 3,996,100	\$ 9,176,320	\$ 1,705,264	\$ 5	\$ 266,900	\$ 396,780	\$ 13,836,100	\$ 0	\$ 13,846,074

Annual Increase	\$ 189,474
2025 Total Rate Need	\$ 984,000
Inc. as % of Rate Need	19.26%

Table 4
Municipality of Centre Hastings
2025 Asset Management Plan
PLOS: Close Cumulative Infrastructure Deficit by 2034 (10-Years)

Legend	2. Forecast of Revenues										3. Funding Gap Calculation		
Year	Operations & Maintenance	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from User Fees	Capital from User Fees (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Yearly Increase in Rate Funding (%)	Add: Existing Unfinanced Capital Commitment	Existing Reserves (for Capital)	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 65,000			\$ 26,690	\$ 396,780	\$ 888,080	\$ 81,030	\$ 81,030
2026	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 162,363	\$ 97,363	149.8%	\$ 26,690		\$ 588,663	\$ 380,447	\$ 461,477
2027	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 259,725	\$ 97,363	60.0%	\$ 26,690		\$ 686,025	\$ 283,085	\$ 744,562
2028	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 357,088	\$ 97,363	37.5%	\$ 26,690		\$ 783,388	\$ 185,722	\$ 930,284
2029	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 454,451	\$ 97,363	27.3%	\$ 26,690		\$ 880,751	\$ 88,359	\$ 1,018,643
2030	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 551,813	\$ 97,363	21.4%	\$ 26,690		\$ 978,113	\$ (9,003)	\$ 1,009,640
2031	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 649,176	\$ 97,363	17.6%	\$ 26,690		\$ 1,075,476	\$ (106,366)	\$ 903,274
2032	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 746,539	\$ 97,363	15.0%	\$ 26,690		\$ 1,172,839	\$ (203,729)	\$ 699,545
2033	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 843,901	\$ 97,363	13.0%	\$ 26,690		\$ 1,270,201	\$ (301,091)	\$ 398,454
2034	\$ 399,610	\$ 414,500	\$ 155,000	\$ 969,110	\$ 399,610	\$ 941,264	\$ 97,363	11.5%	\$ 26,690		\$ 1,367,564	\$ (398,454)	\$ 0
Total	\$ 3,996,100	\$ 4,145,000	\$ 1,550,000	\$ 9,691,100	\$ 3,996,100	\$ 5,031,320	\$ 876,264		\$ 266,900	\$ 396,780	\$ 9,691,100	\$ 0	\$ 6,246,908

Annual Increase	\$ 97,363
2025 Total Rate Need	\$ 984,000
Inc. as % of Rate Need	9.89%