Township of NIPISSING

"Life the way it should be" ESTABLISHED 1888

# Township of Nipissing

# 2025 Asset Management Plan


URBAN RE

## REPORT INFORMATION

**Municipality:** Township of Nipissing

**Title:** 2025 Asset Management Plan

**Author:** UrbanRe Advisory Inc.

**Date:** 28 October, 2025
**Updated:** 14 November, 2025

**Cover Image:** Nipissing Museum

## DISCLAIMER AND NOTICES

This Asset Management Plan (AMP) has been prepared for the Township of Nipissing for the purpose of meeting the requirements of Ontario Regulation 588/17 and to inform long-term infrastructure and financial planning needs. It reflects the best available information at the time of publication and is intended to be a living document that will evolve as better data and methods become available.

The AMP is a strategic planning tool. It is not a capital budget, nor does it commit the Municipality to specific projects, funding levels, or service outcomes. All decisions regarding future investments, priorities, or service levels remain at the discretion of Council through the annual budget and capital planning process.

Financial figures contained in this document represent high-level estimates developed from available asset registers, staff input, condition assessments, and industry costing sources. These estimates are subject to change as new studies, inspections, or more detailed designs are completed.

The analysis within the AMP is based on the processes described herein, which include a series of assumptions using available data. While the Municipality strives for accuracy, some information may be incomplete, approximate, or based on best professional judgment. Updates to the AMP will continue to improve the quality of data and projections over time.

This document is provided for planning purposes only and should not be relied upon for litigation, claims, or other uses beyond its intended scope. Where consultants or third-party data sources have been used, liability is limited to the terms of those professional services agreements. UrbanRe's role in the preparation of this document was limited to the consolidation and presentation of available data and Township input. It cannot be held liable for the accuracy or validity of the information presented herein.

# EXECUTIVE SUMMARY

The Township of Nipissing manages a diverse portfolio of public infrastructure assets that provide important services to residents, businesses, and visitors. This portfolio includes Roads, Bridges and Culverts, Buildings and Land Improvements, and Vehicles and Equipment. Together, these assets support the local economy, contribute to quality of life, and meet the community's day-to-day needs.

This Asset Management Plan (AMP) outlines the assets owned by the Township, their current condition, associated risks, investment requirements, and the financial strategy needed to sustain them over the next 10 years. The AMP covers assets recorded in the Township's Tangible Capital Asset register and has been prepared in accordance with *Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure*.

The regulation requires that each municipality develop a plan for its infrastructure assets, adopt it by Council, and make it available to the public. This AMP provides a technical and financial roadmap for how the Township can manage its capital assets. It aims to support long-term expenditure planning, safeguard the quality and performance of infrastructure, and enable the sustainable delivery of services to the community.

## Asset Portfolio Overview

The current replacement value of the Township's asset portfolio across its four major asset classes is estimated to be $49.8 million in 2025. The breakdown of assets by value is shown in the chart below:

Figure 1: Asset Portfolio by Current Replacement Value

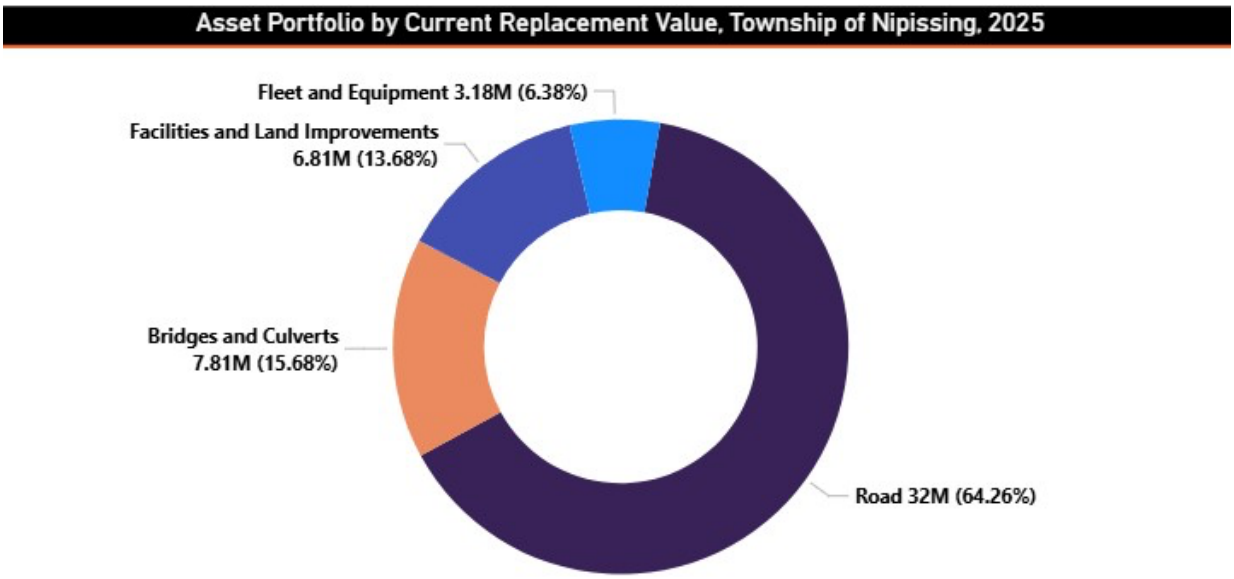



*Figure 1* illustrates the Township's assets by replacement value. Roads represent the largest share at approximately $32 million. Bridges and Culverts are the second-largest category at $7.81 million, followed by Facilities and Land Improvements at $6.81 million, and Fleet at $3.18 million. Additional detail on asset condition, replacement costs, and investment needs is provided in Chapter 2 of this AMP.

The condition of municipal assets has a strong influence on the Township's reinvestment needs over the next 10 years. Overall asset condition is estimated for each asset class as summarized in the graph below.

### Figure 2: Asset Portfolio Condition

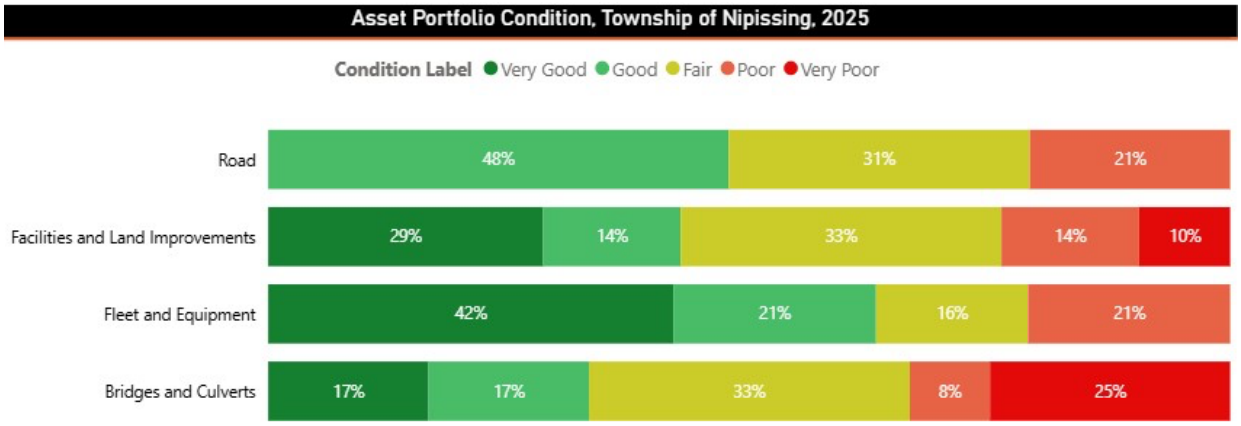


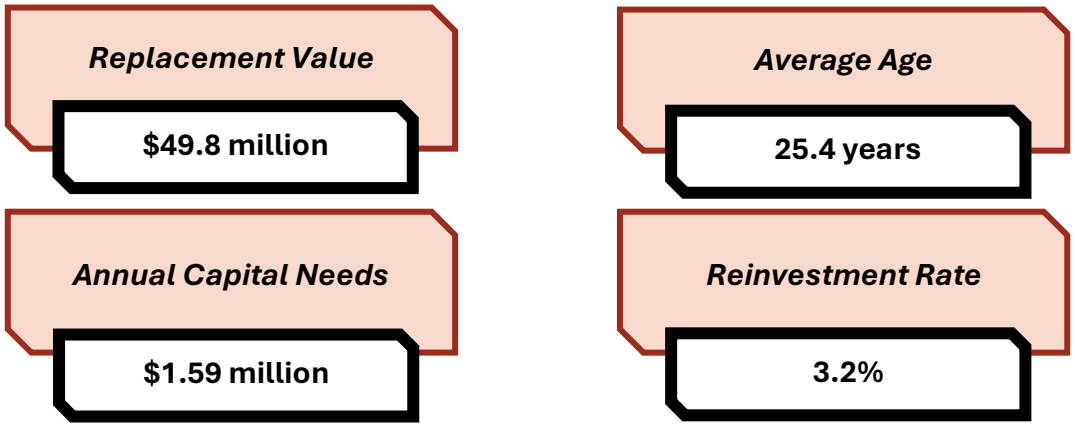

*Figure 2* presents the overall condition of Nipissing's asset portfolio in 2025. Roads of all types have nearly half (48%) in good condition but over one-fifth (21%) rated poor. Fleet assets perform strongly, with 42% in very good condition and 21% rated as poor. In contrast, Bridges and Culverts present a challenge, with one-third (33%) rated poor or very poor, highlighting a key area of need in the AMP. Facilities and Land Improvements fall between these extremes, with the majority in fair or better condition.

## Asset Financial Needs and Strategy

In the near term (2026–2031), the AMP identifies specific projects that address the Township's most pressing infrastructure needs. These projects result in higher-than-average expenditures for the first half of the 10-year timeframe. From 2032 onward, the approach shifts to reserve-based funding, with annual contributions and planned investments aligned to long-term lifecycle needs.

Over the 10-year horizon, asset requirements total $15.9 million, averaging $1.59 million per year (in year-of-expenditure dollars). This represents an annual reinvestment of approximately 3.2% of the Township's total asset value. Beyond funding priorities for asset maintenance and renewal, the AMP also outlines strategies to improve data quality, strengthen strategic planning, and maintain regulatory compliance.

## Nipissing Assets by the Numbers



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# GLOSSARY OF TERMS

## ACRONYMS

| | |
|---|---|
| **AMP** | Asset Management Plan |
| **AODA** | Accessibility for Ontarians with Disabilities Act |
| **BCI** | Bridge Condition Index |
| **GHG** | Greenhouse Gas |
| **LOS** | Levels of Service |
| **MTO** | Ministry of Transportation Ontario |
| **O.Reg 588/17 (Regulation)** | Asset Management Planning for Municipal Infrastructure |
| **PCI** | Pavement Condition Index |
| **PM** | Preventive Maintenance |
| **RCR** | Ride Comfort Rating |
| **TCA** | Tangible Capital Asset |

## DEFINITIONS

| | |
|---|---|
| **Financial Strategy** | The financial strategy outlines the municipality's approach to meeting the requirements of Ontario Regulation 588/17, specifically detailing the costs necessary to maintain existing levels of service for municipal infrastructure assets |
| **Funding Gap** | A funding gap occurs when identified investment needs lack dedicated or assigned funding sources to carry out the planned activities required to maintain or improve municipal infrastructure |
| **Levels of Service (LOS)** | Levels of Service include both qualitative descriptions and quantitative technical measures that define the municipality's commitments, standards, and expectations for the performance and reliability of infrastructure assets |
| **Lifecycle Cost** | Lifecycle cost refers to the total expenditure associated with an asset throughout its entire lifespan, including all phases such as planning, acquisition, construction, operation, maintenance, renewal, disposal, and the related engineering and design work |
| **Expected Useful Life** | The expected useful life is the estimated duration during which an asset is anticipated to function effectively and deliver the required level of service |
| **Lifecycle Management** | Lifecycle management encompasses the comprehensive processes and activities involved in overseeing infrastructure assets from initial planning through to disposal, including acquisition, construction, operation, maintenance, renewal, and associated engineering and design tasks |
| **Own Source Revenues** | Own source revenues are funds generated directly by the municipality through taxation, licensing fees, user charges, or other municipal-imposed fees |
| **Non-Core Assets** | Non-core assets include municipal infrastructure that does not fall within core asset categories (such as roads, water, sewer, and stormwater systems), but are still owned and operated by the municipality. Examples include fleet vehicles, equipment, parks, and municipal facilities |
| **Operating Costs** | Operating costs represent the total expenses incurred to operate a municipal asset over its service life, which includes energy consumption, labor, materials, and other ongoing operational expenditures |

| | |
|---|---|
| **Replacement Value/Replacement Cost** | Replacement value (or replacement cost) is the estimated amount required to fully replace an asset with a new one of equivalent capacity and function, at current market prices |
| **State of Infrastructure** | The state of infrastructure provides a summary overview of the municipality's assets, including information on replacement costs, average asset ages, current conditions, and overall asset health, as required under O.Reg. 588/17 |
| **Community Levels of Service** | Community levels of service describe how residents and stakeholders experience, value, and assess the quality of municipal services, serving as a basis to evaluate whether community expectations are being met |
| **Technical Levels of Service** | Technical levels of service are measurable indicators used to assess and report service delivery, also serving to demonstrate if proposed community levels of service are being achieved |

# 1. INTRODUCTION

## 1.1 Introduction to the Asset Management Plan

The Township of Nipissing (in this report, the "Township", "Municipality" or "Nipissing") is a single-tier municipality in North-Eastern Ontario that owns, operates and manages a range of infrastructure assets. These assets provide municipal services that residents, businesses, and visitors rely on to support economic activity, enhance resident well-being, and protect the local environment.

Nipissing manages assets in four major categories: Roads, Bridges & Culverts, Facilities & Land Improvements, and Fleet & Equipment. Assets in these categories are required to be managed in accordance with Ontario's asset management regulation *O. Reg. 588/17*. This Asset Management Plan (AMP) was prepared following the requirements in that regulation and offers analysis and strategies to support the Township with sustainable delivery of services for the community.

The following asset categories are addressed in this AMP:

### Table 1.1: The Township's Core Infrastructure Assets

| Service Category | Asset Classes |
|---|---|
| **Roads** | Paved, surface treated and gravel roads |
| **Bridges and Culverts** | Bridges and multi plate culverts |

### Table 1.2: The Township's Non-Core Infrastructure Assets

| Service Category | Asset Classes |
|---|---|
| **Facilities and Land Improvements** | Township Office, Public Works Garage and Buildings, Fire Stations 1 & 2, Community Centre and Fitness Centre, Rink Building and Facility, Landfill Buildings, Museum Buildings, Playground and Communication Towers |
| **Fleet and Equipment** | Light vehicles, Heavy vehicles, trailers, Fire Department Apparatus, Public Works equipment, maintenance equipment |

This AMP provides a framework for managing Township assets across their lifecycle, from acquisition, operation, maintenance, to rehabilitation and renewal. It assists the Township to make informed decisions on asset performance, useful life, and total cost of ownership, while meeting evolving community needs.

The *Strategic Plan* for the Township of Nipissing identifies the following goals to guide service delivery and LOS decision-making:

- Safety
- Customer Satisfaction
- Quality
- Quantity
- Financial Sustainability
- Capacity
- Reliability
- Responsiveness
- Environment
- Climate Change Adaptation

These goals are also considered with the review of each asset and services provided within the Township.

## 1.2 Nipissing Municipal Assets in Context

The Township of Nipissing is located within Robinson Huron Treaty lands and was settled as a community by colonial homesteaders traveling along the Nipissing and Colonization roads from about 1862. The Township had a brief boom as a regional hub, which influenced the development of a varied portfolio of infrastructure assets including museums and other heritage structures.

Today, Nipissing is home to approximately 1,769 residents living in 1,012 dwellings, per the 2021 census. To serve this population, as well as visitors and businesses, the Municipality manages a portfolio of assets that support transportation, community services, emergency response, and the daily operations of municipal government. Current inventory highlights include approximately 150.1 km of roadways, 12 bridges and culverts, and 21 public service buildings and recreational facilities.

This AMP provides a forward-looking framework to consider asset planning needs in the context of local population changes, a changing local climate, as well as the Township's financial realities. Considering these factors together will support the Township of Nipissing to continue delivering reliable services.

### Population Trends

The permanent (year-round) population of the Township of Nipissing increased from 1,553 in 2001 to 1,769 in 2021, with a recent increase of approximately 3.6% over the past 5 years. Changes in population affect both service demand and the municipal revenue needed to fund infrastructure:

- Growth can strain existing systems, necessitating capacity upgrades, service expansions, and additional investment. It can also provide additional ratepayers to fund infrastructure needs.
- Decline may result in underutilized assets, rising costs per user, and the need to review service levels to maintain affordability.

Figure 1.1: Nipissing Population Trends, 2001-2021

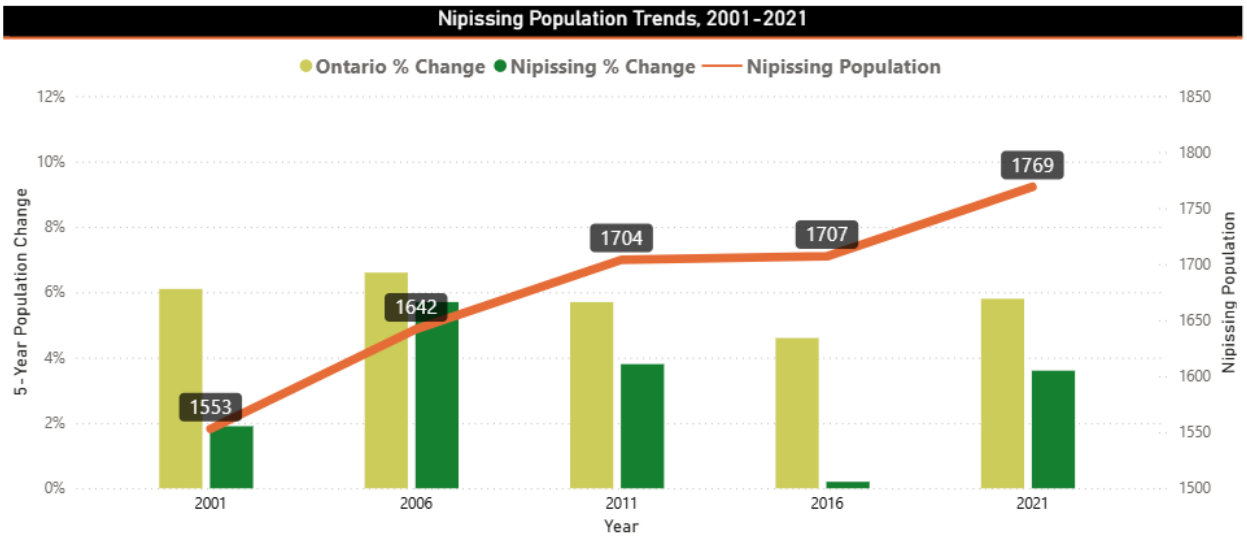


*Figure 1.1* shows the population of Nipissing increasing from 1,553 in 2001 to 1,769 in 2021, with the rate of increase in population per five-year period generally lower than the overall rate of increase in Ontario. This means that while the community is growing, it is growing slower than other communities in the province.

### Climate Change and Asset Resilience

Climate change presents challenges to maintaining municipal services, with extreme weather events, shifting temperature patterns, and more frequent freeze-thaw cycles affecting asset performance and lifecycle costs.

The Township of Nipissing has traditionally experienced warm, humid summers and long, cold, snowy winters. Under anticipated climate conditions, the Township will experience hotter summers, milder winters, and more frequent extreme rainfall and storm events. This is expected to impact infrastructure in the following ways:

- **Buildings:** Climate stressors such as extreme heat, precipitation, and wind are already putting pressure on building components shortening lifespans, raising energy costs, and increasing maintenance demands.
- **Transportation:** The strain of more frequent freeze-thaw cycles, extreme precipitation, and high heat is expected to increase the cost of maintaining roads, bridges, and culverts.
- **Wildfire risk:** Northern Ontario's increased temperature and drier conditions raise concerns over wildland fire hazards. Township structures located within the wildland interface that are subject to upgrades or replacement may consider measures to mitigate the risk of loss in the event of a wildfire.
- **Flooding:** High water levels, spring melt, and intense storms in the Lake Nipissing region have impacted roads and drainage infrastructure, causing localized flooding and raising the risk of prolonged flooding in low-lying regions. Certain Township assets, such as the Bear Creek Culvert, may be identified and assessed for modifications that could mitigate the risk of flooding in the long term.

Proactive investments in adaptation measures, such as adding fire-resistant design elements to buildings, increasing the capacity of drainage infrastructure such as culverts, and providing emergency backup infrastructure, may assist with safeguarding municipal assets and the services they deliver.

## 1.3 Planning Approach

This Asset Management Plan offers a view of Nipissing's infrastructure portfolio, setting out the current state of assets, the Levels of Service (LOS) provided, and the investments required to sustain proposed LOS over the next 10 years. It is guided by the principles of financial prudence, social responsibility, and environmental sustainability, as defined in the Municipality's Asset Management Policy and in alignment with Ontario Regulation 588/17.

The body of the AMP is organized in three main parts, with several chapters comprising the second part:

1. **State of the Infrastructure** introduces the Township's asset portfolio overall and provides high-level information regarding the size, value, and condition of the Municipality's infrastructure.

2. **Assessments by Asset Class:** The main chapters of this AMP are organized to provide an overview of the current state, condition, and performance of each of the major asset classes the Township owns. Each chapter includes:

    - *Asset Overview*: Inventory and condition information
    - *Current and proposed Levels of Service (LOS)* and risks to achieving service levels.
    - *Planned lifecycle activities* over the next 10 years, including maintenance, rehabilitation, and renewal, and the costs to complete these activities.

3. **Financial Strategy, Conclusion and Next Steps** consolidate investment needs across all asset classes into a 10-year financial outlook and discusses strategies for sustainable funding.

    - *Financial forecasts* to support sustainable long-term management of these critical networks.

The AMP draws information regarding municipal assets from sources including financial records, consultant-prepared asset reports, and the operational expertise of municipal staff, to provide an overview the current state of infrastructure and identify investment priorities.

## Assessments by Asset Class

Each asset class is evaluated using a common framework, to consider needs and identify priorities for reinvestment over a 1-year planning timeframe. Major components of this assessment include:

**Levels of Service (LOS)** describe the quality and reliability of services that residents, businesses, and other users can expect from municipal infrastructure. Ontario Regulation *O. Reg. 588/17* requires municipalities to define and monitor both *Community* and *Technical* Levels of Service. Community LOS describe outcomes from the perspective of users and the public, while Technical LOS provide performance metrics to be monitored by staff. The regulation requires municipalities to report current performance and set proposed LOS, which are targets based on community expectations, affordability, and regulatory needs.

**Risk** complements LOS by assessing the likelihood and consequences of infrastructure failures resulting in loss of service. Considering risks such as health and safety impacts, financial costs, and service disruptions can help the Municipality prioritize investments where they matter most.

**Lifecycle Activities (LCA)** are the planned actions required to sustain municipal assets throughout their service life. These activities span the full lifecycle of an asset—from design and construction, through operation and maintenance, to renewal or decommissioning. Under **O.Reg. 588/17**, municipalities must identify the lifecycle activities necessary to maintain proposed Levels of Service (LOS) over the planning horizon and estimate the costs of carrying them out.

**Asset Financial Requirements** demonstrate the funding needed to carry out LCAs that sustain LOS over time. For each asset class, financial requirements quantifying the estimated costs of renewal or replacement of assets over a 10-year planning horizon, are presented at the end of each chapter.

## Methods Used to Determine Asset Condition

Asset Condition was determined for this AMP in two ways:

- **Formal Condition Assessments:** Inspections have been completed for roads, bridges and culverts, and specific facilities by qualified professionals within the last 2 years. Detailed condition information available for these assets is used to report their condition in this AMP.
- **Age-Based Condition Estimates for Other Assets:** Where qualified condition assessments are not available, asset condition is estimated in this AMP based on asset age and expected useful life, applying the methodology described below and detailed in *Appendix A3*.

Condition ratings for most assets in this AMP are evaluated based on the age of the assets relative to their estimated useful life. Condition ratings are determined as follows:

| Condition Rating | Remaining Useful Life (%) |
|---|---|
| Very Good | >= 75% |
| Good | 50% – 74% |
| Fair | 25% – 49% |
| Poor | 0% – 24% |
| Very Poor | < 0% |

Further information on the approaches used for asset condition ratings is provided in *Appendix A*.

## 1.4 Data Sources

This AMP was developed with current asset information at the time of preparation, drawing from municipal records and financial documents, relevant technical studies, and targeted input from municipal staff that together provide insights into the asset portfolio and needs.

Key data sources include:

1. **Technical Reports and Studies**
   - Commissioned by the Township for specific asset categories, for example, roads, bridges, facilities.
   - Recent information on asset condition, lifecycle costs, rehabilitation needs, and recommended timelines for renewal from qualified professionals.
2. **Tangible Capital Asset (TCA) Register**
   - Contains asset acquisition dates, estimated replacement values, and asset classifications.
   - Provides age-based condition inferences and supports prioritization of linear assets (e.g., facilities and land improvements, fleet and equipment).

- Updated during the preparation of this AMP to reflect validated asset inventories and revised replacement cost estimates.

3. **Financial Records**
   - Recent municipal annual budgets and audited financial statements.
   - Includes historical capital expenditures, reserves, and funding allocations that influence asset lifecycle planning, for reference and comparison.

Preference has been given to verified and recent data. Further details on data sources and methodology are provided in *Appendix A2*.

## 1.5 Limitations of the Plan

Like any planning document, this AMP has certain limitations that should be recognized when interpreting its findings. A common challenge in asset management is the reliability and completeness of underlying data. This AMP has been developed using the best information currently available, including the Municipality's asset records and staff input. Key limitations of the AMP include:

- **Estimates for Asset Replacement Values**: Replacement cost estimates in this AMP provide indicative values for planning purposes. Actual costs for construction, rehabilitation, or acquisition will vary at the time of procurement. These estimates allow the Municipality to understand the scale of expected capital needs but should not be relied on as contractor's estimates or for any purpose beyond general reference.

- **Lifecycle Activity Assumptions:** Lifecycle forecasts are based on municipal staff input, historical patterns, and typical asset requirements. They do not capture every asset's unique condition, operational environment, or maintenance history. More accurate requirements may be developed through consultation with asset operators and engineering professionals and incorporated into future AMP updates.

- **Useful Life Projections**: Estimated remaining useful lives are derived from asset age, type, and municipal experience. Actual performance may differ due to factors such as usage intensity, environmental conditions, and maintenance practices. Regular asset condition assessments assist with ongoing validation and refinement of these estimates.

- **Unforeseen Events and Changing Conditions**: Future events including extreme weather, usage shifts, or regulatory changes may impact asset performance and service demand in ways not anticipated in this AMP. These events may accelerate maintenance, rehabilitation, or replacement needs beyond current forecasts.

As new studies, inspections, and updates to the asset register are completed, the findings of this plan can be further refined. Continued efforts to strengthen data collection, improve analysis, and enhance collaboration across departments will support more accurate and informed decision-making in future iterations of the Township's AMP. Strengthening data quality will provide greater confidence in lifecycle planning, expenditure forecasts, and the Municipality's ability to sustain assets while meeting desired Levels of Service.

## 2. STATE OF THE INFRASTRUCTURE

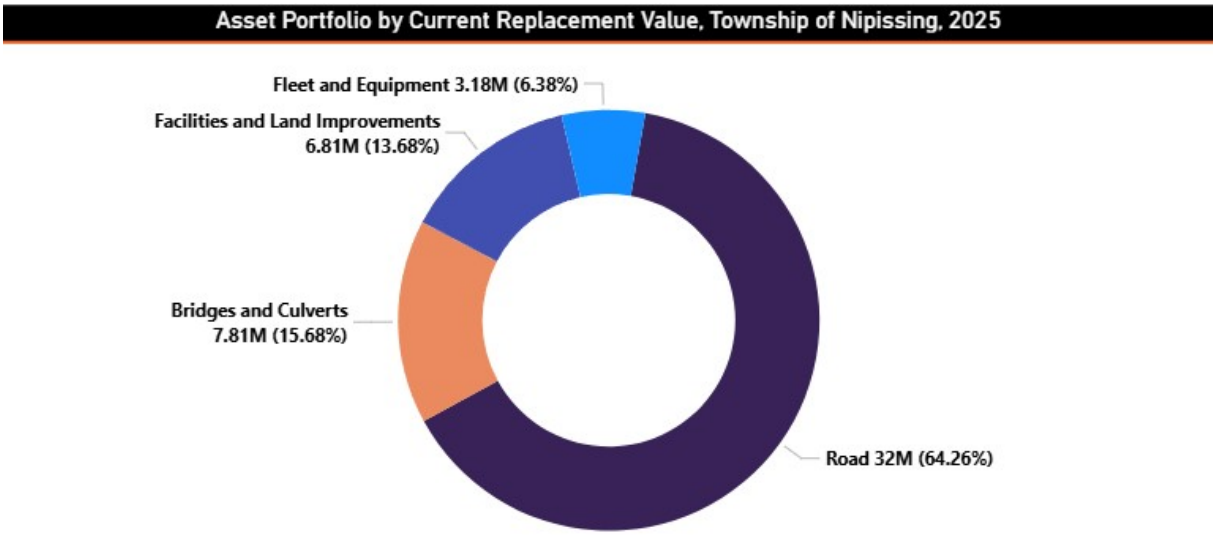
The State of the Infrastructure provides an overview of the Township of Nipissing's major capital assets and their role in supporting municipal services. This chapter outlines the scale and composition of the asset portfolio, presenting current replacement values, average age relative to expected service life, and overall condition ratings. Together, these metrics provide a snapshot of how the Township's assets are performing today and give an indication as to where reinvestment may be needed in the years ahead.

The Township's four asset categories: Roads, Bridges and Culverts, Facilities and Land Improvements, and Fleet, are assessed together to demonstrate relative strengths and vulnerabilities across the portfolio. This information is a foundation for the more detailed evaluation of service delivery expectations, risks, capital needs, and financial strategies in the chapters that follow.

### Asset Portfolio Overview

Nipissing manages a diverse infrastructure asset portfolio with a current replacement value estimated at $49.8 million. Roads represent the largest share of the Township's assets by value, accounting for almost two-thirds of the total asset replacement value. Bridges and culverts are next, at approximately one-sixth. The charts and tables below provide further details on the replacement value, condition, and planned lifecycle activities for each asset class.

Figure 2.1: Asset Portfolio by Current Replacement Value




The pie chart above shows the relative value of each of the four major asset types that the Municipality owns. The breakdown of assets by value shown in the graph is as follows:

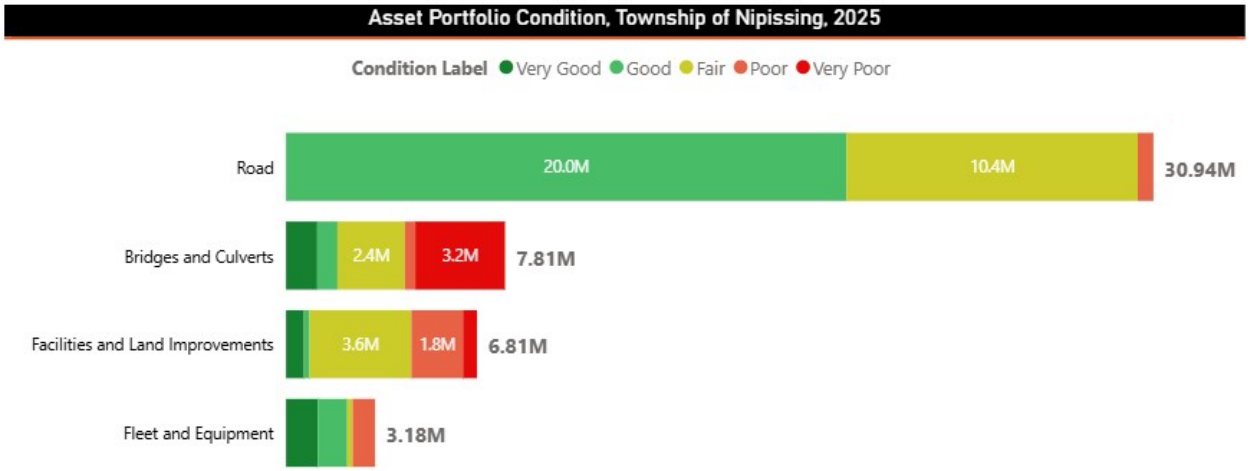
- Roads (including Minor Culverts): $32 million (64% of all assets by value)
- Bridges and Culverts: $7.8 million (16%)
- Facilities and Land Improvements: $6.8 million (14%)
- Fleet and Equipment: $3.2 million (6%)

## Asset Condition Overview

The condition of the Township's assets has an important influence on the need for reinvestment. Asset condition has been assessed according to the methodology described in Chapter 1 and presented in detail in *Appendix A*. Condition estimates were obtained from assessments completed by professional consultants or developed using an age-based methodology.

An overview of the Township's asset condition, by value of assets in each class is presented below:

### Figure 2.2: Asset Condition by Asset Value




**Note, Bridges and Culverts includes structural culverts only, it does not include minor culverts.*

*Figure 2.2* shows a summary of the condition of each of the Municipality's major asset classes, with the following key details:

- Assets such as Roads, Facilities and Land Improvements, and Fleet and Equipment generally have a majority in *Good* or *Fair* condition, reflecting recent investments and proactive maintenance.
- Assets in the Bridges and Culverts class show a higher proportion in *Fair* or *Poor* condition, indicating ongoing and upcoming renewal and reinvestment needs.

These condition ratings are used to inform lifecycle planning and investment priorities in this AMP. Service capacity, reliability, and resilience of assets are all closely related to asset condition.

## Asset Investment Needs

Asset investment needs are informed by a combination of factors, including asset condition, levels of service, age relative to expected useful life, and other performance considerations described in the following chapters of this plan. The State of the Infrastructure table below provides a high-level summary of these measures across the Township's four major asset classes, offering a point of reference and comparison to introduce the Township's overall infrastructure needs.

Table 2.1: State of the Infrastructure – Summary

| Asset Category | Replacement Value (2025 est.) | Quantity / Inventory of Assets | % of Assets in Fair or Better Condition | Annual Funding Needs (Avg est.) |
|---|---|---|---|---|
| **Roads** | $32,004,956 | 150.1 km | 91.8% | $570,770 |
| **Bridges and Culverts** | $7,810,560 | 12 | 40.0% | $449,213 |
| **Facilities and Land Improvements** | $6,812,296 | 21 | 59.0% | $303,630 |
| **Fleet and Equipment** | $3,176,027 | 19 | 95.6% | $266,912 |
| **Total** | **$49,803,839** | | | **$1,590,525** |

The following chapters provide detailed analysis for each of the four asset classes, to support the data summarized in the table above.

# 3. ROADS

The Municipality's Road infrastructure includes gravel, surface treated and asphalt roads and associated drainage components (such as ditches and cross-culverts) and a limited set of streetlights. These assets enable the safe movement of people and goods, as well as allowing for safe and controlled drainage of stormwater and surface runoff.

Road operations are to comply with Ontario's regulatory framework, which includes:

- *Ontario Highway Traffic Act (HTA)*
- Minimum Maintenance Standards for *Municipal Highways (O. Reg. 239/02)*
- Municipal by-laws and design standards governing construction, maintenance, and traffic safety

The Township's existing road network consists of 150.1 km (approximately 300.2 lane-kms) of road infrastructure. The road network includes 115.7 km gravel, 33.2 km surface treated, and 1.2 km of hot mix asphalt surface roads. Municipal roads are all Class 5 for Ontario Minimum Maintenance Standards, as defined under O.Reg 239/02.

## 3.1 Asset Overview

A Road Needs Study conducted in 2023 by D.M. Wills[1] estimated the total Replacement Value for the road network at approximately $28.6 million that year, excluding minor culverts. As of September 2025, the system's estimated replacement value is approximately $32 million, comprising paved asphalt surfaces, gravel roads, shoulders, bases and sub-bases, and non-structural drainage features. This includes 70 minor culverts subject to regular maintenance and replacement.

Table 3.1: Overview – Roads

| Asset Sub-Class | Length / Count | Current Replacement Value (2025 est.) | % of Assets in Fair or Better Condition |
|---|---|---|---|
| **Paved (HCB + LCB)** | 34.4 km | $9,878,729 | 91.7% |
| **Unpaved (Gravel)** | 115.7 km | $21,061,624 | 91.8% |
| **Minor Culverts** | 70 | $1,064,603 | Not Assessed |
| **Total** | **150.1 km of roads** | **$32,004,956** | **91.8%** |

[1] D.M. Wills, Road Needs Study, December 2023

## Asset Condition

The 2023 D.M. Wills Roads Needs Study also evaluated road asset condition, with 77% of roads rated as Good and 23% rated as Fair. Road asset condition ratings are based on the inspection processes as detailed in that report.

### Figure 3.2: Asset Condition – Roads

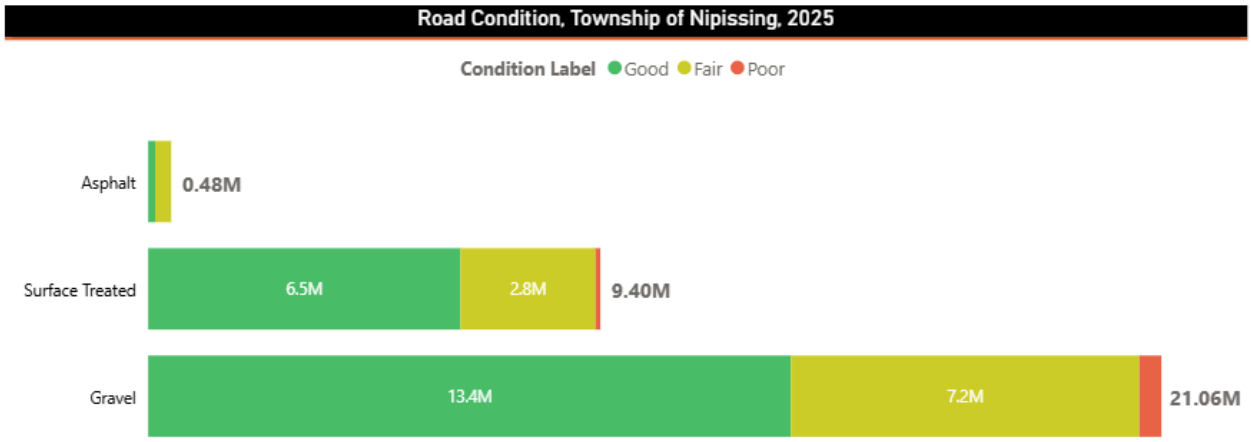



*Figure 5* shows the distribution of conditions among road network assets, demonstrating Asphalt and Surface Treated roads mainly in Good and Fair condition, with Gravel roads predominantly in Good condition with a minority in Fair and very few in Poor condition.

- The road network is in fair to good condition overall, with Paved Roads having an average PCI of *69.5* (*fair* condition) and Unpaved Roads showing an average surface condition rating of *7.7/10* (*good* condition).
- A significant portion (40%) of the gravel network is in *good* condition, with approximately 30 km rated as *poor or very poor* in the Roads Needs Study and in need of regular maintenance and rehabilitation.

The images in Table 3.2 on the following page demonstrate roads of various qualities in the Township. These images also respond to the Levels of Service - Quality statement in Table 3.3.

Table 3.2: Condition Images – Roads

| | Good | Fair | Poor |
|---|---|---|---|
| **Surface Treated** |  |  |  |
| **Gravel** |  |  |  |

The images above provide examples of Gravel and Surface Treated roads in Good, Fair, and Poor condition, respectively. They demonstrate deteriorating road condition such as potholes and cracking, related to wear and other factors.

## 3.2 Levels of Service (LOS)

Under *O. Reg. 588/17*, municipalities must report on *Community* and *Technical* Levels of Service for roads with required scope and quality metrics and optional additional metrics selected by the Township. Together, these metrics track accessibility, safety, and the physical condition of the road network.

### Table 3.3 Community LOS – Roads

| *Attribute* | Description | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Scope*** | Description, which may include maps, of the road network in the Municipality and its level of connectivity. | See map in Appendix A.1 | Same as current |
| ***Quality*** | Description or images that illustrate the different levels of road class pavement condition. | See images in Table 3.2 | Follow Provincial Minimum Maintenance Standard for Class 5 roads |
| ***Community Perception*** | Number of resident complaints received for the following operations in a calendar year: Grading, Winter Maintenance, Brushing, Public Safety (Speed) | 3-4 formal complaints submitted this year | Formal complaints are monitored and responded to. Target no more than 10 complaints per year. |

### Table 3.4 Technical LOS – Roads

| *Attribute* | Metric | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Scope*** | Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the Municipality. | **Local:** 0.77 lane-km per $km^2$<br>**Collector:** 0.007 lane-km per $km^2$ | Maintain current road network |
| ***Quality*** | 1. For paved roads in the Municipality, the average pavement condition index value.<br>2. For unpaved roads in the Municipality, the average surface condition (e.g. excellent, good, fair or poor). | 1. Paved Road PCI = 69.5 (Fair)<br>2. Unpaved Surface Condition = 7.7/10 (Good) | 1. Maintain Paved Road average PCI at 65 or above.<br>2. Maintain unpaved average at 7/10 or better. |
| ***Road Closures*** | Number of significant weather events requiring closure of hills to perform road maintenance occur per calendar year. | Winter 2023-24: 3<br>Winter 2024-25: 1 | Monitor hill closures for winter maintenance, including equipment needs |
| ***Maintenance*** | Number of unplanned road closures (due to maintenance) that occur per calendar year. | 2024: 1 closure<br>2025: 1 closure (Rye Rd) | <2 unplanned road closures per year |

## 3.3 Risk Assessment

Township staff identified specific risks to maintaining road service in Nipissing:

- *Winter Maintenance:* Risk of unsafe road conditions on hills during freezing events. Extreme winter conditions require maintenance including sanding, salting, and plowing. A particular risk occurs during freezing rain or sudden temperature drops that cause icy conditions on steep grades and hills. Until maintenance crews reach and treat these areas with appropriate equipment (sanders, plows, de-icing units), the roads may become impassable or hazardous. These roads are proactively closed by the municipality until crews arrive and treatment is applied.

- *Flooding:* Localized flooding is a risk, particularly in low-lying or floodplain areas such as Stillar Side Road, Simpson Hill Road, Rye Road, and portions of Granite Hill Road. Flooding in these locations may overtop culverts, exceed ditch capacity, or erode embankments, leading to temporary road closures until water levels recede. In severe cases, flooding may result in washouts that compromise road safety and access, requiring emergency repairs or replacement of drainage structures. Long-term resolution is a challenge due to size and location of ditches along these roads.

- *Speeding:* The Township is aware that improved road conditions may permit users to exceed posted speed limits, a violation that leads to heightened risk of accidents. The Township uses road speed sensors and traffic counters to monitor daily traffic counts and communicates the information to the OPP to facilitate informed, effective enforcement. Traffic counts and related records will be considered as part of future road improvement planning.

- *Climate Impacts*: Increased freeze-thaw cycles and heavy rainfall events accelerate pavement wear and affect drainage. This may lead to increasing costs for road maintenance and rehabilitation, if average annual weather conditions continue to fluctuate beyond historic norms.

Risk mitigation strategies include regular condition assessments, drainage maintenance, proactive renewal cycles, and targeted capital reinvestment to maintain safe roadways.

## 3.4 Lifecycle Activities

Section 44(1) of the Municipal Act establishes the Municipality's responsibility to keep highways or bridges under its jurisdiction "in a state of repair that is reasonable in the circumstances." Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways (which has been amended by Ontario Regulation 47/13) provides further clarification by establishing minimum maintenance standards for a range of road network maintenance activities, including but not limited to:

- Patrolling.
- Winter maintenance – snow removal, significant weather events, treatment of icy roadways.
- Regular maintenance – pothole repair, shoulder drop-offs, regulatory warning signage.

Utilizing internal schedules, road surfaces and visual inspection, roads are graded, repaired, scheduled for renewal and maintained to the established Road Class standard and service level for usage.

Surface treated areas are scheduled on an 8–10-year rotation for pulverization, construction repairs as required, culvert repairs and replacements as required, and surface treatment with a re-seal the following year to extend the life of the asset renewal to the 8-year mark.

Quarried granite application is scheduled on a 6–8-year rotation for ditching, culvert repairs and replacements as required, construction repairs as required and the application of quarried granite. The granite is graded and sealed with calcium to provide a solid, dependable surface that can be repaired and extended further with ongoing maintenance of grading and annual calcium application.

Road Needs Study information is also reviewed to confirm the projects are in-line with the identified needs of the Municipality. On-going visual observations from regular patrol duties but staff are included in the regular review and scheduling of maintenance for roadways.

### *Annual Average Daily Traffic*

Annual Average Daily Traffic (AADT) estimates have been established for all Township roads in 2008, 2013, 2023 and ongoing utilizing municipal staff and municipally owned radar monitoring devices rotated around the Township. Utilizing the data obtained from the radar devices, the AADT figures can be monitored and updated on a rotating schedule for most roads, allowing the data to be updated accurately and without additional costs for monitoring and reporting.

All Township roads care considered a Road Class 5 utilizing the AADT information and speed limit on all roads, which is under 500 AADT and a speed limit of 60 km/h.

The Township records annual daily traffic counts utilizing on-site radar counting units at designated areas of the Township. These counts will update the AADT figures at the end of each year where reported. These figures will eventually replace the estimated figures for AADT utilized in the 2023 Road Needs Study and provide a more accurate view of road usage and priority.

## Asset Financial Requirements

A safe and reliable road network requires ongoing investment in maintenance, rehabilitation, and renewal. D.M. Wills estimates that a total road maintenance program will cost the Township $475,000 per year based on road network condition and typical degradation rates, and local cost estimates to complete required maintenance and rehabilitation works.

Table 3.5: Lifecycle Activity Costs, 2025 – Roads

| Road Type | Total Length (km) | Annual Rehab (km) | Unit Cost | Annual Cost |
|---|---|---|---|---|
| **Paved (HCB)** | 1.2 | 0.1 | $ 209,000 | $ 20,900 |
| **Surface Treated (LCB)** | 33.2 | 4.7 | $ 35,000 | $ 164,500 |
| **Gravel** | 115.7 | 14.5 | $ 20,000 | $ 290,000 |
| **Total Road Network** | **150.1** | **19.3** | | **$ 475,400** |

Gravel application costs are split every year with half of the cost being placed into reserve for use the following year to provide an anticipated, stable impact to the tax rates.

The Roads Needs Study identifies various cost structures and ways to approach road maintenance. It has listed priority projects needing specific attention based on vehicles traveled and current condition. The following projects may be considered for specific attention, with costs to be accounted for within the cost structure outlined above:

### Table 3.6: Priority Works – Road Rehabilitation

| Road Name | Length (km) | Cost ($ 2025) | Timeframe |
|---|---|---|---|
| **Westview Drive** | 0.44 | $ 37,000 | Now |
| **Pine Drive** | 0.73 | $ 62,000 | Now |
| **Jones Road** | 0.55 | $ 46,000 | 1-5 Years |
| **Alsace Road** | 4.54 | $ 385,000 | 1-5 Years |
| **Waltonian Drive** | 0.52 | $ 104,000 | 1-5 Years |
| **Rocky Shore Drive** | 1.05 | $ 89,000 | 1-5 Years |
| **Hinchberger Bay Rd** | 0.68 | $ 58,000 | 1-5 Years |
| **Ruth Haven Drive** | 0.83 | $ 70,000 | 1-5 Years |
| **Pine Drive** | 0.28 | $ 23,000 | 6-10 Years |
| **Alsace Road** | 4.11 | $ 143,000 | 6-10 Years |
| **Ski Hill Road** | 1.1 | $ 93,000 | 6-10 Years |
| **Lake Nipissing Road** | 2.45 | $ 85,000 | 6-10 Years |
| **Lakeview Drive** | 0.61 | $ 21,000 | 6-10 Years |
| **Lilian Court** | 0.21 | $ 7,000 | 6-10 Years |
| **Total** | **18.1** | **$ 1,223,000** | |

Note, the above list does not constitute a capital plan nor are the figures to be considered engineering cost estimates. The Township will review its road rehabilitation needs on a regular basis and address these projects through its regular capital budgeting processes. This list is provided based on the consultant's estimate and assessment of roads that are expected to need specific attention over a given timeframe.

The Township may also strategically plan certain road investments based on other investment needs, such as the replacement of Bridges and Culverts together with upgrades to the roadways that serve them.

## Financial Strategy

Budgeting of surface treated roadwork is primarily done utilizing grant opportunities including the Canada Community Building Fund and Ontario Community Infrastructure Fund.

Total amounts spent on these activities over the past three years:

| Year | Township Historic Expenditure on Roads |
|---|---|
| **2023** | $918,812.25 |
| **2024** | $162,529.48 |
| **2025** | $453,550.00 (budgeted amount) |
| **Average over 3 years:** | $511,630.58 |

This amount is generally in line with the forecast requirements from the D.M. Wills study, and therefore the Township may continue at approximately its current rate of expenditures to maintain roads in the long-term, subject to identified and potential future risks.

# 4. BRIDGES AND CULVERTS

The Municipality owns and maintains a network of bridges and culverts that provide transportation links for the safe movement of people, goods, and emergency services. They also allow for watercourses and drainage to transit the Municipality, controlling the risk of flooding. These assets support economic activity and community connectivity and should comply with Ontario's regulatory framework, including:

- *Ontario Public Transportation and Highway Improvement Act (PTHIA),* O. Reg. 104/97
- *Ontario Structure Inspection Manual (OSIM)* standards for bridge and culvert inspections

Under PTHIA standards for bridges, the structural integrity, safety and condition of every bridge shall be determined by an inspection in accordance with the Ontario Structure Inspection Manual (OSIM) every two years. It also states that every bridge shall be kept safe and in good repair.

The Township has 4 bridges and 8 structural culverts (culverts greater than 3 m in diameter) in its inventory. Visual inspections of the assets are conducted every two years in accordance with OSIM by a qualified engineering firm. Studies conducted in 2022 and 2024 by HP Engineering Inc. are the primary source of information for this chapter of the AMP.

## 4.1 Asset Overview

The Municipality's bridge and culvert portfolio includes vehicular bridges, large structural culverts, and associated components. The replacement value of Nipissing's 12 bridges and culverts is estimated at $7.81 million. Two bridges and one large culvert are located on boundary roads and governed by Boundary Road Agreements with the Municipality of Callander and the Municipality of Powassan.

Hummel Bridge is currently closed to vehicular traffic due to concerns regarding safety. Two culverts were replaced in 2025 and a third, the Bear Creek Road culvert, is scheduled for replacement in 2026. An amount is placed into reserve annually for bridge / culvert replacement and repair.

Table 4.1: Overview – Bridges and Culverts

| Asset Sub-Class | Inventory of Assets | Replacement Value (2025 est.) | Average Age (Years) | Est. Avg. Remaining Useful Life (%) | % of Assets in Fair or better Condition |
|---|---|---|---|---|---|
| **Bridges** | 4 | $4,545,840 | 66.3 | 11.8% | 38.9% |
| **Structural Culverts** | 8 | $3,264,720 | 25.0 | 60.7% | 41.5% |
| **Total** | **12** | **$7,810,560** | **38.8** | **32.2%** | **40.0%** |

*Details on assets in this class are provided in Appendix B.*

## Asset Condition

Visual inspections of bridge and culvert assets are conducted every two years by a qualified engineering firm per Ministry of Transportation OSIM requirements. Studies were conducted in 2022 and 2024 by HP Engineering Inc. with the following key observations:

- Condition ratings in the 2024 OSIM study are 33% as Good; 25% as fair; and 42% as poor.
- A portion of structures are in *fair* to *poor* condition, with localized deterioration of decks, bearings, and substructures requiring near-term rehabilitation.
- In 2024, several older culverts displayed corrosion, joint separation, and hydraulic capacity loss, increasing vulnerability to failure. Three of these are subject to replacement in 2025-2026.
- Typical useful lives are 60-75 years for concrete and timber-concrete bridges and 45-55 years for major culverts, with ongoing maintenance and rehabilitation required to achieve full-service life.
- The average asset age is 38.8 years, with some assets at or near the end of their service life.

### Figure 4.1: Asset Condition – Bridges & Culverts

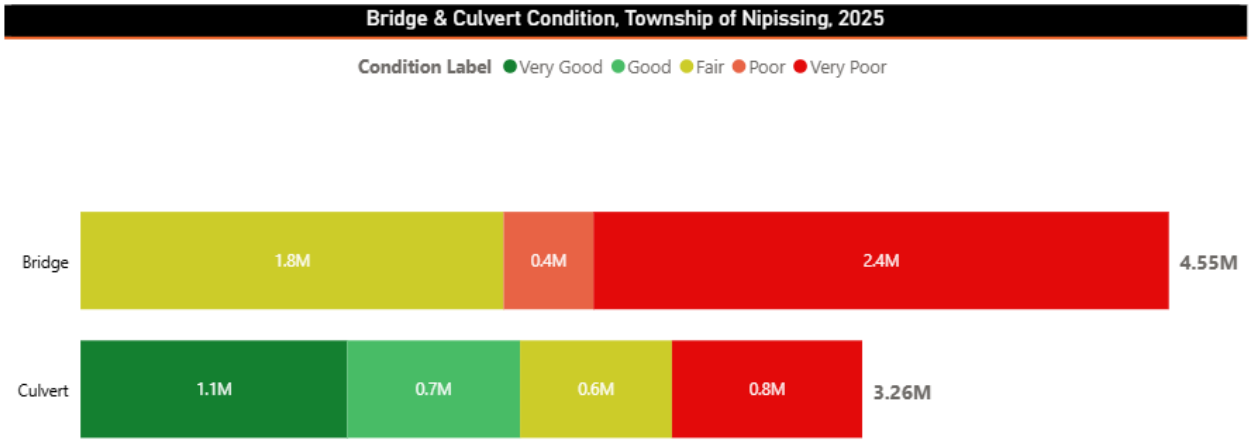
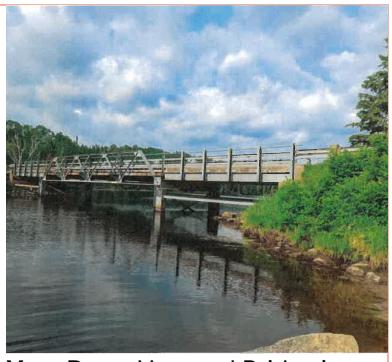



*Figure 4.1* above presents graphs showing the condition of Nipissing's bridge and culvert assets, based on the 2024 OSIM bridge inspections. Bridges are estimated to be predominantly in fair condition, with some in poor and very poor condition. Culverts are evenly distributed from very good to very poor condition.

Table 4.2: Condition Images – Bridges and Culverts

| | | | |
|---|---|---|---|
| **Bridge** |  **Fair:** Pilger's Road Bridge is in fair condition. |  **Poor:** Ponderosa Bridge is in poor condition and has load restrictions. |  **Very Poor:** Hummel Bridge is closed to traffic due to condition-related concerns. |
| **Culverts** |  **Good:** Alsace Rd (Culvert #5) is in good condition. |  **Fair:** Alsace Rd (Culvert #3) is in fair condition. |  **Poor:** Bear Creek Rd. Culvert is in poor condition, in 2025. |

The six images in the table above show examples of Nipissing's Bridges and Culverts in various conditions, with descriptions of the bridge and condition estimate as outlined under each image.

## 4.2 Levels of Service (LOS)

The regulation *O. Reg. 588/17* provides Community and Technical Levels of Service metrics for Bridges and Culverts, while the Municipality may opt to add its own metrics to assess the performance of these assets.

Table 4.3: Community LOS – Bridges and Culverts

| *Attribute* | Description | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Scope*** | Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists). | Heavy transport, motor, and emergency vehicles. Some bridges are used by pedestrians and cyclists. | Maintain support for current traffic levels. Review improvements for pedestrian safety during major projects. |
| ***Quality*** | 1. Description or images of the condition of bridges and how this would affect use of the bridges.<br><br>2. Description or images of the condition of culverts and how this would affect use of the culverts. | Images are provided in the table below. | Conduct regular inspections and maintenance as recommended by qualified professionals. |

Table 4.4: Technical LOS – Bridges and Culverts

| *Attribute* | Metric | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Scope*** | Percentage of bridges in the municipality with loading or dimensional restrictions. | 33% (4 structures with load restrictions). Currently the Hummel Bridge is closed to traffic. | The Township will work towards bridge and culvert replacement according to a priority schedule. |
| ***Quality*** | 1. For bridges in the municipality, the average bridge condition index value.<br><br>2. For structural culverts in the municipality, the average bridge condition index value. | BCI data unavailable in 2024 study | Determine a minimum BCI for bridges and culverts according to current LOS. |

## 4.3 Risk Assessment

The Township has identified the following risks to achieving LOS for Bridge and Culvert assets:

- *Critical Bridges and Culverts:* Some bridges and culverts in the community are critical for access to homes and businesses, and their continued operation is vital for emergency and regular access to these properties. This risk factor will be considered in setting priorities for repairs and replacements.
- *Bridge Closure:* Due to condition, age, and damage following heavy truck usage, the Hummel Bridge is currently closed to vehicular traffic. This impairs traffic movement within Nipissing for residents along roads in the southeast corner of the community. The Township is aware of resident concerns and is working towards a long-term solution that is financially feasible to address these needs.
- *Pedestrian Safety:* Some bridges, such as the Hummel Bridge, are single-lane bridges which may present risks to pedestrian safety. The Township may consider pedestrian improvements among other priorities for the renovation or retrofit of that bridge.
- *Aging Infrastructure*: As with many bridge and culvert assets, progressive deterioration of structural components increases the likelihood of load restrictions or closures.
- *Climate and Environmental Impacts*: More intense rainfall and flooding events place additional hydraulic and structural stress on bridges and culverts. Similarly, sedimentation and debris accumulation in culverts reduce flow capacity, increasing flooding risk.
- *Safety and Compliance*: The Township maintains inspection and maintenance according to regulation to protect bridge user safety.

Mitigation strategies include structural replacement and rehabilitation, sediment and debris management, inspections and risk-based prioritization of capital investments.

## 4.4 Lifecycle Activities

Maintaining safe and reliable bridge and culvert infrastructure requires ongoing investment in maintenance, rehabilitation, and renewal. Based on Nipissing's bridge age, condition, and lifecycle projections, major capital expenditures for planned works over the next 10 years include:

- Structural rehabilitation of aging bridges and critical culverts identified through OSIM inspections.
- Replacement of priority structures that have reached end-of-life or require capacity upgrades.
- During replacements, hydraulic improvements to culverts and bridges to accommodate increases to flow and reduce flooding risk related to climate.
- Targeted maintenance to prolong the service life of bridges and reduce the likelihood of load restrictions.

The Township has identified priority works for the replacement and rehabilitation of its bridge and culvert assets, according to its proposed Levels of Service and identified risks.

## Asset Financial Requirements

The table below shows priority works for major repairs, retrofits, and replacements of bridges and culverts in Nipissing based on asset condition and risk, as determined in 2025 based on existing OSIM reports. These investments are intended to sustain network connectivity, reduce safety risks, and improve bridges and culvert serviceability under expected traffic loads and environmental stressors.

### Table 4.5: Major Works – Bridges and Culverts

| Priority | Asset | Cost (est.) | Year (est.) | Notes |
|---|---|---|---|---|
| **1** | Bear Creek Rd. Culvert | $1,000,000 | 2026 | A structural failure occurred in 2024 and the culvert is scheduled for replacement when qualified contractors become available. This is a critical culvert that serves a housing population with only one road access. Due to this criticality, it may be replaced with a bridge at an estimated cost of $1,000,000. A bridge is expected to increase resilience to flooding and other risks compared to current. |
| **2** | Hummel Bridge | $4,000,000 | 2027-2031 | This structure is closed to vehicular traffic due to structural concerns. It requires a replacement, with costs to be shared between Nipissing and Powassan. This cost is prohibitive for advancing the project at this time. However, studies to prepare a “shovel ready” project for any funding opportunities may be prioritized. The Township’s expected contribution is 33%. |
| **3** | Seventh Concession Bridge | $750,000 | 2027-2031 | Also known as the “Ponderosa” bridge, it has a weight restriction of 10 tons. Works will rehabilitate the structure to remove the weight restriction. |
| **4** | Hart Road Culvert | $439,000 | 2027-2028 | This culvert is shared with Callander. It is scheduled for replacement as funds become available, with the participation of Callander. The Township’s expected contribution is 50%. |
| **Total** | | **$6,189,000** | **2026-2031** | |

### Table 4.6: Other Works – Bridges and Culverts

| Bridge / Culvert | Works | Estimated Cost | Planned Year |
|---|---|---|---|
| **Pilger's Road Bridge** | Guardrails | $99,000 | 2027-2031 |
| **Wolfe Creek Culvert** | Guardrails | $64,000 | 2027-2031 |
| **Alsace Road Culvert 3** | Guardrails | $73,000 | 2027-2031 |
| **Alsace Road Culvert 5** | Guardrails | $99,000 | 2027-2031 |
| **Black Creek Rd. Culvert** | Study | $5,000 | 2027-2031 |
| **All** | | **$250,000** | **2027-2031** |

## Financial Strategy

Identified Lifecycle Activities to complete for Bridges and Culverts from 2026-2031 total approximately $3.64 million. This includes $1 million for the Bear Creek Road culvert in 2026, a contribution of $1.33 million towards the Hummel Bridge replacement by 2031, and $129,500 towards the Hart Road Culvert by 2028. Costs for all other projects identified in Tables 4.5 and 4.6 have been averaged across their scheduled timeframe for completion.

### Table 4.7: Annual Funding Needs – Bridges and Culverts

| Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Funding $** | 1,000,000 | 594,417 | 594,417 | 484,667 | 484,667 | 484,667 | 200,000 | 208,000 | 216,320 | 224,973 |

From 2032 onward, the Township may continue to place funds into a reserve to address long-term Bridge and Culvert maintenance, rehabilitation, and replacement needs. The value of $200,000 for 2032 is estimated based on 2% of the inventory value projected that year and inflated annually at 4% p.a. thereafter.

Continuing to place amounts into reserve after 2031 will, over a 50-year period to 2081, provide the required full replacement value in reserves. These funds may then be used as a stable, available fund for bridge repair and replacement needs.

# 5. FACILITIES AND LAND IMPROVEMENTS

The Municipality owns and maintains a portfolio of facilities and land improvements that support administrative, operational, emergency, and community service functions. These assets provide spaces for municipal staff and equipment, and support recreational, cultural, and civic programs for residents. Relevant regulations in Ontario that guide the management of facilities include:

- *Building Code (OBC)* – structural, safety, and design standards
- *Fire Protection and Prevention Act (FPPA)* – fire safety system maintenance and operations
- *Accessibility for Ontarians with Disabilities Act (AODA)* – accessibility for public-facing buildings
- *Occupational Health and Safety Act (OHSA)* – health and safety of municipal staff and visitors

The Township has 18 facilities and land improvements. Amounts have been placed into reserves dedicated to facility replacement and repair based upon department usage and as the annual budget process allows.

## 5.1 Asset Overview

The Municipality's building and facility portfolio include 13 facilities comprising administrative offices, public works garages and storage buildings, fire halls and recreational facilities. It also includes 8 land improvements including playgrounds, boat launches, wharves, and communications towers. As of September 2025, the replacement value is estimated at $6.81 million[2].

- The portfolio includes 13 facilities and 8 land improvements
- Average asset age is 33 years, with typical useful lives estimated at 60 years, when major rehabilitation, repurposing, or asset replacement may be required.
- Continued service relies on preventative maintenance and appropriate improvements to building envelopes, mechanical systems, and accessibility features as regulations change or as these elements reach the end of their service lives.

Table 5.1: Overview – Facilities and Land Improvements

| Asset Sub-Class | Inventory of Assets | Current Replacement Value | Average Age (Years) | Est. Avg. Remaining Useful Life (%) | % of Assets in Fair or better Condition |
|---|---|---|---|---|---|
| **Facilities** | 13 | $5,704,088 | 42.5 | 11.5% | 62.9% |
| **Land Improvements** | 8 | $1,108,208 | 17.4 | 44.8% | 38.9% |
| **Total** | **21** | **$6,812,296** | **33.0** | **16.9%** | **59.0%** |

[2] Based on replacement values provided by insurance documents, plus inflation to 2025.

## Asset Condition

Facilities and Land Improvements condition ratings are primarily based on asset age relative to expected service life, and with inspection data available for some assets. The methodology is outlined in *Appendix A3*.

### Figure 5.1: Condition – Facilities and Land Improvements

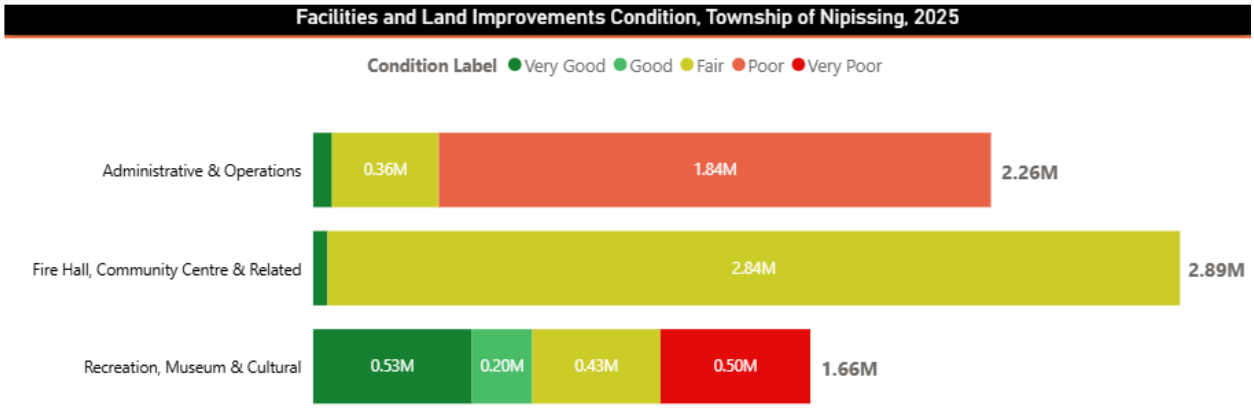



*Figure 5.1* illustrates the distribution of asset conditions across the Facilities and Land Improvements portfolio, with the following highlights:

- Based on asset age and replacement value, many facilities are in *fair* condition, though several facilities are approaching the end of their expected service lives.
- Some museum and cultural structures are estimated to be in *very poor* condition as of 2025.
- Administrative & Operations facilities are in *Fair to Poor* condition.

### Table 5.2: Images – Facilities and Land Improvements

| **Administration and Public Works** | **Cultural and Museums** | **Fire Halls and Related** |
|---|---|---|
|  |  |  |
| **Township Office** | **Museum Office Building** | **Community Centre/ Fire Station #1** |

**Public Works Garage**

**Museum Church Building**

**Fire Station #2**

## 5.2 Levels of Service (LOS)

The Municipality has defined a set of LOS to monitor buildings for their continued safe use for municipal operations and community programming.

Table 5.3: Community LOS – Facilities and Land Improvements

| *Attribute* | Description | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Service*** | Description of services provided by municipal facilities | Municipal offices<br>Garages and Storage<br>Fire Stations<br>Community Centre<br>Museum<br>Playground<br>Landfill<br>Communications Towers | Municipality continues to provide safe and suitable facilities to support these activities. |
| ***Suitability*** | Description of how the municipality evaluates facilities to be suited to purpose. | Condition – free from structural defects and hazards to health and safety<br>Accessibility – contains elements compliant with AODA standards<br>Suitability – of a suitable size and layout to support its intended function | Work toward maintaining facilities in a state of good repair that have appropriate accessible elements and are suited to purpose. |

Table 5.4: Technical LOS – Facilities and Land Improvements

| *Attribute* | Metric | Current LOS | Proposed LOS |
|---|---|---|---|
| ***Availability*** | Number of unplanned incidents where buildings are out of service for >48 hours, or repair costs exceed 5% of the building's total value, and description of the incident. | <1 event per year<br><br>2023: Ice buildup at garage resulted in propane leak | <1 incident per year (Same as current) |
| ***Suitability*** | Number of buildings with structural or functional inadequacies and description of their deficiency. | Staff observe that 5 buildings have deficiencies:<br>1. Town Office - Accessibility, safety, size<br>2. PW Garage - Size, too small to fit municipal fleet<br>3. Quonset Hut - Condition<br>4. Museum Office - Condition<br>5. Community Centre - Accessibility at the Fitness Centre | The Township will work towards reducing these deficiencies according to the schedule below and as budgets allow. |

*Tables **5.2 and 5.3*** above summarize LOS metrics, current performance, and targets for Buildings and Facilities.

## 5.3 Risk Assessment

Township staff have identified several specific risks to maintaining required Levels of Service for Buildings and Facilities, as follows:

- *Water Systems:* Continued use of municipal facilities depends on the safe operation of water supply and septic systems. The well at the Community Centre and Fire Hall #1, and the well that services the Town Office, Museum, Public Works Garage, and Rink Building, are high priorities for regular maintenance and upgrades to maintain water supplies.
- *Public Works Garage Safety and Suitability:* This is the main garage for public works vehicles, and it is in poor condition. The roof is leaking, and insulation has been compromised. The facility is also too small to house the public works vehicles that the Township operates, so long-term replacement of this facility may be recommended by staff. In the short-term, remediation of unsuitable conditions may return it to serviceability until a long-term solution can be implemented.
- *Safety and Accessibility in the Township Office*: Township staff work primarily in a converted home, which was not originally designed as a public access facility. Public-facing amenities may be unsuitable for their current use, such as the public reception area. Notably, Council Chambers were relocated from the site following staffing increases and reorganization in response to COVID.

- *Community Centre Accessibility*: Accessibility of the Community Centre is a priority, for equitable access to facilities and for use as an emergency evacuation centre. While the Township received a grant for a new built-environment accessible Fitness Centre access, COVID prevented the use of those funds. Accessibility improvements of this facility will be prioritized when new grant funding becomes available.

In addition, common risks to safe operation of municipal facilities include:

- *Aging Facilities and Components*: End-of-life mechanical systems, building envelopes, and accessibility features increase the likelihood of closures and other disruptions to services.
- *Climate Impacts*: Increased freeze-thaw cycles, longer and more intense heatwaves, and extreme weather may accelerate deterioration of roofs, siding, and site works, and put strain on HVAC systems to compensate.

Risk mitigation strategies include ongoing condition monitoring, prioritization of high-risk assets, and investment in timely upgrades to maintain reliability and regulatory compliance.

## 5.4 Lifecycle Activities

Lifecycle management supports the safety, functionality, and cost efficiency of the Municipality's buildings and facilities. Lifecycle activities are structured across maintenance, rehabilitation, replacement/disposal, and expansion stages.

- **Maintenance**
  - Regular inspections and safety checks, including monthly safety inspections of playground and fixed equipment.
  - Scheduled cleaning, preventative maintenance, and servicing of HVAC, plumbing, and electrical systems.
  - Routine upkeep of recreational facilities and minor repairs as required.
- **Rehabilitation**
  - Renewal of building envelopes (roofs, siding, windows) and mechanical systems as these components reach end-of-life.
  - Targeted upgrades for energy efficiency and compliance with safety standards.
  - Rehabilitation of changerooms, HVAC systems, accessibility and site works at recreational facilities to support community use.
  - Modernization to enhance energy efficiency, accessibility, and/or operational resilience.
- **Replacements, Upgrades, and Disposals**
  - Replacement of facilities that have reached the end of their structural life or no longer meet operational needs.
  - Decommissioning and disposal of redundant assets in accordance with municipal policies and community needs assessments.
  - Planned renewal of recreational fixtures and equipment to maintain safety and usability.
  - Upgrades and new construction to meet growing demand for administrative, operational, and community programming spaces.
  - Strategic planning to co-locate services and optimize municipal land and building use.

Lifecycle planning is data-driven, guided by asset age, condition assessments, maintenance histories, and operational risk for cost-effective reinvestment and service continuity.

## Asset Financial Requirements

The Municipality is considering its long-term requirements when prioritizing investments in buildings and facilities. While some facilities may currently require minor repairs and upgrades, the Township would like to plan for the next 50 years of services. Therefore, some remedial investment is planned, but reinvestment is targeted to maintain or improve functionality for long-term service delivery.

Based on the current age and condition, staff assessment of suitability and risks, and consultant recommendations, the following investment profile is presented for facilities and land improvements:

- *Estimated capital requirement*: Approximately **$4.81 million** over the next **10 years**.
- *Key cost drivers*: Replacement of facilities with suitability issues, renewal of mechanical systems, building envelopes, and accessibility improvements for high-use facilities.

### Table 5.5: Capital Works – Facilities and Land Improvements

| Priority | Asset | Cost (est.) | Year (est.) | Notes |
|---|---|---|---|---|
| **1** | Public Works Garage | $167,500 | 2026 | Short-term repairs of roof surface and insulation to maintain serviceability. Plan for long-term replacement due to deficiencies related to overall condition and suitability (does not accommodate current vehicles). |
| **2** | Dock at Chapman's Landing | $70,000 | 2026 | Replace top deck and investigation of supporting structures. |
| **3** | Community Centre | $175,000 | 2028 | Accessibility upgrades and repainting the exterior. |
| **4** | Boat Launch at McQuaby Lake | $250,000 | 2030-2032 | Rehabilitation of the boat launch with concrete replacements and upgrades. |
| **5** | Township Office and Public Works Garage | $4,000,000 | 2035 | The existing Township Office and Public Works Garage do not meet Township requirements for suitability and safe operations. A new facility is proposed to replace the existing Office and Garage in 2035 or after. |
| **6** | Quonset Hut | $0 | 2035 | Removal upon completion of new facility. |
| **Total** | | **$4,812,500** | **2026-2035** | |

Renewal investments are prioritized to address safety, accessibility, and operational risk, so that municipal facilities continue to support reliable and sustainable service delivery.

## Asset Financial Strategy

The Township places funding into reserves dedicated to facility replacement and repair based upon department usage and as the annual budget process allows. Use of these funds will be in line with the Township's reserve policies.

For its Lifecycle Activity Strategy, the Township may prioritize investments in the renovation and rehabilitation of buildings that are identified as having deficiencies, according to the priorities in Table 5.5. The Township will also continue to invest in regular maintenance and care of its Facilities and Land Improvements with an annual maintenance budget. In years when major maintenance and repairs are not required, the Township will allocate available facilities funding to reserves, to offset future costs.

### Table 5.6: Annual Funding Needs – Facilities and Land Improvements

| Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Cost $** | 442,774 | 358,684 | 387,232 | 215,921 | 303,091 | 307,082 | 311,232 | 232,214 | 236,703 | 241,371 |

The Township's annual funding requirements for facilities, based on the Lifecycle Strategy and specific projects described above, ranges from a low of approximately $232,000 in 2033 when no specific projects are currently allocated, to a high of $443,000 in 2026 to address identified urgent needs.

# 6. FLEET AND EQUIPMENT

The Municipality owns and operates a fleet of vehicles and heavy equipment that support a range of municipal services, including administrative operations, public works, emergency response, winter maintenance, staff transportation, and parks and recreation activities. These assets are in regular use for municipal service delivery and community well-being.

Fleet assets are managed in compliance with Ontario's regulatory and safety framework, including:

- *Highway Traffic Act (HTA)* – licensing, vehicle safety standards, and operational requirements.
- *Occupational Health and Safety Act (OHSA)* – vehicle operations protect staff and the public.
- *Ministry of Transportation (MTO)* Vehicle Inspection Standards – preventative maintenance, safety inspections, and roadworthiness.
- *Environmental Protection Act (EPA)* – emissions standards and environmental protection.
- Applicable municipal fleet management policies – scheduling, operational readiness, and lifecycle planning.

## 6.1 Asset Overview

The Municipality's portfolio consists of a fleet of 19 vehicles and equipment required for operational, emergency, and community services. As of September 2025, the fleet replacement value is estimated at $3.18 million which includes pickup trucks, fire and emergency service vehicles, and heavy equipment.

- The fleet includes 19 vehicles and pieces of heavy equipment.
- Average asset age is 8.7 years, with typical useful lives ranging from 15–30 years.
- Weighted average remaining service life: 53.4%, with several older vehicles operating beyond their expected lifecycle but maintained for operational reliability.

The fleet portfolio is categorized into sub-classes based on the municipal department that uses them:

Table 6.1: Overview – Fleet and Equipment

| Department | Count of Assets | Replacement Value (2025 est.) | Average Age (Years) | Est. Avg. Remaining Useful Life (%) | % of Assets in Fair or better Condition |
|---|---|---|---|---|---|
| **Administration** | 1 | $31,466 | 10.0 | 0% | 0% |
| **Fire** | 7 | $1,237,572 | 8.3 | 48.3% | 100% |
| **Public Works** | 11 | $1,906,989 | 8.8 | 57.7% | 92.7% |
| **Total** | **19** | **$3,176,027** | **8.7** | **53.4%** | **95.6%** |

## Asset Condition

Vehicle condition ratings are primarily based on asset age relative to expected service life, supported by maintenance records and operational performance, as outlined in *Appendix A3*.

### Figure 6.1: Asset Condition – Fleet and Equipment

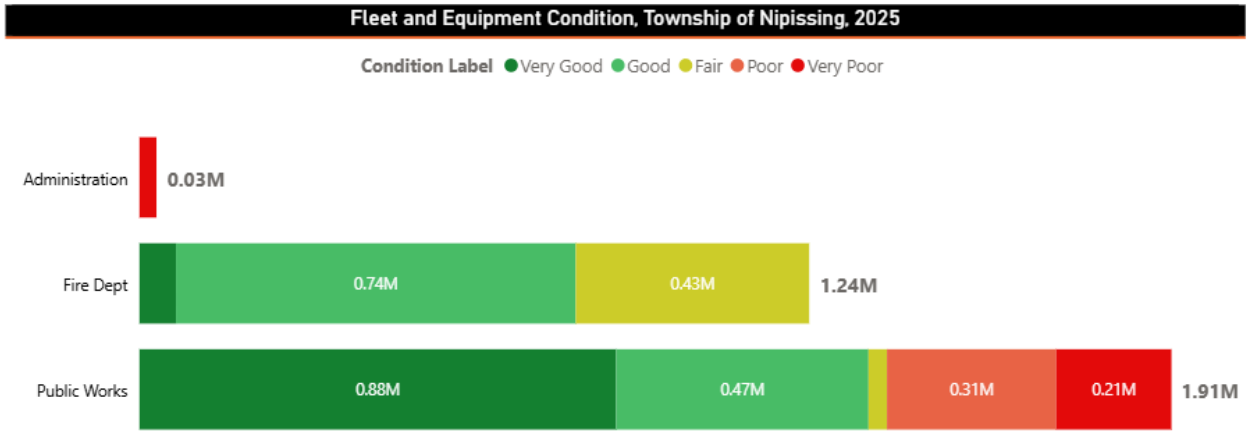



*Figure 6.1 above* illustrates the distribution of asset conditions across the municipal vehicle fleet. Overall, the fleet is in *good* condition, with many units at the midpoint of their lifecycle. Several critical service vehicles, such as fire vehicles and older road maintenance units, have surpassed their expected service lives but continue to meet operational requirements due to low utilization or targeted maintenance interventions.

### Table 6.2: Images – Fleet and Equipment

| | | | |
|---|---|---|---|
| **Public Works** |  |  |  |
| | **Backhoe** | **Freightliner Tandem Truck** | **John Deere Grader** |

| | | | |
|---|---|---|---|
| **Fire Dept** |  |  |  |
| | **International Tanker Truck** | **Polaris Ranger ATV** | **Ford Rescue Truck** |

The Township's fleet is distributed across 3 departments as follows:

### Table 6.3: Fleet Inventory Overview (2025)

| Department | Fleet Components |
|---|---|
| **Administration** | 1 SUV |
| **Public Works** | 3 Pick Up Trucks<br>3 Tandem Trucks<br>1 Excavator<br>1 Backhoe<br>1 Grader<br>1 Compactor |
| **Fire Department** | 1 Pick Up Truck<br>1 Rescue Unit<br>1 Pumper/Tanker<br>1 Tanker<br>1 Pumper<br>1 Trailer<br>1 Side by Side unit |

## 6.2 Levels of Service (LOS)

The Municipality monitors LOS for its vehicle fleet to support objectives related to municipal service delivery, operational efficiency, and public safety.

Table 6.2: Community LOS – Fleet and Equipment

| *Attribute* | Qualitative Description | 2024-2025 Performance | Target Performance |
|---|---|---|---|
| ***Quantity*** | List of services provided by the municipality that require vehicles and equipment. | CBO Inspections<br>Council/Staff Services<br>By-Law Enforcement<br>Road Maintenance<br>Snow Removal<br>Brushing<br>Ditching<br>Landfill Maintenance<br>Fire/Emergency Response<br>Public Education<br>Mutual Aid Support | Maintain sufficient fleet vehicles and equipment to provide the expected services for residents. |

Table 6.3: Technical LOS – Fleet and Equipment

| *Attribute* | Quantitative Metric | 2024-25 Performance | Target Performance |
|---|---|---|---|
| *Age / Reliability* | % of vehicles and equipment beyond their expected useful life | Currently 2 / 19 (10.5%) | Maintain no more than 10% of the fleet beyond its expected useful life |
| *Suitability* | Number and description of essential services required from vehicles where vehicles are inadequate or insufficient to meet demand. | 2 services do not have adequate vehicles for timely and efficient service delivery:<br>Snow removal: Sanding hillsides<br>Emergency response: vehicles for transporting firefighting personnel and equipment | Township will review the adequacy of its fleet for service demands annually. |

## 6.3 Risk Assessment

The Township has identified risks to maintaining its proposed Levels of Service for fleet assets:

- *Winter Maintenance:* Currently, the Township closes roads on hillsides after significant weather events of freeze/thaw or freezing rain, to allow operations teams time to treat and sand those roads to return them to safe service. This results in a temporary loss of service lasting up to several hours on certain roads. Part of this loss of road service is due to crews relying on a single pick-up truck equipped with a sanding unit, capable of spreading salt and navigating the steep slopes more safely

and effectively than the larger tandem plow truck. The dependence on this vehicle reduces operational capability to respond to several road closures and other winter maintenance needs.

- *Safe Transportation of Firefighting Personnel:* Currently, there are not sufficient vehicles in the fleet for safe and effective transportation of firefighting personnel and equipment following an emergency response. While this does not affect the Township's emergency response capability, it does affect Township staff after an emergency is finished.

In addition, the following risks are common to municipal fleets, also affecting Nipissing:

- *Aging Fleet:* Several high-use service and emergency vehicles have exceeded their useful lives, increasing risk of breakdowns and service disruptions.
- *Operational Dependence:* Dependence on single, specialized vehicles means that vehicle failures could delay critical services such as snow removal or emergency response.
- *Regulatory Compliance:* Older vehicles may require upgrades or replacements to meet evolving safety and environmental standards.
- *Climate and Usage Impacts:* Harsh operating conditions and heavy seasonal usage accelerate wear on winter control and road maintenance vehicles.

Risk mitigation strategies include proactive maintenance scheduling, condition-based replacement planning, and prioritization of critical service vehicles to support operational reliability and compliance with safety standards.

## 6.4 Lifecycle Activities

Fleet reliability calls for timely maintenance, rehabilitation of heavy-duty vehicles, and replacement of vehicles at end-of-life. Typical lifecycle activities for vehicles include:

- **Maintenance**
  - Daily pre-operation inspections (circle checks), weekly and monthly preventive maintenance, and scheduled servicing per manufacturer guidelines.
  - Regular monitoring of fluid levels, tire condition, braking systems, and safety equipment.
  - National Fire Protection Association (NFPA 1911) standards for inspection and testing of fire apparatus.
- **Rehabilitation**
  - Mid-life overhauls for fire, winter control, and high-value heavy-duty vehicles to extend operational life.
  - Refurbishment of critical components (e.g., hydraulic systems, mounted equipment, and drivetrains).
  - Targeted upgrades for emissions systems, safety technology, and service-specific modifications according to operational requirements.
- **End-of-Life, Replacement, and Strategic Changes**
  - Planned replacement of vehicles that have reached the end of their useful life or are no longer cost-effective to maintain.
  - Evaluation of remounting or reusing mounted equipment before vehicle replacement.

- Decommissioning, sale, and/or environmentally compliant disposal of retired vehicles.

## Asset Financial Requirements

Based on the current age and condition, staff assessment of suitability, and risks, the following investment profile is presented for Fleet and Equipment assets:

- *Estimated capital requirement*: Approximately **$2.67 million** in total over the next **10 years**.
- *Key cost drivers*: Replacement of major fleet assets at end of service life.

### Table 6.5: Annual Funding Needs – Fleet and Equipment

| Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Cost $** | 33,997 | 226,925 | 329,412 | 351,801 | 73,338 | 32,186 | 159,669 | 474,979 | 407,834 | 578,982 |

*Table 6.5* outlines the annual funding requirements for replacement of fleet assets, based on cost projections detailed in Appendix B. Key considerations outlined in the Appendix include a decision to not replace the Administration SUV, and rather allocate those funds to a larger, 4-door pickup truck that can address Administration and Fire personnel transportation needs. This will assist the Township to better meet its service requirements.

## Asset Financial Strategy

The Township uses funding reserves to procure major fleet and equipment assets, and for certain assets uses a process to lease the equipment to itself, creating a financial system where the use of those assets pays for their cost of ownership. For other Fleet assets, strategic use of reserve funds assists in evening out the funds needed for lifecycle activities year-over-year.

# 7. FINANCIAL STRATEGY

This chapter consolidates the financial requirements identified for the Municipality's tangible capital assets over the 10-year horizon and evaluates financial strategies to respond to these needs. Timely rehabilitation, renewal, and replacement of assets sustains service levels, manages risks, and obtains value from Township assets. This chapter discusses ways to achieve this in a financially responsible manner.

Key considerations in this Financial Strategy include:

- *Lifecycle Perspective:* Funding needs are based on the lifecycle activities to sustain proposed levels of service for each asset class.
- *Data-Informed Decision Making:* Projections are developed based on the current state of assets, risk, and condition data, and refined through staff evaluation of the results with local, informed insights into asset needs.
- *Continuous Improvement*: Asset condition and lifecycle needs are continually evolving, as projects are completed and as assets deteriorate over time. This means continued attention to asset data will improve the quality and reliability of needs assessments, and
- *Integration with Municipal Planning:* The strategy complements the Municipality's capital planning and annual budgeting processes to consider asset needs and funding availability.

A robust funding strategy requires a balanced approach: maintaining stable and predictable local contributions, maximizing external funding opportunities, and strengthening reserves to offset year-to-year funding variability. Aligning funding strategies with lifecycle planning enables the Municipality to deliver timely rehabilitation and renewal activities, mitigate risks of service disruption, control escalating costs, and uphold levels of service commitments in a financially sustainable manner.

Overall, the AMP Financial Strategy serves as a reference for long-term financial planning related to the Township's assets and is intended to assist in the development of practical financial plans with additional considerations related to the Township's needs and capabilities in the year of budgeting.

## 7.1 Annual Asset Funding Needs

Analysis of lifecycle requirements for each asset category indicates that annual funding needs will fluctuate over the 10 years, driven by the timing of lifecycle activities. Current projections show a range from a low of **$1.27 million** in **2032** to a high of **$1.95 million** in **2026,** reflecting scheduled rehabilitation of high-value assets such as the Bear Creek Road Culvert and Public Works Garage.

The projected capital funding requirements for the 10-year horizon represent the financial resources necessary to implement the lifecycle activities outlined across asset classes. These projections reflect investments to maintain current and target levels of service, including overdue rehabilitation of aging infrastructure and planned replacement of critical assets. They also are intended to address regulatory standards, service demand, and adapt to risks such as climate change and technological shifts.

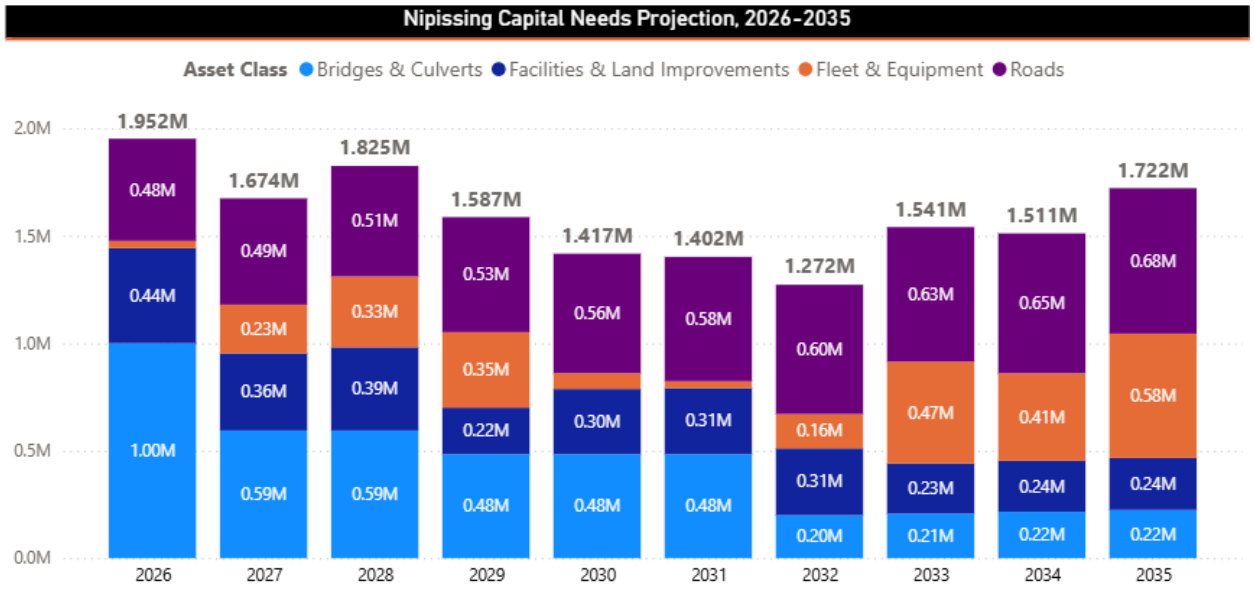
The table below summarizes the anticipated capital funding requirements by asset category:

### Table 7.1: 10-Year Capital Needs Forecast

| Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Roads** | 475,400 | 494,416 | 514,193 | 534,760 | 556,151 | 578,397 | 601,533 | 625,594 | 650,618 | 676,642 |
| **Bridges** | 1,000,000 | 594,417 | 594,417 | 484,667 | 484,667 | 484,667 | 200,000 | 208,000 | 216,320 | 224,973 |
| **Facilities** | 442,774 | 358,684 | 387,232 | 215,921 | 303,091 | 307,082 | 311,232 | 232,214 | 236,703 | 241,371 |
| **Fleet and Equipment** | 33,997 | 226,925 | 329,412 | 351,801 | 73,338 | 32,186 | 159,669 | 474,979 | 407,834 | 578,982 |
| **Total ($M)** | **1.952** | **1.674** | **1.825** | **1.587** | **1.417** | **1.402** | **1.272** | **1.541** | **1.511** | **1.722** |

The investment needs in this table are derived from the lifecycle activities identified in prior chapters, outlining the combined needs to sustain infrastructure performance and service delivery over the 10 years.

### Figure 7.1: 10-Year Capital Needs Projection




Overall, funding needs range between $1.27 million and $1.95 million per year, based on the required lifecycle activities identified for each asset class. Key highlights by asset class include a strong need for funding for Bridges and Culverts through to 2031, from an estimated high of $1 million in 2026 to $0.48

million per year in 2031, with lower requirements identified to 2035. Needs for Fleet and Equipment vary year over year based on the specific equipment that is due for replacement or rehabilitation each year. Needs for Roads and Facilities & Land Improvements are fairly consistent over the planning timeframe, as Roads are subject to regular maintenance regimes, while Facilities & Land Improvements include both planned projects and reserve funding, which stabilizes the overall investment profile.

With a 10-year total funding requirement of approximately **$15.9 million,** the average annual capital expenditure of **$1.59 million** corresponds to an overall annual reinvestment rate of **3.2%** of the Municipality's total asset portfolio replacement value as of 2025. This is slightly higher than reinvestment rates for comparable municipalities, which are typically in the range of **2-3%** of total asset value per year. Actual requirements vary by asset condition, age distribution, and service demand in each municipality.

For Nipissing, replacement of high-value assets including the Hummel Bridge are positioning Bridges as a major cost driver for at least the next five years, until 2031. Reserve funds for Bridge and Building upgrades and replacements from 2032 onward will assist with reducing long-term financial challenges related to managing these major assets.

### Managing Variability in Annual Needs

To manage the variability of capital funding needs across the 10-year planning period, the Municipality may continue to leverage:

- *Dedicated Capital Reserves:* To offset costs in years where required investments exceed average annual budgets.
- *External Funding Sources:* Including provincial/federal grants, low-interest loans, and strategic partnerships (e.g with neighbouring municipalities or service organizations) to reduce the burden on local revenues.
- *Asset Prioritization:* To monitor funding allocation based on the criticality, risk, and service impact of individual assets.

While strategic deferral of certain activities may temporarily reduce immediate spending, ongoing investment remains necessary to avoid cost escalation and prevent service disruption.

Where actual expenditures fall below projected needs or additional funding becomes available, unspent amounts should be allocated to reserves. This approach provides financial flexibility for years of heightened investment, supporting consistent delivery of service levels and infrastructure reliability.

## 7.2 Financial Context

The Municipality's financial capacity to meet its asset needs can be assessed based on historic capital additions, funding sources, and reserves. Tangible capital asset (TCA) investment trends offers useful context for planning the 10-year lifecycle needs identified in Chapter 7.1.

## Recent Capital Additions

The Municipality's audited financial statements show annual net additions to tangible capital assets have ranged from a low of **$305,876** in **2024** to a high of **$1,098,217** in **2023**. Over the **2020-2024** period, the annual average net capital addition was **$694,720** (net of disposals and write-downs).

Not all capital additions have been drawn from Township funds; some capital contributions may have come from other funding sources or transfers in-kind.

### Table 7.3: Net Capital Additions, 2020-2024

| Year of Addition / Asset Class | 2020 $ | 2021 $ | 2022 $ | 2023 $ | 2024 $ | Multi-Year Average |
|---|---|---|---|---|---|---|
| **Roads and Bridges** | 348,641 | 265,384 | 359,347 | 816,441 | 105,348 | 379,032 |
| **Facilities** | 2,840 | 47,013 | 110,000 | 68,061 | 16,385 | 48,860 |
| **Fleet and Equipment** | 321,539 | -2,088 | 616,830 | 213,715 | 184,143 | 266,828 |
| **Total** | **673,020** | **310,309** | **1,086,177** | **1,098,217** | **305,876** | **694,720** |

Table 7.3 above shows the net value of additions to capital assets of all types from 2020 to 2024. Note, the Township's financial statements combine Road and Bridge assets in a single line.

## Annual Surplus Funds

Separate from funds committed to capital projects, the Township has managed to operate at a surplus relative to its budget each year since 2020, ranging from a low of $230,793 in 2021 to a high of $689,630 in 2024. Council has passed resolutions on allocations of surplus funds, in each year of surplus.

### Table 7.4: Annual Surplus (Deficit), 2020-2024

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Budget Surplus ($)** | **522,611** | **230,793** | **409,059** | **647,909** | **689,630** |

The Township typically allocates most of its surplus funds to reserves, as shown in Table 7.5 below.

## Capital Reserves

The Municipality has grown its Working Capital and Capital Reserves through dedicated allocations and commitments of surplus funds over recent years.

Reserve fund balances, as per the Township's audited financial statements, are as follows:

Table 7.5: Reserve Fund Balances, 2020-2024

| Year / Reserve | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Working Capital** | 1,129,051 | 1,137,770 | 1,360,767 | 1,331,079 | 1,582,628 |
| **Capital** | 1,393,101 | 1,516,665 | 1,711,001 | 2,281,563 | 2,766,410 |
| **Total Reserves** | **2,522,152** | **2,654,435** | **3,071,768** | **3,612,642** | **4,349,038** |

The Township's total reserves at the start of 2025 were approximately **$4.35 million**, reflecting growth in reserve funds related to investment returns and, in part, to allocations from budget surpluses in recent years.

Reserves can be used to address multiple needs:

- *Smoothing Investment Peaks:* Offsetting costs in years where lifecycle requirements exceed annual capital budgets.
- *Funding Strategic Projects:* Allowing for multi-year accumulation of funds to meet the Municipality's share of major rehabilitation or renewal projects
- *Strategic Contributions:* Having funds available when external matching funding opportunities arise for identified capital projects.
- *Risk Management:* Maintaining a minimum reserve balance to address emergency needs and unexpected asset failures that could carry significant financial and service-level impacts.

The total value of Working Capital and Capital reserves may continue to be used for these needs. Reserve Funds should not be considered an accumulated surplus, rather, as funds that may be used with appropriate discretion and oversight as required by law and according to the Township's reserve fund policies.

### Implications for the Financial Strategy

The Township's historic capital spending, surpluses, and reserve funds demonstrate its capability to undertake the lifecycle activities as identified across this AMP with costs shown in Section 7.1. Based on multi-year averages, the Township has an estimated funding capacity of $1.16 million in 2025.

Overall, maintaining the Township's asset portfolio will depend on continued strategic contributions to reserves, obtaining access to external funding programs, and aligning annual capital budgets with the long-term reinvestment needs of the asset portfolio. This will support the Municipality's ability to deliver services and manage risks, while responsibly managing revenues from residents, businesses, and external sources.

## 7.3 Funding Needs and Unfunded Projects

Based on the above assessments, there is a funding gap for the Township's capital needs relative to its financial capacity, averaging $224,522 per year from 2026 to 2035. The gap varies from an estimated surplus capacity of $150,365 in 2032 to a maximum gap of $760,566 in 2026.

Overall, the total estimated funding gap is $2.24 million over the 10-year timeframe. This gap means that the Township may not be able to undertake all of the lifecycle activities identified in the AMP, without additional source of funding. Strategies to obtain this funding is described in Section 7.4.

### Unfunded Asset Needs

In addition to the overall funding gap identified for all lifecycle activities, this AMP identifies several projects which are only partially funded through this financial strategy.

Table 7.6: Costs and Risks – Unfunded Asset Needs

| Asset | Estimated Total Cost | Township Funding | External Funding | Notes | Risks |
|---|---|---|---|---|---|
| **Hummel Bridge** | $4,000,000 | $1,330,000 | $2,660,000 | External funding sources and contribution from Powassan to be determined | The bridge is closed to traffic and operational mitigation measures are in place. |
| **Bear Creek Culvert** | $1,000,000 | $1,000,000 | TBD | Repairs completed in 2024, may require replacement with a bridge. | The crossing is critical for access to portions of the community and to mitigate flood risk. |
| **Hart Road Culvert** | $438,000 | $219,000 | $219,000 | Gap to be covered by Callander as funds become available. | The shared culvert is due for replacement and a funding or risk mitigation strategy should be adopted. |
| **Township Office and Public Works Garage** | $4,000,000 | $800,000 | $3,200,000 | Identified funds to be placed in reserve. Gap to be addressed as Township budget or external funding allows. | Continued operation of higher-risk facilities, including undersized / inadequate Twp Office and PW Garage. |
| **Total** | **$9,438,000** | **$3,349,000** | **$6,079,000** | | |

The Township's contributions to these projects as earmarked in this AMP is $3.35 million, is greater than the total funding gap for all lifecycle activities in the AMP. Put differently, these projects are almost completely unfunded based on the Township's current estimated financial capability and unconfirmed external sources.

Even at the target rate of contribution from the Municipality for each project, the Municipality's financial capability accounts for less than 10% of required contributions to these projects over the next 10 years. Funds for these projects may be obtained through the additional funding strategies outlined in Section 7.4.

## 7.4 Additional Funding Strategies

Delivering the investment requirements identified in Chapter 7.1 requires a multi-faceted funding approach that balances internal capacity, external opportunities, and strategic planning. Funding strategies must enable the Municipality to repair, rehabilitate, and renew its aging infrastructure while maintaining service levels and adapting to emerging needs.

Under *O. Reg. 588/17*, municipalities must demonstrate internal capacity to meet long-term rehabilitation and replacement obligations. For smaller communities with limited revenue bases, leveraging external funding remains a key component of sustaining infrastructure investments.

### Leveraging External Funding

Investment may be aligned with opportunities to leverage external funding, including provincial and federal grants, low-interest loans, and targeted donations. Major lifecycle projects, such as Bridge replacements and accessibility improvements to Facilities may be completed when matching funds are available. This would reduce the Municipality's reliance on internal funding sources and diversify funding available to address lifecycle requirements across the Township's assets.

External programs, including federal and provincial grants, remain critical to financing major capital projects. Current funding programs increasingly tie eligibility to specific policy objectives, such as housing-enabling infrastructure. While new housing is not a primary objective for Nipissing, the Municipality may monitor and pursue opportunities to strategically align projects with available funding streams.

Proactive project planning provides readiness to capitalize on short-lived funding windows. The AMP itself provides the supporting evidence required by many programs, demonstrating sound asset management practices and clear prioritization of community needs.

### Supplementary Local Funding Strategies

In addition to grants and transfers, the Municipality may adopt or expand local revenue measures to enhance long-term funding sustainability:

- *Capital Levies:* Targeted levies can be introduced to address specific infrastructure renewal needs or to maintain service levels, with Council-approved adjustments reflecting annual investment priorities. These may be associated with specific needs, such as Bridges and Culverts.
- *Capital Reserve Contributions:* Regular contributions build reserves to fund in-year rehabilitation, cover emergency needs, and meet municipal matching requirements for external funding. A reserve target may be established as something the Township works toward over time.

### Debt Financing

Prudently employed, debt financing can address significant lifecycle investments within regulated repayment limits. The Township monitors its borrowing capacity under Ministry guidelines and may re-evaluate debt utilization as existing debentures mature.

## 7.5 Financial Strategy Summary

The Municipality's ability to provide reliable and sustainable services depends on a financial strategy that balances long-term investment needs with available funding. This financial strategy translates asset conditions, lifecycle requirements, risk considerations, and levels of service into a 10-year investment roadmap to be funded through internal and identified external funding sources.

Key conclusions from this analysis include:

- **Investment Requirements:** Forecasted needs vary over the 10-year horizon, with peaks associated with major rehabilitation and renewal projects. A higher capital need in the first 5 year of the plan reflects current investment needs, while annual fluctuations influenced by both predictable lifecycle investments and reserves for unexpected asset failures.
- **Financial Context:** The use of external grants, as well as current spending and reserve management practices, influences the Municipality's capacity to meet these needs. Maintaining a realistic understanding of available funding sources will help the Township set meaningful budgets moving forward.
- **Sustainability Strategies:** A balanced approach—drawing on tax- and rate-supported revenues, dedicated reserves, external grants, and, where appropriate, debt financing—will be necessary to bridge funding gaps and sustain service levels.
- **Future Readiness:** Strengthening capital reserves, refining financial forecasts as data improves, and aligning budgets with long-term priorities will position the Municipality to respond to planned rehabilitation and unforeseen events. Proactive preparation of "shovel-ready" projects will also improve the Municipality's ability to capture time-limited funding opportunities.

This forward-looking financial strategy provides the foundation for informed decision-making, reduces the risk of deferred maintenance, and supports the continued delivery of essential services. By committing to continuous improvement—grounded in reliable data, sound asset management practices, and ongoing collaboration—the Township will remain on a financially resilient path that benefits both current residents and future generations.

# 8. CONCLUSION AND NEXT STEPS

The Municipality's ability to deliver reliable, sustainable services is supported through an effective asset management strategy that aligns lifecycle investment requirements with available funding. Looking ahead, the Township will continue to refine its financial forecasts as asset data, lifecycle modelling, and levels of service targets are further developed. Capital budgets will be aligned with long-term priorities, maintaining a careful balance between affordability and service reliability.

Efforts to strengthen capital reserves will provide greater flexibility to respond to both scheduled rehabilitation needs and unanticipated asset failures. At the same time, the Municipality can maximize external funding opportunities, preparing shovel-ready projects to take advantage of short-lived grant windows.

This AMP is intended to support informed decision-making, reduce the risks associated with deferred maintenance, and enable the sustainable delivery of municipal services. By committing to continuous improvement with reliable data and collaboration across departments, the Township will be able to manage its assets in a financially prudent manner.

## CONTINUOUS IMPROVEMENT

There are opportunities to strengthen asset management practices for the Township over time. Continuous improvement helps to continue informing infrastructure investment decisions that are evidence-based, financially sustainable, and aligned with the service expectations of the community.

### Key Activities to Strengthen Asset Management

Sustained progress in asset management calls for focused actions to improve data quality, analytical tools, and decision-making processes:

- *Software and Data Management:* The Municipality's current TCA spreadsheet consolidates asset information but maintaining accurate and up-to-date records is an ongoing challenge. Implementing dedicated asset management tools or enhanced spreadsheets can standardize data collection, reduce manual entry errors, and improve data accessibility for planning and reporting.

- *Data Validation:* Reviewing assets that have exceeded their estimated useful life helps determine whether replacement is necessary or if extended service life is feasible. Adjustments to service life assumptions and condition ratings e.g., for vehicles and equipment, can help projections reflect actual asset performance.

- *Risk Management:* Embedding risk-based decision-making in planning and budgeting processes enables the Municipality to allocate resources to assets where failure would have the greatest impact. A consistent methodology for assessing and updating asset risk profiles should be implemented and reviewed regularly.

- *Levels of Service (LOS):* Continuous refinement of LOS metrics, as defined in this AMP, will enable investment decisions to better align with community expectations and regulatory requirements. Additional metrics can identify when service expansion, upgrades, or replacements are warranted.

### Next Steps for Asset Management

Building on these activities, the Municipality may consider the following initiatives over the coming years:

- *Refinement of Target Levels of Service:* Incorporate community engagement and strategic planning insights to define and track LOS performance. Establishing clear processes for consultation will allow for service delivery goals to remain aligned with community priorities.
- *Enhanced Financial Forecasting:* As asset data and LOS information improve, refine annual expenditure projections for each asset category over the 10-year horizon. Improved forecasting will enable more accurate planning for maintenance, rehabilitation, and expansion costs.
- *Integration with Financial Strategy:* Use enhanced data, refined LOS, and updated risk assessments to strengthen the financial planning framework outlined in Chapter 7, ensuring a clear link between asset needs, funding strategies, and long-term service sustainability.

By committing to these continuous improvement actions, the Municipality will build a more resilient and adaptive asset management framework, one capable of supporting informed decisions, optimizing investments, and safeguarding the long-term delivery of municipal services.

## CONCLUSION

The Township of Nipissing manages a diverse portfolio of assets that support essential services for the community. Some of these assets date back to the Township's early development, and some have reached or surpassed their expected service life. Addressing challenges such as aging infrastructure, evolving service demands, and funding pressures requires a shift toward proactive, data-driven asset management.

This AMP provides a roadmap for sustaining municipal infrastructure by linking asset condition, lifecycle strategies, risk management, and service level commitments with long-term financial planning. It highlights the need for consistent reinvestment in core and non-core assets and emphasizes the importance of aligning capital spending with community priorities, regulatory obligations, and available funding.

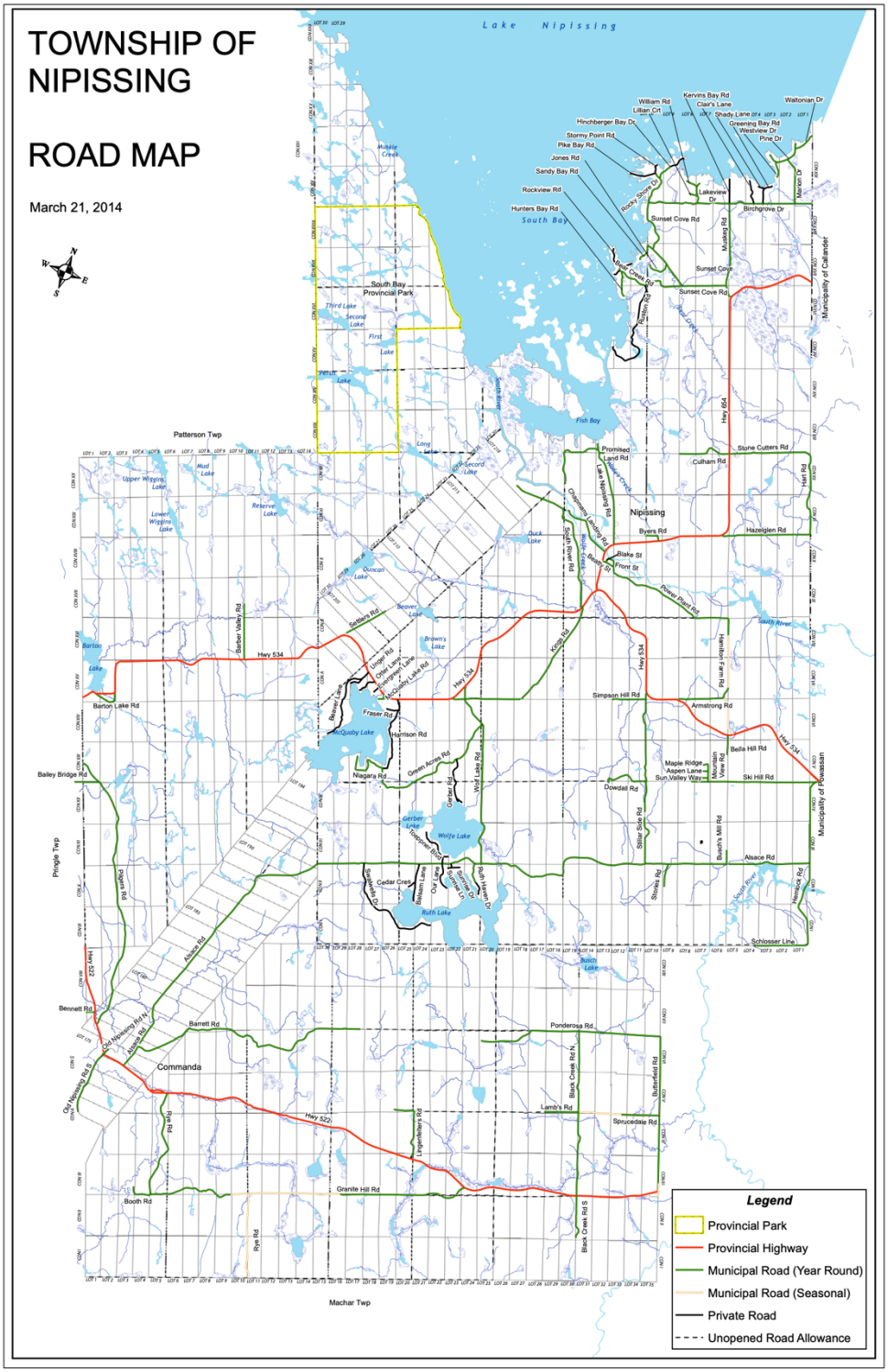
Moving forward, Nipissing will continue to prioritize investments that address risks and deliver value for residents, supported by the information in this AMP. The financial strategies outlined in Chapter 7 and continuous improvement initiatives will enable the Municipality to anticipate future funding requirements, plan capital projects efficiently, and mitigate the risks of deferred maintenance.

Ultimately, this AMP reflects a commitment to building a stronger, more resilient community. By considering its key findings, Nipissing can be confident that its infrastructure is managed responsibly and sustainably, providing reliable service delivery today and for generations to come.

# APPENDIX A: SUPPLEMENTARY ASSET DATA

## APPENDIX A1: ROAD MAP

The following map is presented in response to Levels of Service requirements for Road assets. The township retains a more detailed version showing the spatial extent of roads within Nipissing. This provides the geographic location of the Township's road assets and assists with the evaluation of road lifecycle needs.



## APPENDIX A2: DATA SOURCES

The asset condition, lifecycle activity, and financial projections in this AMP are based on the best available data at the time of preparation. Data were consolidated from multiple sources to create a reliable foundation for asset management planning and to support the continuous improvement initiatives outlined in Chapter 8.

### Table A.1: Primary Data Sources by Asset Class

| Asset Class | Key Documents & Reports | Asset Condition Basis | Lifecycle & Financial Basis |
|---|---|---|---|
| **Roads** | 2023 Road Needs Study Report, D.M. Wills | 2023 Road Needs Study | 2023 Study, TCA and lifecycle cost modelling |
| **Bridges & Culverts** | 2024 Structure Inspection Report, HP Engineering Inc. | Inspection Report | Inspection Report results and staff assessment of needs |
| **Facilities & Land Improvements** | 2024 Baseline Property Condition Assessment, Pinchin Ltd. | Age- and inspection-based | TCA and building condition reports, staff assessment of needs |
| **Fleet & Equipment** | TCA spreadsheets and municipal input | Age-based | TCA and fleet lifecycle tracking |

In addition, the Municipality's *Tangible Capital Asset (TCA)* inventory and its audited financial returns from **2020 to 2024** were used to source, validate or enhance the asset information presented in this AMP.

### Why Data Sources Matter

Reliable, consistent data supports effective asset planning, providing information from asset condition ratings and lifecycle planning to financial forecasting and risk assessment. Continuous refinement of these data sources will improve investment planning accuracy, strengthen the Municipality's funding strategies, and support evidence-based decisions on service levels and priorities.

## Appendix A3: Asset Condition and Estimated Useful Life Approach

Asset conditions presented in this AMP are based on the most reliable assessment data available for each asset category, as outlined in *Appendix A2: Data Sources*. Where direct condition inspections were unavailable, asset condition has been estimated using an age-based approach that compares the current age of the asset to its estimated useful life.

### Methodology

The remaining useful life of each asset is calculated as:

**Remaining Useful Life (%) = (Useful Life – Current Age) ÷ Useful Life**

For example:

- An asset installed in **[Year]** is **[XX]** years old as of **[Current Year]**.
- With an estimated useful life of **[YY]** years, the remaining useful life is:
    - (**[YY] – [XX]**) ÷ **[YY]** = **[X%]**.
- This equates to **[Remaining Years]** years remaining out of an expected **[YY]** years.

**Condition ratings based on remaining useful life:**

| Condition Rating | Remaining Useful Life (%) |
|---|---|
| **Very Good** | >= 75% |
| **Good** | 50% – 74% |
| **Fair** | 25% – 49% |
| **Poor** | 0% – 24% |
| **Very Poor** | < 0% |

### Integration with Asset Management Planning

- *Lifecycle Forecasting:* Remaining useful life percentage estimates guide capital planning for maintenance, rehabilitation, and replacement activities.
- *Risk-Based Decision-Making:* Combined with asset criticality and performance, RUL informs prioritization of investments where failure risks are highest.
- *Financial Strategy Alignment:* Age-based condition data underpin the funding forecasts outlined in Chapter 7, linking asset condition directly to required reinvestment.

### Limitations of the Age-Based Approach

While practical and consistent, this method provides only an approximation of actual asset performance. Factors such as operating environment, usage intensity, maintenance history, and unforeseen deterioration can significantly affect asset condition. Consequently:

- Age-based ratings may *over- or under-estimate* remaining service life.
- Actual asset inspections remain the preferred method for validating condition and refining lifecycle forecasts.

As part of the Municipality's continuous improvement program (Chapter 8), the development of a more comprehensive condition assessment framework including regular field inspections and standardized evaluation templates will enhance the accuracy of future asset condition reporting.