

FINAL REPORT

PREPARED BY HEMSON FOR FRONT OF YONGE TOWNSHIP

ASSET MANAGEMENT PLAN

October 29, 2025



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CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	4
A. Purpose of the Asset Management Plan	4
B. Regulatory Context	5
C. Asset Management Plan Structure	6
2. STATE OF LOCAL INFRASTRUCTURE	8
A. Replacement Cost of Infrastructure	8
B. Remaining Useful Life of the Infrastructure	9
C. Condition of the Infrastructure	10
3. LEVEL OF SERVICE	15
A. The Township's Level of Service Goals	15
B. Customer Levels of Service (CLOS)	16
C. Technical Levels of Service (TLOS)	16
D. Overview of the Township's Level of Service	17
4. ASSET MANAGEMENT STRATEGY	23
A. Overview of Full LifeCycle Cost Model	23
B. Lifecycle Costs	24
C. Risk Analysis	28
D. Managing Risk	30
E. Future Demand	31
F. Climate Change Integration	31
5. FINANCING STRATEGY	34
A. Analysis of Available Revenues	34
B. Benchmark Infrastructure Funding Gap	35
C. Proposed Level of Service Infrastructure Funding Gap	37
D. Financing Strategies and the Relationship to the Proposed Level of Service	38

6.	MONITORING AND IMPROVEMENT PLAN	40
A.	Asset Management Maturity Assessment	40
B.	Improvement Plan	42
	APPENDIX A	44
	APPENDIX B	51

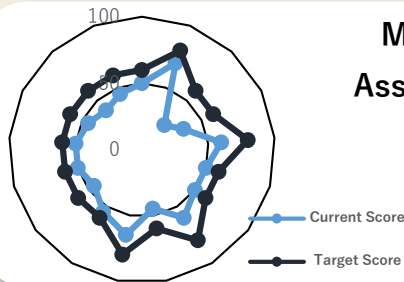
EXECUTIVE SUMMARY

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. A summary of the key results is noted below along with relevant reporting outputs provided in the summary dashboard. Note that all figures are in constant 2025 dollars.

- The replacement cost for all Township assets considered in the 2025 AMP is estimated at \$51.2 million (in constant 2025 dollars). The largest share is related to roads, which total \$34.2 million (67%), followed by buildings at \$11.8 million (23%). Machinery and equipment make up \$3.1 million (6%), while bridges and culverts account for \$0.8 million (1%). Parks and land improvements total \$0.9 million (2%), and fleet assets represent \$0.4 million (1%) of the total replacement value.
- Overall, \$30.3 million (59%) of the assets are in Good to Very Good condition while \$18.2 million (36%) of the assets are Fair condition. The remaining \$2.8 million (5%) are in Poor to Very Poor condition and relate almost entirely to roads, and machinery and equipment.
- The proposed level of service is generally set to maintain the current level of service over the next 10-year period.
 - Local road lane kilometres as a proportion of the Township's land area are about 33%. Collector road lane kilometres as a proportion of the Township's land area are about 19%. The Township does not contain any arterial roads. Paved and unpaved roads in the Township are on average in Good condition with an average Surface Condition Rating of 90 out of 100, and 66 out of 100, respectively.
 - Township buildings are on average in Good condition, with 73% of assets in "Good or better" condition, despite many of these assets are beyond their useful life.
 - Township bridges have a condition rating of 70 BCI, while culverts have a slightly higher BCI of 77. No bridges or culverts currently have loading or dimensional restrictions. The Township will continue to perform legislated inspections every two years.

- All other asset categories are proposed to be maintained at their current level of service or better.
- The total 10-year lifecycle costs to meet proposed levels of service amount to \$17.4 million (an average of \$1.7 million per year). To meet the proposed levels of service, the Township would be required to increase capital spending by about \$68,500 per annum (plus inflation) from the current 2025 tax levy of \$4.6 million.
- Monitoring of the funding gap will need to continue going forward to ensure that funding levels remain sufficient to meet level of service objectives.

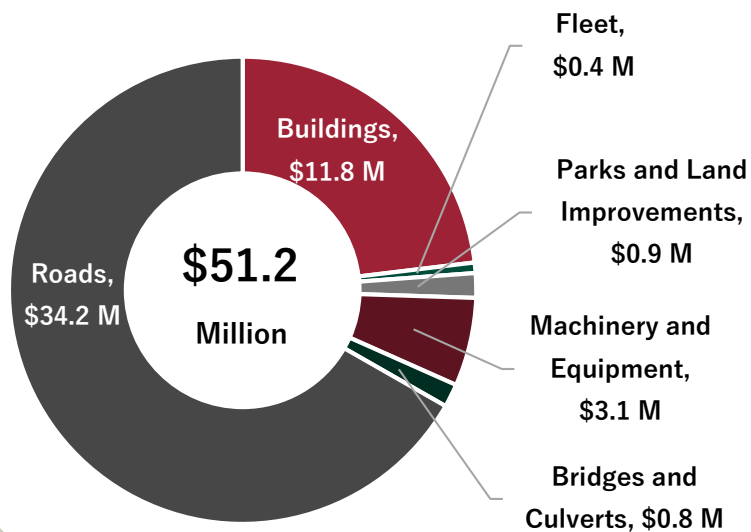
Summary of 2025 Asset Management Plan



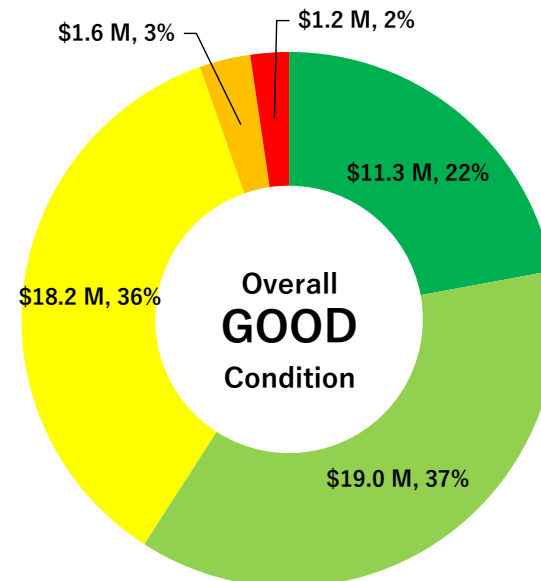
Total Need to Meet PLOS
2025-2034

**\$17.5
Million**

Summary of Total Replacement Value (\$M)



Summary of Asset Condition (\$M)



1. INTRODUCTION

Front of Yonge Township's 2025 Asset Management Plan (2025 AMP) provides the Township with a tool to assist in asset management financing decisions. The AMP covers all Township 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 Township'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 Township'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 Township'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 Township'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 Township 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 to continually keep asset information up to date.

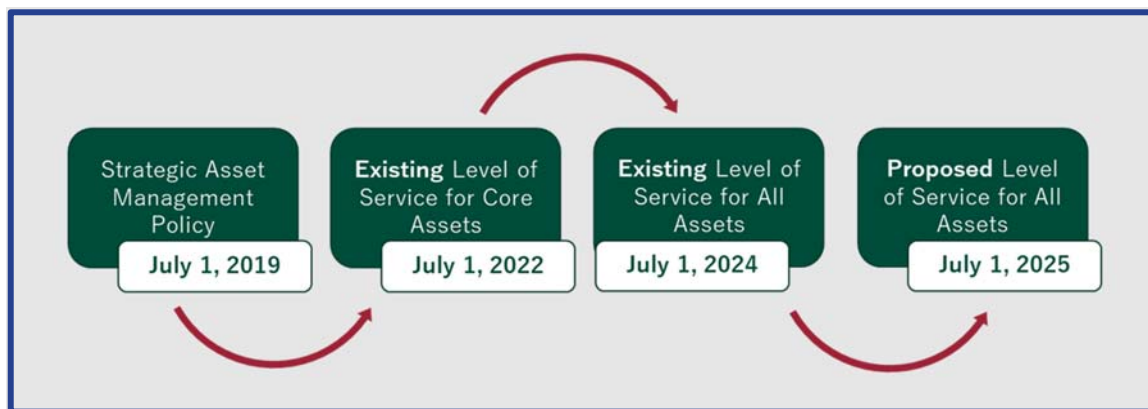
By following the key objectives above, the AMP establishes a “clear line of sight” from the service being provided to residents and businesses in the Township. Any investment requirements included in the AMP are clearly linked to a well-defined need. These needs over the 10-year period are set to meet the proposed level of service, which in the case of Front of Yonge, is largely related to maintaining or exceeding the current 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 passed 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* 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 more 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. Through this update, the Township has updated the current level of service utilizing more recent engineering reports, updated inventories and datasets compiled through consultation with Township staff.

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

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>.

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 Township'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 Township in maintaining assets so that proposed levels of service can be met. This section also includes a risk analysis of Township 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.

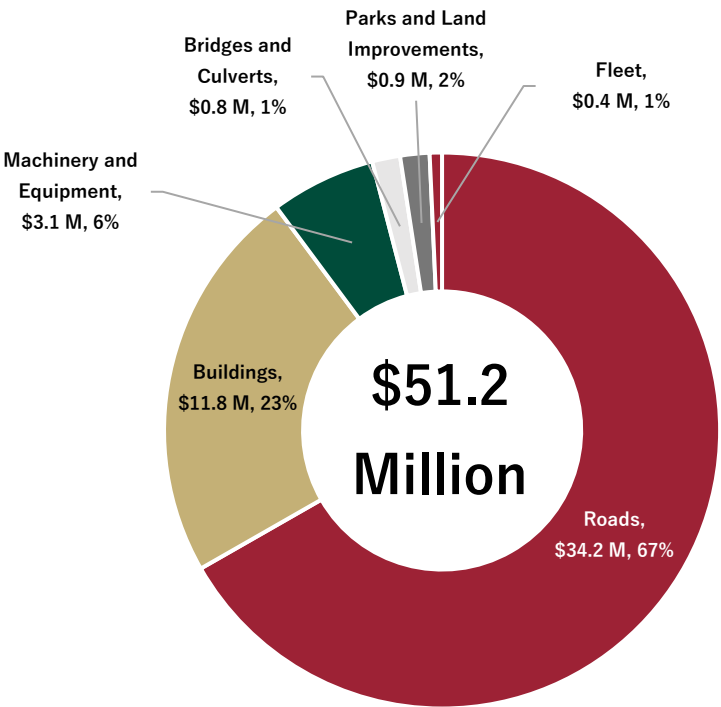
2. STATE OF LOCAL INFRASTRUCTURE

This section provides a summary of the Township’s assets with reference to asset quantity and quality. Most assets have condition assessments based on engineering inspections, while the balance of 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 Township 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 replacement cost for all Township assets considered in the 2025 AMP is estimated at \$51.2 million (in constant 2025 dollars). The largest share is related to roads, which total \$34.2 million (67%), followed by buildings at \$11.8 million (23%). Machinery and equipment make up \$3.1 million (6%), while bridges and culverts account for \$0.8 million (1%). Parks and land improvements total \$0.9 million (2%), and fleet assets represent \$0.4 million (1%) of the total replacement value.

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 \$51.2 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

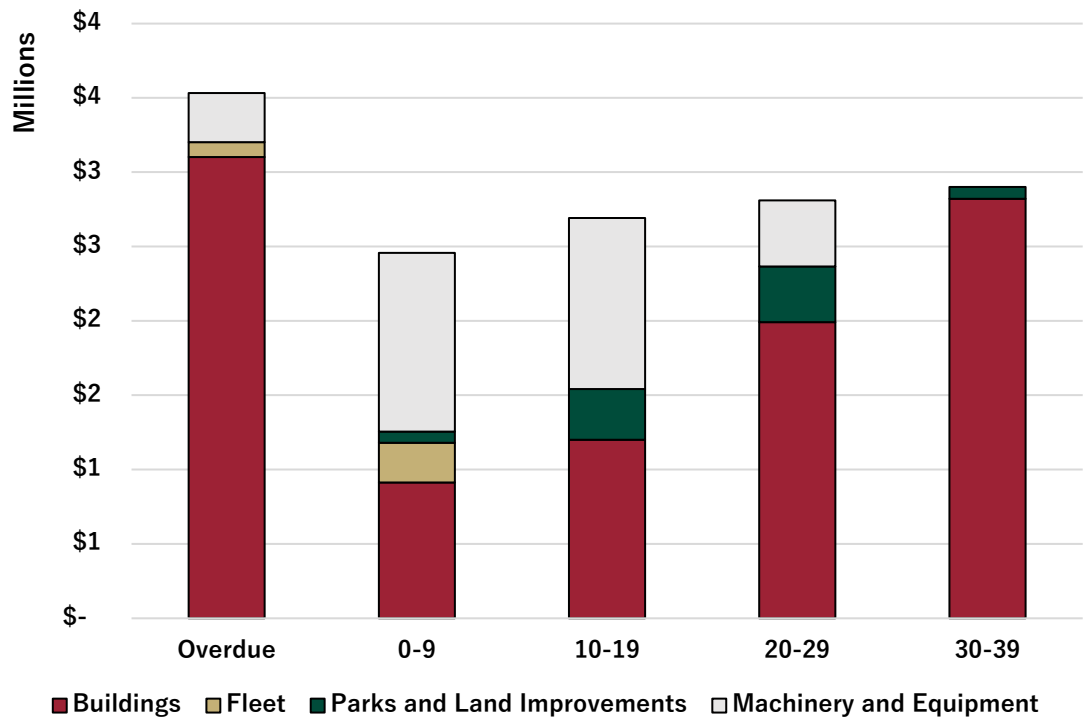
Asset Category	Methodology
Roads	Based on replacement costs per kilometer of road section provided in the Township's Roads dataset.
Buildings	Combined approach between replacement costs provided in the facility condition assessments where applicable, inflated to 2025 dollars.
Machinery and Equipment	Historical cost inflated to 2025 dollars.
Bridges & Culverts	Based on replacement cost per square meter of deck area as detailed in the OSIM Reports.
Parks and Land Improvements	Historical cost inflated to 2025 dollars.
Fleet	Historical cost inflated to 2025 dollars.

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). About \$2.9 million (20%) of the infrastructure has greater than 30 years of remaining useful life. About \$5.5 million (39%) has between 10 and 29 years of remaining useful life while about \$2.5 million (17%) has 0 to 9 years of remaining useful life.

The remaining \$3.5 million (25%) is considered overdue and past its design life. This is largely related to Township buildings (excluding the Mallory Coach House¹), consisting of about \$3.5 million in assets overdue at this time. Although these facilities are considered past their design life, the buildings are in working order and continue to be used.

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



Note: Roads are excluded as no acquisition date or useful life information is available as the Township maintains the roads based on its condition and not on age. Bridges have also been excluded as the planning for lifecycle activities on bridges is done through the bi-annual OSIM Reporting.

Note ⁽¹⁾ The Mallory Coach House has also been excluded from this analysis as it is a cultural facility that is maintained as a Museum and is therefore far beyond the original useful life of the building.

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	Well maintained, good condition, new or recently rehabilitated asset.
Good	Good condition, few elements exhibit existing deficiencies.
Fair	Some elements exhibit significant deficiencies. Asset requires attention.

Condition Rating	Definition
Poor	A large portion of the system exhibits significant deficiencies. Asset mostly below standard and approaching end of service life.
Very Poor	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 Township aims to continually update the asset inventory to reflect changes in conditions or when assets are replaced.

- Condition assessments for the roads are based the PCI (Pavement Condition Index) recorded within the Township's road maintenance database. The condition of the roads has been translated to the 5-point scale based on the scale in Table 4.

Table 4 – Road Surface Condition Parameters

Condition Rating	PCI Range
Very Good	80 - 100
Good	70 - 80
Fair	60 - 70
Poor	50 - 60
Very Poor	Less than 50

- Condition assessments for bridges and culverts are based on the engineered assessments developed through the 2024 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 – Culvert Condition Parameters

Condition Rating	BCI Range
Very Good	80 - 100
Good	70 - 80
Fair	60 – 70
Poor	50 – 60
Very Poor	Less than 50

- Condition assessments for buildings are based on the engineered assessments developed through the building condition assessments undertaken in the Township. The condition assessment report rates the buildings on a 100-point Facility Condition Index scale (FCI). The condition of buildings has been translated to the 5-point scale based on the scale in Table 5 below.

Table 6 – Building Condition Parameters

Condition Rating	FCI Range
Very Good	85 - 100
Good	65 - 85
Fair	50 - 65
Poor	35 - 50
Very Poor	Less than 35

2. Staff Consultation

For some assets where engineering conditions were not available, estimates were developed in consultation with Township staff. This approach is important where there is low confidence that age and useful life represents the condition of a particular asset. This method has been used for some assets contained in this 2025 AMP, such as vehicles, where Township staff who are familiar with the assets felt that the age-based condition did not match the true condition of the assets.

3. Age Based Approach

For some asset types where the Township 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 Township 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 7 shows the methodology where the condition is assigned based on the remaining useful life of the assets.

Table 7 – Age Based Condition Parameters

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

Condition Rating	Percentage of Remaining Useful
Very Poor	Less than 20%

Summary of the Condition of Assets

Figure 4 summarizes the condition of Township assets which are determined to be in Good condition on average. Overall, \$30.3 million (59%) of the assets are in Good to Very Good condition while \$18.2 million (36%) of the assets are Fair condition. The remaining \$2.8 million (5%) are in Poor to Very Poor condition.

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

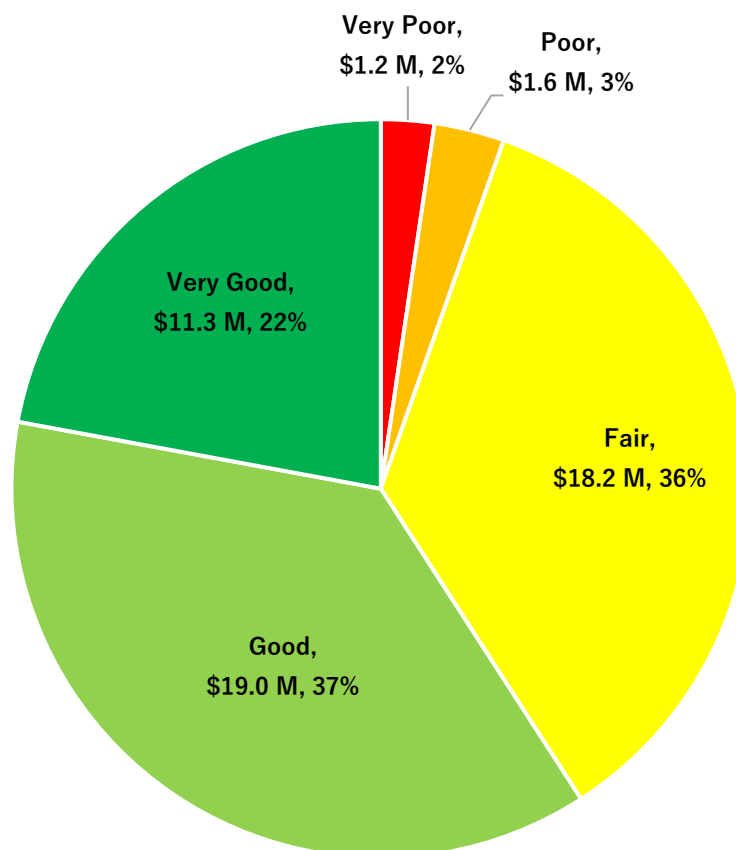
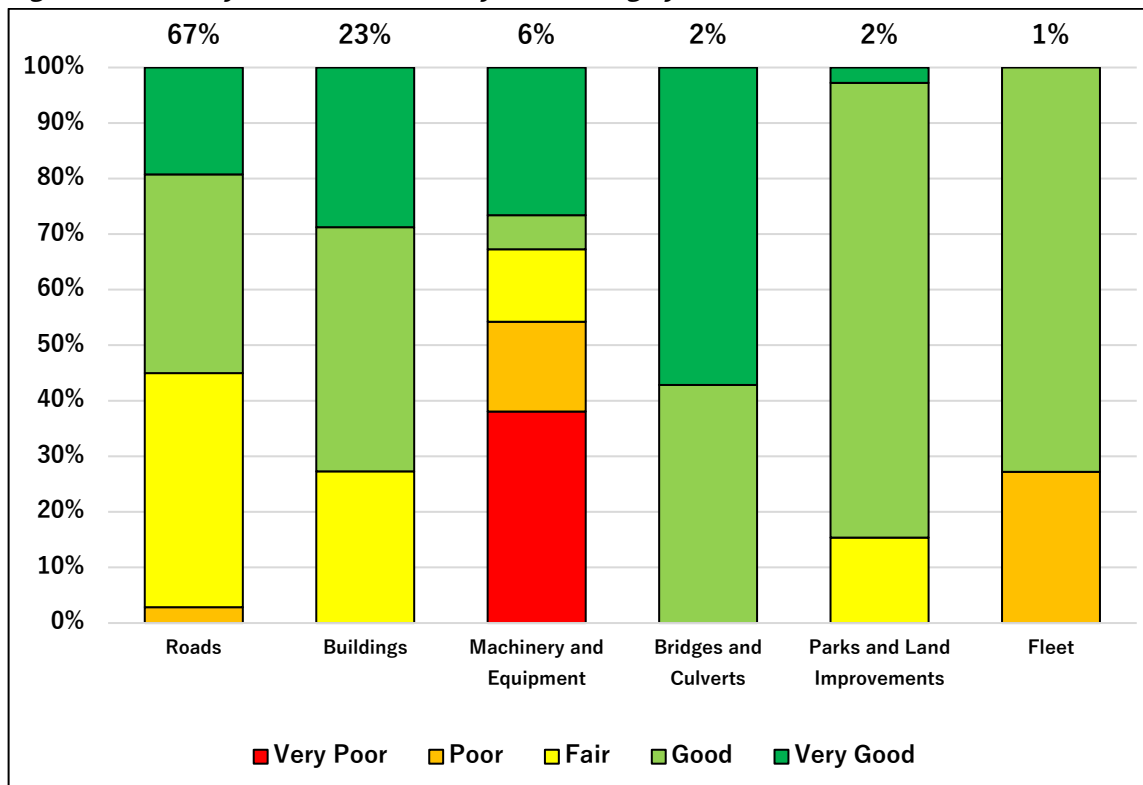


Figure 5 shows the condition of assets delineated by each asset category. Figure 5 shows the following for assets with larger shares in Poor or Very Poor condition:

- Following the parameters outlined in Table 4, Roads were determined to be in Good condition overall. \$18.8 million (55%) of Roads are in Good and Very Good Condition. With \$14.4 million (42%) falling in Fair condition, this leaves only 3% of assets, or \$1.0 million (3%) in Poor and Very Poor condition.

- Buildings are in Good condition overall. \$8.6 million (73%) of Township buildings are in Good and Very Good condition, and the remaining \$3.2 million (27%) are in Fair condition. None are in Poor or Very Poor Condition.
- Machinery and Equipment are generally in Fair condition, with about \$1.0 million (33%) in Good and Very Good condition, and \$1.7 million (54%) in Poor and Very Poor condition. The remaining \$0.4 million (7%) are in Fair condition.
- Bridges and Culverts are in Very Good condition with \$357,600 (43%) falling in Good condition, and the remaining \$476,900 (57%) falling in Very Good condition. None of the Township's bridges were assessed as Fair or below.
- Parks and land improvements are in Good condition overall, with about \$737,000 (85%) in Good or Very Good condition. The remaining \$134,000 (15%) are in Fair condition. No parks or land improvements were determined to be in Poor or Very Poor condition.
- Fleet assets are generally in Fair condition, with about \$267,500 (73%) in Good condition, and \$100,000 (27%) in Poor condition.

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 Township assets.

3. LEVEL OF SERVICE

Levels of service (LOS) describe the outputs or objectives the Township 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 Township 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 Township to be transparent with its stakeholders to find the appropriate balance between affordability and service expectations.

A. THE TOWNSHIP'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 Township 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 Township 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 Township owns and operates. The CLOS are documented as high-level qualitative statements that capture these characteristics. For the purposes of meeting O. Reg. 588/17 requirements, the Community Levels of Service (outlined in the regulation) are also 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 Township'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 Township 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
- 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 Township 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 TOWNSHIP'S LEVEL OF SERVICE

The Township's 2025 Asset Management Plan was prepared for all Township infrastructure assets under the "current level of service" framework as required by O. Reg. 588/17. The Township 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 for the purposes of this plan and the process ensured that the current level of service accurately reflected the performance and condition of infrastructure assets given the available data at the time.

Current Level of Service

For the purposes of this 2025 Asset Management Plan, the customer and technical level of service reporting measures remain generally consistent with those outlined in O.Reg 588/17. Additional metrics were established for the non-core assets within the Township. The "current performance" has been updated with information from Township staff and the AMP Model. 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 Township 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 Township. 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 Township.

For every level of service that the Township measures, a corresponding set of PLOS measures have been developed. Consultation with Township 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 Township. 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 Township. 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 Township’s operational capacity. Notwithstanding the Township’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 that the Township has available. This process inherently involves approval by Council and the organization, with affordability considerations integrated into budgetary decisions.

Summary of the Level of Service

Table 8 summarizes the customer levels of service for the core assets only while Table 9 shows the technical levels of service as required by O. Reg. 588/17. Table 9 shows the following:

- Local road lane kilometres as a proportion of the Township’s land area are about 33%. Collector road lane kilometres as a proportion of the Township’s land area are about 19%. The Township does not contain any arterial roads. The proposed level of service for these measures is to maintain the current level of service as the Township does not expect to change these proportions in the foreseeable future.
- Paved and unpaved roads in the Township are on average in Good condition with an average Surface Condition Rating of 90 out of 100, and 66 out of 100, respectively. This relationship is expected as paved roads have a much longer useful life than unpaved

roads and require fewer lifecycle interventions to maintain a high condition rating. This information is based on the Township's Roads Needs Study from 2022 and is expected to be updated in the near future. The proposed level of service is to maintain the current average for both paved and unpaved roads.

- Township buildings are on average in Good condition, with 73% of assets in “Good or better” condition, despite 41% of these assets are beyond their useful life. The Township aims to maintain the current performance for these metrics, over the next 10 years, at minimum.
- Township bridges have a condition rating of 70 BCI, while culverts have a slightly higher BCI of 77. No bridges or culverts currently have loading or dimensional restrictions. The Township will continue to perform legislated inspections every two years.
- Fleet within the Township are on average in Fair condition, with 73% of assets in “Good or better” condition. 27% of these assets are beyond their useful life. The Township aims to maintain the current performance for these metrics, over the next 10 years, at minimum. The Township will also look to maintain the average age of these assets (9) over the next 10 years.
- Parks and Land Improvements are on average in Good condition, with 85% of assets in “Good or better” condition. None of these assets are beyond their useful life. The Township aims to maintain the current performance for these metrics, over the next 10 years.
- Machinery and Equipment are on average in Fair condition, with 33% of assets in “Good” or better condition. 11% of these assets are beyond their useful life. The Township aims to maintain the current performance for these metrics, over the next 10 years.

Table 8 – 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 Township and its level of connectivity.	The connectivity of roads can be found in Schedules A to C of the Township's Official Plan.
		Description or images that illustrate the different levels of road class pavement condition.	The Township 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 Section 2 of this report, or the report cards in Appendix A.
Buildings	Maintain safe and functional buildings with sufficient capacity for residents and staff.	The Township owns and operates 13 buildings and structures which have been assessed as part of the facility condition assessments. These include the Township Office, Council Chambers, a public works garage, a sand storage shed, a fire hall, the landfill site building, heritage buildings, a canteen, and a baseball dugout.	
Machinery and Equipment	Maintain safe and functional equipment that is reliable and available for use when needed.	The Township uses a wide variety of equipment to facilitate the functions it provides, including IT hardware and computers, recreation equipment, furniture, fire rescue equipment, fire PPE, communication equipment, etc.	
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 9).
		Description or images of the condition of bridges/culverts and how this would affect use of the bridges.	Details on engineered bridges and culverts conditions including images and technical specifications are included in the 2024 OSIM Report.
Parks and Land Improvements	Maintain the assets that compose outdoor amenities for use by residents.	The Township maintains a set of assets that are categorized as "land improvements". These include any outdoor amenities which require intervention from the Township to maintain, such as parking lots, trails, and outdoor rink, a pickleball court, sidewalks, streetlights, and a playground structure.	
Fleet	Maintain safe and functional motor vehicles and machinery available to respond to service needs when required.	The Township currently owns and maintains 4 different fleet assets: 2 of which belong to the Fire Department and 2 of which belong to the Public Works department.	

Table 9 – Technical Levels of Service

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
Roads	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the Township (O. Reg. 588/17)	Roads Needs Study	0.00	0.00
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the Township (O. Reg. 588/17)	Roads Needs Study	0.19	0.19
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the Township (O. Reg. 588/17)	Roads Needs Study	0.33	0.33
	For paved roads in the Township, the average pavement condition index value (O. Reg. 588/17)	Roads Needs Study	90	90
	For unpaved roads in the Township, the average surface condition (O. Reg. 588/17)	Roads Needs Study	66	66
	Percentage KM of Gravel Roads Restoned Annually	Township Staff	100%	100%
Bridges and Culverts	Percentage of bridges in the Township with loading or dimensional restrictions (O. Reg. 588/17).	OSIM Report	0%	0%
	For bridges in the Township, the average bridge condition index value (O. Reg. 588/17).	OSIM Report	70	70
	For structural culverts in the Township, the average bridge condition index value (O. Reg. 588/17).	OSIM Report	77	77
Buildings	% of assets at or above "Good" or "Very Good" condition	2025 AMP	73%	73%
	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	GOOD	GOOD
	% of assets beyond their useful life	2025 AMP	27%	27%
Fleet	% of assets at or above "Good" or "Very Good" condition	2025 AMP	73%	73%

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	FAIR	FAIR
	% of assets beyond their useful life	2025 AMP	27%	27%
	Average Age of Fleet Assets	2025 AMP	9 Years	9 Years
Parks & Land Improvements	% of assets at or above "Good" or "Very Good" condition	2025 AMP	84%	84%
	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	GOOD	GOOD
	% of assets beyond their useful life	2025 AMP	0%	0%
	Percentage of Playgrounds that are AODA Compliant	2025 Staff Consultation	0%	100%
Machinery & Equipment	% of assets at or above "Good" or "Very Good" condition	2025 AMP	33%	33%
	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	FAIR	FAIR
	% of assets beyond their useful life	2025 AMP	11%	11%
	Planned vs. Unplanned Maintenance	2025 Staff Consultation	0%	TBD

4. ASSET MANAGEMENT STRATEGY

This section sets out an action plan that will assist the Township 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 Township, along with Hemson, have identified the total full life cycle 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 10 provides a description of each lifecycle category. The Township undertakes all the activities described in Table 10, however, the Township's budget generally accounts for these expenditures in different categories.

Table 10 - 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.
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 Township's infrastructure assets are long-lived, the starting point for the lifecycle costs analysis covers a 20-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 the recommendations from all engineering reports are considered, and assets are replaced at the end of their useful life with no adjustments or considerations for existing municipal asset practices or relationship to the target level of service. These costs are referred to as the "benchmark" lifecycle costs.

B. LIFECYCLE COSTS

Table 12 outlines the methodologies and 10-year costs to meet this ideal scenario. Over the 10-year period, the total benchmark lifecycle costs is estimated at \$21.3 million (an average of about \$2.1 million per year). Of the total lifecycle costs, most costs can be attributed to saving for the renewal, rehabilitation or replacement of infrastructure, making up about 54% of the total lifecycle costs. The 10-year average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about \$1.1 million per year (see Table 11).

To determine the total lifecycle costs to meet proposed levels of service over the next 10-years, consultations with Municipal staff were undertaken to determine the best approach. Table 12 outlines the 10-year lifecycle costs needed to meet the proposed level of service relative to the benchmark expenditure need. Over the 10-year period, a total need of about \$17.4 million is identified (an average of about \$1.7 million per year). Of the total lifecycle costs, 43% of forecasted costs can be attributed to saving for the renewal, rehabilitation, or replacement of infrastructure. The 10-year average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about \$750,000 per year (see Table 11).

Table 11 – Average 10-Year Annual Renewal/Rehabilitation/Replacement Need by Asset Category for Tax-Supported Assets

Asset Category	10-Year Benchmark Annual Average	10-Year PLOS Annual Average
Roads	\$213,930	\$192,537
Buildings	\$589,106	\$294,553
Machinery and Equipment	\$224,385	\$179,508
Bridges and Culverts	\$29,138	\$29,138
Parks and Land Improvements	\$42,141	\$21,070
Fleet	\$40,805	\$32,644
Total	\$1,139,504	\$749,450

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

Category	Lifecycle Cost Approach to Meet PLOS	10-Year Cumulative Benchmark Lifecycle Costs	10-Year Cumulative Lifecycle Costs to Meet PLOS
Non-Infrastructure Solutions	Provision of \$25,000 per year starting in 2025 to undertake activities to manage assets.	\$250,000	\$250,000
Operations and Maintenance Activities	- Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific operating and maintenance – estimated at \$943,000 on average per annum using the 2025 budget. - In most instances, does not include general operating costs associated to staffing (ex. staff that carry out recreational programs).	\$9.4 million	\$9.4 million
Replacement Activities	- Need for Bridges has been maintained from the calculated annual provision of \$29,000, which was based on estimated useful life and inflated replacement values from OSIM Report. - Risk-based replacement schedule for all other asset categories. - For the PLOS lifecycle costs for parks and land improvements, as well as buildings, 50% the benchmark lifecycle costs has been used to remain consistent with the conditions reported in the facility condition assessments, and to reflect an increased estimated useful life than the useful life used for financial amortization on these assets. - For fleet, as well as machinery and equipment, 80% of the replacement value has been used to recognize the repair activities currently undertaken by the Township to extend the useful life of vehicles and machinery, rather than replacement at the end of the financial useful life.	\$9.3 million	\$5.6 million
Renewal (Roads)	- Renewal expenditures for roads are calculated based on the anticipated need from 2025-2034: - The Proposed Level of Service lifecycle costs consider 90% of the total calculated benchmark need for roads, recognizing that the Township has many gravel roads which have a higher frequency of intervention, but rarely require full replacement to remain in good condition.	\$2.1 million	\$1.9 million
Expansion Activities	Annual provisions for the expansion of infrastructure related to population growth (as outlined in the Township's Official Plan), has been included as a lifecycle cost in both the benchmark and PLOS Financing Strategies. This is equivalent to 2% of the total replacement and renewal needs.	\$228,000	\$228,000

Category	Lifecycle Cost Approach to Meet PLOS	10-Year Cumulative Benchmark Lifecycle Costs	10-Year Cumulative Lifecycle Costs to Meet PLOS
	No additional allocation has been made for contributed assets in this analysis. However, as infrastructure is emplaced through the subdivision agreement process, the Township should calculate the long-term repair and replacement requirements of that infrastructure.		
Cumulative Total		\$21.3 million	\$17.4 million
Average per Year		\$2.1 million	\$1.7 million
Average per Year (for Renewal/Replacement Activities)		\$1.1 million	\$0.8 million

Note: All costs expressed in constant 2025 dollars.

C. 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 Township 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 the probability of asset failure in the short-term be high. This type of asset may be near the end of its useful life or has deteriorated significantly. 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 13 outlines the definition of likelihood of failure used for the Township's assets.

Table 13 - 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 Township 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 Township differs greatly by asset type. For example, if a fire emergency vehicle was not available for service, the potential impact could be 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 14 below outlines the definition of consequence of failure used for the Township's assets. The consequence of

failure, rated on a 1-5 scale, was weighted relative to each category in Table 14 depending on how impactful the consequence may be to the Township.

Table 14 - 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 Township. 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 15 below provides a summary of the risk matrix.

Table 15 - 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 16 presents the findings of the risk analysis and illustrates the Township's asset risk rating. Most of the Township'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 15. It is important to note, that the Township 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, bridges and culverts have been excluded from the risk analysis in Table 16 as the infrastructure needs and timing of repair and replacement has been informed based on detailed engineered assessments outlined through the Township's Roads Management software and the OSIM reports.

Table 16 - Summary Risk Assessment (excluding Roads, Buildings, Bridges and Culverts)

Asset Type	Replacement Cost (\$2025)	Risk (Weighted Average)
Buildings	\$11,830,000	Moderate
Machinery and Equipment	\$3,129,000	Moderate
Parks and Land Improvements	\$870,500	Low
Fleet	\$367,500	Moderate
Total	\$16,197,000	Moderate

Note: Roads, Bridges, and Culverts are excluded from the risk analysis as risk factors and prioritization have been addressed through the Township's Roads Needs Study and OSIM reports respectively.

Further to Table 16, the 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 17 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 17 - 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

D. MANAGING RISK

It is important to recognize the risk associated with the Township's ability to deliver the plan while recognizing that any deviation may affect the overall ability to deliver service. Table 18 below provides a summary of the identified risks, potential impacts and mitigating actions associated with the asset management program. Table 18 is intended to provide the Township with a framework that can be continually updated. This framework can be used to track potential asset related risks and document mitigation actions so that they can be implemented into the Township's asset management practices.

Table 18 -Risk Associated to the Plan

Risk Associated to the Plan		
Identified Risk	Potential Impact	Mitigating Action
Failed Infrastructure <i>(Condition or Level of Service Needs)</i>	▪ Delivery of service ▪ Asset and equipment damage	▪ Repair and rehabilitate as necessary ▪ Increase investment
Inadequate Funding	▪ Delivery of service ▪ Increased risk of failure ▪ Shorten asset life ▪ Defer funding to future generations	▪ Reductions of service by reviewing the current level of service ▪ Find additional revenue sources
Regulatory Requirements	▪ Non-compliance ▪ Mandatory investments ▪ Increased costs	▪ Find additional revenue sources ▪ Lobby actions
Plan is not followed or not undertaking required lifecycle activities	▪ Shorten asset life ▪ Inefficient investments ▪ Prioritization process failure ▪ Failure to deliver service	▪ Monitor and review levels of service ▪ Implement process to implement AMP ▪ Investigate alternative lifecycle management options

E. FUTURE DEMAND

The 2025 Plan largely focuses on the assets that the Township of Front of Yonge currently owns and operates. According to Statistics Canada census data, over the last five years (2016–2021) the Township’s population has remained relatively stable, decreasing very slightly from 2,602 in 2016 to 2,595 in 2021. While population growth has been stagnant, the Township’s Official Plan forecasts 3,000 permanent residents by 2031, showing an anticipation for gradual development in the future, which may create a need for additional infrastructure to support new residents and businesses.

F. 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. In response to the regulatory requirements, the Township adopted its first Strategic Asset Management Policy in 2019 and committed to integrating climate change as part of its asset management planning.

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 Township 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 19 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 Township 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 19 - Framework for Climate Change Integration with Risk

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Freezing Rain / Ice Storm	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings	▪ Reduced road, bridge, and culvert conditions, potential for closures ▪ Potential impact to access to facilities or closures
Extreme Temperatures – Cold Wave	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Parks and Land Improvements ▪ Machinery and Equipment	▪ 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	▪ All Services	▪ Potential damage to various municipal assets due to high winds
Intense Rain	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings	▪ Flooding of bridges, 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
Flood – Urban	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Land Improvements	▪ 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
Extreme Temperatures – Heat Wave	Rare to almost certain	▪ Buildings ▪ Land Improvements ▪ Machinery and Equipment	▪ Potential closure/reduce used of outdoor amenities due to high temperatures (reduced levels of service). ▪ Increased strain on indoor cooling systems leading to reduced service life and functionality of components and systems
Windstorm	Rare to almost certain	▪ Buildings ▪ Parks and Land Improvements ▪ Fleet	▪ 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 Township has continually undertaken both operating and capital expenditures necessary to maintain tax and rate funded services, however, the investments made fall short of the required need to meet the proposed levels of services. The Township 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 Township build on the existing asset management practices already in place. The financing strategies presented provide the Township 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 rate revenues for rate-supported assets.

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. Table 20 below provides a summary of the revenues assumed in this analysis for tax-supported assets and rate-supported assets.

Table 20 - Financing Strategy Key Assumptions for Tax and Rate Supported Assets

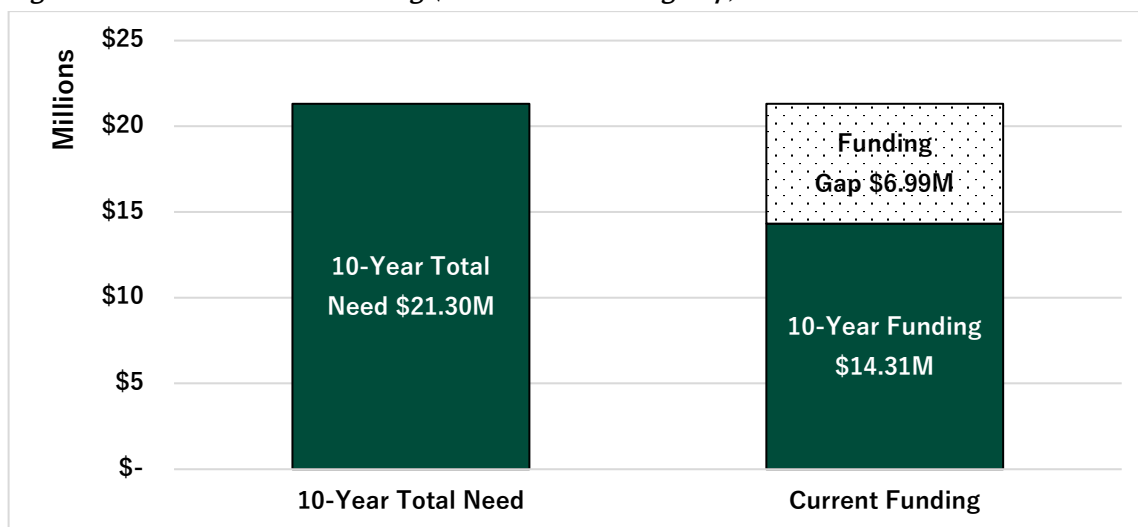
Category	Assumptions	10-Year Revenue
Operations and Maintenance from Taxation/Rates	▪ The service areas provide ongoing maintenance and support activities that preserve the condition or performance of assets and ensures the longevity of assets in line with their design and operational requirements. ▪ These maintenance activities are funded through the Township's regular operating budget and it has been assumed that revenues from taxation/user fees will continue to fully fund existing asset maintenance needs.	\$9.4 million

Category	Assumptions	10-Year Revenue
Capital from Taxation	Existing 2025 capital funding of about \$90,000 is assumed to be the starting point and base case for increasing annual capital contributions.	\$892,300
Grants	Gas tax funding for 2025 is equal to approximately \$185,000. This amount has been assumed in 2025 and 2026. For the remainder of the ten-year period, gas tax funding of about \$88,400 is assumed annually. These values are informed based on the AMO allocations.	\$1.9 million
Capital from Operating (Debt)	Specific capital lifecycle activities that have been funded through the debt payments in the operating budget have been assumed to be capital revenue for the purposes of this financing strategy.	\$1.6 million
Existing Reserves	Existing asset management related reserve funds 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 in the analysis only capture funds available for capital and generally exclude operating reserves.	\$500,000
Total		\$14.3 million

B. BENCHMARK INFRASTRUCTURE FUNDING GAP

To implement sustainable asset management practices the Township 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 used to inform the 2025 AMP or on their design life, versus the case if funding levels were maintained at current levels (see Table 20). Figure 6 indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a notional gap of \$7.0 million exists over the same period.

Figure 6 – 10-Year Need vs Funding (Benchmark Funding Gap)



If the Township were to implement a funding strategy to eliminate the benchmark funding gap, the Township would be required to increase capital contributions on an annual basis by an average of about \$155,330 for 10 years (plus annual inflation). For 2025, the increase would be in addition to the funding sources already identified in Table 20. The yearly revenue requirement is equivalent to about 7.12% of the Township's 2025 tax levy revenues of about \$2.2 million. A detailed table of this strategy can be found in Appendix B.

It is unrealistic to expect the Township to address the total benchmark funding gap in the short-term. Eliminating the gap by 2034 is an aggressive objective - a few reasons include:

- The required capital contributions (to eliminate the gap) will necessitate an increase to property taxes beyond a reasonable measure;
- The Township would need to decrease or limit funding of other key services or initiatives in lieu for 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 Township'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 Township 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.

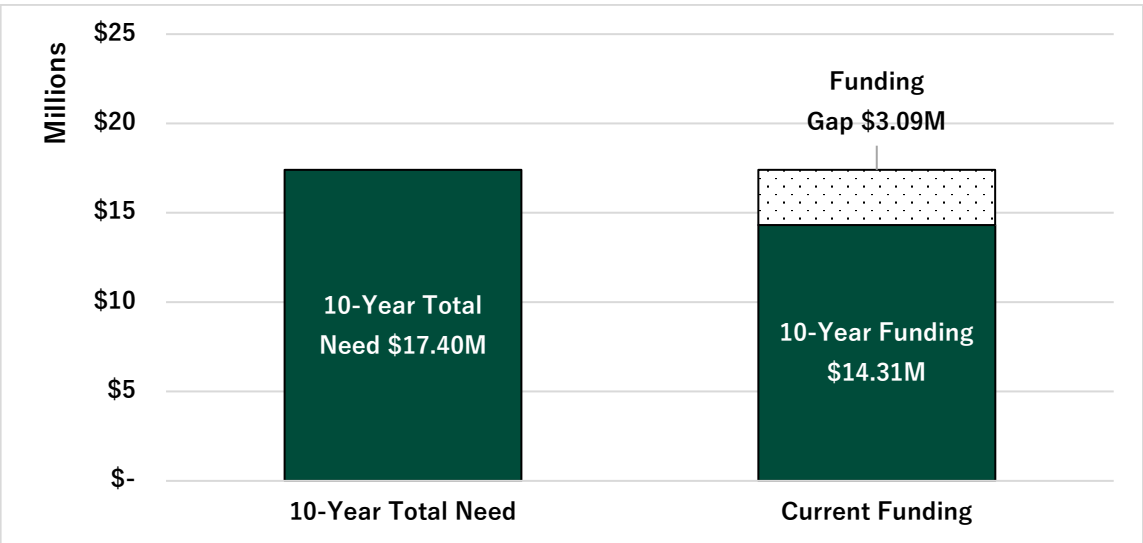
C. PROPOSED LEVEL OF SERVICE INFRASTRUCTURE FUNDING GAP

The 2025 AMP combines the analysis on proposed levels of service developed in Section 3 with the corresponding lifecycle costs in Section 4 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 10-year 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. Figure 7 still indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a funding gap of \$3.1 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 \$7.0 million over the planning period.

In order to fund this \$3.1 million infrastructure funding gap over the 2025-2034 planning period, the Township would be required to increase capital contributions by approximately \$68,650 (3.2% of 2025 tax levy of \$2.2 million) per year in each of the next ten years, plus inflation.

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



Consideration of Fire Hall Expansion

An additional forecast has been compiled to determine the additional need that arises in the event that a Fire Hall Expansion is included in the Township's capital plan.

Since a provision for the replacement of the existing Fire Hall has been included in the benchmark and PLOS funding gaps (detailed above), the figures below reflect the additional costs that are expected to arise in order to complete the expansion. The total estimated costs that relate to the expansion are about \$1.2 million and have been assumed to be debentured under the terms the Township has received in the past (3.54% for 30 years, compounding semi-annually). This assumption highlights the need for further financial strategy discussions to ensure the Fire Hall Expansion can proceed without compromising service delivery or fiscal sustainability. All revenue assumptions have been maintained from the PLOS Funding Gap presented in above.

With these assumptions, the costs required to fund the lifecycle costs increase by approximately \$64,400 per year. This increases the PLOS Funding Gap of \$3.1 to about \$3.7 million. In order to fund this \$3.7 million infrastructure funding gap over the 2025-2034 planning period, the Township would be required to increase capital contributions by approximately \$81,500 (3.7% of 2025 tax levy of \$2.2 million) per year in each of the next ten years, plus inflation.

D. FINANCING STRATEGIES AND THE RELATIONSHIP TO THE PROPOSED LEVEL OF SERVICE

The information illustrated previously emphasizes the need for the Township to continue the utilization of these funding programs to meet service levels over the long-term. However, as the municipal asset management program further advances, it can be expected that the cost analysis be improved to better reflect asset risks, levels of service and a better understanding of the condition of the infrastructure. Overall, the funding allocations in Figure 7 are required to ensure the Township delivers the proposed levels of service identified in Section 3 of the AMP for its infrastructure assets which represent the lifecycle activities outlined in Section 4. Should an alternative strategy be adopted 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 21 outlines several approaches to closing the funding gap.

Table 21 - Approaches to Closing the Infrastructure Gap

Category	Description
Improved Data Quality	As the Township 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 Township 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 Township'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.

6. MONITORING AND IMPROVEMENT PLAN

The major premise of a comprehensive asset management plan is that a Township 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 Township'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 Township's current maturity and to establish a target maturity that can be reasonably 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 8. The elements in each maturity category are outlined in Table 22.

Table 22 – Asset Management Maturity Assessment Elements

Category	AM Element
Understanding and Defining the Requirements	Analysing the Strategic Initiatives (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 Works Planning
	Asset Financial Planning and Management

Category	AM Element
	AM Plans (for the Asset Portfolio Assets)
Asset Management Enablers	AM People and Leaders
	Asset Data and Information
	Asset Information Management Systems (AIMS)
	AM Process Management
	Outsourcing and Procurement
	Continual Improvement

Each element is assessed independently and assigned a score based on criteria outlined in Table 23 which scores each criteria between 0 and 100 for each element. In general, a Township 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 Township 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 23 – Maturity Assessment Scoring Scale

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

Figure 8 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 Township;
- Enhancement in understanding the Township’s asset management practices and general alignment with other key planning documents like the RNS and OSIM reports; and
- General understanding of the Township’s assets and the data available through consolidation of various data sources into the AMP financial model.

Figure 8 – 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 Township’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.

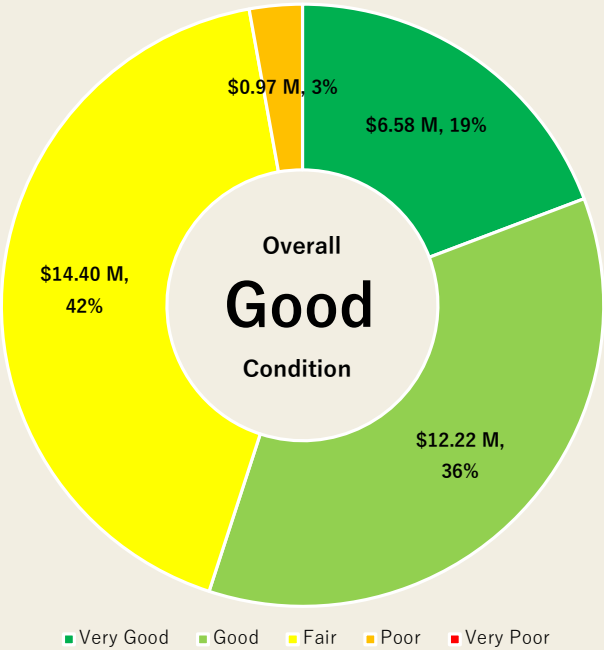
Table 24 – Improvement Plan Initiatives

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 Township'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 Township expects to continue to rely on grant funding for capital projects.

APPENDIX A

STATE OF LOCAL INFRASTRUCTURE

Roads



Current
Replacement Value
\$34.2
Million

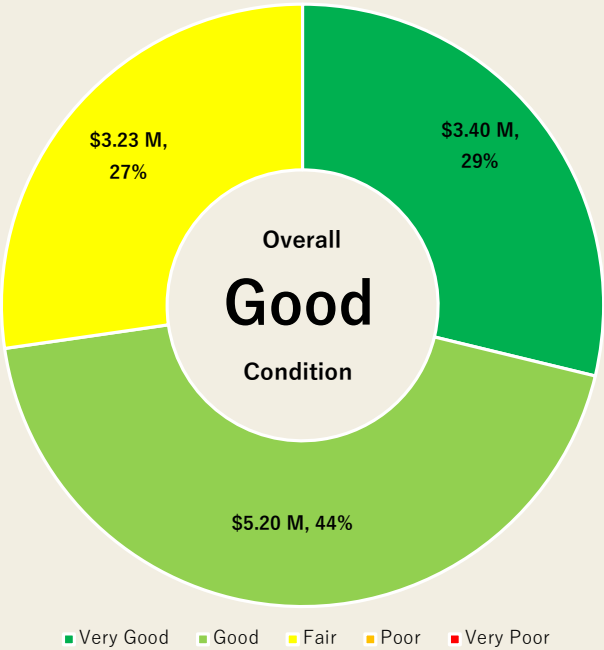
Asset Inventory
65
KM

**Data Confidence
& Reliability**

Level 4 (Reliable)

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

Buildings



Current
\$11.8
Million

Asset Inventory
13
Facilities

Average Remaining
Useful Life
8
Years

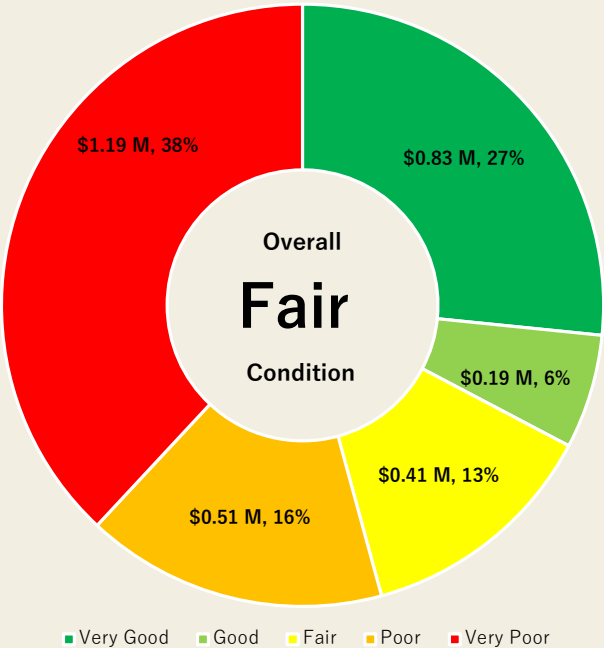
Estimated
Useful Life
20-40
Years

**Data Confidence
& Reliability**

Level 4 (Reliable)

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

Machinery and Equipment



Current
Replacement Value
\$3.1
Million

Asset Inventory
24
Units

Data Confidence
& Reliability

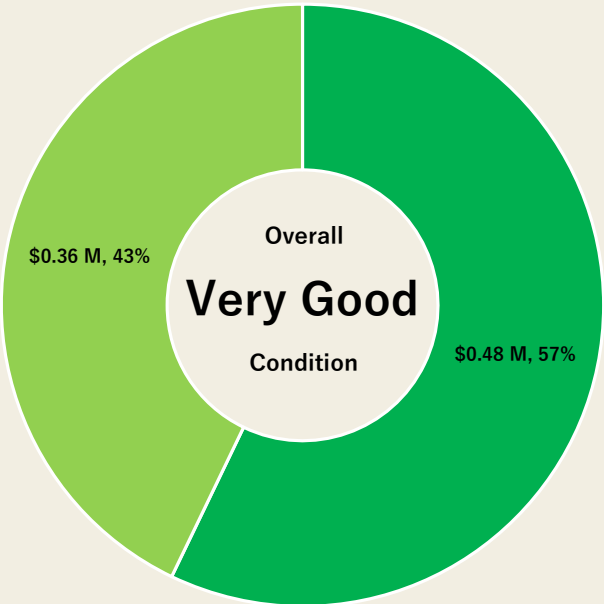
Level 4 (Reliable)

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

Average
Remaining
Useful Life
8
Years

Estimated
Useful Life
10-40
Years

Bridges and Culverts



■ Very Good ■ Good ■ Fair ■ Poor ■ Very Poor

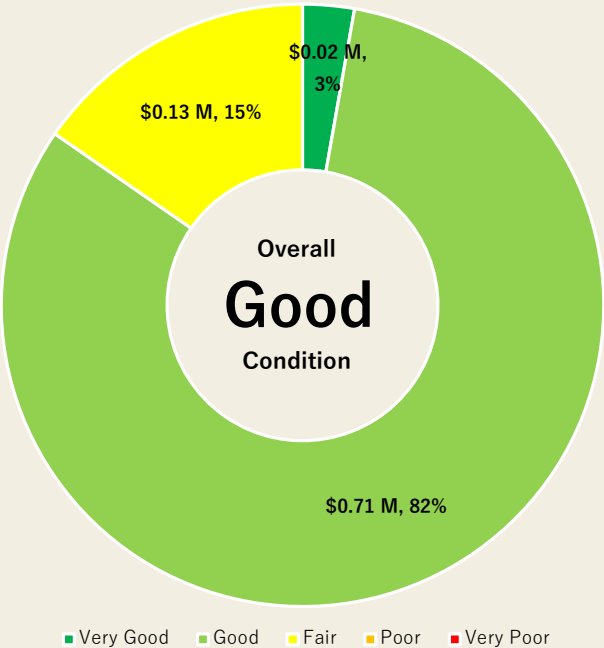


**Data Confidence
& Reliability**

Level 4 (Reliable)

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

Parks and Land Improvements



Current Replacement Value
\$0.9
Million

Asset Inventory
Pooled

Average Remaining Useful Life
15
Years

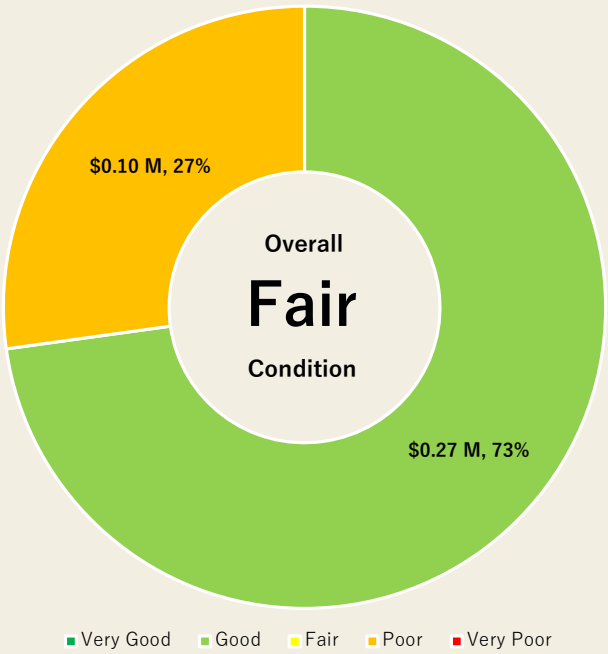
Estimated Useful Life
12-40
Years

Data Confidence & Reliability

Level 4 (Reliable)

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

Fleet



Current
Replacement Value
\$0.4
Million

Asset Inventory
4
Vehicles

Data Confidence
& Reliability

Level 4 (Reliable)

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

Average Remaining
Useful Life
2

Estimated
Useful Life
10-25
Years

APPENDIX B

FINANCING STRATEGY

Table 1
Front of Yonge Township
2024 Asset Management Plan
Base Scenario: Close Cumulative Deficit by 2034

Year	Lifecycle Costs						Forecast of Revenues								Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Renewal (Roads)	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Yearly Increase in Tax Funding (%)	Canada Community Building Fund CCBF (formerly Gas Tax)	Capital through Operating (Debt)	Other Grants (OCIF)	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 89,230			\$ 84,987	\$ 143,193	\$ 100,000	\$ 506,925	\$ 1,867,408	\$ (262,969)	\$ (262,969)
2026	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 244,436	\$ 155,206	174%	\$ 84,987	\$ 163,272	\$ 100,000	\$ -	\$ 1,535,767	\$ (594,610)	\$ (857,579)
2027	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 399,642	\$ 155,206	63%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,694,354	\$ (436,023)	\$ (1,293,602)
2028	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 554,848	\$ 155,206	39%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,849,560	\$ (280,817)	\$ (1,574,420)
2029	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 710,053	\$ 155,206	28%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,004,766	\$ (125,611)	\$ (1,700,031)
2030	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 865,259	\$ 155,206	22%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,159,972	\$ 29,594	\$ (1,670,436)
2031	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 1,020,465	\$ 155,206	18%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,315,178	\$ 184,800	\$ (1,485,636)
2032	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 1,175,671	\$ 155,206	15%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,470,384	\$ 340,006	\$ (1,145,630)
2033	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 1,330,877	\$ 155,206	13%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,625,589	\$ 495,212	\$ (650,418)
2034	\$ 25,000	\$ 943,073	\$ 925,574	\$ 213,930	\$ 22,800	\$ 2,130,377	\$ 943,073	\$ 1,486,083	\$ 155,206	12%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,780,795	\$ 650,418	\$ -
Total	\$ 250,000	\$ 9,430,730	\$ 9,255,743	\$ 2,139,300	\$ 228,000	\$ 21,303,773	\$ 9,430,730	\$ 7,876,563			\$ 876,918	\$ 1,612,637	\$ 1,000,000	\$ 506,925	\$ 21,303,773		

Table 2
Front of Yonge Township
2024 Asset Management Plan
PLOS Scenario: Close Cumulative Deficit by 2034

Year	Lifecycle Costs						Forecast of Revenues								Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Renewal (Roads)	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Yearly Increase in Tax Funding (%)	Canada Community Building Fund CCBF (formerly Gas Tax)	Capital through Operating (Debt)	Other Grants (OCIF)	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 89,230			\$ 84,987	\$ 143,193	\$ 100,000	\$ 506,925	\$ 1,867,408	\$ 127,085	\$ 127,085
2026	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 157,757	\$ 68,527	77%	\$ 84,987	\$ 163,272	\$ 100,000	\$ -	\$ 1,449,089	\$ (291,234)	\$ (164,150)
2027	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 226,284	\$ 68,527	43%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,520,997	\$ (219,326)	\$ (383,476)
2028	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 294,811	\$ 68,527	30%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,589,524	\$ (150,799)	\$ (534,275)
2029	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 363,339	\$ 68,527	23%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,658,051	\$ (82,272)	\$ (616,547)
2030	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 431,866	\$ 68,527	19%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,726,578	\$ (13,745)	\$ (630,292)
2031	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 500,393	\$ 68,527	16%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,795,105	\$ 54,782	\$ (575,510)
2032	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 568,920	\$ 68,527	14%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,863,633	\$ 123,309	\$ (452,200)
2033	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 637,447	\$ 68,527	12%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 1,932,160	\$ 191,837	\$ (260,364)
2034	\$ 25,000	\$ 943,073	\$ 556,913	\$ 192,537	\$ 22,800	\$ 1,740,323	\$ 943,073	\$ 705,974	\$ 68,527	11%	\$ 88,368	\$ 163,272	\$ 100,000	\$ -	\$ 2,000,687	\$ 260,364	\$ 0
Total	\$ 250,000	\$ 9,430,730	\$ 5,569,131	\$ 1,925,370	\$ 228,000	\$ 17,403,231	\$ 9,430,730	\$ 3,976,022			\$ 876,918	\$ 1,612,637	\$ 1,000,000	\$ 506,925	\$ 17,403,231		