



Town of Innisfil 2025 Asset Management Plan

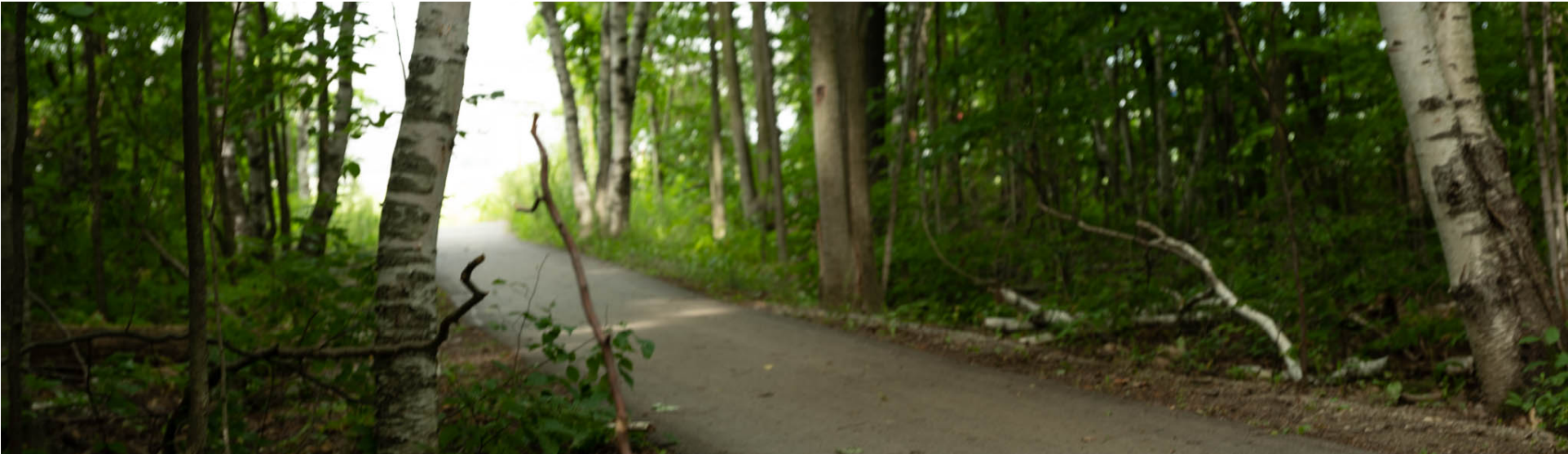


Version History

Version	Date	Description
1.0	June 8, 2022	Initial release of core assets content in compliance with 2022 O. Reg. 588/17 requirements.
1.1	June 26, 2024	Updated to include non-core assets content in compliance with 2024 O. Reg. 588/17 requirements.
2.0	June 25, 2025	Updated and consolidated to include all assets, proposed levels of service, and financial analysis in compliance with 2025 O. Reg. 588/17 requirements.

Public Accessibility

The Town is dedicated to ensuring public transparency and fostering open communication. In alignment with Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure (O. Reg. 588/17), the Town's Asset Management Plan is available on the Town of Innisfil's website. Should you require this document in an alternative format, please contact communications@innisfil.ca.



Rotary Trail

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1.0 Executive Summary

The Town of Innisfil (the “Town”) owns and manages a large range of assets that support the delivery of municipal services. These assets must be managed efficiently and effectively to ensure that they continue to meet the current and future needs of the community. The **2025 Asset Management Plan (AMP)** has been updated to include all Town assets within one document, providing a complete overview of the Town's infrastructure and resources. This holistic view facilitates better strategic planning and decision-making and highlights interdependencies between asset categories. This enables Town staff to determine resource needs and allocation efficiencies across various departments, optimizing collaboration, budgets and investment decisions.

The Town adheres to Ontario Regulation 588/17 (O. Reg. 588) by preparing an AMP that meets 2025 regulatory requirements, including proposed levels of service, lifecycle activities, and cost analysis for all asset categories. Additionally, the AMP aligns with the Town's Strategic Plan 2030 organized around the pillars of Grow, Sustain, Connect, and Serve, ensuring infrastructure support for transportation networks, stormwater systems, community spaces, and municipal fleet contributes to sustainable growth and service delivery.

Corporate Asset Summary

The Town oversees approximately \$1.5 billion in infrastructure assets, essential for delivering effective municipal services. This portfolio includes, transportation, stormwater, community spaces, and municipal fleet, collectively ensuring connectivity, environmental stewardship, and operational efficiency. To maintain the quality and performance of these assets, regular assessments are conducted to monitor their condition and average age. This information enables informed decision-making regarding lifecycle activities and the financial resources required to achieve proposed level of service targets.

Table 1-1 provides an overview of the Town's asset inventory and Current Replacement Value (CRV) for each asset category. Overall, the condition of most assets fall within the fair to good range. As a result, the Town's strategy will focus on maintaining the current condition of these assets.



Aerial photograph of Innisfil subdivision

Table 1-1: Inventory and Current Replacement Value (CRV)

Asset Category	Asset Type	Quantity	CRV (\$M)
Transportation	Roads	783.7 km	\$1,003.1
	Structures	45	
	Pedestrian Pathways	136.1 km	
Stormwater	Mains	97.1 km	\$129.7
	Laterals	4505	
	Maintenance Holes	1767	
	Catch Basins	3106	
	Oil and Grit Separator Units	7	
	Low Impact Developments	11	
	Stormwater Management Ponds	43	
Community Spaces	Parks	87 (166.7 ha)	\$336.0
	Amenities	99	
	Facilities	52	
Municipal Fleet	Vehicles	111	\$47.5
	Equipment	59	
	Trailers and Attachments	45	
		Total CRV	\$1,516.3

Note: CRV data is from 2022/2023 and has been inflated to calculate 2025 values.

Financial Investment Summary

Table 1-2 details that the Town's forecasted investment in asset management over the next 10 years will total \$917.5 million dollars. This investment supports the acquisition, operation, maintenance, and renewal of Town assets to ensure they continue to provide value and support the delivery of services within the community.

Table 1-2: 10-Year Financial Summary (\$ Millions)

Budget Category	10-Year Total
Operating Expenses	201.0
Capital Expenditures	716.5
Total Forecast	917.5

The data and figures presented in this plan have been compiled using the best available information at the time of development. All financial figures within the plan are estimates and may change over time in response to evolving requirements, shifting priorities, and changing economic conditions.

Supporting background information and reports used in creating the Asset Management Plan are accessible on the Town of Innisfil's website or can be obtained upon request. Additional resources such as budgets, master planning documents, and condition assessments are also available to provide further insight.



Town Campus

2.0 Organization of the Document

The Town's AMP is structured to comply with O. Reg. 588/17 and adhere to industry best practices. Each section is designed to clearly document key data and facilitate understanding through a logical information flow and the inclusion of visual aids, such as charts, graphs, and tables, enhancing overall readability and comprehension.

Section 1 - Executive Summary: Provides a concise overview of the entire AMP, highlighting key findings, and strategic goals.

Section 2 - Organization of the Document: This section details the structure of the Town's AMP, including a high-level overview of each section.

Section 3 - Frequently Asked Questions: Addresses common terms and acronyms found throughout the AMP, enhancing clarity and stakeholder understanding.

Section 4 - Introduction: Offers context for the AMP, outlining assets in scope, and methodologies for essential information including state of infrastructure, levels of service, and lifecycle management.

Section 5, 6, 7, and 8 - Asset Categories: Building on the methodologies outlined in Section 4, these sections delve into specific asset categories highlighting their current state, service levels, and tailored lifecycle management strategies.

Section 9 - Growth and Climate Demands: Addresses the impact of population growth and climate change on assets, preparing strategies to meet these evolving demands across all categories.

Section 10 - Risk Management: Identifies general risks associated with the asset categories and provides a coordinated approach to mitigation strategies to ensure continued service delivery.

Section 11 - Financial Summary: Presents an overview of the budgetary and funding requirements across all asset categories, establishing a financial plan for sustainable management.

Section 12 - Monitoring and Improvement: Describes the ongoing monitoring and evaluation processes that apply to all asset categories, aiming at continuous improvement in asset management strategies.



Throughout the AMP, staff have identified opportunities for advancing the Town's asset management program maturity. Each opportunity is highlighted in the plan with a light bulb icon and is sequentially numbered (e.g. **O-1**). A full list of these and other opportunities is found in Section 12.

3.0 Frequently Asked Questions

What is an asset?

An asset is an item of property owned or managed by the Town of Innisfil that is deemed to have value. This encompasses a wide range of items such as facilities, roads, bridges, and parks.

What is an asset category?

An asset category refers to a set of assets that have similar characteristics or purpose (e.g. the “Transportation” asset category encompasses roads, structures, sidewalks and trails).

What is the objective of asset management?

The objective of asset management is to intervene at strategic points in an asset’s lifecycle to extend the expected useful life, and thereby maintain its performance. When maintenance activities are scheduled strategically it helps decrease costs by avoiding expensive unplanned or excessive maintenance.

What is an Asset Management Plan?

An Asset Management Plan (AMP) is a strategic document that provides summary level information about the quantity, quality, average age, and replacement value for a particular asset category. It identifies the levels of service to be delivered by the assets and the lifecycle activities required to maintain the assets in a condition that will adequately support this deliverable. Finally, the plan provides a summary of the required investment over the next 10 years.

How does the Town of Innisfil include community feedback in the Plan?

The Town provides opportunities for community engagement by actively engaging residents through public consultations, surveys, and open forums, ensuring public priorities and concerns are reflected in discussions with Council and staff. This information informs the development of various documents including master plans, budgets, and the AMP.

How frequently is the AMP updated?

The Town will update its AMP at least every 5 years, in compliance with O. Reg. 588/17. Additionally, an annual review of the municipalities asset management progress shall be submitted to Council on or before July 1st of each year. The annual review must address the municipalities progress in implementing its AMP, any factors impeding success, and a strategy to address these factors.

Common Acronyms

AMP	Asset Management Plan
ARUL	Average Remaining Useful Life
CRV	Current Replacement Value
DC’s	Development Charges
EUL	Estimated Useful Life
GIS	Geographical Information System
LOS	Level of Service
O&M	Operations and Maintenance
TCA	Tangible Capital Assets

4.0 Introduction

The Asset Management Plan (AMP) establishes a strategic framework for the effective management and stewardship of the Town's infrastructure assets. It serves as a platform to integrate asset management practices across various departments, promoting coordinated efforts to achieve strategic objectives and prepare for future challenges. The AMP's primary objectives include ensuring sustainable service delivery, enhancing asset performance, and optimizing investment decisions. It supports informed decision-making, ensures regulatory compliance, and aligns asset management practices with the Town's long-term planning and fiscal policies. Furthermore, the plan enhances transparency and accountability in infrastructure maintenance and development.

4.1 Scope

Asset categories included in the scope of the 2025 AMP are detailed in Table 4-1, including: transportation, stormwater community spaces, and municipal fleet. Within these categories, the AMP covers:

- Assessment of the current state of assets.
- Defined levels of service to meet community needs.
- Lifecycle management strategies that maintain service delivery.
- Identification and management of risks.
- Challenges and opportunities presented from growth and climate demands.
- Financial planning for sustainable asset management.
- Identified opportunities to ensure continuous improvement of the Town's asset management program and AMP.

Table 4-1: Assets In-Scope

Category	Type	Sub-Type
Transportation	Roads	Paved, Unpaved
	Structures	Vehicle Bridges, Pedestrian Bridges, Structural Culverts
	Pedestrian Pathways	Sidewalks, Trails
Stormwater	Collection and Conveyance	Mains, Laterals, Catch Basins, Maintenance Holes
	Treatment and Control	Oil and Grit Separator Units, Low Impact Developments, Stormwater Management Ponds
Community Spaces	Parks	In-Land, Lakeside
	Amenities	Sports Fields and Courts, Recreation Structures
	Facilities	Municipal Offices, Community and Culture, Emergency Response, Accessory Structures
Municipal Fleet	Vehicles	Light and Medium Duty, heavy duty, Fire Apparatus
	Equipment	Heavy Equipment, Sidewalk, Recreation and Turf Equipment, Freight and Elevation
	Trailers and Attachments	Trailers and Trailer Mounted Equipment, Miscellaneous Attachments

4.2 Regulatory and Strategic Alignment

In 2015, the Ontario government introduced 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 and protection of the environment. The Act also serves to incorporate design excellence into infrastructure planning.

Under this Act, the Ontario government introduced Ontario Regulation 588/17 (O. Reg. 588/17), mandating that municipalities prepare an Asset Management Policy and an Asset Management Plan (AMP) concerning their core and non-core municipal infrastructure assets. The Town's AMP has been structured to fulfill the 2025 regulatory requirements of O. Reg. 588/17, which include documenting proposed levels of service for each asset category and identifying the lifecycle activities and annual costs necessary to achieve these goals.

Following the 2025 approval, an annual progress report must be submitted to Council identifying the Town's progress in implementing the AMP, and any factors impeding success. Improvements in asset management, including opportunities documented in Section 12, will be included in the annual report to monitor this progress. The AMP and the Asset Management Policy will be updated every 5 years to ensure these documents remain current and reliable.

The Town's Strategic Plan 2030 provides direction on the actions and outcomes the Town is working to achieve in asset management planning. The AMP supports the Town's strategic priorities through fulfillment of the following objectives:

- Improve our stormwater infrastructure and monitoring programs to continue to protect Innisfil's precious water supply and environment, especially Lake Simcoe.
- Develop a long-term financial plan to guide future policy and budget decisions so that we maintain the Town's financial health and stability.
- Implement a comprehensive asset management program so that we know the condition of our infrastructure assets and can prioritize investments to meet the needs of tomorrow.

Furthermore, asset management planning supports the principles of the strategy through continuous improvement in service delivery and ensuring safe and reliable infrastructure.

2019

Asset Management Policy approved by Council.

2022

AMPs for core infrastructure assets approved by Council.

2024

AMPs for non-core infrastructure assets approved by Council.

2024

All AMPs updated to include proposed levels of service.

2026 +

Annual report provided to Council. AMPs and Policy reviewed and updated every 5 years.

4.3 State of Infrastructure

The State of Infrastructure section provides a comprehensive summary of the current conditions, performance, and essential characteristics of municipal infrastructure assets. This section informs strategic decision-making and planning to ensure sustainable asset management and service delivery. Each asset category includes an in-depth overview of the following information:

- Inventory
- Condition
- Age and Useful Life
- Current Replacement Value (CRV)

Inventory

Asset inventory details the asset types and sub-types within each asset category that are owned or managed by the Town of Innisfil. The primary source of inventory data is generated by the Town's Geographic Information System (GIS) database and supplemented by local departmental records. To enhance data reliability, it is recommended that the Town acquire Enterprise Asset Management Software (EAMS), which can integrate GIS and TCA data, unifying all records. Further, expanding asset inventory is recommended to include currently out-of-scope items, such as guide rails, curbs, parking lots, bike lanes, street and park furniture, traffic and safety assets, and natural assets like trees, ditches, and water courses. Town staff recognize this as opportunities for improvement, with implementation timelines and details outlined in Section 12.



O-1 Purchase and implement Enterprise Asset Management Software (EAMS) integrated with GIS and Tangible Capital Assets (TCA).

O-2 Expand inventory to include assets currently out-of-scope.

Condition

Asset conditions evaluate how well each asset meets its intended function and identifies any existing deficiencies, providing a clear picture of asset performance and potential areas of concern. Asset condition assessments are conducted through a combination of regular inspections by Town staff, utilizing direct measurement against technical standards, and studies/reports completed by third-party consultants. These assessments provide a comprehensive understanding of the current state of Town assets.

Most assets are evaluated using a condition index, assigning numerical values for maintenance planning. General grading criteria has been established for all assets based on a 5-point condition index, using descriptions provided by the Canadian Infrastructure Report Card. As detailed in table 4-2, assets in good to very good condition are generally recently acquired or rehabilitated and undergo minimal or routine maintenance activities to maintain condition. Assets in fair condition have reached mid-service life range, and function as intended with signs of age or stress requiring maintenance activities and minor repairs. Assets in poor condition are still functioning but are nearing the end of their service life, requiring rehabilitation or reconstruction activities. Very poor assets are generally at the end of the service life and are no longer meeting the functional service requirements, requiring replacement or reconstruction to restore usability.

Assets that follow their own condition indices include structure assets (3-point grading system) and municipal fleet assets which conduct replacement assessments to establish condition grading based on weighted components. Where there is an industry standard for condition rating, the standard is referenced within the state of infrastructure section for that asset type.

Table 4-2: Condition Index - General Grading Criteria

Condition	Description
Very Good	Fit for the future. Well maintained, good condition, new or recently rehabilitated.
Good	Adequate for now. Acceptable, generally approaching mid stage of expected service life.
Fair	Requires attention. Signs of deterioration, some elements exhibit deficiencies.
Poor	At risk of affecting service. Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration.
Very Poor	Unfit for sustained service. Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unsafe.

Age and Useful Life

The asset age and useful life details the current age, Estimated Useful Life (EUL) and Average Remaining Useful Life (ARUL) of the assets within each category. Section 3150 of the Public Sector Accounting Board (PSAB) Handbook details the reporting requirements municipalities must adhere to regarding the age and useful life of their assets. Asset age is documented at the time of acquisition within the Tangible Capital Assets (TCA) file.

Accurate age and useful life data are crucial for efficient asset management. This data enables predictive maintenance through the scheduling of maintenance activities based on the EUL, significantly reducing unexpected failures and downtimes. This approach facilitates a shift from reactive to proactive maintenance strategies, enhancing asset reliability. EUL is defined by the Town's TCA policy and represents the period during which an asset is expected to provide safe and reliable service. ARUL indicates the time remaining before an asset should be replaced, calculated by subtracting the average age from the EUL for each asset sub-type.

Current Replacement Value

Current Replacement Value (CRV) estimates the financial resources required to replace each asset, facilitating effective budgeting and investment planning for asset renewal. CRV is crucial for long-term financial planning as it identifies the current costs of future asset replacement, aligning long-term financial strategies with operational needs.

This information has become increasingly significant, as the Ministry of Infrastructure uses CRV data to determine Ontario Community Infrastructure Funding (OCIF) allocations. A complete understanding of CRV not only supports funding efficiency but also enhances decision-making processes, ensuring that asset management strategies sustainably meet the Town's evolving needs.

CRV estimates are derived from various sources, depending on the asset category, including:

- **Development Charges (DC) Background Study:** Assess future growth impacts on infrastructure needs, helping predict future funding requirements.
- **Master plans:** Offer strategic insights and long-term guidance on infrastructure development and renewal.
- **Condition assessments:** Provide data on the current state and expected lifespan of assets, which is vital for accurate CRV calculations.
- **Current Manufacturer's Suggested Retail Price (MSRP):** Provide up-to-date market pricing data for calculating potential replacement costs.

4.4 Levels of Service

O. Reg. 588/17 mandates that municipalities establish and report on current and proposed Levels of Service (LOS) for all asset categories. LOS describes the quantity and performance of services that assets should support during their useful life and provide a direct link between the Town's strategic objectives, the public's service expectations and the measured performance of the delivered service.

LOS are organized into two categories:

- **Community LOS:** are qualitative descriptions presented in non-technical terms or images that help residents understand the quality of services they receive and how modifications might impact their experience.
- **Technical LOS:** are quantitative metrics that describe the LOS provided by the asset, for example, the percentage of bridges in the municipality with loading or dimensional restrictions. Technical LOS are critical for translating Community LOS into quantitative performance measures, facilitating a data-driven approach to managing assets and delivering services.

O. Reg. 588/17 identifies community and technical LOS for core infrastructure assets that must be reported on in the AMP. The regulation provides municipalities full discretion in defining LOS for non-core asset categories. The Town has chosen to adopt a similar approach for non-core assets to maintain service standards across all asset categories.

Current and Proposed LOS

While the current LOS reflects existing service performance, the proposed LOS reflects the future targets that the Town plans to deliver over the next 10 years. Setting SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) targets enables the Town to define required lifecycle activities, anticipate financial investments, and apply appropriate risk management strategies to address future service needs.

The proposed LOS are informed by a review of three LOS scenarios, each exploring options for modifying or maintaining services over the next 10 years. Each scenario presents its own benefits and challenges and incorporate best practices as recommended by Asset Management Ontario (AMONTario):

- **Scenario 1:** Increase service levels over the next decade to achieve standards aligned with industry best practices. This scenario would require significant increases in both capital and operating funds.
- **Scenario 2:** Decrease service levels over the next decade to align with existing budget constraints. This scenario minimizes costs but may result in reduced service quality.
- **Scenario 3:** Maintain current service levels over the next decade while incorporating recommended lifecycle activities that may not currently be in-scope. This scenario requires moderate investment, balancing service preservation with fiscal responsibility.

Recommended Scenario

Scenario 3 is recommended as it offers a balanced approach for maintaining asset conditions without overextending budget requirements. Following the acquisition of asset management software, the Town will conduct a detailed scenario analysis to more accurately assess the impacts of changes to LOS on performance, risk, and lifecycle costs.

4.5 Lifecycle Management

Municipal assets progress through a series of stages known as the asset lifecycle. Managing this lifecycle is crucial for delivering consistent and reliable service and controlling costs over the life of the asset. A fundamental principle of lifecycle management is that maintaining an asset in good condition is significantly more cost-effective than reconstructing an asset in poor condition. Proactive management of each lifecycle stage not only optimizes asset performance but also extends its useful life, ultimately reducing long-term expenses and ensuring continued service reliability.

Lifecycle stages include:

- Acquisition
- Operations and Maintenance (O&M)
- Renewal (Rehabilitation and Reconstruction)
- Asset Disposal

Acquisition: includes acquiring new assets or upgrading existing ones to enhance service levels, expand capabilities, or meet evolving service needs. Acquisition occurs by either assuming ownership from developers within a new subdivision, or through planned capital projects to construct, upgrade, or purchase new assets.

Operations and Maintenance (O&M): are the ongoing activities that ensure assets function efficiently and effectively throughout their lifecycle. "Operations" are the daily activities involved in using assets to deliver intended services, while "Maintenance" involves routine inspections, repairs, and upkeep to prevent deterioration, extend asset life, and uphold service quality and safety standards. O&M activities begin once the assets are operational, including regular maintenance and minor repairs. Assets spend most of their service life in the O&M stage requiring regular maintenance to ensure they remain in good working condition. O&M activities such as grass cutting and preparing fleet for seasonal use are funded through the Town's Operating Budget.

Renewal: includes rehabilitation and reconstruction activities to restore or enhance asset condition and functionality. "Rehabilitation" extends the asset's useful life, enhances performance, and ensures continued compliance with service standards, while "Reconstruction" involves rebuilding or significantly restructuring an asset to improve performance. Rehabilitation and reconstruction activities are primarily funded through the Town's Capital Budget. Staff utilize condition and age data to determine when assets require these activities and are scheduled proactively to prevent unplanned asset failures.

Asset Disposal: are the activities to decommission, remove, and dispose of assets that have reached the end of their useful life or are no longer functional. Asset disposal activities ensure that outdated or inefficient assets do not hinder service delivery or incur unnecessary costs. Infrastructure assets such as roads, bridges, and stormwater systems are rarely disposed of, and instead are rehabilitated or reconstructed to renew condition, returning to the O&M stage. Some assets, such as light and medium duty vehicles, follow a replacement schedule to ensure the timely replacement of important essential transportation and equipment. Assets such as playgrounds and other recreation structures are removed and replaced with a new structure at the end of their useful life to ensure the safe and accessible use of community spaces.

Lifecycle Activities

O. Reg. 588/17 mandates municipalities to conduct comprehensive lifecycle assessments of their assets to identify necessary activities for maintaining service levels. Determination of the specific activity to be taken in each lifecycle stage is based on careful consideration of the asset condition, remaining life, and available budget. The timing of these actions also considers competing priorities and related project activities to minimize redundant work. This approach ensures that the Town engages in the most appropriate and cost-effective activities to optimize asset lifecycles.

Current lifecycle strategies are informed by subject matter experts and detailed studies and reports, which assess asset conditions and necessary lifecycle activities. These evaluations provide insights into infrastructure needs, specifying the timing and projected costs for interventions. Some activities are integrated into the Town's regular O&M schedule for routine upkeep and extending asset life. However, some required actions extend beyond the usual operating budget's scope and demand additional funding allocations to address them adequately.



Construction of a concrete sidewalk

Current Activities

These are the activities that staff are performing today and are specifically tailored for each asset type.

Recommended Activities

These are the activities that staff recommend to extend or enhance asset lifecycle. These activities require additional funding and resources.

Impacts

These are the expected outcomes from performing current and recommended activities.



Maintain current condition through O&M activities such as routine inspections, cleaning and upkeep, and minor repairs.



Improve condition and/or extend useful life through maintenance and renewal activities such as enhancements, upgrades and rehabilitation.

5.0 Transportation

5.1 Transportation Overview

Transportation assets form a major component of the Town's core infrastructure, providing safe, accessible, and efficient connectivity and mobility for residents, businesses and visitors to the community. Assets included in the transportation category include:

- Roads (paved and unpaved)
- Structures (vehicle bridges, pedestrian bridges, and structural culverts)
- Pedestrian Pathways (sidewalks and trails)

Transportation assets have a total replacement value of \$1.0 billion.

Table 5-1: Assets In-Scope

Type	Sub-Type	Quantity
Roads	Paved and Unpaved	783.7 lane km
Structures	Vehicle Bridges, Pedestrian Bridges, and Structural Culverts	45
Pedestrian Pathways	Sidewalks and Trails	136.1 km



Aerial photograph of Innisfil Beach Road

5.2 Roads

Road assets form a crucial component of the Town's infrastructure, supporting the movement of goods and people both within the community and to neighbouring areas. Roads are organized into two sub-types:

- **Paved Roads** - are constructed with either a High Class Bituminous (HCB) or a Low Class Bituminous (LCB) asphalt surface.
- **Unpaved Roads** - are constructed with a groomed gravel surface.

Roads are further organized by the following classifications:

- **Arterial roads** - facilitate efficient, high-capacity travel and connect the Town to external regions. All the Town's arterial roads are comprised of a HCB surface.
- **Collector roads** - gather traffic from local roads and channel it into arterial roads and are designed for moderate traffic volumes. The Town's collector roads are comprised of either a HCB, LCB, or gravel surface.
- **Local roads** - provide direct access to residences and businesses, supporting the community's day-to-day activities and are characterized by low-speed limits and fewer lanes for safety. The Town's local roads are comprised of either a HCB, LCB or gravel surface.

5.2.1 State of Infrastructure

Inventory

Road asset inventory was obtained from data in the Town's GIS database and cross-referenced with the latest Road Needs Study (RNS). Table 5-2 provides an overview of road inventory by asset type, including road classification and road surface.

Table 5-2: Inventory of Road Assets

Sub-Type	Road Classification	Road Surface	Quantity (Lane km)
Paved	Arterial	HCB	7.9
	Collector	HCB	225.5
		LCB	6.1
	Local	HCB	414.8
		LCB	67.1
Unpaved	Collector	Gravel	2.5
	Local	Gravel	59.8
Total			783.7

Condition

Condition data of road assets is gathered through the latest RNS in accordance with the Ministry of Transportation (MTO) Inventory Manual for Municipal Roads. The condition of paved roads is evaluated using a Pavement Condition Index (PCI) based on the MTO SP-024 - Manual for Condition Rating for Flexible Pavements, which provides a numerical rating from 0 to 100, with 100 representing a brand-new road. PCI values help prioritize maintenance and rehabilitation efforts and enable Town staff to assess the effectiveness of these activities overtime. PCI values are detailed in Table 5-3. Condition values for road assets are detailed in Table 5-4 and Figure 5-1. Paved roads have an average PCI of 73.9 (Good) and unpaved roads have an average PCI of 78.0 (Good).

The current process for assessing unpaved (i.e. gravel) roads relies on PCI-equivalent measures, which may not be entirely suitable due to the non-uniform surface characteristics of these roads.

Town staff have recognized the need for an improved methodology that incorporates Average Annual Daily Traffic (AADT), which analyzes the number of vehicles passing a specific point on a road over a 24-hour period, averaged annually. This metric helps municipalities determine road design and maintenance needs by providing an overall picture of traffic volume and patterns. This will enable more informed decision-making regarding lifecycle activities and establish levels of service targets that better align with use and volume. Implementation timelines and details are outlined in Section 12.



O-3 Refine PCI targets through an evaluation of AADT counts and specific service needs for use and volume.

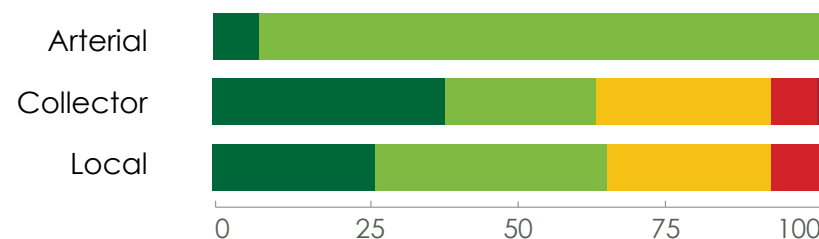
Table 5-3: Pavement Condition Index (PCI)

PCI	Condition Grade
>=85	Very Good
70-85	Good
40-70	Fair
25-40	Poor
<25	Very Poor

Table 5-4: Condition of Road Assets (lane km)

Condition Grade	Paved			Unpaved	
	Arterial	Collector	Local	Collector	Local
Very Good	0.7	89.4	126.3	0.4	13.7
Good	7.2	52.6	168.5	0.6	37.3
Fair	0.0	61.4	122.1	1.5	8.2
Poor	0.0	27.2	61.7	0.0	0.0
Very Poor	0.0	1.1	3.3	0.0	0.5
Avg PCI	78.4	75.5	73.2	70.0	79.0
Avg Grade	Good	Good	Good	Good	Good

Figure 5-1: Average Condition of Road Assets



Age and Useful Life

The age and useful life of road assets is determined through a variety of data sources including GIS, TCA, and the latest RNS. This information provides the history of when the road was first constructed or acquired, and guides Town staff in managing lifecycle activities to extend the useful life. Age and useful life inform the timing of capital projects, such as road rehabilitation and reconstruction activities.

The EUL of road assets is identified in the TCA Policy based on the surface treatment and sub-base applied on the road type. While a well-built sub-base is essentially a permanent structure, TCA assigns the sub-base of a road an EUL of 50 years for depreciation purposes. Road surface types vary depending on the road classification. Table 5-5 outlines this information in further detail along with averages for age and remaining useful life.

Table 5-5: Age and Useful Life of Road Surfaces (Years)

Road Classification and Surface	Average Age	EUL	ARUL
Arterial - HCB	11	20	9
Arterial - LCB	26	10	0
Collector - HCB	22	20	0
Collector - LCB	25	10	0
Local - HCB	20	20	0
Local - LCB	35	10	0
Local - Gravel	25	20	0

Note: Data confidence is low due to 25.6% of assets having no age data, and 38.8% of assets with age data having an age that is more than 10 years beyond EUL.

Current Replacement Value (CRV)

The CRV of road assets is calculated from the full replacement of surface and base using new construction roadwork costs identified in the 2023 Transportation Master Plan. As detailed in Table 5-6, road assets have a total replacement value of \$907.5 million.

Table 5-6: CRV of Road Assets

Sub-Type	CRV (\$M)
Paved	\$860.8
Unpaved	\$46.7
Total	\$907.5



School Bus on a Town Road

5.2.2 Levels of Service (LOS)

Community LOS

O. Reg. 588/17 requires municipalities to provide a description of the road network and its level of connectivity and descriptions or images that illustrate the different level of road class pavement conditions. High connectivity facilitates the efficient movement of people and goods and ensures effective emergency responses by providing well-linked routes and alternative access. Good pavement conditions enhances rider safety by providing comfortable, smooth driving experiences.

Table 5-7 provides a description of the Town’s road network, with Figure 5-2 illustrating the level of connectivity of Town roads, including private, unassumed, county, and provincial roads.

Pavement conditions are described in Table 5-8, with sample pictures to illustrate condition grade.

Table 5-7: Community LOS - Road Connectivity

Scope	Description
Description of the road network in the municipality and its level of connectivity.	The Town maintains 783.7 km of road across 272.2 square kilometers of land. Roads are integrated with the Provincial and County Road network, including County Road 27 and Highways 400 and 89, facilitating travel within and between settlement areas and access to regional roads.

Figure 5-2: Road Network

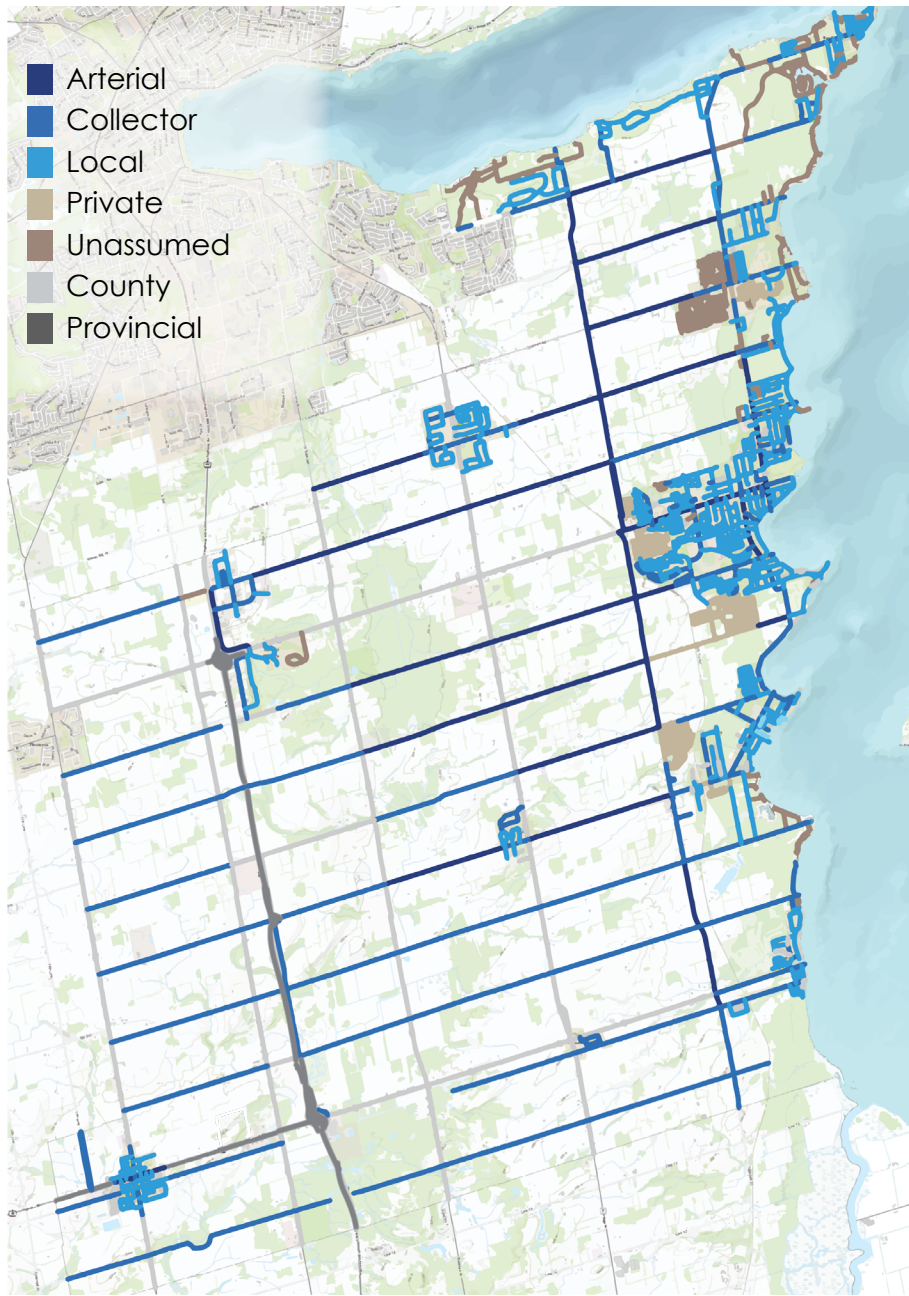



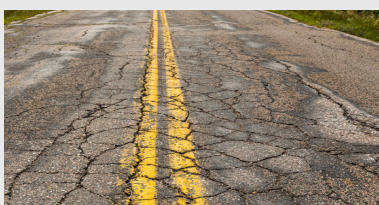
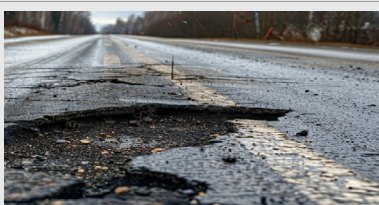


Table 5-8: Community LOS - Sample Road Condition

Condition Grade & PCI	Example Paved Road	Description
Very Good PCI ≥ 85		Pavement is in very good condition with no surface defects or cracking distresses. No maintenance required in the short-term.
Good PCI 70-85		Pavement is in good condition with minor surface defects or cracking distresses. Some maintenance required to uphold condition.
Fair PCI 40-70		Pavement is in fair condition with moderate surface defects and cracking distresses. Some rehabilitation or preventative maintenance required to prevent further deterioration.
Poor PCI 25-40		Pavement is in poor condition with significant signs of aging and deterioration. Will require substantial repairs or reconstruction within the short-term.
Very Poor PCI < 25		Pavement is in very poor condition with severe damage affecting usability and safety. Immediate repair or full reconstruction is often needed.

Technical LOS

O. Reg. 588/17 requires municipalities to evaluate and report on the total number of lane kilometres of arterial, collector, and local roads as a proportion of square kilometers of land area of the municipality, as well as the average condition of paved and unpaved roads. The total lane kilometers provide the province with a view to the scale of the Town's road network relative to the Town's size. Average condition metrics evaluate the quality of roads and their ability to meet service level targets.

Current LOS are informed through the latest RNS, while proposed LOS are informed through a review of industry best practices and consultation with Town staff. Current and Proposed LOS for road assets are detailed in Table 5-9.



Reive Boulevard

Table 5-9: Technical LOS - Roads

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scope	# of lane-km of arterial roads as a proportion of land area	0.03	The lane-kilometres will increase over time through the assumption and construction of new roads. For more details on growth demands, see Section 9.0.								
	# of lane-km of collector roads as a proportion of land area	0.86									
	# of lane-km of local roads as a proportion of land area	2.00									
Quality	Average PCI of paved roads	73.9	>70								
	Average PCI of unpaved roads	78.0									
	% of roads in fair or better condition	88%	>85%								

5.2.3 Lifecycle Management

Road assets are primarily acquired through development agreements, in which developers construct roads and transfer ownership to the municipality after completion and inspection. Road assets can also be acquired or created through approved capital projects outlined in the Transportation Master Plan, such as expanding or extending existing roads to enhance connectivity, accommodate growth, and improve service delivery.

Road assets spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain road quality and ensure safety standards are met. When conditions fall below acceptable levels, road assets undergo rehabilitation to extend the life of the road and restore them to a satisfactory condition. Once road assets reach the end of their useful life, they are reconstructed, which may involve replacing the entire base and surface layer of the road.

The choice between renewal activities depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for road assets are informed through:

- Ontario Regulation 366/18, which established the Minimum Maintenance Standards (MMS) which establishes standards for the maintenance of municipal highways in Ontario.
- Town staff - operating, maintaining and managing our assets.
- Assessments by third-party consultants who provide recommendations for lifecycle activities based on the current state of the asset.

Current and recommended lifecycle activities, as well as the benefits and impacts they provide are presented in Tables 5-10 and 5-11.

Table 5-10: Current Activities - Roads

Activity	Impact	Impact
Road Patrol	Detects issues like potholes, cracks, and drainage problems early for timely repair.	→
Inspections /RNS	Identifies current condition and lifecycle requirements.	→
Street Sweeping and Dust Control	Improves traction, air quality, and extends pavement life.	↑
Hot/Cold Patching and Asphalt Repairs	Repairs surface defects to enhance safety and extend pavement life.	↑
Gravel Resurfacing	Improves rider comfort and maintains structural integrity.	→
Slurry Seal	Protects the road surface, slows degradation and fills small defects.	↑
Winter Maintenance Activities	Plowing and sanding keep roads safe and accessible.	→
Pavement Markings	Enhances visibility, guidance to drivers, and traffic regulation/flow.	→
Resurfacing and Reconstruction	Restores structural integrity and improves surface quality.	↑

→ Maintain condition

↑ Improve condition and/or extend useful life

Table 5-11: Recommended Activities - Roads

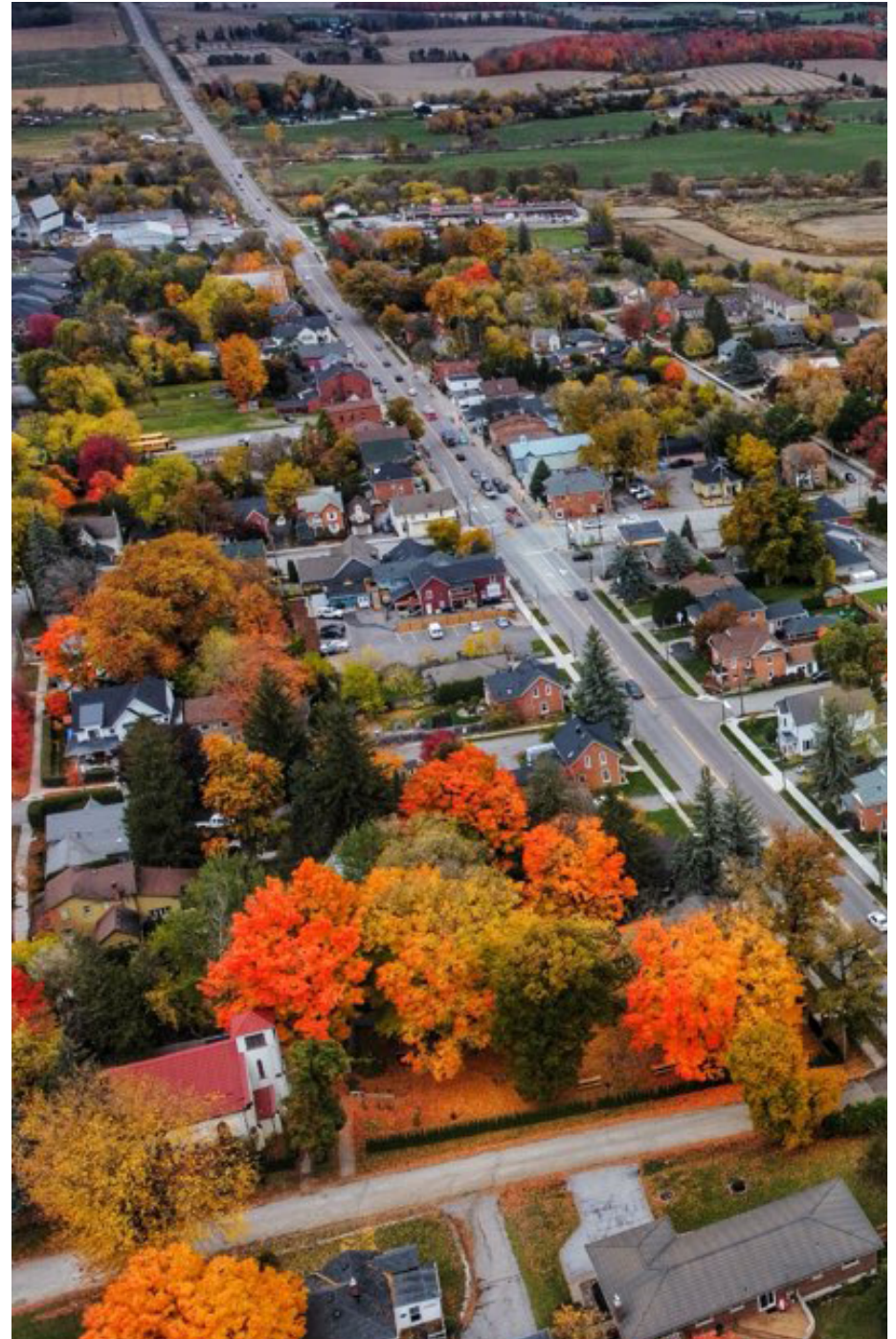
Activity	Impact	Impact
Increase Condition Inspections	Regularly assessed condition; helps in early detection of issues.	→
Micro-Resurfacing	Maintains condition and extends pavement life.	↑
Increase frequency of Slurry Seal Application	Protects the road surface, slows degradation and fills small defects.	→
Crack Sealing	Prevents moisture entry to maintain structural integrity.	↑
Shouldering	Maintains and reinforces the road shoulder to improve drainage, enhance safety and extend pavement life.	→
Increase Frequency of Dust Control	Improves air quality, safety, road integrity, and reduces maintenance costs overtime.	→
Increase Interval of Resurfacing	Reduces long-term maintenance costs and disruptions, while maximizing the use of modern, durable materials that extend pavement lifespan.	↑



Maintain condition



Improve condition and/or extend useful life



Aerial photograph of Innisfil

5.3 Structures

Structure assets are essential to the Town's transportation network, ensuring efficient connectivity across various terrains and water courses.

Structures are organized by sub-type including:

- **Vehicle Bridges** - are structures designed to carry vehicles and pedestrians across obstacles such as water courses, roads, or railways. These assets support the uninterrupted flow of traffic, facilitating economic activities and enhancing accessibility to different areas.
- **Pedestrian Bridges** - also known as footbridges, are structures designed to allow pedestrians, cyclists and maintenance vehicles to cross obstacles, such as roads, railways, or water courses. These assets enhance accessibility and improve safety.
- **Structural Culverts** - are similar to a vehicle bridge, however the main purpose is to provide drainage under a road or passage accessed by vehicles, pedestrians, or cyclists and which is greater than or equal to three metres in span.

5.3.1 State of Infrastructure

Inventory

Structure asset inventory was obtained from the latest Ontario Structure Inspection Manual (OSIM) Bridge Inspection Report and cross-referenced with the data in the Town's GIS database. Table 5-12 provides an overview of structure inventory by asset sub-type.

Table 5-12: Inventory of Structure Assets

Sub-Type	Quantity
Vehicle Bridges	11
Pedestrian Bridges	12
Structural Culverts	22
Total	45



5th Line Structure

Condition

Condition data of structure assets is gathered through the latest OSIM Bridge Inspection Report. This report follows the Ministry of Transportation standards for inspection and evaluation of the condition of structural elements and components.

Results of these inspections are used to assign a Bridge Condition Index (BCI) value to each structure asset, which is the weighted condition of all elements and components of the structure. The BCI is calculated using asset management principles based on the remaining useful life and current replacement value. The BCI uses a 3-level grading system of good, fair, and poor, as shown in Table 5-13, and assists staff in prioritizing maintenance and rehabilitation activities and assessing the effectiveness of these activities over time. Condition values for structure assets is detailed in Table 5-14, and Figure 5-3. The average BCI of structure assets is 76.6 (good).



Reive Boulevard Bridge

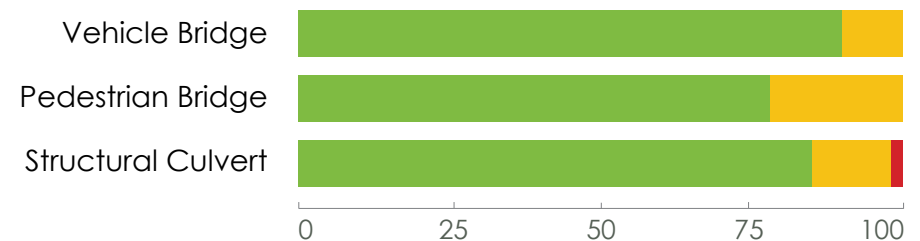
Table 5-13: Bridge Condition Index (BCI)

BCI	Condition Grade
≥ 70	Good
50-70	Fair
< 50	Poor

Table 5-14: Condition of Structure Assets (Quantity)

Condition Grade	Vehicle Bridges	Pedestrian Bridges	Structural Culverts
Good	10	9	18
Fair	1	3	3
Poor	0	0	1
Average BCI	78.4	87.7	76.8
Avg Grade	Good	Good	Good

Figure 5-3: Condition of Structure Assets (%)



Age and Useful Life

The age and useful life of structure assets helps to inform the selection and timing of rehabilitation and reconstruction activities. The Town's TCA Policy details the EUL for each asset type, while age is identified through an analysis of Year-Built data contained in the OSIM Bridge Inspection Report, GIS, and TCA file.

Table 5-15 summarizes the age and useful life data and identifies the ARUL for each asset type. Most vehicle bridges and structural culverts have an EUL of 75 years, except for structural culverts comprised of metal, which only have a lifespan of 20 years. Pedestrian bridges have an EUL of 25 years.

Table 5-15: Age and Useful Life of Structure Assets (Years)

Asset Sub-Type	Average Age	EUL	ARUL
Vehicle Bridges	39	75	36
Pedestrian Bridges	6	25	19
Structural Culverts - Concrete	20	75	55
Structural Culverts - Metal	30	20	0

Note: 46% of structures have Year-Built data in TCA, with the remainder unknown.

Current Replacement Value (CRV)

The CRV of structure assets is determined through the 2024 OSIM Bridge Inspection Report. As detailed in Table 5-16, structure assets have a total CRV of \$49.9 million.

Table 5-16: CRV of Structure Assets

Asset Sub-Type	CRV (\$M)
Vehicle Bridges	\$20.3
Pedestrian Bridges	\$18.9
Structural Culverts	\$10.7
Total	\$49.9

5.3.2 Levels of Service

Community LOS

O. Reg. 588/17 mandates municipalities to assess and report on the traffic supported by municipal bridges, and descriptions of the condition of bridges and culverts and how this would affect their use. These LOS measures identify the scope of the Town's structure assets and the impact of deteriorating asset conditions. The capacity of bridges to support the Town's evolving transportation requirements directly influences efficiency and public safety, while asset conditions impact the reliability and user experience of structures. Well-maintained structures reduce the risk of closures and load restrictions, ensuring continuous service provision and preventing disruptions in transportation networks.

Table 5-17 provides a summary of the Town's vehicle and pedestrian bridge inventory, while Figure 5-4 illustrates the location of all structure assets in the municipality. Structure conditions are described in Table 5-18, with sample pictures to illustrate condition grade.

Table 5-17: Community LOS - Traffic Support by Bridges

Scope	Description
Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	The Town's vehicle bridges support the passage of all vehicle types including heavy transport, emergency services, non-commercial as well as bicycles and pedestrians. Pedestrian bridges support the passage of pedestrians, bicycles, and light utility vehicles. There is one vehicle bridge with load restrictions located in the Town (Jebb Bridge). A map showing the location of the Town's structure assets is illustrated in Figure 5-4.

Figure 5-4: Structure Network

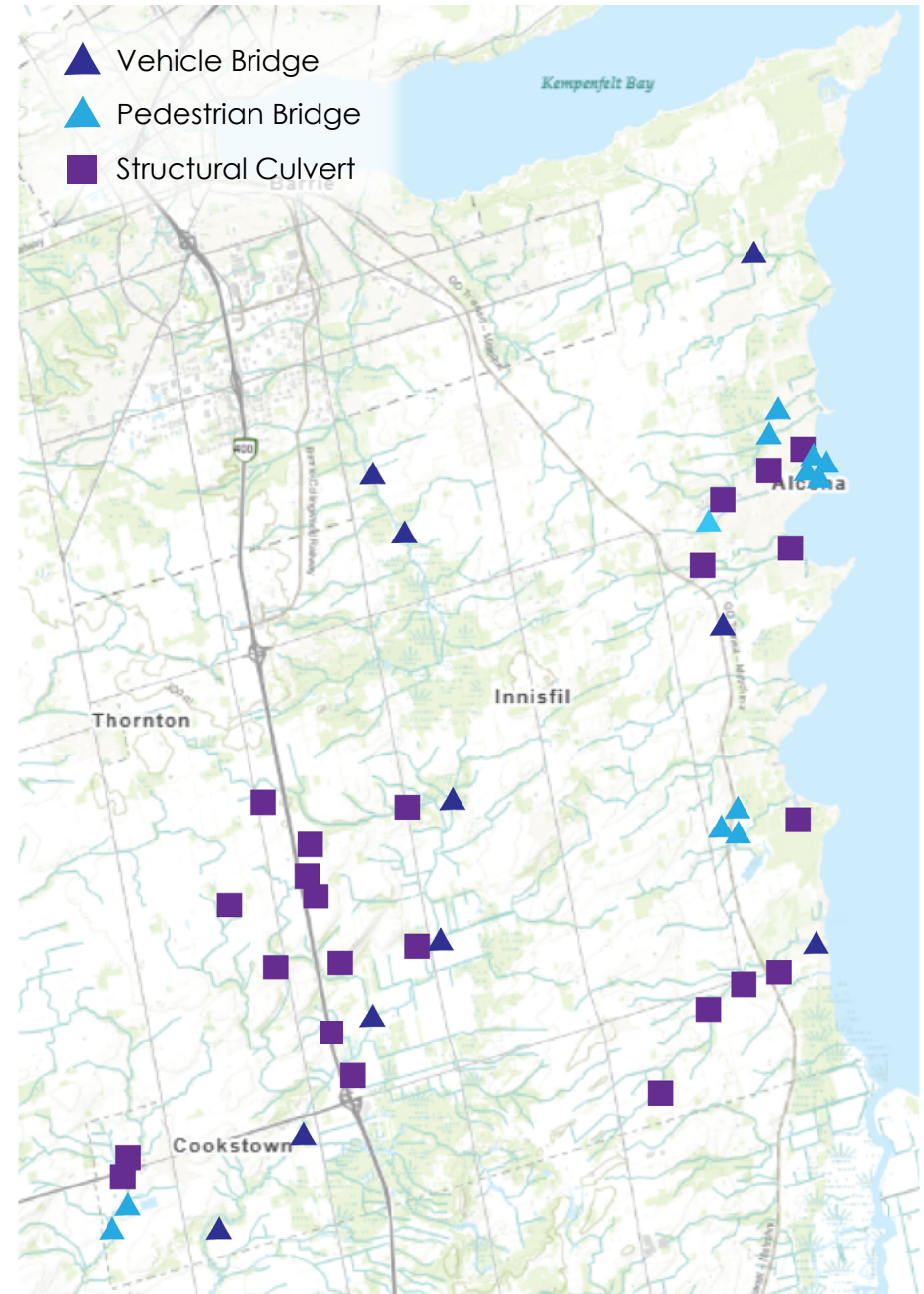


Table 5-18: Community LOS - Sample Structure Condition

Condition Grade & BCI	Example Vehicle Bridge	Example Structural Culvert	Description
Good BCI ≥ 70			Structures with a BCI of 70 to 100 are considered in good to excellent condition, and remain fully operational, requiring only routine maintenance, such as cleaning, over the next five years to sustain their optimal use.
Fair BCI 50-70			Structures with a BCI of 50 to 70 are in fair to good condition, meaning they are generally functional but may require repairs or rehabilitation within the next five years to avoid a decline in usability.
Poor BCI < 50			Structures with a BCI below 50 are in poor condition and are likely to face operational constraints due to nearing the end of their service life, necessitating renewal and/or reconstruction within one year to restore full functionality.

Technical LOS

O. Reg. 588/17 requires municipalities to evaluate and report on the percentage of bridges in the municipality with loading or dimensional restrictions along with the average BCI values. This information provides a critical metric for evaluating the usability, safety and reliability of structure assets and aids in the prioritization of capital projects. Loading or dimensional restrictions indicate the capacity limitations of the structure affecting traffic flow and transportation logistics. Condition monitoring provides an overview of the structure's health, helping to identify potential risks and directing lifecycle activities effectively.

Current LOS for scope and quality attributes are informed through the latest MBIR, while proposed LOS are informed through a review of industry best practices and consultation with Town staff. Current and Proposed LOS for structure assets are detailed in Table 5-19.



Pedestrian Bridge at Innisfil Beach Park

Table 5-19: Technical LOS - Structures

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scope	% of vehicle bridges with loading or dimensional restrictions	9.1%	No change (see note)								
Quality	Average BCI for vehicle bridges	78.4	>70								
	Average BCI of pedestrian bridges	87.7									
	Average BCI of structural culverts	76.8									
	% of structures that are in fair or better condition	97.8%	>90%								

Note: The Town has only one vehicle bridge with loading restrictions (Jebb Bridge) and there are no plans to remove these restrictions within the next 10 years.

5.3.3 Lifecycle Management

Structures are primarily acquired through approved capital projects outlined in the Transportation Master Plan, such as new bridge construction and bridge expansions over roadways to enhance connectivity, accommodate growth, and improve service delivery.

Structures spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain structure quality and ensure safety standards are met. Vehicle bridges share some of the same lifecycle activities as roads due to their road surface. When condition falls below acceptable levels, structure assets undergo rehabilitation to extend the life of the structure and restore it to a satisfactory condition. Once structure assets reach the end of their useful life, they are reconstructed, which may involve partial or full replacement of components such as piles, footings, girders, decks, and arches.

The choice between rehabilitation and reconstruction depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for structure assets are informed through:

- Ontario Regulation 366/18, which established the Minimum Maintenance Standards (MMS) and establishes standards for the maintenance of municipal highways in Ontario.
- Town staff - operating, maintaining and managing our assets.
- Assessments by third-party consultants, who provide recommendations for lifecycle activities based on the current state of the asset.

Current and recommended lifecycle activities, as well as the benefits and impacts they provide, are presented in Tables 5-20 and 5-21.

Table 5-20: Current Activities - Structures

Activity	Benefit	Impact
Road Patrol	Detects issues like potholes, cracks, and drainage problems early for timely repair.	→
Inspections / OSIM	Identifies current condition and lifecycle requirements.	→
Street Sweeping and Debris removal	Improves traction, air quality, and extends pavement life.	↑
Deck Drain Cleaning	Removes debris from the drains so water can escape.	→
Bearing Seat Flushing and Expansion Joint Cleaning	Removes debris so the bridge can move as expected.	→
Rehabilitation or Reconstruction	Restores structural integrity and improves surface quality.	↑

→ Maintain condition

↑ Improve condition and/or extend useful life

Table 5-21: Recommended Activities - Structures

Activity	Benefit	Impact
Increase Condition Inspections	Regularly assessed condition; helps in early detection of issues.	→
Railing Inspection	Enhances road safety through inspections to verify correct height, alignment, and installation of bolted sections and extend useful life	↑
Concrete Patching and Parging	Repairs and replaces damaged components to maintain condition and extend useful life	↑

→ Maintain condition ↑ Improve condition and/or extend useful life



Pedestrian Bridge at Innisfil Beach Park

5.4 Pedestrian Pathways

Pedestrian pathways are fundamental to the Town's transportation network, providing essential routes that enhance connectivity, accessibility, and safety for pedestrians. These assets play a vital role in promoting healthy lifestyles and community well-being within the Town.

Pedestrian Pathways are organized by sub-type including:

- **Sidewalks** - designed primarily for pedestrian traffic to facilitate safe movements along local streets. Sidewalks are further organized by surface type including asphalt and concrete. Asphalt surfaces are cost-effective to implement but require higher maintenance and repair costs over their lifecycle. Concrete surfaces have higher implementation costs than asphalt, but are preferred for their durability, low maintenance needs and longer useful life.
- **Trails** - designed primarily for recreational use for pedestrians, cyclists, and non-motorized sports. Trails are often located in parks, open spaces, and accommodate a variety of leisure and recreational activities. Trails are further categorized by surface type including paved and unpaved. Paved trails are surfaced with asphalt while unpaved trails are constructed with natural surfaces such as gravel.

5.4.1 State of Infrastructure

Inventory

Pedestrian pathways asset inventory was obtained from the Town's GIS database. Sidewalk data was cross referenced with the latest Sidewalk Needs Study (SNS), while Trails were reviewed against available data in the Transportation Master Plan and Land and Lake Plan. Table 5-22 provides an overview of asset inventory by asset type and surface material.

Table 5-22: Pedestrian Pathways Inventory

Asset Type	Surface Material	Quantity (km)
Sidewalks	Asphalt	6.3
	Concrete	83.8
Trails	Paved	13.0
	Unpaved	33.0
Total		136.1

Trail Typology

The Land and Lake Plan recommends updating trail typology (categories) to better distinguish the types of these assets based on location, size, and type. Staff have identified this as an opportunity for improvement to better align asset management planning with the recommended typology. This restructuring will also aid in determining levels of service with respect to connectivity. This opportunity for improvement is further detailed in Section 12.



O-4 Adopt trail typology outlined in the Land and Lake Plan and update inventory.

Condition of Sidewalks

Condition data for sidewalk assets is gathered through the latest SNS. As detailed in Table 5-23, the condition of sidewalks is evaluated using a Sidewalk Condition Index (SCI) which assigns a numerical rating from 0 to 100, with 100 representing a brand-new sidewalk. SCI values help staff prioritize lifecycle management activities and assess the effectiveness of these activities over time. Overall, sidewalks are in very good condition with an average SCI of 88.4, as detailed in Table 5-24 and illustrated in Figure 5-5.

Condition of Trails

Condition data of trails assets is gathered through routine inspections by Town staff, and through Parks Condition Assessments (PCAs) completed every 10 years by a third-party consultant. PCAs inspect components and elements within a park such as trails and identify necessary lifecycle activities without the assignment of a condition rating. Since 2017, many of the Town's parks (and the trails contained within) have undergone maintenance to improve their condition, making the 2017 PCA data no longer relevant. Town staff record inspection information in a Parks Inspection Database and identify sections of the trail that are operational (fit for service) and elements that require a work order to restore condition. Staff utilize the same report to follow up on maintenance efforts to ensure work orders are completed in a timely manner.

In the absence of a condition index, staff have analyzed the inspection reports completed over the last year and have determined that trails are kept in good condition and undergo regular inspections to ensure service delivery is maintained. In the future, a condition index for trails should be developed to align with condition methodologies and best practices. Staff have recognized this as an opportunity for improvement and is identified below, with further details outlined in Section 12.

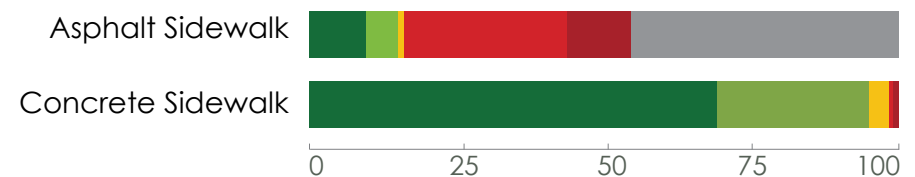
Table 5-23: Sidewalk Condition Index (SCI)

SCI	Condition Grade
>=85	Very Good
70-85	Good
55-70	Fair
40-55	Poor
<40	Very Poor
N/A	Unknown

Table 5-24: Condition of Sidewalks (km)

Condition Grade	Asphalt	Concrete
Very Good	0.6	64.0
Good	0.3	15.9
Fair	0.1	3.4
Poor	1.6	0.2
Very Poor	0.7	0.3
Unknown	3.0	0.0
Average SCI	55.0	89.4
Avg Grade	Fair	Very Good

Figure 5-5: Condition of Sidewalk Assets



O-5 Establish condition methodology for staff-inspected assets.

Age and Useful Life

The age and useful life of pedestrian pathways helps to inform the selection and timing of rehabilitation and reconstruction activities. The Town's TCA Policy details the EUL for each asset type, while age is identified through an analysis of Year-Built data contained in the latest TCA file.

Table 5-25 summarizes the age, EUL, and ARUL for each asset sub-type.

Table 5-25: Age and Useful Life of Pedestrian Pathways (Years)

Asset Type	Surface Material	Average Age	EUL	ARUL
Sidewalks	Asphalt	13	15	2
	Concrete	18	25	7
Trails	Paved	16	25	9
	Unpaved	16	15	0

Note: Data confidence is very low as this is based on a limited TCA data set that contains almost no Asset ID or Length information. There are 202 sidewalk records in TCA and 764 Asset records in inventory. 66% of paved trails and 31.6% of unpaved trails have Year-Built data with the remainder not captured.

Current Replacement Value (CRV)

The CRV of sidewalks is calculated from the estimated reconstruction unit cost per square metre provided in the 2023 SNS and 2023 Transportation Master Plan. The CRV of trails is calculated from the 2023 DC Background Study on cost per metre. As detailed in Table 5-26, pedestrian pathways have a total CRV of \$45.7 million dollars.

Table 5-26: CRV of Pedestrian Pathways Assets

Asset Type	CRV (\$M)
Sidewalks	\$18.0
Trails	\$27.7
Total	\$45.7



Concrete sidewalk in Cookstown

5.4.2 Levels of Service (LOS)

Community LOS

In keeping with the approach of O. Reg. 588/17, pedestrian pathways are evaluated for level of connectivity and overall condition. These measures directly impact accessibility, safety and community satisfaction. High connectivity of sidewalks and trails indicates a comprehensive active transportation network that facilitates pedestrian movement and accessibility in and around the areas where residents and visitors can benefit the most. Accessibility of sidewalks and trails is mandated by the Design of Public Spaces Standard of the Accessibility for Ontarians with Disabilities Act (AODA). This standard lists the minimum requirements for exterior paths of travel, requiring them to be made accessible to travelers with disabilities.

Table 5-27 provides a description of the traffic supported by these assets and the level of connectivity. Condition descriptions for concrete sidewalks are described in Table 5-28, with sample pictures to illustrate condition grade.

Table 5-27: Community LOS - Pedestrian Pathways

Scope	Description
Description, which may include maps, of the pedestrian pathways in the municipality and their level of connectivity, including types of traffic supported.	The Town maintains 136.1 km of pedestrian pathways including 90.1 km of sidewalks and 46 km of trails providing safe access for pedestrians and cyclists. Sidewalks and trails that are newly constructed, adhere to AODA requirements, ensuring safe and accessible exterior paths of travel.

Table 5-28: Community LOS - Sidewalk Condition

Condition Grade & SCI	Quality	Description
Very Good SCI ≥ 85		Sidewalk is in very good condition with no surface defects. Continue with routine maintenance to maintain condition.
Good SCI 70-85		Sidewalk is in good condition with minor surface defects. Continue with routine maintenance with minor repairs to uphold condition.
Fair SCI 55-70		Sidewalk is in fair condition with moderate surface defects. Some rehabilitation or preventative maintenance required to prevent further deterioration.
Poor SCI 40-55		Sidewalk is in poor condition with significant signs of aging and deterioration. Will require repair or reconstruction within the short-term.
Very Poor SCI < 40		Sidewalk is in very poor condition with severe damage affecting usability and safety. Immediate repair, rehabilitation or reconstruction is often needed.

Technical LOS

In keeping with the approach of O. Reg. 588/17, pedestrian pathways are evaluated to determine the total number of kilometers as a proportion of square kilometers of settlement land area of the municipality. This information provides a metric for reporting the distribution of sidewalks and trails within settlement areas and assists staff in determining the future needs for accommodating growth and maintaining or improving connectivity. These assets are further evaluated for average condition and percentage of these assets that are in fair or better condition.

Current LOS for sidewalks are informed through the latest SNS, while proposed LOS for sidewalks and trails are informed through a review of best practices and consultation with Town staff. Current and Proposed LOS are detailed in Table 5-29.



Paved trail at Innisfil Beach Park

Table 5-29: Technical LOS - Pedestrian Pathways

Attribute	Description	Current LOS	Proposed LOS									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Scope	# of km of sidewalks as a proportion of settlement land area	0.38	The lane-kilometres will increase over time based on growth activities, primarily through the construction of sidewalks in new residential developments or growth activities outlined in the Land and Lake Plan and Transportation Master Plan. For more details on growth demands, see Section 9.0.									
	# of km of trails as a proportion of settlement land area	0.17										
Quality	Average SCI of asphalt sidewalks	55.0	>55									
	Average SCI of concrete sidewalks	89.4	>85									
	Average condition of paved trails	N/A	Condition index and methodology not yet in place for trails. Levels of Service will be developed once these are in place.									
	Average condition of unpaved trails	N/A										
	% of pedestrian pathways that are in fair or better condition	93.4%	>85%									

5.3.3 Lifecycle Management

Pedestrian pathways are primarily acquired through development agreements, in which developers construct sidewalks or trails and transfer ownership to the municipality after completion and inspection or through planned capital projects outlined in the Land and Lake Plan and Transportation Master Plan. These projects aim to expand or extend existing infrastructure to enhance connectivity, accommodate growth, and improve service delivery. These documents identify opportunities for new infrastructure and potential enhancements.

Sidewalks and trails spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain quality and ensure safety standards are met. When conditions fall below acceptable levels, these assets undergo rehabilitation to extend their useful life and restore them to satisfactory conditions. Once these assets reach the end of their useful life, they are reconstructed, which may involve partial or full replacement of segments such as concrete panels, patching and repairing asphalt, or the removal and installation of new material.

The choice between renewal activities depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for sidewalk assets are informed through:

- Ontario Regulation 366/18, which established the Minimum Maintenance Standards (MMS) and establishes standards for the maintenance of municipal highways in Ontario.
- Town staff - operating, maintaining and managing our assets.
- Assessments by third-party consultants who provide recommendations for lifecycle activities based on the current state of the asset.

Current and recommended lifecycle activities, as well as the benefits and impacts they provide are presented in Table 5-30.

Table 5-30: Current Activities for Pedestrian Pathways

Activity	Benefit	Impact
Inspections / SNS	Identifies current condition and lifecycle requirements.	→
Trail Grooming	Removes debris from trail surface	→
Winter Maintenance	Removes snow and ice to enhance usability during winter months.	→
Surface Repairs	Repairs to concrete or asphalt surfaces to improve surface quality.	→
Grinding and Jacking	Removes tripping hazards from sidewalk surface.	→
Resurfacing and Reconstruction	Restores structural integrity and improve surface quality.	↑

→ Maintain condition

↑ Improve condition and/or extend useful life

6.0 Stormwater

6.1 Stormwater Overview

Stormwater assets are critical infrastructure designed to collect, convey, treat, and control runoff generated from precipitation events such as rain and melted snow. Runoff can accumulate pollutants and debris as it flows over impervious surfaces such as parking lots, paved roads, and rooftops, causing contamination and other environmental issues. Stormwater assets work in tandem to effectively capture, direct, and regulate stormwater flow, thereby preventing urban flooding and property damage, while safeguarding environmental health. Assets included in the stormwater category serve two purposes:

- Collection and conveyance, including mains, laterals, maintenance holes, and catch basins.
- Treatment and control, including oil and grit separator (OGS) units, low impact developments (LIDs), and stormwater management ponds.

The Town owns and manages approximately \$129.7 million in stormwater infrastructure.

Table 6-1: Assets In-Scope

Type	Sub-Type	Quantity
Collection and Conveyance	Mains	97.1 km
	Laterals	4505
	Maintenance Holes	1767
	Catch Basins	3106
Treatment and Control	OGS Units	7
	LIDs	11
	SWM Ponds	43



Coral Woods Stormwater Pond

6.2 Stormwater

Stormwater assets are mostly underground, providing collection points for runoff to be treated before returning to natural water bodies such as Lake Simcoe. Some stormwater infrastructure, such as stormwater management ponds, are designed to slow the flow of water to avoid accumulation of flood water downstream into the receiving environment, while other infrastructure, such as mains and catch basins, are designed to facilitate the flow of water away from Town roads and public properties, as quickly as possible.

Stormwater assets are organized by sub-type including:

- **Mains** - primary underground pipes for moving stormwater and snow melt to discharge points like stormwater management facilities or water bodies.
- **Laterals** - secondary underground pipes that carry stormwater from properties to mains.
- **Maintenance Holes:** underground access points for maintaining stormwater systems, altering flow direction, and merging pipes. These assets can also serve as catch basins.
- **Catch Basins** - structures under road grates that channel stormwater into pipes, capturing debris and sediment.
- **Oil and Grit Separators (OGS) Units** - devices that clean stormwater runoff by removing sediments and debris.
- **Low Impact Developments (LIDs)** - eco-friendly practices that manage stormwater runoff and prevent issues like flooding and pollution by mimicking natural water processes.
- **Stormwater Management Ponds (SWM Ponds)** - both dry and wet, serve as detention and retention basins, regulating stormwater volume and treating and managing stormwater before it enters watercourses. Dry ponds temporarily store rainwater and release it slowly, while wet ponds retain water permanently for ongoing stormwater treatment.

6.2.1 State of Infrastructure

Inventory

Stormwater asset inventory was obtained from the Town's GIS database and cross referenced with the Town's TCA file and Stormwater Master Plan and Flooding Strategy. Table 6-2 provides an overview of stormwater inventory by asset sub-type.

Table 6-2: Inventory of Stormwater Assets

Sub-Type	Quantity
Mains	97.1 km
Laterals	4505
Maintenance Holes	1767
Catch Basins	3106
OGS Units	7
LIDs	11
SWM Ponds	43



Wooden signage for SWM Facility #8-11

Condition

Condition data of stormwater assets has been completed for 53.5% of stormwater mains (inspected between 2020 and 2022), and all SWM ponds (inspected in 2024), by third-party consultants. Stormwater mains are inspected using Close Circuit Television (CCTV) which utilizes cameras to identify issues such as deterioration, cracking, blockages, and other damage within sewer pipes. SWM ponds are visually inspected without the assignment of a condition rating to identify issues such as erosion, sediment accumulation, obstructions, presence of invasive species, and deterioration of various elements. Areas that require lifecycle activities are flagged for Town staff and completed through a work order to restore condition.

Inspection of the remainder of stormwater assets are conducted by Town staff to determine maintenance needs without the assignment of a condition rating. Town staff are exploring the feasibility of obtaining condition data for other stormwater asset types, with timelines identified in Section 12.



O-6 Establish condition methodology for staff-inspected assets.

Condition of Stormwater Mains

The National Association of Sewer Service Companies (NASSCO) provides the Pipeline Assessment and Certification Program (PACP), which standardizes pipeline condition assessment with a severity grading index from 1 to 5. A rating of 1-2 indicates good condition, 3-4 indicates fair, and 5 indicates poor condition. This system helps the Town accurately diagnose pipeline issues and efficiently plan appropriate lifecycle activities including, maintenance, rehabilitation, and reconstruction. The PACP grading index is outlined in Table 6-3. Condition values for stormwater mains are detailed in Table 6-4, and Figure 6-1. Stormwater mains have an average PACP Index of 1.4 (good).

Table 6-3: PACP Grading Index

PACP Index	Condition Grade
0-2	Good
3-4	Fair
5	Poor
N/A	Unknown

Table 6-4: Average Condition of Stormwater Mains (km)

Condition Grade	Condition
Good	45.5
Fair	11.7
Poor	4.1
Unknown	35.8
Avg PACP	1.4
Avg Grade	Good

Figure 6-1: Average Condition - Stormwater Mains



Age and Useful Life

The age and useful life of stormwater assets helps inform the selection and timing of rehabilitation and reconstruction activities. The Town's TCA Policy details the EUL for each asset type, while age is typically identified through an analysis of Year-Built data contained in the latest TCA file. Sufficient age data for the majority of stormwater assets is not available. To mitigate this information gap, Town staff conduct regular inspections and review CCTV results to evaluate the current state and approximate the remaining useful life.

Table 6-5 summarizes the average age and service life for each asset sub-type, where available.

Table 6-5: Age and Useful Life Stormwater (Years)

Asset Sub-Type	Average Age	EUL	ARUL
Mains	Unknown	75	Unknown
Laterals		75	
Maintenance Holes		75	
Catch Basins		50	
OGS Units	10	50	40
LIDs	7	50	43
SWM Ponds	21	50	29

Current Replacement Value (CRV)

The CRV of stormwater assets is calculated using average per unit reconstruction estimates from third-party reports and current cost for construction based on recent examples. CRV costs do not include cost to replace any related road segments as part of reconstruction. As detailed in Table 6-6, stormwater assets have a total CRV of \$129.7 million.

Table 6-6: CRV of Stormwater

Asset Sub-Type	CRV (\$M)
Mains	\$37.0
Laterals	\$19.5
Maintenance Holes	\$18.8
Catch Basins	\$12.6
OGS Units	\$0.6
LIDs	Unknown
SWM Ponds	\$41.0
Total	\$129.7

6.3.1 Levels of Service (LOS)

Community LOS

O. Reg. 588/17 mandates municipalities to evaluate and report on the user groups or areas in the municipality that are protected from flooding including the extent of the protection provided by the municipal stormwater management system. This measure identifies high-risk areas susceptible to flooding, allowing for targeted risk mitigation strategies and enhanced planning on where to prioritize investments in stormwater infrastructure.

The Town is located within two Conservation Authority limits: Lake Simcoe Region Conservation Authority (LSRCA) and Nottawasaga Valley Conservation Authority (NVCA), both providing floodplain mapping that highlights properties at risk during major storm events. The mapping is based on historical storm events like Hurricane Hazel and the Timmins Storm, serving as benchmarks for defining flood hazards. These benchmarks assist in infrastructure planning, emergency preparedness and policy development for flood resilience throughout Ontario.

Understanding which areas are protected from flooding allows for assessment of system effectiveness, guiding future upgrades or expansions needed for comprehensive coverage. This measure aids staff in defining what level of service the community can expect in terms of flood protection, aiding in public awareness and emergency planning activities.

Table 6-7 provides a description of the areas of the municipality that are protected from flooding and the stormwater management systems within these areas that aid in this protection.

Table 6-7: Community LOS - Stormwater

Scope	Description
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.	Stormwater in the Town is managed through 97.1 km of stormwater mains as well as natural channels like ditches, swales, and watercourses. OGS units and SWM ponds are used for water quality and quantity control. Flood risk is mapped by Conservation Authorities, based on the 100-year storm or historic rainfall data, using Hurricane Hazel and the Timmins Storm. At present, the Town does not have municipal infrastructure such as dams and dykes that have been constructed to provide flood protection. Development that has occurred since the 1990's has incorporated stormwater management to prevent increased flood risk to existing areas.

Technical LOS

O. Reg. 588/17 requires municipalities to evaluate and report on the percentage of properties in the municipality resilient to a 100-year storm and the percentage of the municipal stormwater management system resilient to a 5-year storm. Higher percentages indicate that majority of properties have effective flood protection measures or are not located in a flood prone area, whereas lower percentages indicate less flood protection measures, increasing the risk of potential damage from extreme storm events.

Although O. Reg. 588/17 does not provide targets for these percentages, Asset Management Ontario (AMO), has developed an optional rating scale municipalities can utilize for these measures with ranges from 0 to 100% to describe performance. This scale is outlined in Table 6-8.

Current LOS and proposed LOS are informed through a review of best practices and consultation with Town staff. The percentage of properties resilient to a 100-year storm event is targeted to remain within a "Good" range of 80-90%. The municipal stormwater system's resilience to a 5-year storm is set to achieve a target range within "Fair", between 60-80%, over the same period. Current and proposed LOS for stormwater assets are detailed in Table 6-9.

Table 6-8: AMO Performance Rating Scale

Scale (%)	Performance Rating
>90%	Very Good
80% - 90%	Good
60% - 80%	Fair
40% - 60%	Poor
<40%	Very Poor

Table 6-9: Technical LOS - Stormwater

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scope	% of properties resilient to a 100-year storm.	89.5%	>90%								
	% of the municipal stormwater management system resilient to a 5-year storm.	46.9%	48%	49%	50%	51%	52%	54%	56%	58%	60%

Note: Percentage of the municipal stormwater management system resilient to a 5-year storm is based on an analysis of the total number of crossings (bridges and culverts across watercourses) located in the Town. 52 crossing structures met the conveyance criteria as defined by the MTO, while 111 are undersized and therefore risk flooding the road for a smaller storm return period than expected.

6.3.2 Lifecycle Management

Stormwater assets are primarily acquired through development agreements, in which developers construct stormwater infrastructure and transfer ownership to the municipality after completion and inspection. Stormwater assets can also be acquired or created through approved capital projects outlined in the Stormwater Master Plan and Flooding Strategy and Transportation Master Plan, such as retrofitting existing stormwater management ponds for growth and climate resilience.

Stormwater assets spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain quality and ensure safety standards are met. When conditions fall below acceptable levels, stormwater assets undergo rehabilitation to extend their useful service life and return them to satisfactory condition. Reconstruction occurs when assets reach the end of their useful life and require full or partial replacement such as removal and installing of pipes and retrofitting stormwater management ponds to improve or enhance the water quality, quantity and erosion control performance.

The choice between rehabilitation and reconstruction depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for sidewalk assets are informed through:

- The Stormwater Management Planning and Design Manual, which provides guidance on O&M activities including frequency and best practices.
- The Consolidated Linear Infrastructure Environmental Compliance Approval (CLI ECA).
- Town staff - operating, maintaining and managing our assets.
- Assessments by third-party consultants who provide recommendations for lifecycle activities based on the current state of the asset.

Current and recommended lifecycle activities are identified in Tables 6-10 and 6-11 including the benefits and impacts of each activity.

Table 6-10: Current Activities - Stormwater

Current Activity	Description and Benefits	Impact
Inspections / Condition Assessments	Identifies current condition and lifecycle requirements.	→
Street Sweeping and Dust Control	Removes build-up of pollutants on road surfaces and prevents mobilization during rainfall events.	→
Catch Basin Cleaning	Prevents build up of pollutants, clogging of downstream conveyance systems and restores the catch basin sediment-trapping capacity.	→
OGS Inspection and Maintenance	Similar benefits to catch basin cleaning to restore the OGS unit trapping capacity.	→
SWM Pond Maintenance	Erosion protection, sediment removal, vegetation management, animal management and concrete repairs.	↑
Flushing and CCTV Inspection of Storm Sewer	Removes deposited materials, ensuring pipes convey design flows and remove pollutants from the storm sewer system.	→
Invasive Species Control	Removal of noxious weeds improves hydraulic capacity, biodiversity and prevents structural damage.	→



Maintain condition



Improve condition and/or extend useful life

Table 6-11: Recommended Activities - Stormwater

Activity	Benefit	Impact
Increase Frequency of Inspections	Regularly assessed conditions; helps in early detection of issues.	➔

- ➔ Maintain condition
- ⬆ Improve condition and/or extend useful life



Stormwater Management Pond

7.0 Community Spaces

7.1 Community Spaces Overview

The Town's community spaces assets provide safe, accessible, and community-centered environments for residents, businesses, and visitors. They host inclusive programs, services, and facilities that support year-round activities and events, fostering a sense of togetherness, belonging, and well-being. In addition, they provide diverse indoor and outdoor recreational opportunities to promote health and wellness. Assets included in the community spaces category are:

- Parks (inland and lakeside).
- Amenities (sports fields and courts and recreation structures).
- Facilities (municipal offices, community and culture, emergency response, and accessory structures).

Community spaces assets have an approximate replacement value of \$336.0 million.

Table 7-1: Assets In-Scope

Type	Sub-Type	Quantity
Parks	In-Land and Lakeside	87 (166.7 ha)
Amenities	Sports Fields and Courts and Recreation Structures	99
Facilities	Municipal Offices, Community and Culture, Emergency Response, and Accessory Structures	52



Bonsecours Park (9th Line)

7.2 Parks and Amenities

Parks and their amenities offer essential spaces that promote leisure, fitness, and a strong connection with both nature and the community. Parks are located strategically throughout the Town and are designed with a variety of amenities tailored to meet the specific needs of the community. Amenities, which are key features within parks, enrich the user experience and encourage active lifestyles. These can include soccer fields, playgrounds, splash pads, and more. Together, parks and amenities enhance the quality of life by fostering a healthy, more engaged community through accessible recreation and social interaction opportunities.

Parks and amenities are organized by sub-type including:

- **Inland Parks**- includes 34 parks located away from the lake, offering a wide range of outdoor recreation amenities and activities. The Town's Land and Lake Plan further categorizes inland parks as Neighbourhood, Community/District, Regional and Special Use, and Conservation.
- **Lakeside Parks** - includes 27 municipally owned rights-of-way that were formally referred to as roads ends, as well as 26 parks located on Lake Simcoe, offering access points to the lake for activities on land and water.
- **Sports Fields and Courts** - outdoor areas for specific sports including baseball, basketball, beach volleyball, soccer, tennis, and pickleball.
- **Recreation Structures** - outdoor areas for climbing, play, or water activities including playgrounds, skate parks, bike parks, splash parks, outdoor skating rinks, docks, and boat launches.

7.2.1 State of Infrastructure

Inventory

The parks and amenities asset inventory was obtained from the latest Operations inventory data and cross-referenced with the Land and Lake Master Plan and GIS database. Table 7-2 provides an overview by asset sub-types including 87 parks across 166.7 hectares (ha) of parkland and 99 amenities.

Table 7-2: Inventory of Parks and Amenities

Sub-Type 1	Sub-Type 2	Quantity
Inland Parks	Neighbourhood	22 (32.4 ha)
	Community / District	6 (11.5 ha)
	Regional and Special Use	4 (64.7 ha)
	Conservation	2 (22.3 ha)
Lakeside Parks	N/A	53 (35.8 ha)
Sports Fields and Courts	Baseball Diamonds	9
	Basketball Courts	10
	Beach Volleyball Courts	3
	Soccer Fields	12
	Tennis / Pickleball Courts	7
Recreation Structures	Playgrounds	38
	Skate / Bike Parks	4
	Splash Parks and Outdoor Rinks	4
	Docks and Boat Launches	12
Total Parks		87 (166.7 ha)
Total Amenities		99

Note: 1 ha = 10,000 sq m

Condition

Condition data of parks and amenities is gathered through routine inspections by Town staff and through Parks Condition Assessments (PCAs) completed every 10 years by a third-party consultant. The Town's last PCA was completed in 2017 and included 41 parks which were inspected based on the condition of elements within the park such as playgrounds, sports fields, benches, and parking lots. Condition assessments follow the American Society for Testing and Materials (ASTM) Standards for Property Condition Assessments (ASTM E-2018-15), and Classification for Building Elements and Related Sitework (ASTM E01557-09 (2015)).

Since 2017, the Town's parks (and the amenities contained within) have undergone extensive maintenance and rehabilitation activities to improve condition, making 2017 PCA data no longer relevant. Town staff complete regular grounds inspections to ensure that assets are maintained, safe, and accessible to the community. Each inspection is recorded in a Parks Inspection database and documents the condition of different elements within the parks. Staff identify elements that are operational (fit for service) and elements that require a work order to restore condition. Staff utilize the same report to follow up on maintenance efforts and to ensure work orders are completed in a timely manner.

In the absence of a condition index, staff have analyzed the inspection reports completed over the last year and have determined that parks and amenities are kept in good condition and undergo regular inspections to ensure levels of service are maintained. In the future, a condition index for parks and amenities should be developed to align with condition methodologies and best practices. Staff have recognized this as an opportunity for improvement with implementation timelines outlined in Section 12.



Playground Equipment at Webster Park

Age and Useful Life

The age and useful life of parks and amenities helps to inform the selection and timing of rehabilitation and reconstruction activities. The Town's TCA Policy details the EUL for each asset type, while age is identified through an analysis of Year-Built data contained in the latest TCA file.

Table 7-3 summarizes the age, EUL and ARUL for each asset sub-type. Parks or "land" as defined in the TCA Policy, are deemed to have an infinite useful life and are not included in Table 7-2.

Table 7-3: Age and Useful Life of Parks and Amenities (Years)

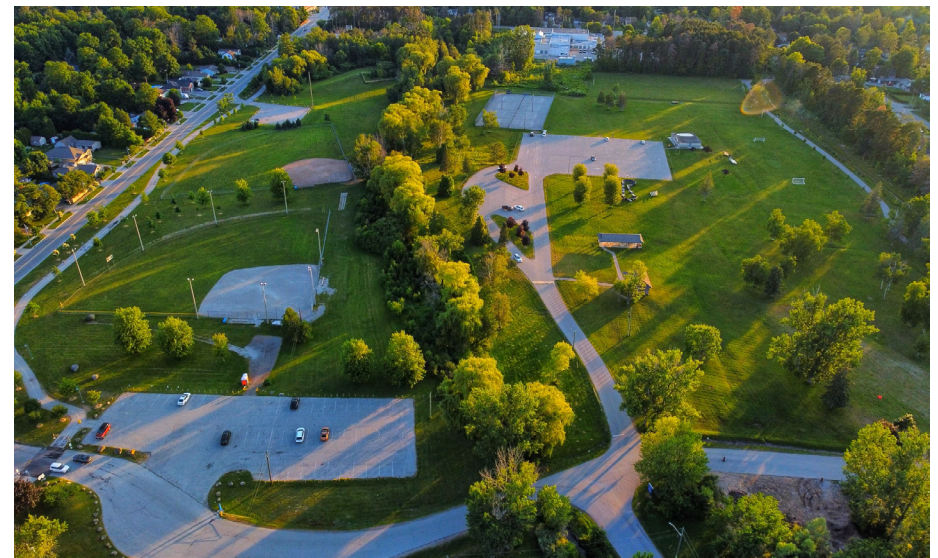
Asset Sub-Type	Average Age	EUL	ARUL
Baseball Diamonds	25	30	5
Basketball Courts	10	25	15
Beach Volleyball Courts	10	30	20
Soccer Fields	10	30	20
Tennis/Pickleball Courts	10	20	10
Playgrounds	11	20	9
Skate/Bike Park	11	10	0
Splash Parks and Outdoor Rinks	6	20	14
Docks	20	20	0
Boat Launches	15	15	0

Current Replacement Value (CRV)

The CRV of parks and amenities assets is determined through the 2023 DC Background Study. As detailed in Table 7-4, parks and amenities have a total CRV of \$63.5 million.

Table 7-4: CRV of Parks and Amenities

Asset Sub-Type	CRV (\$M)
Inland Parks	\$32.0
Lakeside Parks	\$6.4
Sports Fields and Courts	\$10.8
Recreation Structures	\$14.2
Total	\$63.5



Aerial photograph of Innisfil Beach Park

7.2.2 Levels of Service (LOS)

Community LOS

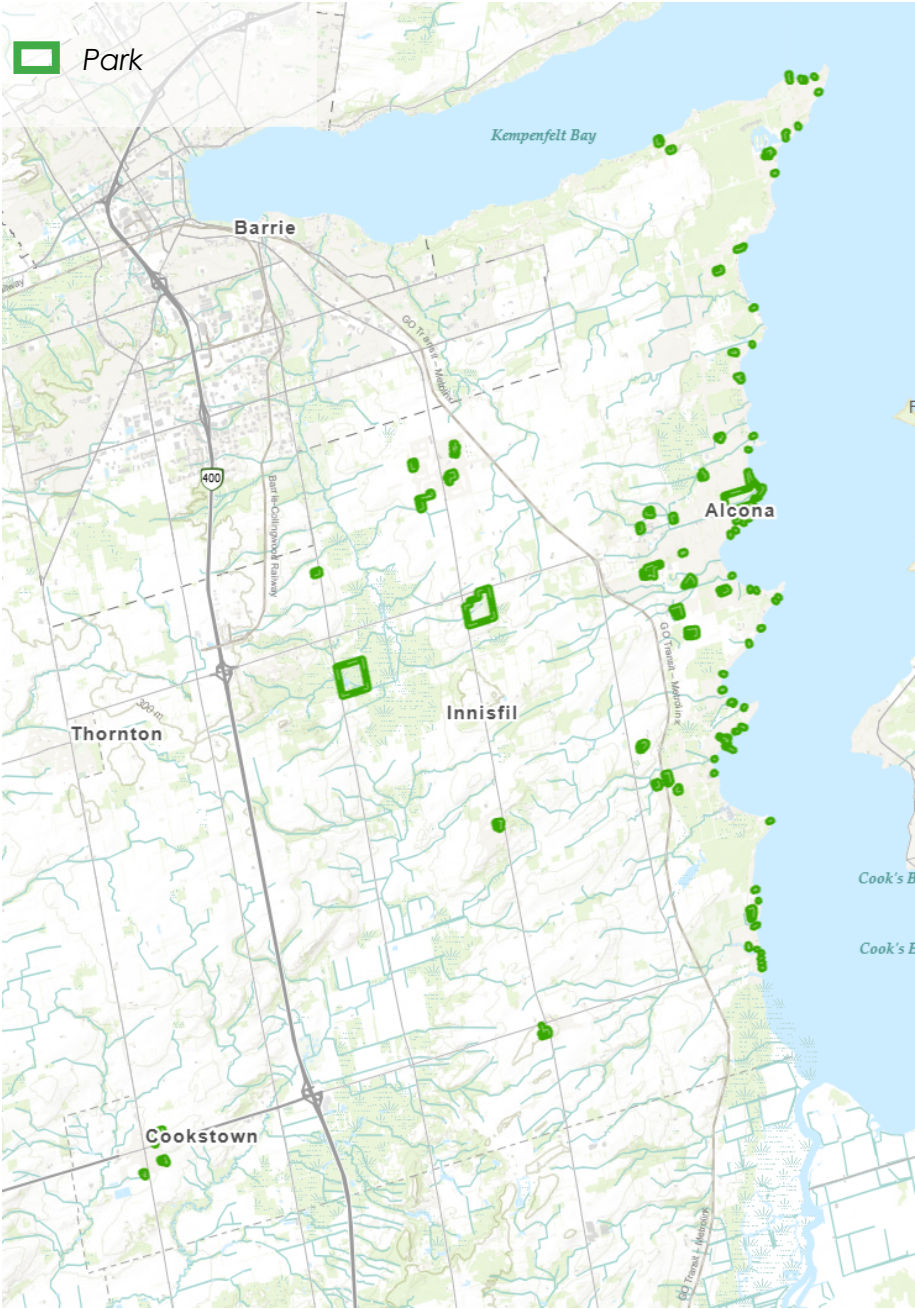
In keeping with the approach of O. Reg. 588/17, parks and amenities are evaluated for their level of connectivity. This measure informs the distribution of these assets across the municipality, and aids in resource allocation, planning for maintenance, and potentially the strategic development of these spaces. High connectivity indicates a comprehensive parks and amenities network and reflects the Town's capacity to support various sports, recreational activities, and community engagements. Connectivity information was obtained from the Land and Lake Plan, which highlighted areas that are serving the community well, and those which would benefit from expansions or improvements to increase usability and accessibility.

Table 7-5 provides a description of the parks and amenities in the municipality and the level of connectivity. Figure 7-1 illustrates the location of these assets.

Table 7-5: Community LOS - Parks and Amenities

Description	Current LOS
Description, which may include maps, of location of parks and amenities in the municipality.	The Town maintains 87 parks (166.7 ha) of parks and 99 amenities, including 41 sports fields and courts and 58 recreation structures. The Lake and Lake Plan outlines the connectivity of parks and amenities and whether there is sufficient distribution across the Town.

Figure 7-1: Location of Town Parks



Technical LOS

In keeping with the approach of O. Reg. 588/17, parks and amenities were evaluated for average condition including the percentage of these assets in good or better condition. The condition of parks and amenities impacts safety, usability, and user experience. Assets in good condition support accessibility requirements, similar to sidewalks for exterior paths of travel, to encourage involvement and engagement of all demographic groups in community activities.

Current LOS are informed through inspection data, while proposed LOS are informed through a review of industry best practices and consultation with Town staff. Current and proposed LOS for parks and amenities are detailed in Table 7-6.



Basketball Court at Meadows of Stroud Park

Table 7-6: Technical LOS - Parks and Amenities

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Quality	Average condition of parks and amenities	Good	Proposed LOS for parks and amenities is good or better over the next 10-years.								
	% of parks and amenities in fair or better condition	N/A	Condition index and methodology not yet in place for parks and amenities. Proposed LOS will be developed once these are in place.								

7.2.3 Lifecycle Management

Parks and amenities are primarily acquired through planned capital projects recommended through the Land and Lake Plan or through specific Parks Master Plans like Innisfil Beach Park Vision 2020 and detailed in the Town's capital budget. The Land and Lake plan outlines the future location of these assets, or expansions to existing assets to improve connectivity, accessibility, and safety. These assets spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain quality and ensure safety standards are met. Staff review and plan for replacement of amenities based on a combination of condition assessments and lifecycle estimates and then incorporate into budget requests.

When conditions fall below acceptable levels, parks (and the amenities contained within) undergo rehabilitation to extend their useful life and return them to satisfactory condition. Reconstruction occurs when assets reach the end of their useful life and require full or partial replacement to improve or enhance the quality and usability. The choice between rehabilitation and reconstruction depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for parks and amenities are informed through:

- Town staff - operating, maintaining, and managing our assets.
- Assessments by third-party consultants which provide recommendations for lifecycle activities based on the current state of the asset.
- Children's Playground Equipment and Surfacing (CZA Z614:20 National Standard of Canada).

Current lifecycle activities are identified in Tables 7-7 including the benefits and impacts of each activity.

Table 7-7: Current Activities - Parks and Amenities

Current Activity	Description and Benefits	Impact
Inspections / Condition Assessments	Identifies current condition and lifecycle requirements.	→
Beach Grooming	Removes debris from the beach area to maintain cleanliness.	→
Grass Cutting and Turf Maintenance	Trimming grass to a desired length to adhere to property standards and maintain optimal use.	→
Snow Removal	Removes snow accumulation from parking lots located at parks.	→
Tree Pruning	Removes diseased, damaged, or dead trees and branches, and improves resident safety.	→
Waste Collection	Removes waste to maintain park cleanliness.	→
General Cleaning and Sanitization	Reduces risk of contamination, ensures operational efficiency, and enhances public safety.	→
General Small Repairs and Upkeep	Prevents deterioration, enhances safety, and maintains user satisfaction.	→
Refresh and Replacement of Amenities	Ensures continued use of amenities.	↑



Maintain
condition



Improve condition and/
or extend useful life

7.3 Facilities

Facility assets are essential to the Town's community spaces, functioning as hubs for public services, cultural activities, and community engagement. These assets enable effective service delivery across various sectors including Town administration and emergency operations, thereby supporting health and wellness initiatives while strengthening community vibrancy and resilience.

Facilities are categorized into four types:

- **Municipal Offices** - provide administrative services, such as those at Town Hall and Operations buildings.
- **Community and Culture** - includes multi-use buildings for recreation, education, and culture activities, such as community centres, libraries, performing arts venues, and health and wellness centers.
- **Emergency Response** - comprise essential facilities for emergency services, including fire and police stations.
- **Accessory Structures** - support public spaces with storage and additional buildings for parks and amenities.



Rizzardo Health and Wellness Centre

7.3.1 State of Infrastructure

Inventory

Facilities inventory was obtained from the latest Operations inventory data and cross-referenced with the latest Building Condition Assessment (BCA) report completed every 5 years by a third-party consultant. Table 7-8 provides an updated inventory by asset sub-type.

Table 7-8: Inventory of Facilities

Sub-Type 1	Sub-Type 2	Quantity	Area (m ²)
Municipal Offices	Town Hall	1	3,834
	Operations Buildings	2	3,336
Community and Culture	Community Centres	5	21,440
	Libraries	3	3,970
	Performing Arts	1	470
	Health and Wellness	1	3,866
Emergency Response	Fire Stations	5	4,397
	Police Stations	1	1,528
Accessory Structures	Storage and Outbuildings	33	2,926
Totals		52	45,767

Condition

Condition data of facility assets is gathered through routine inspections by Town staff, contracted workers hired to complete repairs and maintenance activities, and through BCA reports in accordance with the American Society for Testing and Materials (ASTM) Standards for Property Condition Assessments: Baseline Property Condition Assessment Process (E2018-15).

The BCA report provides an evaluation of a facilities current state, through a visual inspection of building components and systems based on the Uniformat II building nomenclature system including substructure, shell, interiors, services, and building site work. A Facility Condition Index (FCI) is provided for each asset component from Excellent (1), Good (2), Fair (3), Poor (4), or Immediate (5). These values roll up to provide an overall condition rating as detailed in Table 7-9.

Table 7-9: Facility Condition Index (FCI)

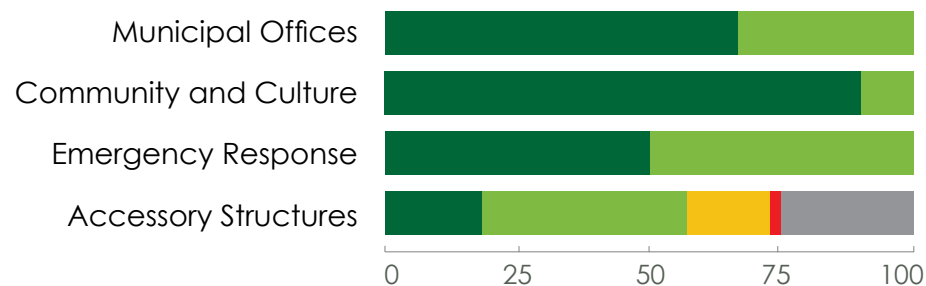
FCI	Condition	Definition
1	Excellent	Functioning as intended. No repairs anticipated within 10 years.
2	Good	Functioning as intended. No repairs anticipated within 5 years.
3	Fair	Functioning as intended with some deterioration consistent with age of asset. Repairs and/or replacements required within 2 to 5 years.
4	Poor	Not functioning as intended. Significant repair or replacement required within 0 to 1 years.
5	Immediate	Not functioning as intended with elevated risk to health and safety. Repair or replacement required within 0-60 days.
N/A	Unknown	Condition data not available

Of the Town of Innisfil's 52 facilities, 11 accessory structures were not included in the scope of the BCA as they were not accessible during the BCA timeline. Condition values for facilities assets are detailed in Table 7-10 and Figure 7-2. The average FCI of facilities is 2.1 (good).

Table 7-10: Average Condition of Facilities

Condition Grade	Municipal Offices	Community & Culture	Emergency Response	Accessory Structures
Excellent	1	1	3	3
Good	2	10	3	14
Fair	0	0	0	4
Poor	0	0	0	1
Immediate	0	0	0	0
Unknown	0	0	0	11
Average FCI	2.0	2.2	1.9	2.0
Avg Grade	Good	Good	Excellent	Good

Figure 7-2: Average Condition of Facilities



Age and Useful Life

The age and useful life of facilities helps to inform the selection and timing of rehabilitation and reconstruction activities. The Town's TCA Policy details the EUL for each asset type, while age is identified through an analysis of Year-Built data contained in the latest TCA file.

Table 7-11 summarizes the age, EUL and ARUL for each asset sub-type.

Table 7-11 Age and Useful Life - Facilities (Years)

Asset Sub-Type 2	Average Age	EUL	ARUL
Town Hall	17	75	58
Operations Buildings	11	75	64
Community Centres	36	75	39
Libraries	22	75	53
Performing Arts	157	75	0
Health and Wellness	5	75	70
Fire Stations	16	75	54
Police Stations	45	75	30
Storage and Outbuildings	39	15-20	0

Note: The Knock Community Centre (built in 1902) is omitted from the average age of community centres as it is an extreme outlier. Most storage and outbuildings exceed their EUL. Many are used for storage purposes, with no access to the public and remain in good condition despite their age. The average age of storage and outbuildings is based on 70% of known age data.

Current Replacement Value (CRV)

The CRV of facilities is determined through the 2023 DC Background Study except for the South Simcoe Theatre, which is based on the replacement values in the 2024 Facilities Master Plan. As detailed in Table 7-12, facilities have a total CRV of \$272.5 million.

Table 7-12: CRV of Facilities

Asset Sub-Type	CRV (\$M)
Municipal Offices	\$35.4
Community and Culture	\$178.2
Emergency Response	\$42.3
Accessory Structures	\$16.6
Total	\$272.5

Note: Replacement values for Accessory Structures is only available for 61% of these assets.



Morgan Russell Memorial Arena

7.3.2 Levels of Service (LOS)

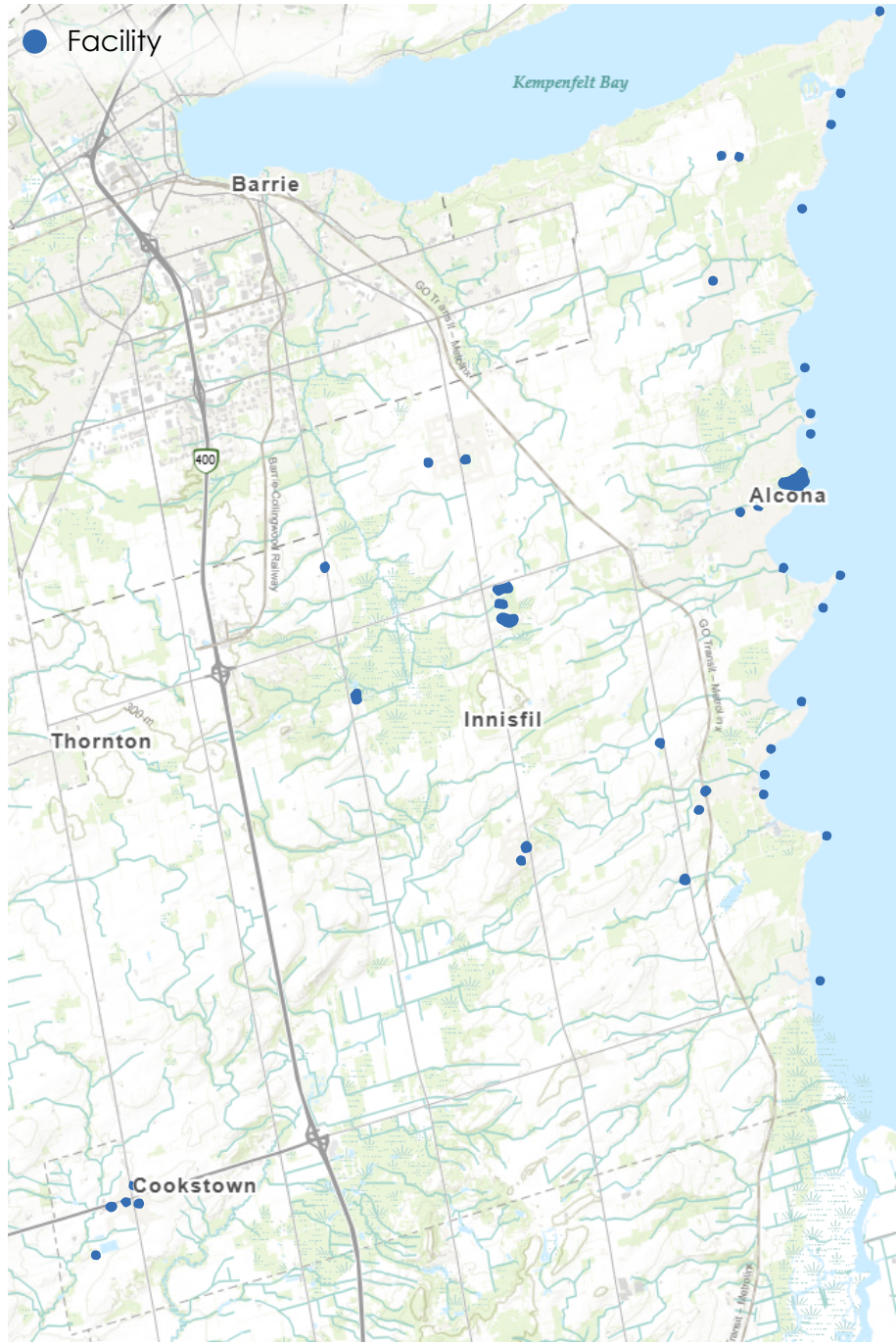
Community LOS

In keeping with the approach of O. Reg. 588/17, facilities were evaluated for scope (quantity) to understand the number of these assets available in the Town and their accessibility to the public. This measure aids in resource allocation, planning for maintenance, and potentially the strategic development of these spaces. It also reflects the Town's capacity to support various administrative, community, culture, and emergency response needs. Community LOS are detailed in Table 7-13.

Table 7-13: Community LOS - Facilities

Description	Current LOS
Description, which may include maps, showing the location of Town facilities.	The Town maintains 52 facilities located across the Town. Facilities support a variety of uses including administrative, operations, recreation, community engagement, culture and performing arts, health and wellness, and emergency response. Facility locations are illustrated in Figure 7-3.

Figure 7-3: Location of Facilities



Technical LOS

In keeping with the approach of O. Reg. 588/17, Facilities were evaluated for average condition, including the percentage of these assets in good or better condition.

Current LOS are informed through the latest BCA, while proposed LOS are informed through a review of industry best practices and consultation with Town staff. Current and proposed LOS for facilities are detailed in Table 7-14.



Interior view of Lakeshore ideaLAB & Library in Alcona

Table 7-14: Technical LOS - Facilities

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Quality	Average condition of municipal offices	2.0	>2								
	Average condition of community and culture facilities	2.2									
	Average condition of emergency response facilities	1.9									
	Average condition of accessory structures	2.0									
	Percentage of facilities in fair or better condition	88.9%	>85%								

Note: Excellent = 1.0, Good = 2.0, Fair = 3.0, Poor = 4.0, Immediate = 5.0

7.3.3 Lifecycle Management

Facilities are primarily acquired through approved capital projects outlined in the Facilities Master Plan, such as additions or expansions to existing buildings or new construction, such as a new fire station.

Facilities spend most of their service life in the O&M stage where Town staff perform routine and preventative maintenance activities to maintain quality and ensure safety standards are met. When conditions fall below acceptable levels, facilities undergo rehabilitation to extend the life of the asset and restore the asset to a satisfactory condition. Once facilities reach the end of their useful life, they are reconstructed, which may involve partial or full demolition and replacement of building components.

The choice between rehabilitation and reconstruction depends on factors such as age, current condition, and budget constraints with a view to optimizing lifecycle performance through good asset management planning practices.

Lifecycle activities for facilities are informed through:

- Town staff - operating, maintaining, and managing our assets.
- Assessments by third-party consultants who provide recommendations for lifecycle activities based on the current state of the asset.

Current lifecycle activities are identified in Tables 7-15 including the benefits and impacts of each activity.

Table 7-15: Current Activities - Facilities

Activity	Description and Benefits	Impact
Inspections / Condition Assessments	Identifies current condition and lifecycle requirements.	→
Space Management	Maximizes utilization of existing facilities and aligns configuration with current operational needs.	→
General Cleaning and Sanitization	Reduces risk of contamination, ensures operational efficiency, and enhances public safety.	→
General Small Repairs and Upkeep	Prevents deterioration, enhances safety, and maintains user satisfaction.	→
Preventative Maintenance	Extends the lifespan of building components, reducing costly reactive repairs and replacements.	→
Pest Control	Protects structural integrity, prevents damage, and maintains a healthy and hygienic environment for occupants.	→
Tenant Management	Increases rental income through effective lease agreements and tenant satisfaction.	→
Asset Component Major Repair and/or Replacement	Ensures continued use of facility assets	↑



Maintain
condition



Improve condition and/
or extend useful life

8.0 Municipal Fleet

8.1 Municipal Fleet Overview

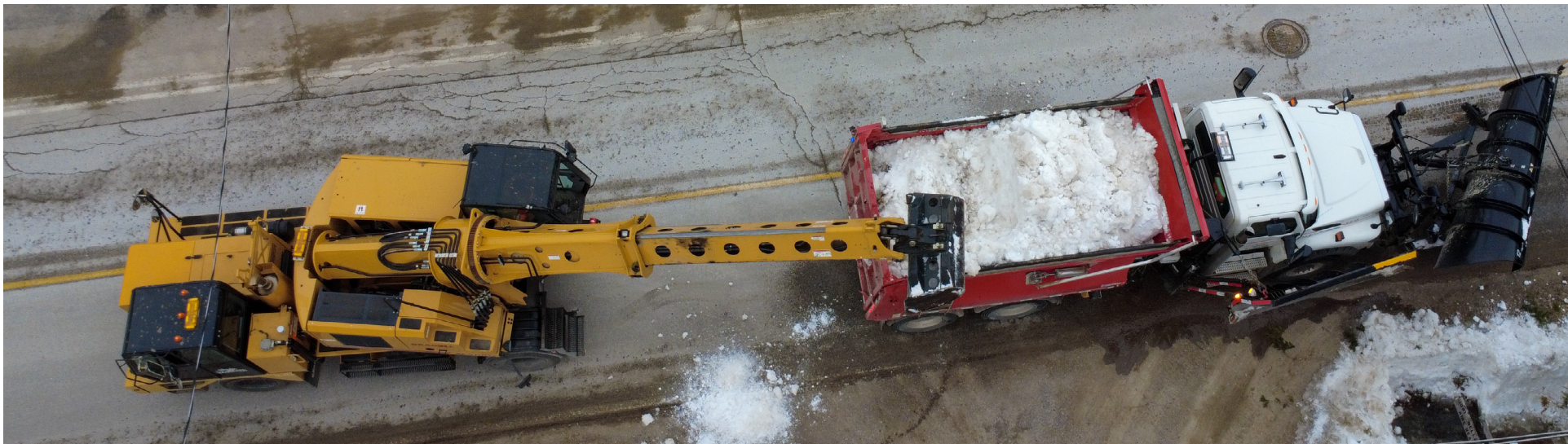
Municipal fleet are a vital component of the Town's asset portfolio providing available, reliable, economical, and sustainable fleet assets for internal and external Town service areas. Fleet assets support daily administration and operations activities such as road, sidewalk, and park maintenance and emergency response by Fire and Rescue Services. Assets included in the municipal fleet category are:

- Vehicles - (light and medium duty, heavy duty, and fire apparatus).
- Equipment (heavy equipment, sidewalk, recreation and turf equipment, and freight and elevation).
- Trailers and Attachments (trailers and miscellaneous attachments).

Municipal Fleet assets have a total CRV of \$47.5 million.

Table 8-1: Assets In-Scope

Sub-Type 1	Sub-Type 2	Quantity
Vehicles	Light and Medium Duty, Heavy Duty, Fire Apparatus	111
Equipment	Heavy Equipment, Sidewalks, Recreation and Turf Equipment, Freight and Elevation	59
Trailers and Attachments	Trailers and Trailer-Mounted Equipment, Miscellaneous Attachments	45



Aerial image of fleet equipment completing snow removal activities

8.2 Municipal Fleet

Municipal fleet assets play a crucial role in enabling the Town to provide essential services to the community. These assets facilitate a wide range of operations, enhancing the Town's capability to effectively manage and maintain its infrastructure and respond to various operational needs.

Municipal fleet assets are categorized into three sub-types

- **Vehicles** - includes light and medium duty, heavy duty, and fire apparatus vehicles. These assets support everyday operations and maintenance tasks, such as road and infrastructure maintenance, inspection services, and emergency response.
- **Equipment** - includes heavy equipment, sidewalk, recreation and turf equipment, and freight and elevation equipment. These assets support road works, large-scale maintenance tasks, and the regular upkeep of community spaces.
- **Trailers and Attachments** - includes trailers, trailer-mounted equipment, and miscellaneous attachments. These assets support and enhance the capabilities of vehicles and equipment, making them versatile for various operational needs.



Fleet garage

8.2.1 State of Infrastructure

Inventory

Municipal fleet inventory was obtained from the latest fleet inventory data managed by Operations staff and updated regularly to ensure the data is current, complete and available to staff. Table 8-2 provides an overview of these assets.

Table 8-2: Inventory of Municipal Fleet

Sub-Type 1	Sub-Type 2	Quantity
Vehicles	Light and Medium Duty	74
	Heavy Duty	21
	Fire Apparatus	16
Equipment	Heavy Equipment	11
	Sidewalk, Recreation, and Turf Equipment	45
	Freight and Elevation Equipment	3
Trailers and Attachments	Trailers and Trailer-Mounted Equipment	33
	Miscellaneous Attachments	12
Total Vehicles		110
Total Equipment		59
Total Trailers and Attachments		45

Condition

All municipal fleet assets utilize the same methodology for assessing condition. Condition data is gathered through quarterly replacement assessments completed by Town staff which inform the annual maintenance needs, repair costs, and the timing for potential replacements. Staff employ a 5-point Fleet Condition Index (FCI) as outlined in Table 8-3, which grades condition based on three components:

- **Useful Life** - determined by service years and/or usage (kilometers driven/engine hours), which vary by fleet type.
- **Cost of Maintenance** - calculated as the total maintenance and repair expenditure in relation to the asset's purchase price.
- **Physical/Mechanical Condition** - evaluated through annual inspections conducted by certified mechanics, assigning a condition rating from 1 (Excellent) to 5 (Poor / Needs Immediate Consideration). Physical condition assessments cover the asset's body, paint and interior cab, while mechanical condition inspections encompass components such as the engine, clutch, axles, gearbox, steering, suspension, battery, electrical, and exhaust.

Condition values for municipal fleet assets are detailed in Table 8-4, and Figure 8-1. The average FCI for municipal fleet assets is 1.7 (excellent).

Table 8-3: Fleet Condition Index

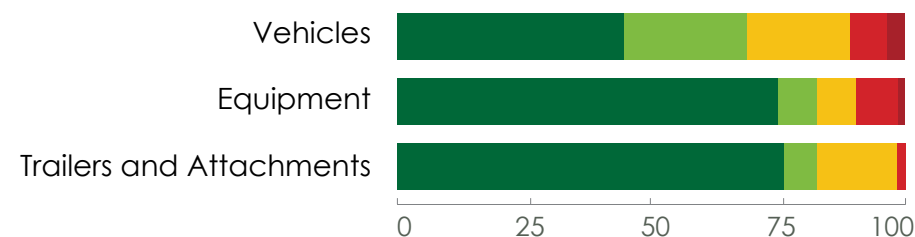
FCI	Condition Grade
1	Excellent
2	Good
3	Acceptable
4	Qualifies for Replacement
5	Needs Immediate Consideration

Table 8-4: Average Condition of Municipal Fleet

Condition Grade	Vehicles	Equipment	Trailers and Attachments
Excellent	50	41	31
Good	25	5	4
Acceptable	18	6	8
Qualifies for Replacement	11	6	3
Needs Immediate Consideration	7	1	0
Avg FCI	2.0	1.6	1.6
Avg Grade	Good	Excellent	Excellent

Note: 63% of Fire Apparatus vehicles are due to be replaced within the next 10 years, 3 of which are already in the process of being replaced.

Figure 8-1: Average Condition of Municipal Fleet



Age and Useful Life

The age and useful life of municipal fleet assets helps to inform the selection and timing of maintenance, repair, and replacement activities. The Town's TCA Policy details the EUL for each asset sub-type, while age is identified through an analysis of First Year in Service data contained in the latest Fleet Inventory file. Municipal fleet assets range in EUL from 8 years to 20 years depending on use. Table 8-5 summarizes the age, EUL and ARUL for each asset sub-type.

Table 8-5: Age and Useful Life of Municipal Fleet (Years)

Asset Sub-Type	Average Age	EUL	ARUL
Light and Medium Duty Vehicles	5	10	5
Heavy Duty Vehicles	7	8-10	1-3
Fire Apparatus Vehicles	10	15	5
Heavy Equipment	8	10-20	2-12
Sidewalk, Recreation, and Turf Equipment	5	8-15	3-10
Freight and Elevation Equipment	8	10	2
Trailers and Trailer-Mounted Equipment	8	10-20	2-12
Miscellaneous Attachments	8	8-10	0-2

Current Replacement Value (CRV)

The CRV of municipal fleet assets is determined through the Development Charges Background Study. As detailed in Table 8-6, municipal fleet assets have a total CRV of \$47.5 million.

Table 8-6: CRV of Municipal Fleet

Sub-Type	CRV (\$M)
Vehicles	\$37.2
Equipment	\$8.7
Trailers and Attachments	\$1.6
Total	\$37.2



Backhoe and Tractor

8.2.2 Levels of Service (LOS)

Community LOS

In keeping with the approach of O. Reg. 588/17, municipal fleet were evaluated for scope to understand the number of these assets available in the Town. This measure aids in resource allocation, maintenance planning, and reflects the Town's ability to support various operational functions such as emergency response, road maintenance and upkeep of community spaces. Community LOS are detailed in Table 8-7.

Technical LOS

In keeping with the approach of O. Reg. 588/17, the Town's municipal fleet was evaluated for average condition including the percentage of these assets in acceptable (fair) or better condition. Current LOS were informed through the latest condition assessments, while proposed LOS are informed through a review of industry best practices and information from Town staff. Current and proposed LOS for municipal fleet are detailed in Table 8-8.

Table 8-7: Community LOS - Municipal Fleet

Scope	Current LOS
Description of the municipal fleet owned or managed by the Town.	The Town owns and manages 219 municipal fleet assets, including 111 vehicle assets, 59 equipment assets and 45 trailers and trailer-mounted equipment assets. Municipal fleet assets are used by Town departments to deliver services to the community.

Table 8-8: Technical LOS - Municipal Fleet

Attribute	Description	Current LOS	Proposed LOS								
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Quality	Average condition of vehicles	2.0	2.0 or better over the next 10-years.								
	Average condition of equipment	1.6									
	Average condition of trailers and trailer-mounted equipment	1.6									
	Percentage of municipal fleet assets in acceptable (fair) or better condition	86%	>85%								

Note 1.0 = Excellent, 2.0 = Good, 3.0 = Acceptable, 4.0 = Qualifies for Replacement, 5.0 Needs Immediate Replacement

8.2.3 Lifecycle Management

Municipal fleet assets are scheduled for acquisition or purchase through the capital budget process. New fleet are procured either to replace an existing asset or to enhance the current fleet inventory to meet increased service demands. Municipal fleet spend most of their service life in the O&M stage where they follow a Preventative Maintenance (PM) program which directly impacts their lifecycle length and condition. Proactive repairs keep assets in good working order and lowers the cost of breakdowns and repairs. PM is provided in three (3) ways:

- **Predictive Maintenance Practices** - proactive activities to identify risks before they occur, reduce downtime and increase the efficiency of municipal fleet assets.
- **Seasonal Set-up Routines** - scheduled activities to prepare municipal fleet assets for seasonal use.
- **Regular Preventative Maintenance Program** - regular scheduled activities prompted by time-sensitive triggers such as total number of kilometers driven.

When conditions fall below acceptable levels, municipal fleet assets qualify for replacement and are added to the replacement schedule. Once these assets reach the end of their useful life, they are disposed of through a public sale or auction. This process allows the Town to recover some residual value from the assets, which can then be reinvested into new acquisitions or other operational needs.

Lifecycle activities for vehicles are informed through:

- Town staff - operating, maintaining, and managing Town assets.
- The Town's Fleet Management Policy.

Current lifecycle activities are identified in Tables 8-9 including the benefits and impacts of each activity.

Table 8-9: Current Activities - Municipal Fleet

Activity	Description and Benefits	Impact
Inspections / Condition Assessments	Identifies current condition and lifecycle requirements.	→
Cleaning	Extends EUL, enhances visibility and safety, prevents corrosion, and reduces repair costs.	↑
Oil Changes	Enhances engine efficiency, protect the engine, reduce costly repairs, and improve fuel efficiency.	→
Tire Rotation	Extends the life of tires, increases safety, and improves fuel economy.	↑
Brake Servicing	Extends the life of brakes, results in better brake performance, and improves stopping power.	↑
Seasonal Activities	Enables the extended and safe use of municipal fleet for winter and summer activities.	→
Rustproofing	Provides a protective layer against salt, dirt, and grime from the road and protects exposed metal from moisture and air.	→
Manufactured Scheduled Maintenance	Increases the EUL, reduces breakdowns and repairs costs, and improves safety, efficiency and performance.	↑



Maintain condition



Improve condition and/or extend useful life

9.0 Growth and Climate Demands

Population growth and climate change are intensifying the pressure on asset management resources. As the population of Innisfil continues to rise, the demand for infrastructure, utilities, and public services grows. This increase requires a more comprehensive strategy for managing and maintaining the Town's assets. At the same time, climate change presents new challenges, including more frequent extreme weather events that can damage infrastructure and increase maintenance costs. Together, these factors necessitate an adaptive and resilient approach to asset management, emphasizing sustainability and resource efficiency to address the growing demands.

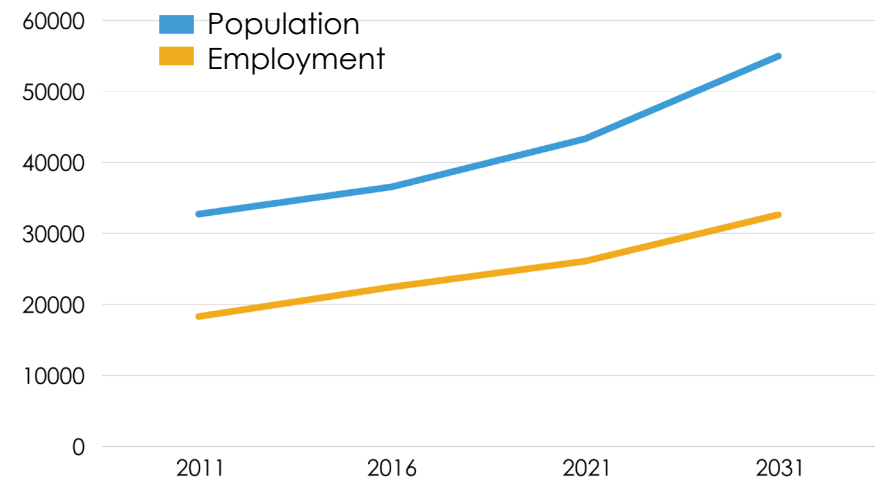
Growth

The Town is preparing for significant growth over the coming years, which will impact how assets are managed and utilized. The Town's Official Plan "Our Place" plays a critical role in managing this growth by establishing land use policies that guide development to ensure it is efficient, sustainable, and supportive of complete communities. As illustrated in Figure 9-1, Innisfil's population is projected to increase from approximately 43,326 residents (2021 Census) to 54,970 by 2031, and the employment base is expected to grow from 26,101 to 32,631 jobs (according to the 2022 Community Profile). To accommodate this growth, additional assets and potentially new types of infrastructure will be required to meet service delivery needs effectively.



A sample rendering of The Orbit, a transit-oriented community built around the proposed Innisfil GO Station by 6th Line and east of 20th Sideroad.

Figure 9-1: Population and Employment



Climate

In 2024, the Town adopted the Integrated Sustainability Master Plan (ISMP), which provides a strategic framework for mitigating and adapting to climate change impacts. Adaptation refers to preparing for and responding to the predicted climate change effects, while mitigation involves actions the Town can undertake to reduce these impacts.

In the context of asset management, climate change presents challenges for the Town in maintaining desired levels of service and functionality of infrastructure assets. To ensure that the Town's assets are safe and reliable, it is essential to incorporate climate change considerations and the use of sustainable materials into decision-making and long-term planning.

Table 9-1 outlines recommended adaptation and mitigation strategies for managing the Town's asset management portfolio.



Electric Pickup Truck

Table 9-1: Adaptation and Mitigation Strategies

Climate Impact	Adaptation	Mitigation
Asset Deterioration Due to Extreme Heat.	Utilize heat resistant materials for paved surfaces.	Enhance tree and shade cover.
Asset Damage Due to Increased Flooding.	Increase capacity of stormwater infrastructure to accommodate increased flow.	Reduce impervious surfaces to decrease runoff.
	Enhance green infrastructure such as rain gardens and permeable pavements. Restore natural water bodies and wetlands for better water absorption.	
Increased Green House Gases.	Increase percentage of electric vehicles, where feasible, in fleet inventory.	Convert existing fleet to electric/hybrid (where feasible). Explore alternative fuel options. Conduct route planning and optimization.

10.0 Risk Management

In the context of municipal asset management, risk refers to the challenges that may impact a municipality's ability to deliver public services efficiently and sustainably. Municipalities face risks related to infrastructure conditions, financial constraints, climate change impacts, and operational inefficiencies. To manage these risks, Town staff utilize strategies such as regular asset condition assessments, preventative maintenance activities, and inter-departmental collaboration.

Tools like risk registers, data analytics, and lifecycle cost analysis are used to identify and assess and determine suitable treatment options. Town staff acknowledge ISO 31000 as the industry best practice for risk management. This standard offers a structured framework that enhances risk management by increasing risk awareness, supporting informed decision-making, ensuring compliance, and building stakeholder confidence through systematic risk identification, assessment, treatment, and ongoing monitoring and review.



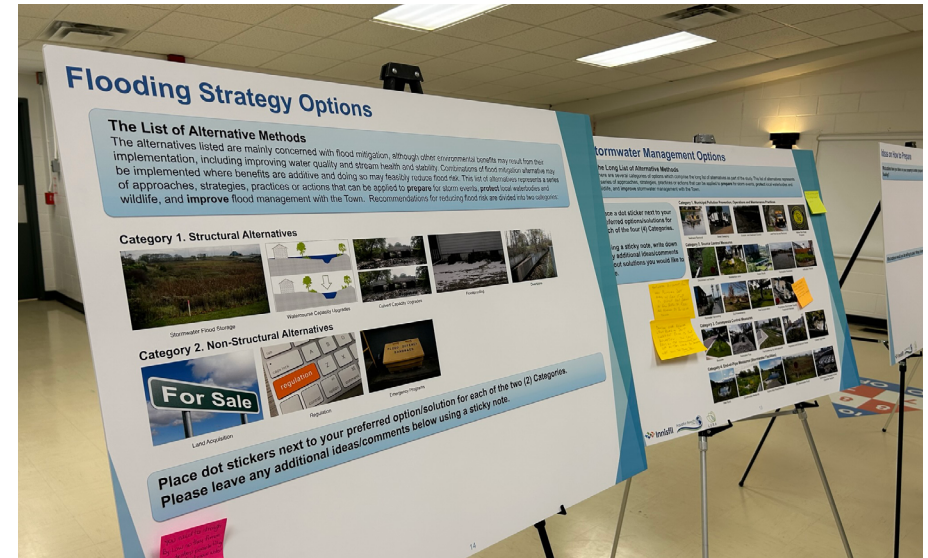
Innisfil Fire and Rescue ladder truck

ISO 31000 Risk Framework

- 1. Risk Identification:** Identify potential risks by compiling data from diverse sources such as routine inspections, public reports, historical incidents, and staff experience to integrate stakeholder insights into the risk identification process.
- 2. Risk Assessment:** Evaluate each risk to determine likelihood (probability of occurrence) ranging from unlikely to likely and impact (severity of consequences), ranging from minor to severe. Prioritize risks by assigning a risk rating based on their potential threat level.
- 3. Risk Treatment:** Implement measures to minimize risk impacts and prepare response plans. Treatment aligns with risk tolerance, considering likelihood, impact, cost, and urgency, including strategies like:
 - **Elimination:** Completely remove the risk.
 - **Mitigation:** Reducing likelihood and/or impact.
 - **Acceptance:** Acknowledging and retaining risks.
- 4. Monitoring and Review:** Continuously oversee and evaluate the effectiveness of risk assessments and treatments, keeping strategies current and allowing proactive hazard management.

In this version of the AMP, staff have applied ISO 31000 principles to document various risks affecting the asset management program. A comprehensive risk register is expected following the enterprise risk management project planned for 2026.

Table 10-1 highlights sample risks across different sections of the program, detailing specific risks, associated considerations, and potential treatment options.



Stormwater community engagement

Table 10-1: Sample Risk

Category	Risk Question/Considerations	Treatment	Treatment Response
Growth	Do assets have enough capacity to meet the demands for service from a growing population?	Mitigation	Align asset management planning with land use planning policies. Utilize demographic forecasting tools to better predict growth trends.
Climate	Are assets designed to withstand extreme weather events?	Acceptance / Mitigation	Implement sustainable materials and policies for new development. Incorporate LID measures and ensure retrofits or replacements are adequately designed to withstand severe weather.
Levels of Service	Are levels of service aligned with community expectations?	Mitigation	Asset management is informed by master planning documents and the budget both of which incorporates insights gathered from community engagement.
	Does the Town have sufficient reserves to maintain proposed levels of service?	Mitigation	Establish a long-term financial strategy that includes diverse revenue streams. Conduct periodic financial review to optimize budget allocation.
Lifecycle Activities	Are the current lifecycle activities sufficient to maintain desired levels of service?	Mitigation	Implement lifecycle management software to model the effect of lifecycle activities on levels of service and monitor through regular periodic asset condition inspections.
Regulatory Compliance	Are all assets compliant with the latest regulations and standards?	Elimination	Continue to monitor applicable regulations and standards and adjust practices as needed to maintain compliance.

11.0 Financial Summary

11.1 Financial Overview

Assets require significant investment throughout their useful life to ensure they remain efficient and effective both now and in the future. This involves regular assessment of asset conditions, reviews of service level targets, and a full understanding of lifecycle needs along with economic pressures to identify and secure the necessary levels of reserve funding. Effective management of reserve funds enables the Town to allocate resources required for planned lifecycle activities and better equips the Town to respond to unforeseen events such as extreme weather or asset breakdowns.

The financial details presented in this section are based on the Town's 2025/2026 Budget, which incorporates the approved two-year budget and an eight-year capital forecast. All financial figures are estimates and may change over time. These estimates represent the funding required over the next 10 years to achieve the proposed levels of service detailed in Sections 4 through 8.



The 2025/2026 Budget is available on the Town of Innisfil website.

Table 11-1 details the Town's total forecasted investment in asset management amounting to \$917.5 million dollars over the next 10 years. This significant investment supports the acquisition, operation, maintenance, and renewal of Town assets. By allocating these resources, the Town aims to ensure that its infrastructure and services remain efficient and effective, consistently supporting the community's needs and seamless delivery of services.

Table 11-1: 10-Year Financial Summary (\$ Millions)

Budget Category	10-Year Total
Operating Expenses	201.0
Capital Expenditures	716.5
Total Forecast	917.5

Operating Budget

The Town's operating budget is primarily funded through property taxation and is allocated to finance the operation and maintenance of assets throughout their lifecycle. The operating budget is also used to fund capital reserves through annual contributions. Table 11-1 and Figure 11-1, detail the operating expenses projected over the next 10 years.

The amounts for 2025 and 2026 have been approved by Council in the 2025/2026 Budget. For the years 2027 through 2034, the 2026 budget is utilized as a baseline, with an annual increase of 5% applied to address inflation and growth-related pressures. It is anticipated that property tax revenues will incrementally rise over time to accommodate these annual increases, ensuring adequate funding.

The Town's estimated 10-year operating expenses total \$201.0 million. This, along with the total 10-year capital expenditures detailed on Page 72, supports the lifecycle activities necessary to achieve the proposed LOS targets.

Figure 11-1: Total 10-Year Operating Expenses (\$ Millions)

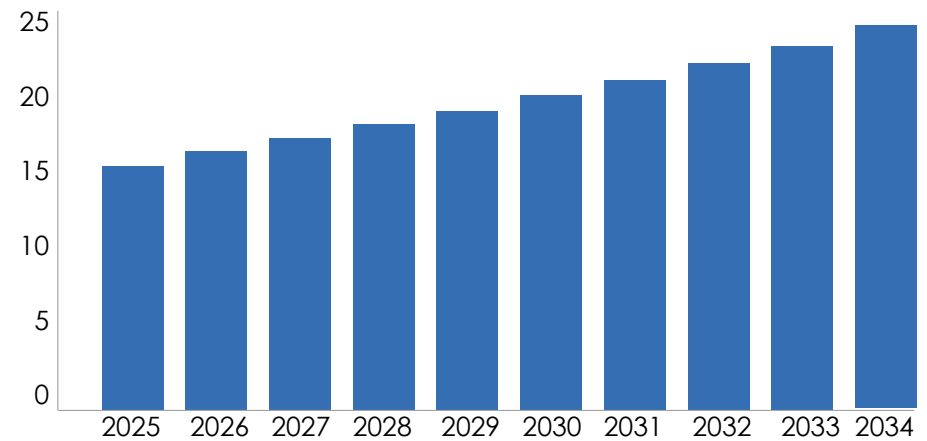


Table 11-2: 10-Year Operating Expenses (\$ Millions)

Asset Category	Years										10-Year Total
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Transportation	6.9	7.4	7.8	8.2	8.6	9.0	9.4	9.9	10.4	10.9	88.5
Stormwater	0.9	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.6	13.0
Community Spaces	7.7	8.0	8.4	8.8	9.3	9.7	10.2	10.7	11.3	11.8	95.9
Municipal Fleet	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	3.6
Total Operating	15.8	16.8	17.6	18.5	19.4	20.4	21.4	22.5	23.6	24.8	201.0

Capital Budget

The Town's capital budget is primarily financed through the 1% Capital Tax Levy and Tax-Supported Reserves. It is allocated for the acquisition of new assets, rehabilitation or reconstruction of existing assets, and any costs related to asset disposal. Table 11-3 and Figure 11-2, provide a detailed breakdown of capital expenses projected over the next 10 years.

The budget allocations for 2025 and 2026 were approved by Council as part of the 2025/2026 Budget. For the years 2027 through 2034, the eight-year capital forecast from the 2025/2026 Budget is used to estimate future costs and the timing of capital project expenditures.

The Town's estimated capital expenditures over the next 10 years total \$716.9 million. This figure, along with the 10-year operating expenses detailed on Page 71, supports the lifecycle activities necessary to achieve the proposed LOS targets.

Figure 11-2: Total 10-Year Capital Expenditures (\$ Millions)

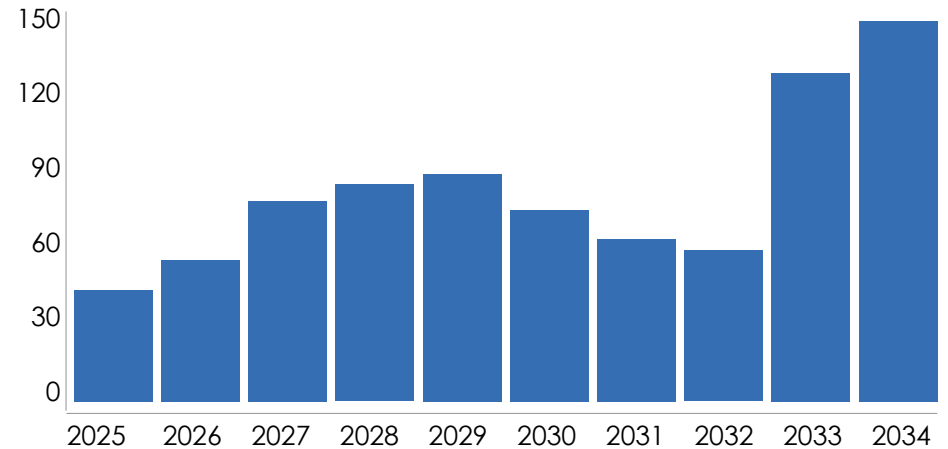


Table 11-3: 10-Year Capital Expenditures (\$ Millions)

Asset Category	Years										10-Year Total
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Transportation	13.1	16.9	27.5	35.0	41.1	31.9	34.0	24.2	65.7	62.5	351.8
Stormwater	5.1	14.8	19.3	13.6	8.7	8.1	10.3	11.2	26.3	25.8	143.3
Community Spaces	14.8	7.3	15.7	20.7	22.4	18.2	5.6	7.0	8.1	34.7	154.6
Municipal Fleet	4.8	9.0	5.4	4.3	5.0	6.9	5.3	8.6	11.4	6.1	66.9
Total Capital	37.8	48.0	67.9	73.6	77.1	65.1	55.2	51.1	111.5	129.1	716.5

Available Funding

The Town's capital expenditures are primarily funded through the Capital Reserve Fund and Alternative Revenue Sources (ARS). The Capital Reserve Fund is essential for balancing out the fluctuations in capital funding over time, ensuring that projects can progress without disruption. ARS includes funding received from the Ontario Lottery and Gaming (OLG) Corporation, which is used to support growth-related capital projects and one-time strategic initiatives, which include various asset lifecycle expenditures. Funds are contributed annually to the reserves. As of January 2025, the Town has a reserve balance of \$85.6 million for asset management related expenditures.

The Town also utilizes a portion of the funding received from the Ontario Community Infrastructure Fund (OCIF) and the Canada Community-Building Fund (CCBF), to support asset lifecycle expenditures.



Aerial image of Stroud

11.2 Financial Analysis

O. Reg. 588/17 requires municipalities to identify potential funding shortfalls and explore potential strategies to mitigate the risks associated with these shortfalls. This approach encourages the Town to initiate critical discussions concerning the affordability of maintaining both current and proposed LOS targets.

Table 11-4 summarizes the following components of the Town's financial analysis:

- **Contributions to Reserves** - additional capital added from municipal sources to support asset lifecycle expenditures.
- **Grant Funding (OCIF and CCBF)** - the portion of funds received from OCIF and CCBF allocated to asset lifecycle expenditures.
- **Available Funding** - the sum of the contributions and grants.
- **Forecasted Expenditures** - the total amount of forecasted capital investment for infrastructure lifecycle activities.
- **Funding Shortfall** - the deficit between the available funding and the forecasted expenditures.
- **Withdrawal From Reserves** - the amount of reserve capital utilized to cover the deficit between available funding and forecasted expenditures.
- **Net Funding Shortfall** - the amount of forecasted expenditures that cannot be covered by the available funding and reserves.

The forecasted expenditures over the 10-year period will total \$716.5 million. Estimated funding over the same period will total \$523.2 million, which consists of \$437.6 million of available funding (i.e. contributions to reserves and grant funding) and \$86.5 million of reserve funding. This results in a 10-year funding shortfall of \$193.3 million. Table 11-4 identifies the annual breakdown of this information and highlights that the reserves will be fully depleted as of 2028.

The forecasted capital expenditures are based on the current scope of the capital projects and their planned timelines. These are subject to change over time due to shifting circumstances, evolving priorities, and economic factors. The impact of these changes is a mitigation of the funding shortfall as it effectively distributes the forecasted expenditures over a longer time frame.

In alignment with the Town's Strategic Plan, an updated long-term financial plan is underway to guide future policy and budget decisions and ensure continued financial sustainability. The long-term financial plan will provide a structured framework to support the Town's asset management program, including updated forecasting and project prioritization.

As the long-term financial plan updates are integrated into the AMP, the infrastructure funding shortfall is expected to evolve over time, allowing for more precise adjustments in funding allocations. Additionally, Implementing Enterprise Asset Management Software (EAMS) will allow the Town to better analyze how changes in expenditures affect levels of service, which will enhance the Town's annual and long-term forecasting.

Table 11-4: 10-Year Financial Analysis (\$ Millions)

Component	Years										10-Year Total
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Contributions to Reserves	25.0	25.7	27.9	34.6	37.0	40.2	43.8	47.9	52.5	55.5	390.1
Grants (OCIF & CCBF)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	47.5
Available Funding	30.0	30.7	32.9	39.6	42.0	44.7	48.3	52.4	57.0	60.0	437.6
Forecasted Expenditures	(37.8)	(48.0)	(67.9)	(73.6)	(77.1)	(65.1)	(55.2)	(51.1)	(111.5)	(129.1)	(716.5)
Funding Shortfall	7.8	(17.3)	(35.0)	(34.0)	(35.1)	(20.4)	(6.9)	1.3	(54.5)	(69.1)	(278.9)
Withdrawal from Reserves	7.8	17.3	35.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0	85.6
Net Funding Shortfall	0.0	0.0	0.0	(8.5)	(35.1)	(20.4)	(6.9)	1.3	(54.5)	(69.1)	(193.3)

Strategies to Mitigate the Funding Gap

O. Reg. 588/17 requires municipalities to identify potential funding shortfalls and explore the available options to manage the associated risks. This approach encourages the Town to initiate critical discussions concerning the affordability of maintaining both current and proposed LOS targets. To address the funding shortfalls over the next 10 years, the following strategies have been explored:

1. Update the Long-Term Financial Plan:

This involves an analysis of capital expenditures and available funding over a longer term to provide financial sustainability and support effective asset management planning.

2. Improve State of Infrastructure Data:

This involves enhancing the accuracy of infrastructure data through the increase of inspections. Accurate data allows for early identification of potential issues, enabling timely operations and maintenance activities, which can preserve asset conditions and extend their useful life. By doing so, municipalities can potentially decrease the forecasted capital requirements, thus addressing budget constraints more efficiently.

3. Reduce Funding Requirements:

This approach involves strategically the consideration of adjusting levels of service over the next 10 years to reduce the forecasted capital expenditures. This approach would result in decreased service delivery.

4. Increase Available Funding:

Increase available funding through new fees and charges to increase revenue and strengthen the Town's financial position.



Community Engagement for Innisfil Beach Park

12.0 Monitoring and Improvement

Continuous improvement is a fundamental component of the Town's asset management program. Staff have taken a proactive approach in this regard by employing the Asset Management Readiness Scale (AMRS), developed by the Federation of Canadian Municipalities (FCM). The AMRS enables municipalities to self-assess their current asset management practices, identify opportunities for improvement, determine actions to improve practices, and track the progress in evolving the maturity of the Town's asset management program.

The AMRS measures the maturity of a municipality's asset management program across five competency areas:

- 1. Policy and Governance:** Evaluates the existence of policies and senior management support for asset management.
- 2. People and Leadership:** Assesses staff competencies, leadership commitment, and role clarity in asset management efforts.
- 3. Data and Information:** Examines the quality, accessibility, and integration of asset-related data and systems.
- 4. Planning and Decision-Making:** Analyzes the use of data in planning processes, decision-making, and investment prioritization.
- 5. Contribution to Community Sustainability:** Looks at how effectively asset management efforts contribute to broader sustainability goals.

The Town's current performance using the AMRS is reported annually to Council through the Year-End Key Performance Indicators (KPI) and Metrics Report.

Opportunities Identified in the AMP

Staff have identified opportunities throughout the AMP to strengthen the Town's performance in the Data and Information competency area of the AMRS. These opportunities are summarized in Table 12-1 along with a timeline for completion.

Additional Opportunities

In addition to the improvement opportunities outlined in Table 12-1, Town staff have also identified opportunities to strengthen the Town's maturity in the Policy and Governance and Planning and Decision-Making competency areas of the AMRS. These opportunities are detailed in Table 12-2 along with a timeline for completion.

Annual Review

In compliance with O. Reg. 588/17, staff will conduct an annual review of the Town's asset management program and provide a report to Council detailing the following:

- The Town's progress in implementing the AMP
- Any factors impeding the Town's ability to implement the AMP
- A strategy to address these factors

Table 12-1: Opportunities Identified in the AMP

Opportunity	Description	Timeline
O-1	Purchase and implement Enterprise Asset Management Software (EAMS) integrated with GIS and Tangible Capital Assets (TCA).	2026
O-2	Expand inventory to include assets currently out-of-scope (e.g. street lights, street signs, curbs, ditches, parking lots, trees).	2027
O-3	Refine PCI targets through an evaluation of AADT counts and specific service needs for use and volume.	2027
O-4	Establish condition methodology for staff-inspected assets.	2027
O-5	Adopt trails typology outlined in the Land and Lake Plan and update inventory.	2026
O-6	Establish standardized 5-point condition index to be used across all asset categories and types.	2027

Table 12-2: Additional Opportunities

Opportunity	Description	Timeline
O-7	Update asset management policy.	2027
O-8	Establish asset management strategy.	2027
O-9	Establish risk management framework.	2027
O-10	Establish a greater level of integration with the budget process to enhance the level to which the AMP informs budget decisions.	2028