2025

Asset Management Plan

Township of North Huron

January 2026 v3

This Asset Management Program was prepared by:

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

Key Statistics

Replacement cost of asset portfolio

$325.5m

Replacement cost of infrastructure per household

$143k (2024)

Percentage of assets in fair or better condition

82%

Percentage of assets with assessed condition data

83%

Annual capital infrastructure deficit

$3.9m

Recommended timeframe for meeting Proposed Levels of Service

10 Years

Target reinvestment rate

2.2%

Actual reinvestment rate

1.0%

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Executive Summary

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

Scope

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

This AMP includes the following asset categories:

Asset Category

- Road Network
- Bridges & Culverts
- Storm Network
- Buildings & Facilities
- Water Network
- Machinery & Equipment
- Sanitary Network
- Land Improvements
- Vehicles
- Information Technology

With the development of this AMP the Township has achieved compliance with O. Reg. 588/17 to the extent of the requirements that must be completed by July 1, 2025.

Findings

The overall replacement cost of the asset categories included in this AMP totals $325.5 million. 82% of all assets analyzed in this AMP are in fair or better condition and assessed condition data was available for 83% of assets. For the remaining 17% of assets, assessed condition data was unavailable, and asset age was used to approximate condition – a data gap that persists in most municipalities.

Generally, age misstates the true condition of assets, making assessments essential to accurate asset management planning, and a recurring recommendation in this AMP.

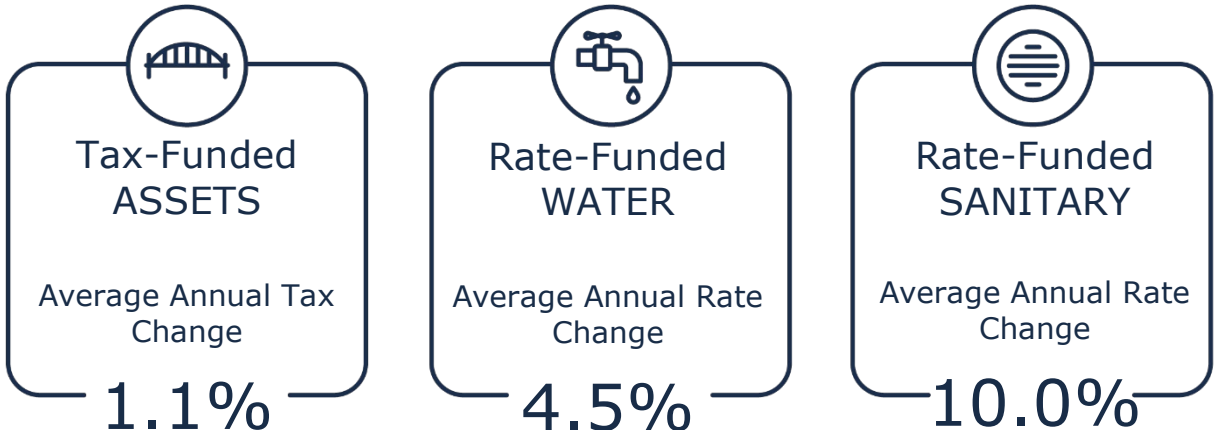
The development of a long-term, sustainable financial plan requires an analysis of whole lifecycle costs. This AMP uses a combination of proactive lifecycle strategies (paved roads) and replacement only strategies (all other assets) to determine the lowest cost option to maintain the current level of service.

To meet capital replacement and rehabilitation needs for existing infrastructure, prevent infrastructure backlogs, and achieve long-term sustainability, the Township's average annual capital requirement totals $7.0 million. Based on a historical analysis of sustainable capital funding sources, the Township is committing approximately $3.1 million towards capital projects or reserves per year. As a result, there is currently an annual funding gap of $3.9 million.

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

Recommendations

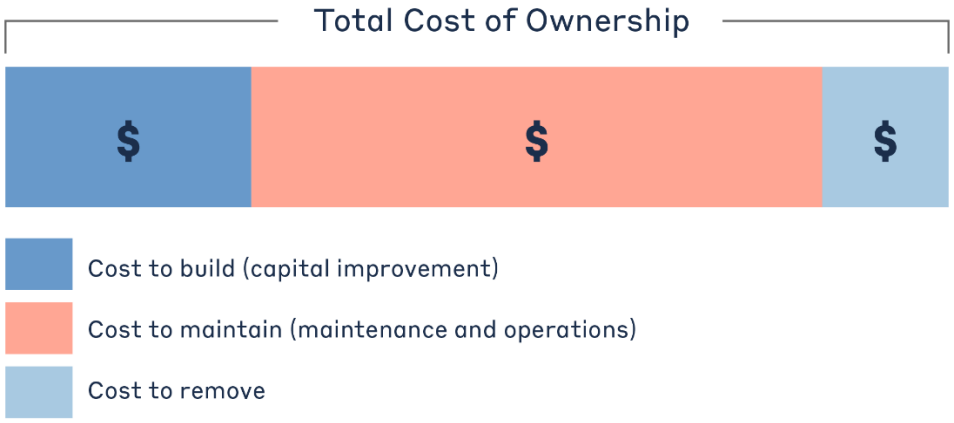
A financial strategy was developed in accordance with Administration's direction. The following graphic shows annual tax/rate change required to meet Township's ***proposed levels of service*** based on a 10-year plan for taxes and utility rates. Note that these recommendations differ from 'full funding', and are based on specific financial targets defined by Administration.



Overview of Asset Management

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

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



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

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

Foundational Documents

In the municipal sector, 'asset management strategy' and 'asset management plan' are often used interchangeably. Other concepts such as 'asset management framework', 'asset management system', and 'strategic asset management plan' further add to the confusion; lack of consistency in the industry on the purpose and definition of these elements offers little clarity. To make a clear distinction between the policy, strategy, and the plan see the following sections for detailed descriptions of the document types.

Strategic Plan

The strategic plan has a direct, and cascading impact on asset management planning and reporting, making it a foundational element. Developing alignment with corporate goals and objectives through to service delivery and lifecycle management ensures the Township has line of sight to achieve their strategic objectives.

Asset Management Policy

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

The Township adopted By-law No. 66-2024 "A By-law to Adopt a Strategic Asset Management Policy for the Township of North Huron" on September 3rd, 2024, in accordance with Ontario Regulation 588/17.

The objectives of the policy are to provide a framework for implementing asset management, and to provide guidance to staff responsible for asset management.

Asset Management Strategy

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

The Township's Strategic Asset Management Policy contains many of the key components of an asset management strategy and may be expanded on in future revisions or as part of a separate strategic document.

Asset Management Plan

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

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

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

Key Concepts in Asset Management

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

Lifecycle Management Strategies

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

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

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

Lifecycle Activity	Description	Example (Roads)	Cost
Maintenance	Activities that prevent defects or deteriorations from occurring	Crack Seal	$
Rehabilitation/ Renewal	Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	Mill & Re-surface	$$
Replacement/ Reconstruction	Asset end-of-life activities that often involve the complete replacement of assets	Full Reconstruction	$$$

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

The Township's approach to lifecycle management is described within each asset category outlined in this AMP. Developing and implementing a proactive lifecycle strategy will help staff to determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest total cost of ownership.

Risk Management Strategies

The Township has generally taken a 'worst-first' approach to infrastructure spending. Rather than prioritizing assets based on their importance to service delivery, assets in the worst condition are fixed first, regardless of their criticality. However, not all assets are created equal. Some are more important than others, and their failure or disrepair poses more risk to the community than that of others. For example, a road with a high volume of traffic that provides access to critical services poses a higher risk than a low volume local road. These high-value assets should receive funding before others.

By identifying the various impacts of asset failure and the likelihood that it will fail, risk management strategies can identify critical assets, and determine where maintenance efforts, and spending, should be focused. This AMP includes a high-level evaluation of asset risk and criticality through qualitative and quantitative methodologies.

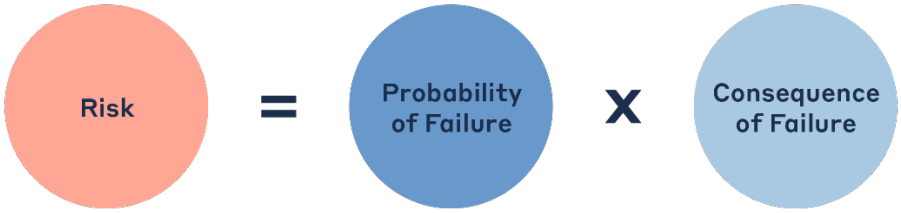
Qualitative Approach to Risk

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

Quantitative Approach to Risk

Asset risk is defined using the following formula:

Formula to Assess Risk of Assets



The probability of failure relates to the likelihood that an asset will fail at a given time. The probability of failure focuses on two highly imperative impacts for risk assessment – structural and functional impacts. Structural impacts are related to the structural aspects of an asset such as load carrying capacity, condition, or breaks; whereas the functional impacts can include parameters, slope, traffic count, and other impacts that can affect the performance of an asset.

The consequence of failure describes the overall effect that an asset's failure will have on an organization's asset management goals. Consequences of failure can range from non-eventful to impactful.

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

Levels of Service

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

These measures include a combination of those that have been outlined in O. Reg. 588/17 in addition to performance measures identified by the Township as worth measuring and evaluating. The Township measures the level of service provided at two levels: Community Levels of Service, and Technical Levels of Service.

High-Level Service Indicators

While community and technical levels of service provide a description of the service provided or performance metrics, these do not always provide a clear, succinct illustration of how the service is balanced.

Measuring and evaluating levels of service is a matter of finding a balance between three key indicators: cost, performance, and risk. This balance will inform the high-level decisions of the Township to key decisions, such as whether it is acceptable to take on more costs to achieve better performance.

Ultimately, these key indicators will be supplemented by the community and technical levels of service for further context of service provisions. The criteria for the high-level service indicators are described in the following table.

Indicator	Metric	Measurement
Cost	Annual Average Capital Invested	Annual funding available for each asset category derived from sustainable sources
	Average Annual Capital Required	Annual funding required to sustain and renew the current asset portfolio
Performance	Overall Condition	% of assets in very good, good, fair, poor, and very poor condition
Risk	Overall Risk Distribution	% of assets in very low, low, moderate, high, and very high state of risk

Community Levels of Service

Community levels of service are a simple, plain language description or measure of the service that the community receives. For core asset categories (Roads, Bridges, Water, Wastewater, Stormwater) the Province, through O. Reg. 588/17, has provided qualitative descriptions that are required to be included in this AMP. For non-core asset categories, the Township has determined the qualitative descriptions that will be used to determine the community level of service provided. These

descriptions can be found in the Levels of Service subsection within each asset category.

Technical Levels of Service

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

For core asset categories (Roads, Bridges, Water, Wastewater, Stormwater) the Province, through O. Reg. 588/17, has provided technical metrics that are required to be included in this AMP. For non-core asset categories, the Township will determine technical metrics that measure the current levels of service.

Current and Proposed Levels of Service

This AMP focuses on measuring the current level of service provided to the community, as well as proposed levels of service over a 10-year period, in accordance with O. Reg. 588/17.

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

The North Huron Asset Management Plan was developed in accordance with Ontario Regulation 588/17 ("O. Reg 588/17"). It contains a comprehensive analysis of the Township's infrastructure portfolio. This is a living document that should be updated regularly as additional asset and financial data becomes available.

Ontario Regulation 588/17

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

Requirement	2019	2022	2024	2025
Asset Management Policy	●		●	
Asset Management Plans		●	●	●
State of infrastructure for core assets		●		
State of infrastructure for all assets			●	●
Current levels of service for core assets		●		
Current levels of service for all assets			●	
Proposed levels of service for all assets				●
Lifecycle costs associated with current levels of service		●	●	
Lifecycle costs associated with proposed levels of service				●
Growth impacts		●	●	●
Financial strategy				●

Scope and Methodology

The scope of this document is to identify the current practices and strategies that are in place to manage public infrastructure and to make recommendations where they can be further refined. Through the implementation of sound asset management strategies, the Township can ensure that public infrastructure is managed to support the sustainable delivery of municipal services.

Asset Categories

This asset management plan for the Township of North Huron is produced in compliance with Ontario Regulation 588/17. The July 2025 deadline under the regulation—the third of three AMPs—requires analysis of all municipal assets, as well as proposed levels of service and how to fund them.

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

Asset Category	Source of Funding
Road Network	Tax Levy
Bridges & Culverts	
Buildings & Facilities	
Information Technology	
Land Improvements	
Vehicles	
Machinery & Equipment	
Storm Water Network	
Water Network	User Rates
Sanitary Sewer Network	

Deriving Replacement Costs

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

- **User-Defined Cost and Cost/Unit**: Based on costs provided by municipal staff which could include average costs from recent contracts; data from engineering reports and assessments; staff estimates based on knowledge and experience

- **Cost Inflation/CPI Tables**: Historical cost of the asset is inflated based on Consumer Price Index or Non-Residential Building Construction Price Index

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

Estimated Useful Life and Service Life Remaining

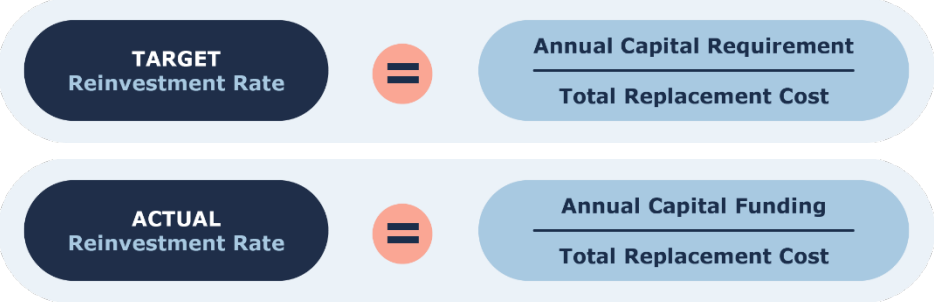
The estimated useful life (EUL) of an asset is the period over which the Township expects the asset to be available for use and remain in service before requiring replacement or disposal. The EUL for each asset in this AMP was assigned according to the knowledge and expertise of municipal staff and supplemented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

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

Reinvestment Rate

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

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



Deriving Asset Condition

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

A condition assessment rating system provides a standardized descriptive framework that allows comparative benchmarking across the Township's asset portfolio. The table below outlines the condition rating system used in this AMP to determine asset condition. This rating system is aligned with the Canadian Core Public Infrastructure Survey which is used to develop the Canadian Infrastructure Report Card. When assessed condition data is not available, service life remaining is used to approximate asset condition.

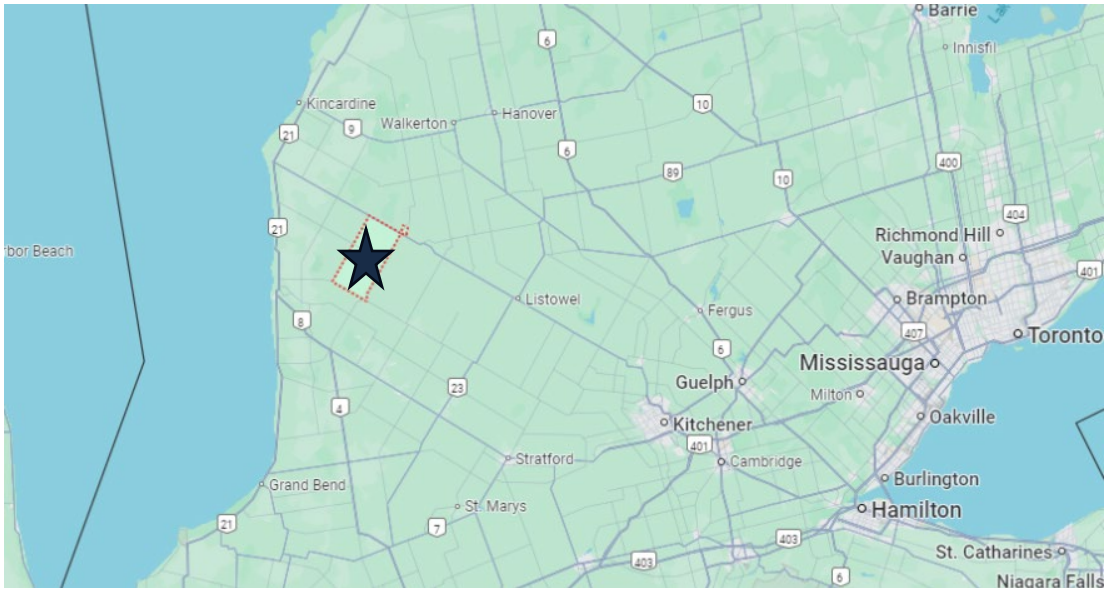
Condition	Description	Criteria	Service Life Remaining (%)
Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated	80-100
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life	60-80
Fair	Requires attention	Signs of deterioration,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

The analysis in this AMP is based on assessed condition data only as available. In the absence of assessed condition data, asset age is used as a proxy to determine asset condition. Appendix E includes additional information on the role of asset condition data and provides basic guidelines for the development of a condition assessment program.

Portfolio Overview

Community Profile

The Township of North Huron is located within Huron County on Ontario's West Coast. Located in the north of the Maitland River watershed, with portions of the middle Maitland River flowing through Wingham and East Wawanosh, the Township is characterized by a flat to gently rolling terrain with a significant portion of the municipality in the Maitland's flood zone or the flood zone of one of its tributaries. The Municipality was formed in 2001 after the amalgamation of the former township of East Wawanosh, the village of Blyth, and the Town of Wingham.



The Township is nestled between Highways 86 and 25 connecting the Township to the shores of Lake Huron 40 km to the west, the urban centers of Kitchener-Waterloo and the GTA in the east, and Highway 4 leading directly south to London.

The Town of Wingham is the largest and northernmost settlement area in the municipality with a population of approximately 3,100 (2021 census). The Town is built up around a downtown core (Josephine St./ Highway 4) with a large array of small businesses ranging from financial services to retail with an industrial core continuing to develop in the northwest portion.

The majority of municipal and other community services such as medical facilities and schools that service the Township and surrounding areas are located in Wingham. Directly south of Wingham along Highway 4 and east of the Wingham Wastewater Treatment Plant is the developing settlement area of Hutton Heights and further south along Highway 4 is the settlement area of Belgrave.

The southernmost settlement area in the Township is the village of Blyth located along the intersection of Highway 4 and Highway 25 (Blyth Road) with a population of 1,065 (2021 census). This low-density settlement area is structured similarly to Wingham, centering around a downtown core (Queen St./ Highway 4) and has the greatest concentration of tourist and art-based facilities in the Township, hosting

the Blyth Center of the Arts, Blyth Memorial Hall, and the Township's campground. There are two industrial areas in Blyth, both located in the northeast of the village.

The other major areas of the Township comprise the rest of the population including the hamlets of Whitechurch, located along Highway 86 to the west of Wingham; Auburn, located west of Blyth at the intersection of Highways 25 and 22, and East Wawanosh. East Wawanosh has the lowest residential density of the Township and is intentionally designated as low-density rural with the main industries being agriculture and its related services. This land is primarily used for pastoral agriculture and farming of crops such as wheat, soybeans, and corn.

Census Characteristic	North Huron	Ontario
Population 2021	5,052	14,223,942
Population Change 2016-2021	2.4%	5.8%
Total Private Dwellings	2,277	5,929,250
Population Density	28.2/km^2	15.9/km^2
Land Area	179.01 km^2	892,411.76 km^2

Climate Change

Climate change can cause severe impacts on human and natural systems around the world. The effects of climate change include increasing temperatures, higher levels of precipitation, droughts, and extreme weather events. In 2019, Canada's Changing Climate Report (CCCR 2019) was released by Environment and Climate Change Canada (ECCC).

The report revealed that between 1948 and 2016, the average temperature increase across Canada was 1.7°C; moreover, during this period, Northern Canada experienced a 2.3°C increase. The temperature increase in Canada has doubled that of the global average. If emissions are not significantly reduced, the temperature could increase by 6.3°C in Canada by the year 2100 compared to 2005 levels. Observed precipitation changes in Canada include an increase of approximately 20% between 1948 and 2012. By the late 21st century, the projected increase could reach an additional 24%.

During the summer months, some regions in Southern Canada are expected to experience periods of drought at a higher rate. Extreme weather events and climate conditions are more common across Canada. Recorded events include droughts, flooding, cold extremes, warm extremes, wildfires, and record minimum arctic sea ice extent.

The changing climate poses a significant risk to the Canadian economy, society, environment, and infrastructure. The impacts on infrastructure are often a result of climate-related extremes such as droughts, floods, higher frequency of freeze-thaw cycles, extended periods of high temperatures, high winds, and wildfires. Physical infrastructure is vulnerable to damage and increased wear when exposed to these extreme events and climate variabilities. Canadian municipalities are faced with the responsibility to protect their local economy, citizens, environment, and physical assets.

North Huron Climate Profile

The Township of North Huron is located in Southwestern Ontario. The Township is expected to experience notable effects of climate change which include higher average annual temperatures, an increase in total annual precipitation, and an increase in the frequency and severity of extreme events. According to Climatedata.ca – a collaboration supported by Environment and Climate Change Canada (ECCC) – the Township of North Huron may experience the following trends:

Higher Average Annual Temperature:

- Between the years 1971 and 2000 the annual average temperature was 6.8ºC.
- Under a high emissions scenario, the annual average temperatures are projected to increase by 2.5ºC by the year 2050 and around 6.4ºC by the end of the century.

Increase in Total Annual Precipitation:

- Under a high emissions scenario, North Huron is projected to experience an 12% increase in precipitation by the year 2080 and a 16% increase by the end of the century.

Increase in Frequency of Extreme Weather Events:

- It is expected that the frequency and severity of extreme weather events will change.
- In some areas, extreme weather events will occur with greater frequency and severity than others.

Integration Climate Change and Asset Management

Asset management practices aim to deliver sustainable service delivery - the delivery of services to residents today without compromising the services and well-being of future residents. Climate change threatens sustainable service delivery by reducing the useful life of an asset and increasing the risk of asset failure. Desired levels of service can be more difficult to achieve because of climate change impacts such as flooding, high heat, drought, and more frequent and intense storms.

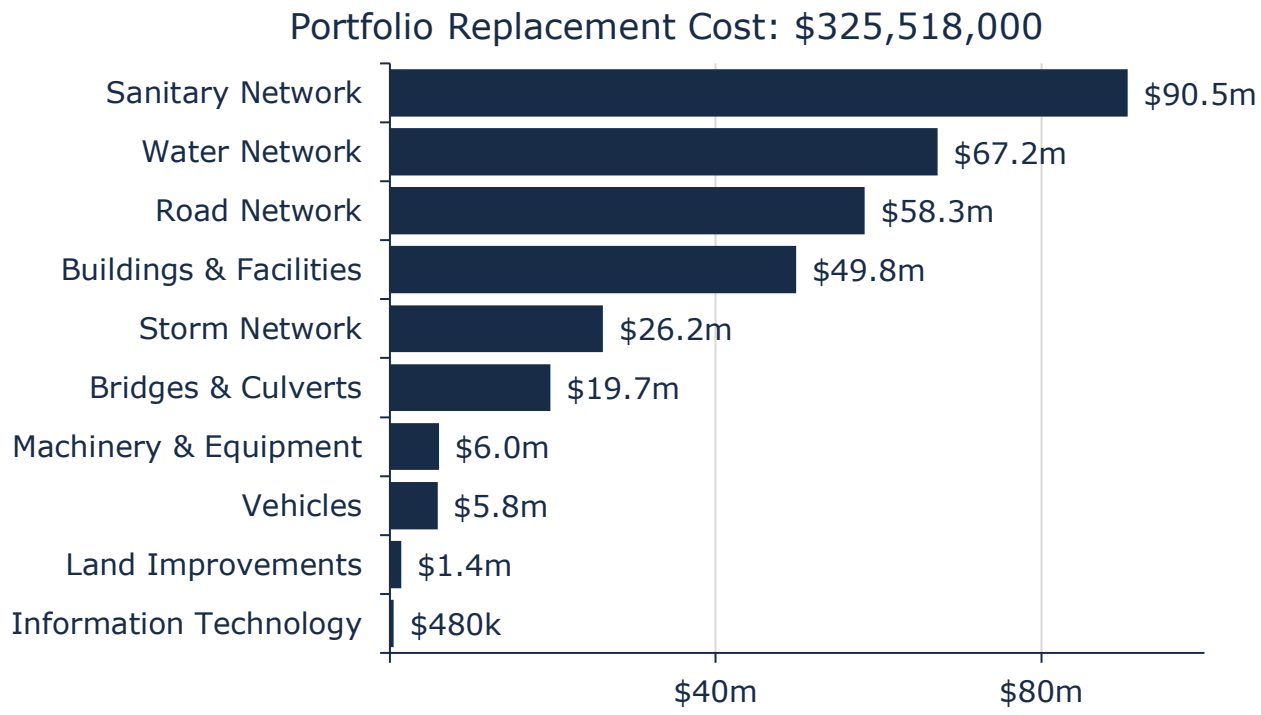
To achieve the sustainable delivery of services, climate change considerations should be incorporated into asset management practices. The integration of asset management and climate change adaptation observes industry best practices and enables the development of a holistic approach to risk management.

State of the Infrastructure

Asset Category	Replacement Cost	Asset Condition	Financial Capacity	
Road Network	$58,281,000	Fair (54%)	Annual Requirement:	$1,249,000
			Funding Available:	$528,000
			Annual Deficit:	**$721,000**
Bridges and Culverts	$19,698,000	Fair (59%)	Annual Requirement:	$248,000
			Funding Available:	$75,000
			Annual Deficit:	**$173,000**
Storm Network	$26,170,000	Good (73%)	Annual Requirement:	$354,000
			Funding Available:	$130,000
			Annual Deficit:	**$224,000**
Buildings & Facilities	$49,843,000	Good (73%)	Annual Requirement:	$1,893,000
			Funding Available:	$120,000
			Annual Deficit:	**$1,773,000**
Land Improvements	$1,427,000	Poor (21%)	Annual Requirement:	$58,000
			Funding Available:	$40,000
			Annual Deficit:	**$18,000**
Machinery & Equipment	$6,021,000	Poor (30%)	Annual Requirement:	$460,000
			Funding Available:	$355,000
			Annual Deficit:	**$105,000**
Vehicles	$5,841,000	Poor (33%)	Annual Requirement:	$434,000
			Funding Available:	$410,000
			Annual Deficit:	**$24,000**
Information Technology	$480,000	Very Poor (11%)	Annual Requirement:	$77,000
			Funding Available:	$50,000
			Annual Deficit:	**$27,000**
Water Network	$67,208,000	Good (67%)	Annual Requirement:	$949,000
			Funding Available:	$729,000
			Annual Deficit:	**$220,000**
Sanitary Network	$90,548,000	Good (69%)	Annual Requirement:	$1,295,000
			Funding Available:	$650,000
			Annual Deficit:	**$645,000**
Overall	**$325,518,000**	**Good (65%)**	Annual Requirement:	$7,017,000
			Funding Available:	$3,088,000
			Annual Deficit:	**$3,929,000**

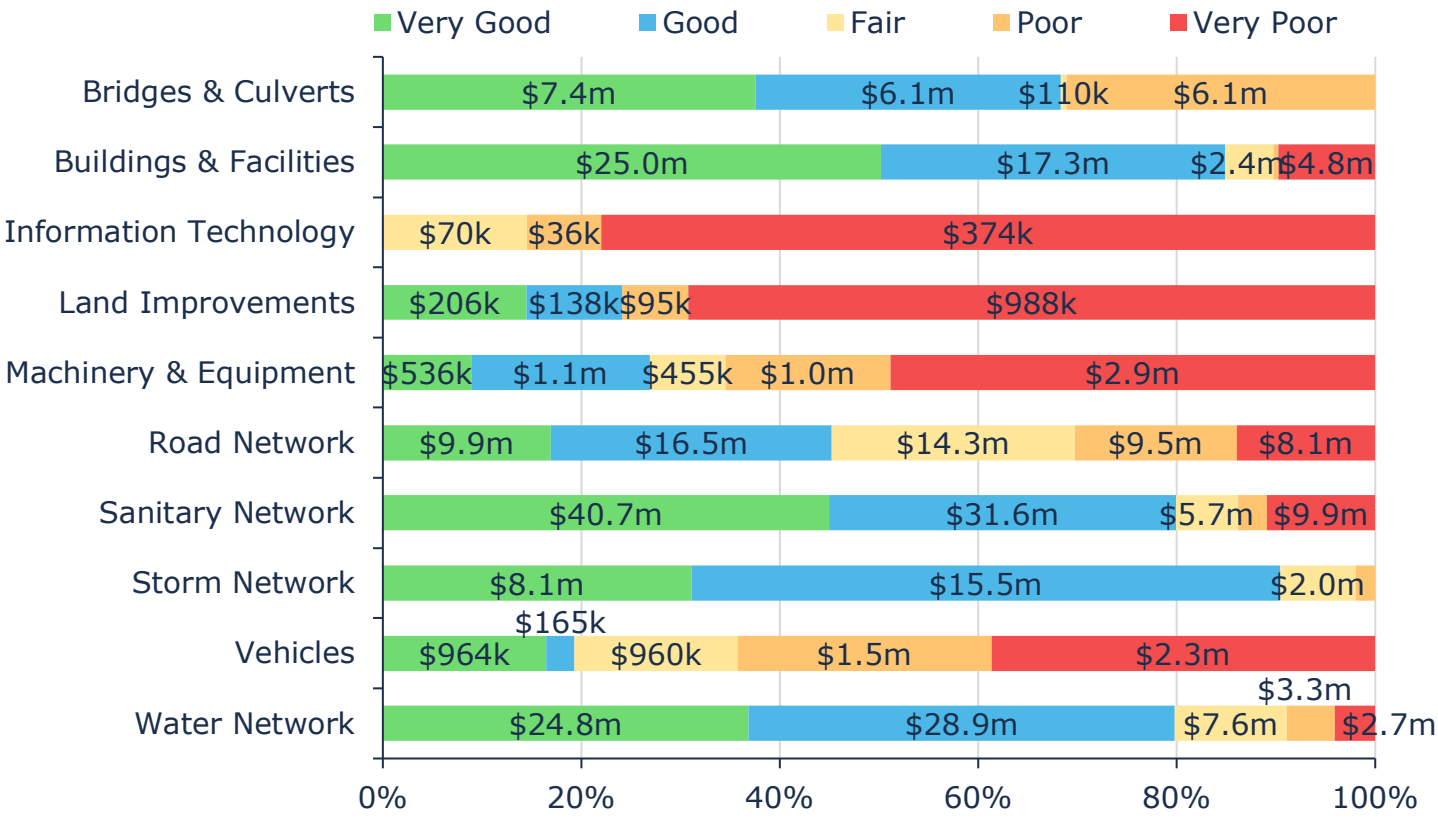
Total Replacement Cost of Asset Portfolio

The asset categories analyzed in this AMP have a total replacement cost of $325.5 million based on inventory data from 2024. This total was determined based on a combination of user-defined costs and historical cost inflation. This estimate reflects replacement of historical assets with similar, not necessarily identical, assets available for procurement today.



Condition of Asset Portfolio

The current condition of the assets is central to all asset management planning. Collectively, 82% of assets in North Huron, based on replacement value, are in fair or better condition. This estimate relies on both age-based and field condition data.



Value and Percentage of Asset Segments by Replacement Cost

This AMP relies on assessed condition data for 83% of assets; for the remaining portfolio, age is used as an approximation of condition.

Assessed condition data is invaluable in asset management planning as it reflects the true condition of the asset and its ability to perform its functions. The table below identifies the source of condition data used throughout this AMP.

Asset Category	Asset Segment	% of Assets with Assessed Condition	Source of Condition Data
Road Network	All	95%	2021 Streetscan Canada, 2016 Road Needs Study, & Staff Assessments
Bridges & Culverts	All	100%	2022 OSIM Report[1] & Staff Assessment
Storm Network	All	76%	2013 Staff Assessments
Buildings & Facilities	All	85%	Staff Assessments & 2023 B.M Ross & 2020 Capital Management Eng.
Machinery & Equipment	All	0%	Age-Based
Information Technology	All	0%	Age-Based
Vehicles	All	3%	2024 Staff Assessments
Land Improvements	All	13%	2023 Staff Assessments
Water Network	All	81%	2013 Don Nicholson
Sanitary Network	Facilities & Mains	86%	2013 Don Nicholson & 2020 Capital Management Eng.

Note: *Condition data older than ~5 years (timeframe varies by asset type) may be unreliable and will be reviewed by staff as to whether condition data is still appropriate/accurate.*

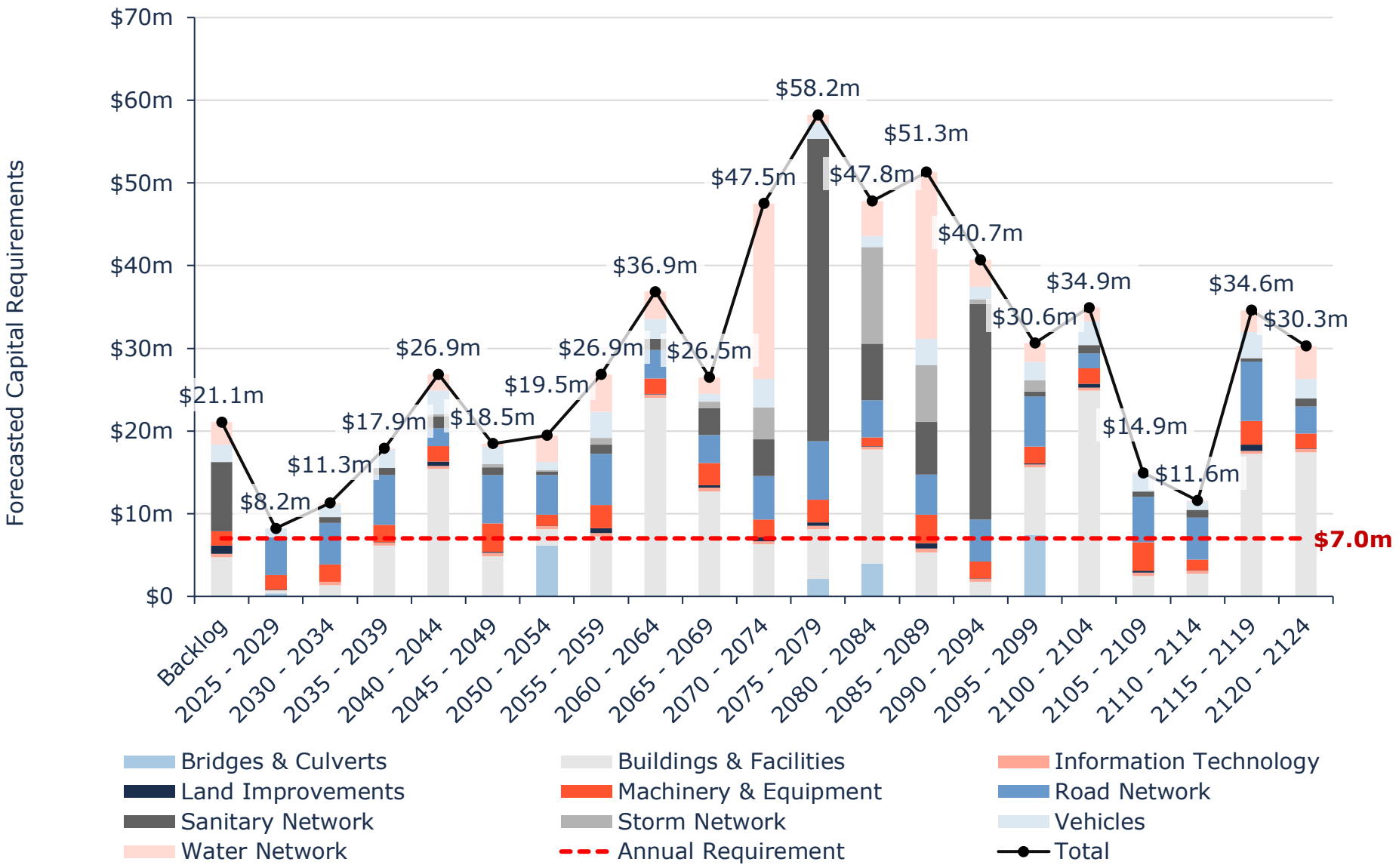
Service Life Remaining

Based on asset age, available assessed condition data and estimated useful life, 17% of the Township's assets will require replacement within the next 10 years. Capital requirements over the next 10 years are identified in Appendix B.

Forecasted Capital Requirements

The development of a long-term capital forecast should include both asset rehabilitation and replacement requirements. With the development of asset-specific lifecycle strategies that include the timing and cost of future capital events, the Township can produce an accurate long-term capital forecast. The following graph identifies capital requirements over the next 100 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins.

[1] 2024 OSIM Report data was not available at time of compiling the AMP.


Forecasted Capital Requirements
$70m
$60m
$50m
$40m
$30m
$20m
$10m
$0
$21.1m
$8.2m
$11.3m
$17.9m
$26.9m
$18.5m
$19.5m
$26.9m
$36.9m
$26.5m
$47.5m
$58.2m
$47.8m
$51.3m
$40.7m
$30.6m
$34.9m
$14.9m
$11.6m
$34.6m
$30.3m
$7.0m
Backlog
2025 - 2029
2030 - 2034
2035 - 2039
2040 - 2044
2045 - 2049
2050 - 2054
2055 - 2059
2060 - 2064
2065 - 2069
2070 - 2074
2075 - 2079
2080 - 2084
2085 - 2089
2090 - 2094
2095 - 2099
2100 - 2104
2105 - 2109
2110 - 2114
2115 - 2119
2120 - 2124
Bridges & Culverts
Buildings & Facilities
Information Technology
Land Improvements
Machinery & Equipment
Road Network
Sanitary Network
Storm Network
Vehicles
Water Network
Annual Requirement
Total

Risk & Criticality

Qualitative Risk

The Township has noted key trends, challenges, and risks to service delivery that they are currently facing:

Lifecycle Management Strategies
The current lifecycle management strategies are considered more reactive than proactive. It is a challenge to find the right balance between maintenance, capital rehabilitation, and reconstruction. In the absence of mid-lifecycle rehabilitative events, most assets are simply maintained with the goal of full replacement once they reach end-of-life. Staff hope to develop better defined strategies that will extend lifecycle and a lower total cost. These strategies will require sustainable annual funding to minimize the deferral of capital works.

Asset Data & Information
There is a lack of confidence in the available inventory data for asset management purposes. Staff are in the process of evaluating the resources and activities required to build and/or improve the existing asset inventory including consolidating data sources. Staff plan to prioritize data refinement efforts to increase confidence in the accuracy and reliability of asset data and information.

Quantitative Risk

The overall risk breakdown for North Huron's asset inventory is portrayed in Appendix C. Reviewing the list of very high-risk assets to evaluate how best to mitigate the level of risk the Township is experiencing will help advance North Huron's asset management program.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$58,970,426 (18%)	$92,518,258 (28%)	$61,412,734 (19%)	$48,234,720 (15%)	$64,381,593 (20%)

This is a high-level model developed for the purposes of this AMP and municipal staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

Proposed LOS Analysis

Overview

Ontario Regulation 588/17 Proposed LOS

The third iteration of municipal Asset Management Plans required under O. Reg. 588/17 requires the evaluation of levels of service (LOS) that includes:

- Proposed LOS options (i.e. increase, decrease, or maintain current LOS) and the risks associated with these options.
- How the proposed LOS may differ from current LOS.
- Whether the proposed LOS are achievable; and
- The municipality's ability to afford proposed LOS.

Additionally, a lifecycle management and financial strategy to support the proposed LOS must be identified for a period of 10 years with specific reporting on:

- Identification of lifecycle activities needed to provide the proposed LOS.
- Annual costs over the next 10 years to achieve the proposed LOS; and
- Identification of proposed funding projected to be available.

Considerations

Proposed LOS for the Township have been developed through comprehensive engagement with Township staff. In order to achieve any target LOS goal, careful consideration should be given to the following:

Financial Impact Assessments

- Assess historical expenditures/budget patterns to gauge feasibility of increasing budgets to achieve increased service levels
- Consider implications of LOS adjustments on other services and other infrastructure programs (i.e. trade-offs)

Infrastructure Condition Assessments

- Regularly assess the condition of critical infrastructure components
- Use standardized condition assessment protocols (where possible) to quantify the state of the infrastructure
- Identify non-critical components where maintenance could potentially be deferred without causing severe degradation
- Use current condition metrics as benchmarks to gauge feasibility of large adjustments to LOS

Service Metrics

- Measure user satisfaction, response times, and other relevant indicators for the specific service

Service Impact Assessment

- Evaluate potential impacts on user satisfaction and service delivery due to decreased infrastructure condition

Key Lifecycle Activities

- Implement routine maintenance and inspections to ensure infrastructure reaches its optimal useful life
- Monitor and optimize operational processes for efficiency
- Regularly review and update preventive maintenance schedules
- Prioritize critical infrastructure components for maintenance
- Implement cost-saving measures without compromising safety or compliance
- Develop strategies for managing and communicating service impacts to stakeholders
- Invest in technology and process improvements to enhance maintenance efficiency
- Upgrade critical infrastructure components to improve overall reliability
- Explore opportunities for innovation and efficiency gains

Risk Management

- Identify potential risks to infrastructure and service quality resulting from adjusted service levels
- Develop contingency plans to address unforeseen challenges without compromising service quality
- Monitor performance closely to ensure that the target investment translates to the desired infrastructure condition

Infrastructure Condition Enhancement

- Identify areas for improvement and increased maintenance to enhance overall infrastructure condition
- Adjust condition indices or metrics to reflect the increased maintenance budget

Timelines

- Although O. Reg. 588/17 requires evaluation of expenditures for a 10-year period in pursuit of proposed LOS, it does not require municipalities to achieve the LOS within this 10-year timeframe (ex. a municipality may have a goal to reach X% condition by 2050, the AMP is required to review the first 10 years of the strategy to reach this goal)

- Careful consideration should be given to setting realistic targets for when proposed service levels can be achieved

Stakeholder Engagement

- It is recommended to ensure adjustments to LOS are not made in isolation and without consultation of various stakeholders. This could include, but is not limited to:
- Department Heads/Infrastructure Managers
- Residents
- Service Users
- Council
- Efforts should be made to communicate changes to LOS transparently to all affected stakeholders

Flexibility

- Priorities may change over time due to a variety of factors, such as:
- Financial state of the municipality
- Availability of grants
- Significant increases or decreases in population
- Changes in political priorities
- Changes in resident priorities
- New technologies
- Changes in legislation
- Any proposed changes to LOS should be flexible and able to adapt to changes listed above, and other unforeseen circumstances

Stakeholder Engagement

To ensure asset management goals are not set in isolation, various stakeholder engagement opportunities were provided including with the public, administration, and Council. Additionally, considerations were taken from previous engagements for the 2024 Community Improvement Plan, 2024 Strategic Plan, and the 2021 Parks, Recreations & Culture Master Plan. The summarized findings of these engagements are listed below, with more information being available in Appendix E.

Common Themes Across All Engagement Groups

- Core Infrastructure is a Priority:
  Roads, bridges, water, sewer, and emergency services are consistently viewed as the most important services across public, staff, and Council feedback. While utilities and emergency response are generally meeting expectations, roads and sidewalks stand out as persistent problem areas—cited frequently for poor condition, safety issues, and a lack of visible reinvestment.

- Aging Assets and Deferred Maintenance:
  Many of the Township's assets—particularly buildings, bridges, and underground systems—are aging and suffering from deferred maintenance. Staff and Council warn that current funding levels are insufficient to prevent long-term deterioration, with some services operating reactively rather than through planned lifecycle management. Without timely reinvestment, asset reliability and public safety may be at risk.
- Limited Funding and Capacity:
  Rising infrastructure costs, inflation, and limited revenue options are straining the Township's ability to maintain or improve service levels. While there is general agreement on prioritizing essential assets, opinions vary on how aggressively to pursue reinvestment, especially given concerns about high property taxes and affordability. This tension reflects the challenge of balancing fiscal constraints with service expectations.
- Communication Gaps:
  There is a strong call for better communication, both in how decisions are explained and how the Township engages with residents. Low awareness of key planning efforts, frustration over unclear spending priorities, and inconsistent messaging across platforms are key concerns. Improving transparency, access to information, and responsiveness will be critical to building trust and gaining support for service level changes.
- Shifting Community Profile:
  North Huron's population is predominantly older adults, with 23% aged 65 and over and an average age of 43. This demographic trend highlights an increasing need for infrastructure that is safe, accessible, and supportive of aging residents, many of whom live on fixed incomes. At the same time, this population profile may limit the community's willingness to accept higher taxes, presenting challenges for funding essential services and upgrades. Effective planning for levels of service must balance meeting the immediate needs of the current residents while ensuring infrastructure and amenities remain sustainable and appealing to attract younger families and future growth.

The development of Proposed Levels of Service (PLOS) for the Township of North Huron is a vital step in strengthening long term asset management and aligning municipal services with the expectations of residents, staff, and elected officials. Community feedback highlights clear priorities around core infrastructure, particularly roads, water, sewer, and emergency services, while also expressing concern over aging assets, limited funding, and unclear communication. While some services like utilities and emergency response meet expectations, others, especially roads and sidewalks, are seen as underperforming. Council and staff echo these concerns, emphasizing the need for increased reinvestment, better planning, and improved data. At the same time, financial pressures and a largely aging population create constraints around what service enhancements are feasible and affordable.

Looking ahead, the Township must strike a careful balance between fiscal responsibility, sustainable infrastructure investment, and evolving community expectations. This means prioritizing essential services, improving communication

and transparency, and making difficult decisions about where to maintain, increase, or potentially reduce service levels. A clear, evidence-based approach to service planning anchored in regulatory requirements, stakeholder input, and lifecycle costing will help North Huron maintain a high quality of life for current residents while laying a foundation for future growth and resilience.

Proposed Levels of Service Scenarios

The three scenarios outlined in the following section were analyzed as options for proposed service levels for all categories included in this Asset Management Plan.

Note: While all three scenarios were reviewed, the Township of North Huron selected Scenario 3 as their preferred path forward regarding proposed levels of service, which is reflected in the financial strategy and 10-year capital replacement forecasts.

Scenario 1: Maintain Current Spending Levels

Approach: Maintain 2025 capital investment levels and analyze resulting asset conditions over time.

- Tax funded assets remain funded at $1.7 million/year
- Water assets remain funded at $729,000/year
- Sanitary assets remain funded at $650,000/year
- Total funding for all assets maintained at $3.1 million/year

Affordability/Achievability of Scenario 1

Of the three scenarios analyzed, Scenario 1 is the least expensive. While this scenario requires no increases to taxes or rates, it dramatically increases the Township's risk exposure and will severely limit its ability to complete asset replacements and lifecycle interventions.

Risks Associated with Scenario 1

There are pros and cons associated with each scenario analyzed, and each benefit is counter-balanced with consequences. For Scenario 1, the following risks have been identified:

- Increased infrastructure backlog
    - While mitigating the impact of financial increases on residents, maintaining existing funding levels well below that of recommendations will increase the number of replacements and interventions that are overdue and increase the backlog. Being unable to complete strategic lifecycle interventions and replacements may result in increased asset failures, reduced reliability, and the potential for costly unbudgeted repairs to maintain services.
    - By intentionally underfunding the Township's asset portfolio, there is increased risk of services being impacted by deteriorating asset conditions.

- Reliance on Grants
    - As Scenario 1 maintains funding levels well below the ideal, the Township will be more reliant on conditional grants, as they become available. While these are beneficial to all municipalities to secure to reduce their tax/rate burden on residents, they are considered an unsustainable revenue source. The Township will be more vulnerable to changes in provincial and federal policy and funding programs.

Scenario 2: Unlimited Capital Spending

Approach: Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.

- Spending varies widely year-to-year
- Tax funded assets require an average of $4.8 million/year
- Water assets require an average of $949,000/year
- Sanitary assets require an average of $1.3 million/year
- Total funding required for all assets is $7.0 million/year

Affordability/Achievability of Scenario 2

Of the three scenarios analyzed, Scenario 2 is the most expensive. Reaching ideal funding levels immediately would require an immediate tax increase of 39.5%, water rate increase of 10% and sanitary rate increase of 40%. This is not reasonable to achieve within a short period of time.

Risks Associated with Scenario 2

There are pros and cons associated with each scenario analyzed, and each benefit is counter-balanced with consequences. For Scenario 2, the following risks have been identified:

- Political and Public Pushback
    - With dramatic and sudden increases in taxes and rates, the Township risks significant political and public pushback, which may result in a deterioration of trust in administration.

Scenario 3: Township Defined Capital Investment Increases *(Preferred Scenario)*

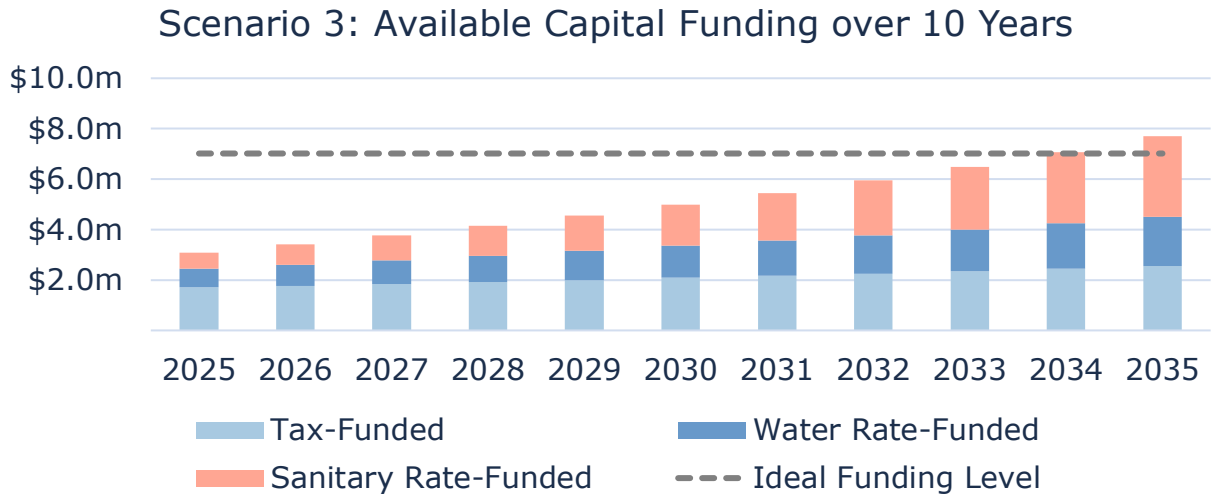
Approach: Adjust Township capital investment to pre-determined levels and analyze the resulting asset conditions over time.

- Township's capital investment from tax revenues will increase 5% annually for a period of 10 years
- Tax funded assets stabilize at a funding rate of $2.6 million/year by 2035
- Water flat rates will increase 4.5% annually for a period of 10 years, with the increase being allocated to capital investment
- Water rate funded assets stabilize at a funding rate of $1.9 million/ year by 2035

- Sanitary flat rates will increase 10% annually for a period of 10 years, with the increase being allocated to capital investment
- Sanitary rate funded assets stabilize at a funding rate of $3.2 million/ year by 2035
- Total funding for all assets stabilizes at $7.7 million/year by 2035

Affordability/Achievability of Scenario 3

Of the three scenarios analyzed, Scenario 3 is a moderate middle option. While this moderates increases to taxes and rates to a subjectively reasonable level, it continues to increase the Township's risk exposure for tax-funded assets and will severely limit its ability to timely complete asset replacements and lifecycle interventions.



Risks Associated with Scenario 3

There are pros and cons associated with each scenario analyzed, and each benefit is counter-balanced with consequences. For Scenario 3, the following risks have been identified:

- Increased infrastructure backlog
    - While mitigating the impact of financial increases on residents, maintaining existing funding levels well below that of recommendations will increase the number of replacements and interventions that are overdue and increase the backlog. Being unable to complete strategic lifecycle interventions and replacements may result in increased asset failures, reduced reliability, and the potential for costly unbudgeted repairs to maintain services.
    - By intentionally underfunding the Township's asset portfolio (for tax-funded assets), there is increased risk of services being impacted by deteriorating asset conditions.

- Reliance on Grants
    - As Scenario 3 targets funding levels still well below the ideal, the Township will be more reliant on conditional grants, as they become available. While these are beneficial to all municipalities to secure to reduce their tax/rate burden on residents, they are considered an unsustainable revenue source. The Township will be more vulnerable to changes in provincial and federal policy and funding programs.
- Missed opportunities for efficiencies
    - While analyzing Scenario 3, no alternative lifecycle strategies were proposed. Mid-lifecycle interventions, such as asphalt overlays and sewer lining, can result in extended lifespans of assets and reduced costs over the lifetime of the assets. By relying on existing lifecycle strategies, the Township risks paying more than necessary to maintain their asset inventory.

Analysis of Tax-funded Assets

Tax-funded assets are valued at $167.8 million with 77% of assets in fair or better condition. The average annual capital requirement to sustain the current level of service for tax-funded assets is approximately $4.8 million.

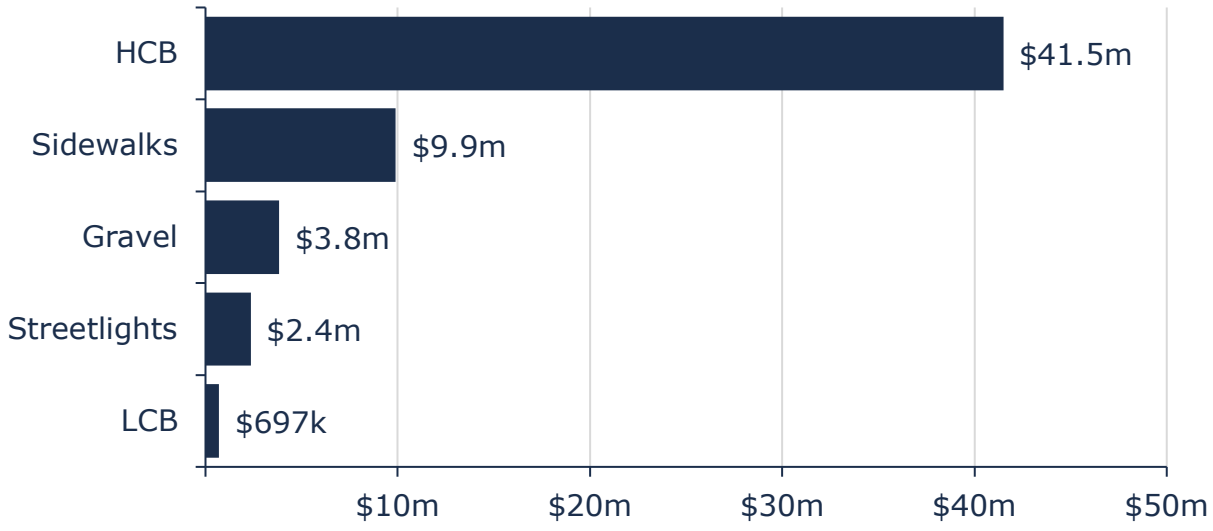
Road Network

The Road Network is a critical component of the provision of safe and efficient transportation services and represents the highest value asset category in the Township's asset portfolio. It includes all municipally owned and maintained roadways in addition to supporting roadside infrastructure including sidewalks and streetlights.

Asset Inventory & Replacement Cost

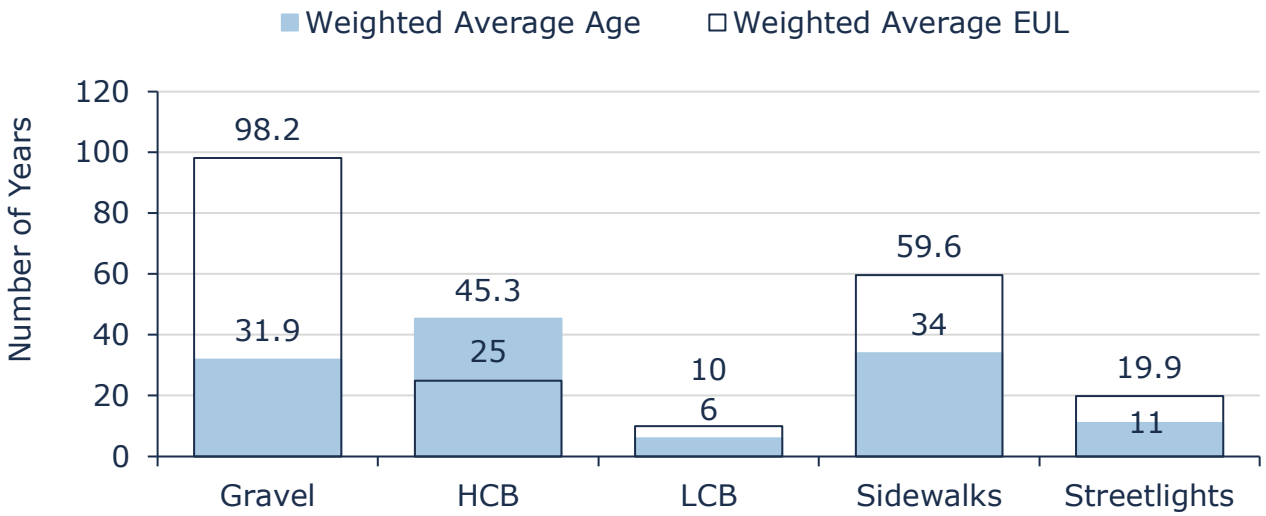
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Road Network inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Gravel	120,252 m	CPI	$3,832,284
HCB	49,220 m	CPI	$41,504,496
LCB	11,028 m	CPI	$696,983
Sidewalks	33,318 m	CPI	$9,897,608
Streetlights	613 (assets)	CPI	$2,350,014
			$58,281,385

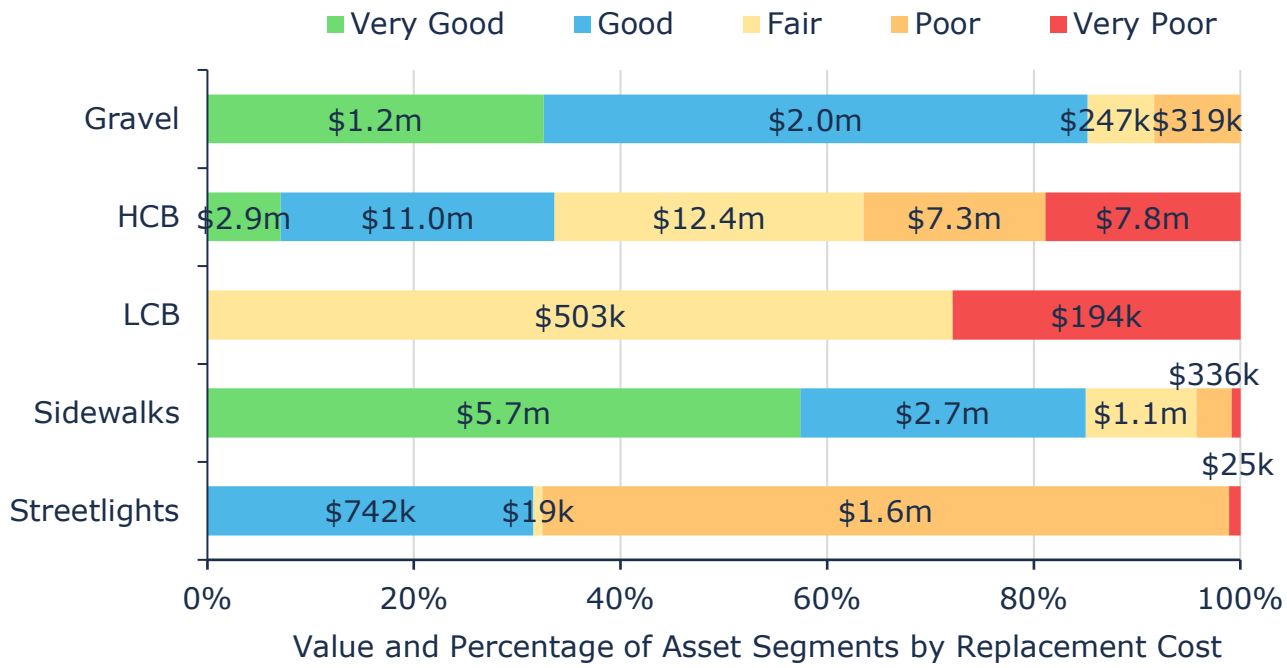


Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. It is all weighted by replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to more confidently determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

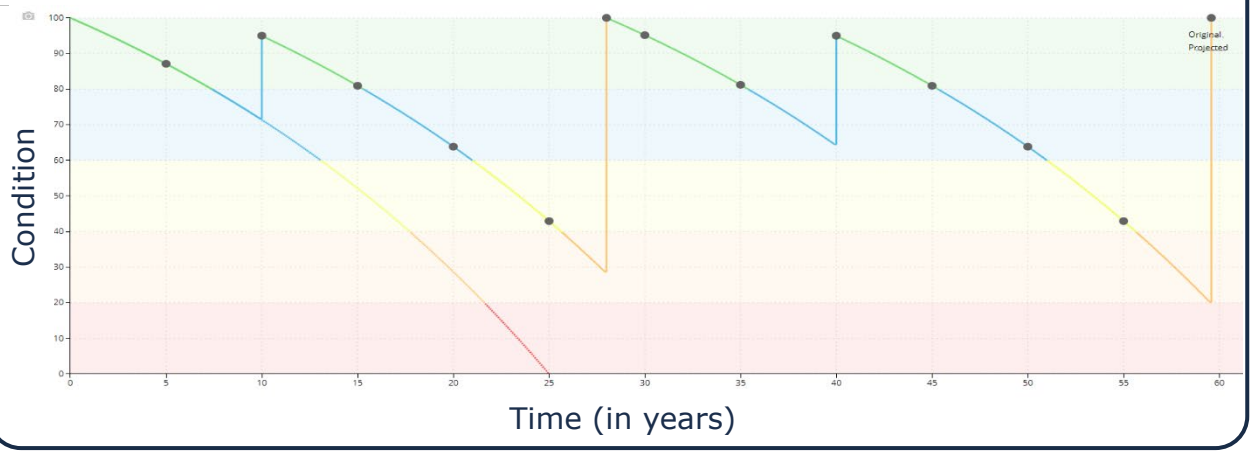
- A Road Needs Study was completed in 2016 by external contractors that included a detailed assessment of the condition of each road segment
- A street scan was completed in 2021 and the data has been uploaded into the municipality's asset management system
- Staff assessments are completed based on Ontario Maintenance Standards
- In the future, staff aim to perform Road Needs Studies internally

Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment. The following lifecycle strategies have been developed as a proactive approach to managing the lifecycle of paved roads. Instead of allowing the roads to deteriorate until replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

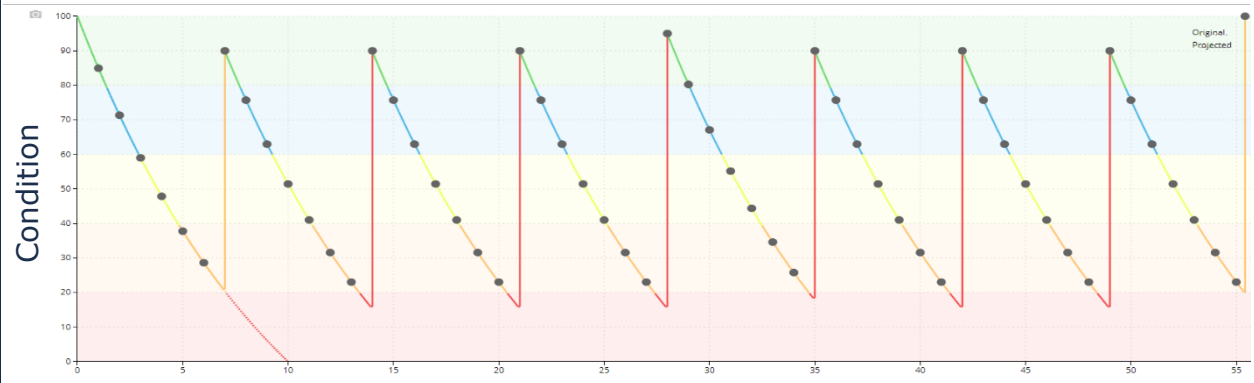
Paved Roads (HCB)

Event Name	Event Class	Event Trigger
Crack Sealing	Maintenance	5 Years (Repeated)
Single Lift 1	Rehabilitation	10 Years
Double Lift	Rehabilitation	28 Years
Single Lift 2	Rehabilitation	40 Years
Full Reconstruction	Replacement	Condition



Paved Roads (LCB)

Event Name	Event Class	Event Trigger
Patching	Maintenance	1 Year (Repeated)
Pulverizing and Repaving	Rehabilitation	28 Years
Single Surface Treatment – 1st Cycle	Rehabilitation	7 Years (Repeated)
Single Surface Treatment – 2nd Cycle – 1st Application	Rehabilitation	35 Years
Single Surface Treatment – 2nd Cycle – 2nd Application	Rehabilitation	42 Years
Single Surface Treatment – 2nd Cycle – 3rd Application	Rehabilitation	49 Years
Full Reconstruction	Replacement	Condition



Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$13,858,856 (24%)	$3,066,426 (5%)	$1,054,556 (2%)	$11,609,377 (20%)	$28,692,170 (49%)

This is a high-level model developed for the purposes of this AMP and municipal staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows staff to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-

specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Climate Change

As severe weather events become more frequent and intense, increased strain will be placed on the Township's road network. Irregular freeze-thaw cycles will also speed up asphalt and concrete deterioration.

Lifecyle Management Strategies

There is some concern that the lack of defined lifecycle management strategy for roads in the past resulted in the inadequate maintenance of road pavement structures. Staff are working on the development of a suitable lifecycle management strategy for roads that accounts for their current condition and how they have been historically maintained.

Organizational Cognizance/Capacity

There is presently not enough staff capacity to manage capital projects relating to the road network. Due to staffing constraints, the Township is not able to engage in proactive management of the road network assets.

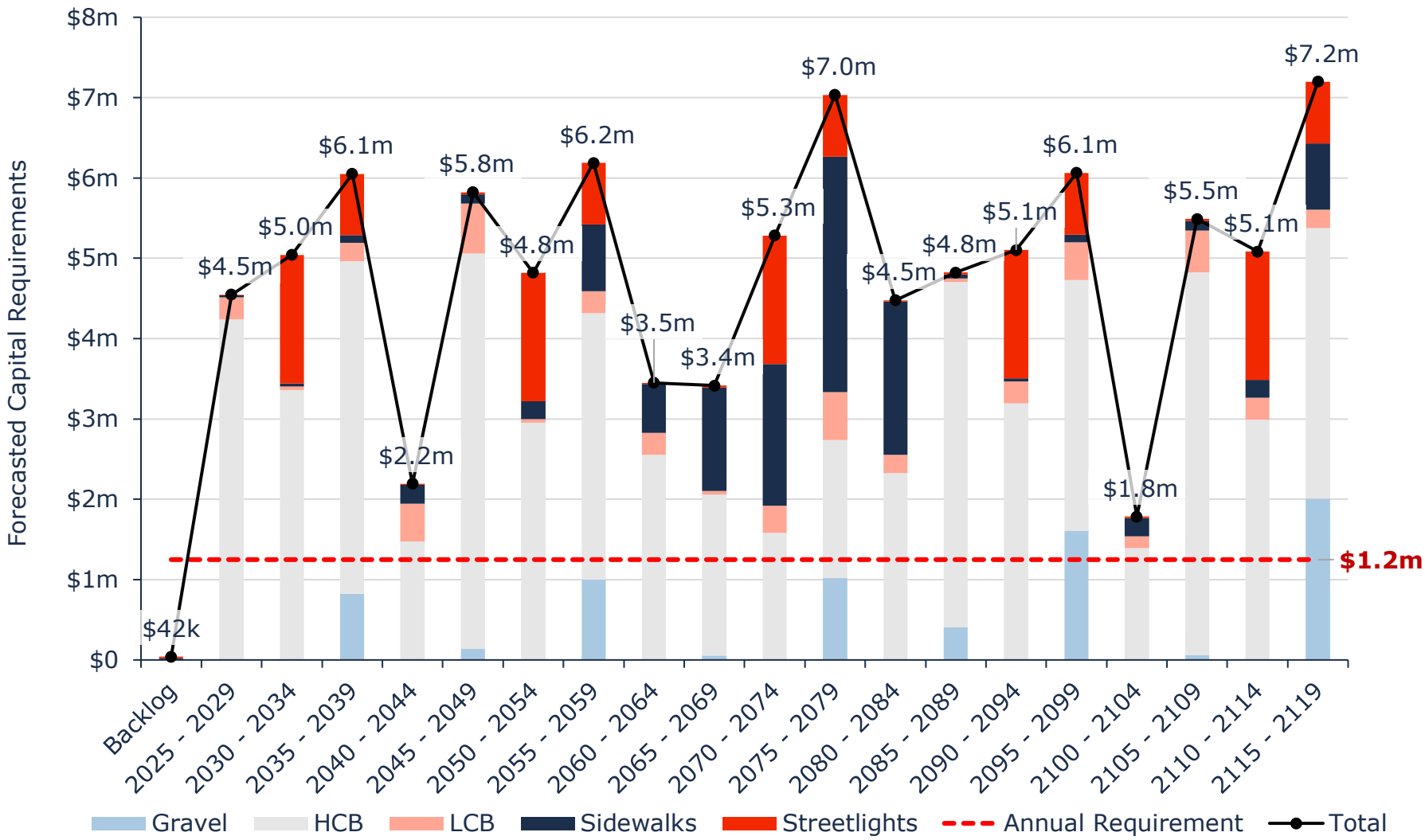
Financial Reinvestment

The current level of financial reinvestment does not sufficiently address maintenance and capital rehabilitation requirements to ensure roads remain in an adequate state of repair and achieve their intended service life. The financial strategy in this report addresses the extent of this underfunding.

Forecasted Capital Requirements

Based on the lifecycle strategies identified previously for Paved Roads, and assuming the end-of-life replacement of all other assets in this category, the following graph forecasts capital requirements for the Road Network.

The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs to meet future capital needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Current Levels of Service

The following tables identify the Township's current level of service for the Road Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the Road Network.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps, of the road network in the Township and its level of connectivity	See Appendix B
Quality	Description or images that illustrate the different levels of road class pavement condition	The Township completed a Road Needs Study in 2016 and a StreetScan in 2021. Every road section received a Pavement Condition Index (PCI) from 0-100. (0-60) Road surface exhibits moderate to significant deterioration (49% of roads have a PCI within 20-59) (60-100) Road surface is in good condition or has been recently re-surfaced (51% of roads have a PCI within 61-100)

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the Road Network.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	Lane-km of arterial roads (MMS classes 1 and 2) per land area (km/km^2)	0
	Lane-km of collector roads (MMS classes 3 and 4) per land area (km/km^2)	0
	Lane-km of local roads (MMS classes 5 and 6) per land area (km/km^2)[2]	2.02
Quality	% of sidewalks inspected	98%
	% of road network inspected	93%
	Average pavement condition index for paved roads in the Township	HCB: 47% LCB: 40%
	Average surface condition for unpaved roads in the Township (e.g. excellent, good, fair, poor)	Good
Performance	Target vs. Actual Capital Reinvestment Rate	2.1 vs. 0.9%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

The below tables and graphs explain the proposed levels of service scenarios that were analyzed for roads. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

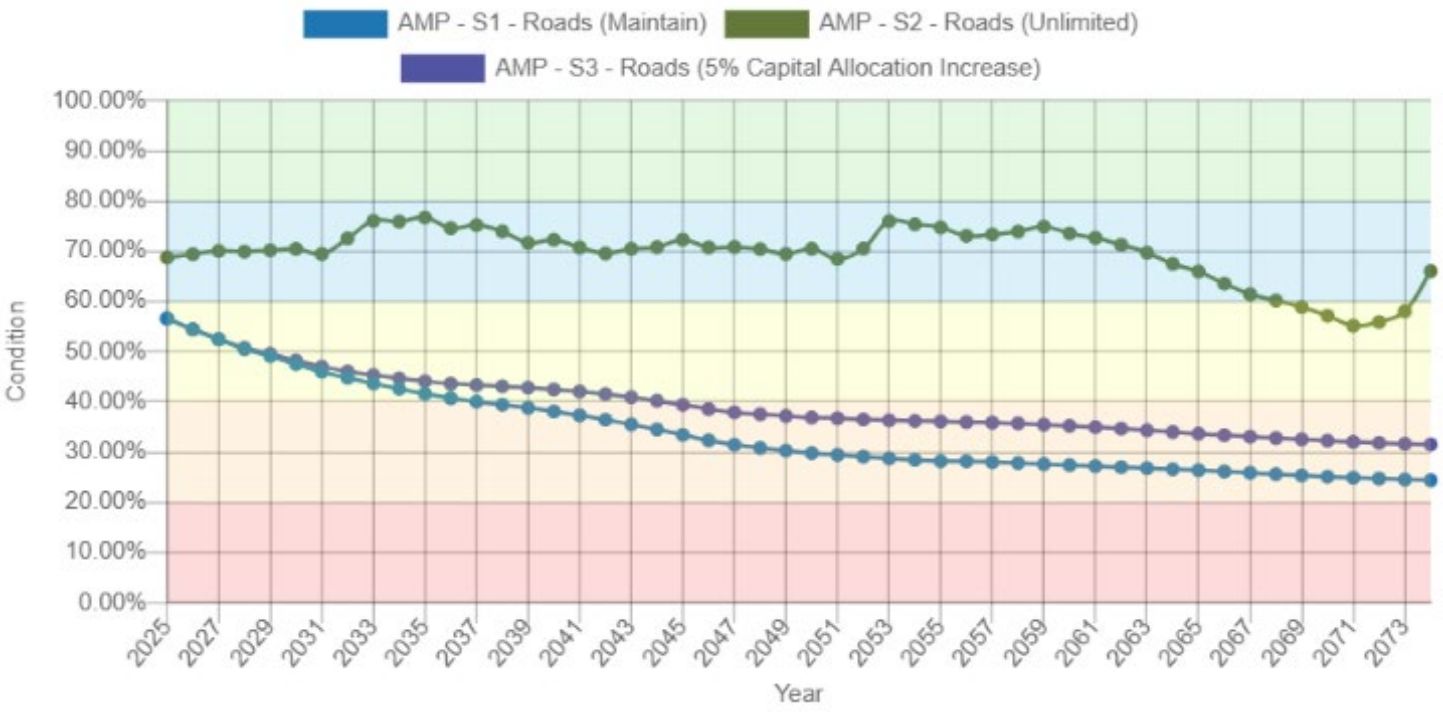
[2] All roads assumed to have 2 lanes.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Road funding is maintained at $528k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Road funding is gradually increased from $528k in 2025 to $717k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	57%	42%	30%
	Average Asset Risk	12.2	14.0	15.7
	Annual Investment Required		$528,000	
	Average Capital re-investment rate		0.9%	
Scenario 2 (Unlimited)	Average Condition	57%	77%	70%
	Average Asset Risk	12.2	6.1	7.3
	Annual Investment Required		$1,249,000	
	Average Capital re-investment rate		2.1%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	57%	44%	37%
	Average Asset Risk	12.2	13.4	14.3
	Annual Investment Required		$717,000	
	Average Capital re-investment rate		1.2%	


AMP - S1 - Roads (Maintain)
AMP - S2 - Roads (Unlimited)
AMP - S3 - Roads (5% Capital Allocation Increase)
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Condition
2025
2027
2029
2031
2033
2035
2037
2039
2041
2043
2045
2047
2049
2051
2053
2055
2057
2059
2061
2063
2065
2067
2069
2071
2073
Year

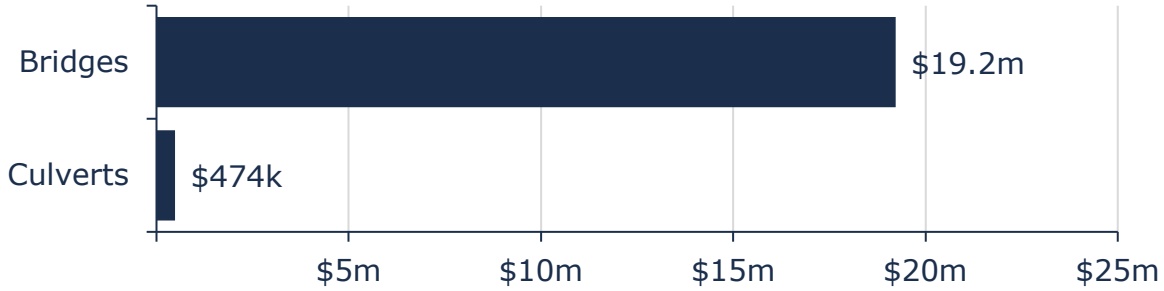
Bridges & Culverts

Bridges represent a critical portion of the transportation services provided to the community. The Public Works Department is responsible for the maintenance of all bridges located across municipal roads with the goal of keeping structures in an adequate state of repair and minimizing service disruptions.

Asset Inventory & Replacement Cost

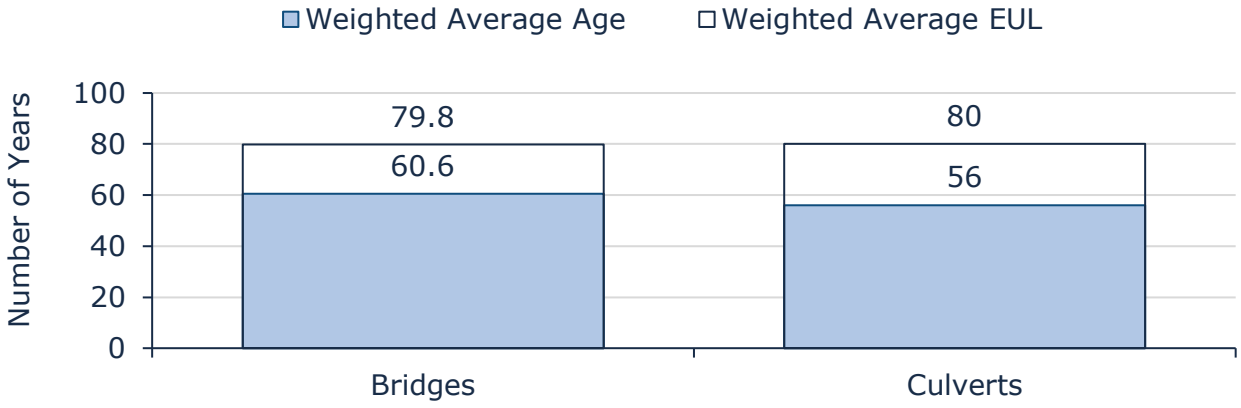
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Bridges inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Bridges	10	User-Defined[3]	$19,223,905
Culverts	1	User-Defined	$474,300
			$19,698,205



Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.

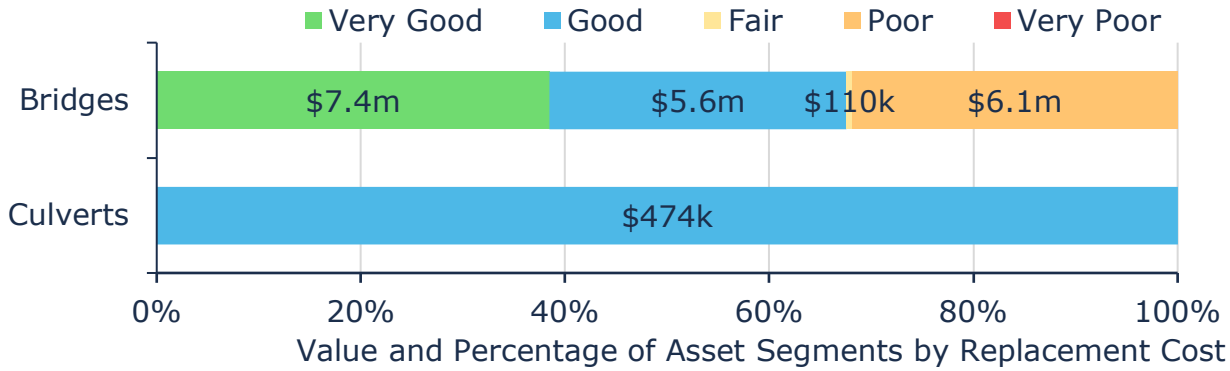


[3] User defined costs are based on OSIM inspection reports.

The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.

Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently. The following describes the Township's current approach:



Note: *Condition assessments of all bridges and culverts with a span greater than or equal to 3 meters are completed every 2 years in accordance with the Ontario Structure Inspection Manual (OSIM).*

Lifecycle Management Strategy

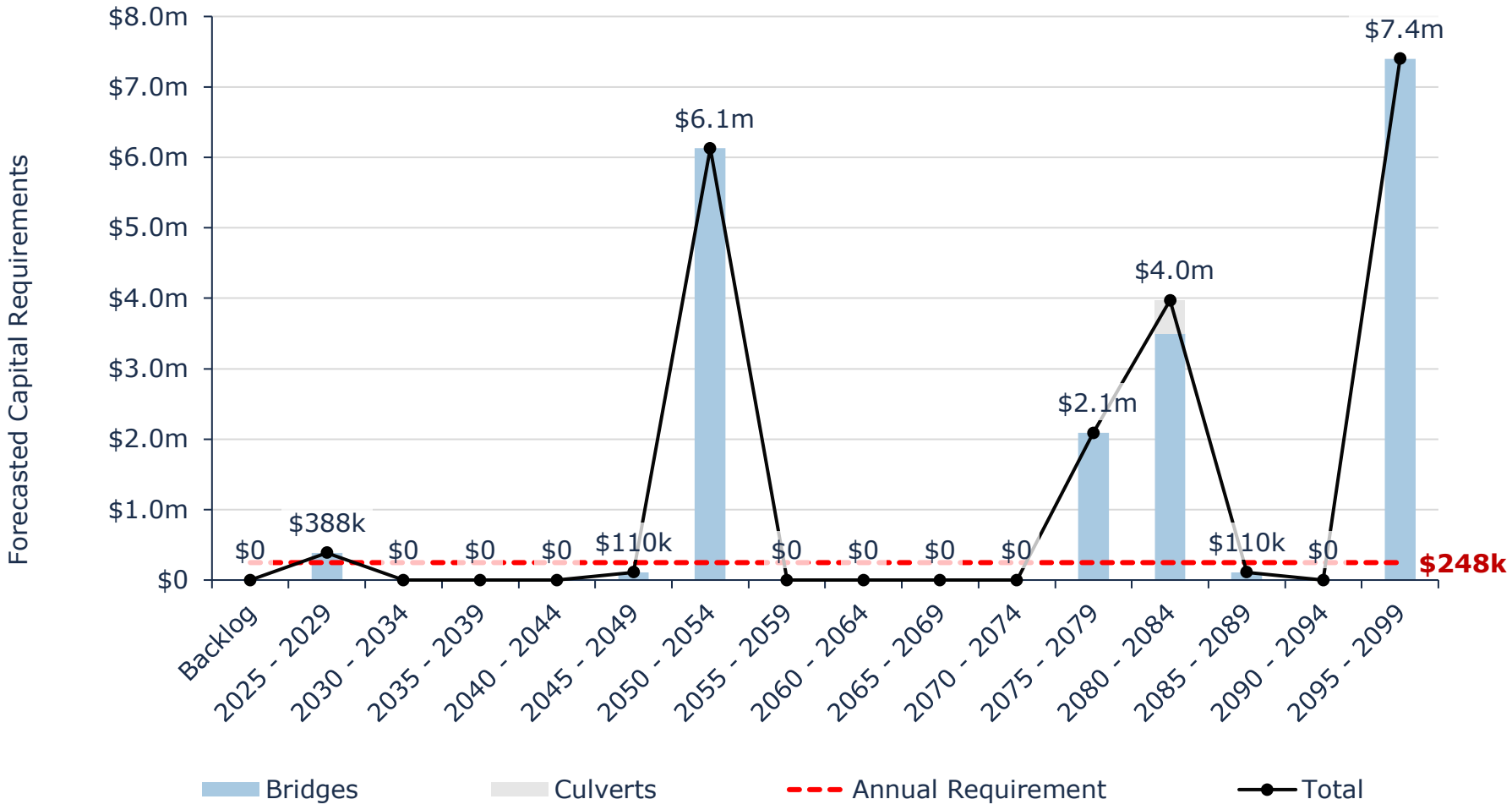
The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

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

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation and Replacement	All lifecycle activities are driven by the results of mandated structural inspections competed according to the Ontario Structure Inspection Manual (OSIM)
Inspection	The most recent inspection report was completed in 2022 by BM Ross and internal staff.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$474,300 (2%)	$12,986,500 (66%)	- (0%)	$1,886,405 (10%)	$4,351,000 (22%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Environmental & Climate Change

The Township's bridges and culverts are experiencing significant erosion due to increased rainfall amounts and freeze-thaw events. This is causing the assets to deteriorate much quicker, resulting in more frequent rehabilitation and replacement of the Township's bridges and culverts. As the effects of climate change become more pervasive, these effects are expected to increase.

Capital Funding Strategies

The current level of investment in infrastructure is not sufficient to meet lifecycle requirements and maintain a good state of repair. There is currently no budget set aside to address rehabilitation and replacement needs for the Township's bridges and culverts.

Current Levels of Service

The following tables identify the Township's current level of service for Bridges. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by Bridges.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the traffic that is supported by municipal bridges and culverts (e.g. heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	Bridges and culverts are a key component of the municipal transportation network. The traffic that is supported by the Township's bridges and culverts includes motor vehicles, emergency vehicles, pedestrians and cyclists
Safe & Regulatory	Compliant of the OSIM inspection process	OSIM inspections are completed every two years according to the regulations. The inspections are performed by an external contractor
Quality	Description or images of the condition of bridges and culverts and how this would affect use of the bridges and culverts	See Appendix B

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by Bridges and culverts.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	% of bridges in the Township with loading or dimensional restrictions	0%
Quality	Average bridge condition index value for bridges in the Township	59%
	% of bridges inspected every two years	100%
Performance	Target vs. Actual Capital Reinvestment Rate	1.3% vs. 0.4%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

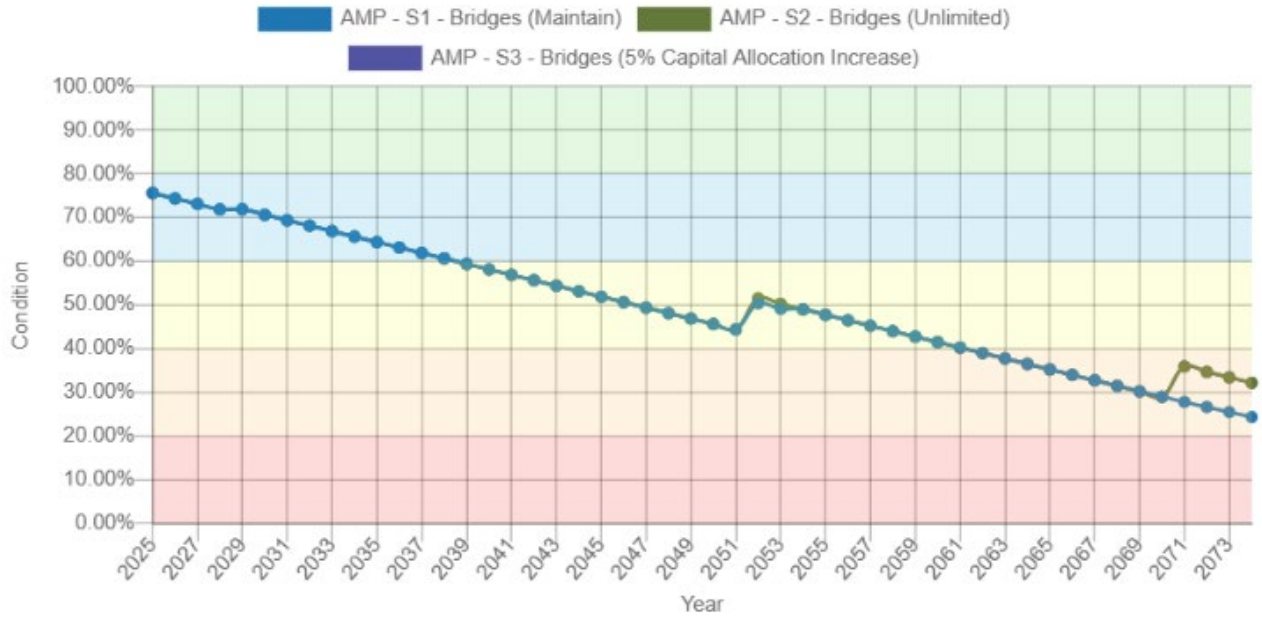
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for bridges and culverts. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Bridge funding is maintained at $75k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Bridge funding is gradually increased from $75k in 2025 to $122k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	76%	64%	46%
	Average Asset Risk	6.4	10.0	12.3
	Annual Investment Required		$75,000	
	Average Capital re-investment rate		0.4%	
Scenario 2 (Unlimited)	Average Condition	76%	64%	46%
	Average Asset Risk	6.4	10.0	12.3
	Annual Investment Required		$248,000	
	Average Capital re-investment rate		1.3%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	76%	64%	46%
	Average Asset Risk	6.4	10.0	12.3
	Annual Investment Required		$122,000	
	Average Capital re-investment rate		0.6%	



Note: *Replacement events are only initiated in the models when the asset reaches a pre-determined trigger, such as a Condition Rating of 0. Regardless of funding, the system will not initiate a replacement prematurely. Due to the relatively high condition ratings of bridge and culvert assets, combined with long estimated useful lives, large deviations in conditions between the different scenarios will not be seen until the 2080s to 2090s (outside of the model timeframe).*

Buildings

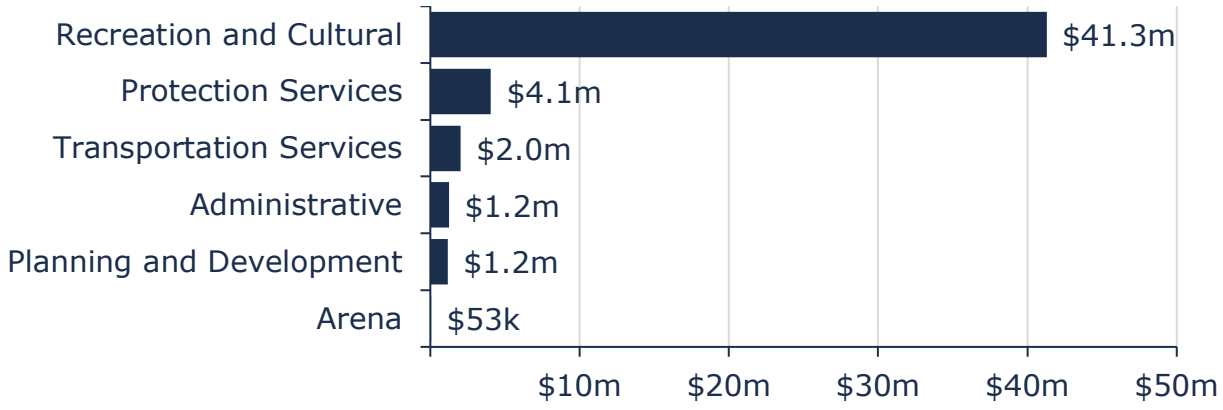
The Township of North Huron owns and maintains several facilities and recreation centres that provide key services to the community. These include:

- Community centers
- Public libraries
- Fire halls
- Public works and transportation services buildings
- A Town Hall and Theatre

Asset Inventory & Replacement Cost

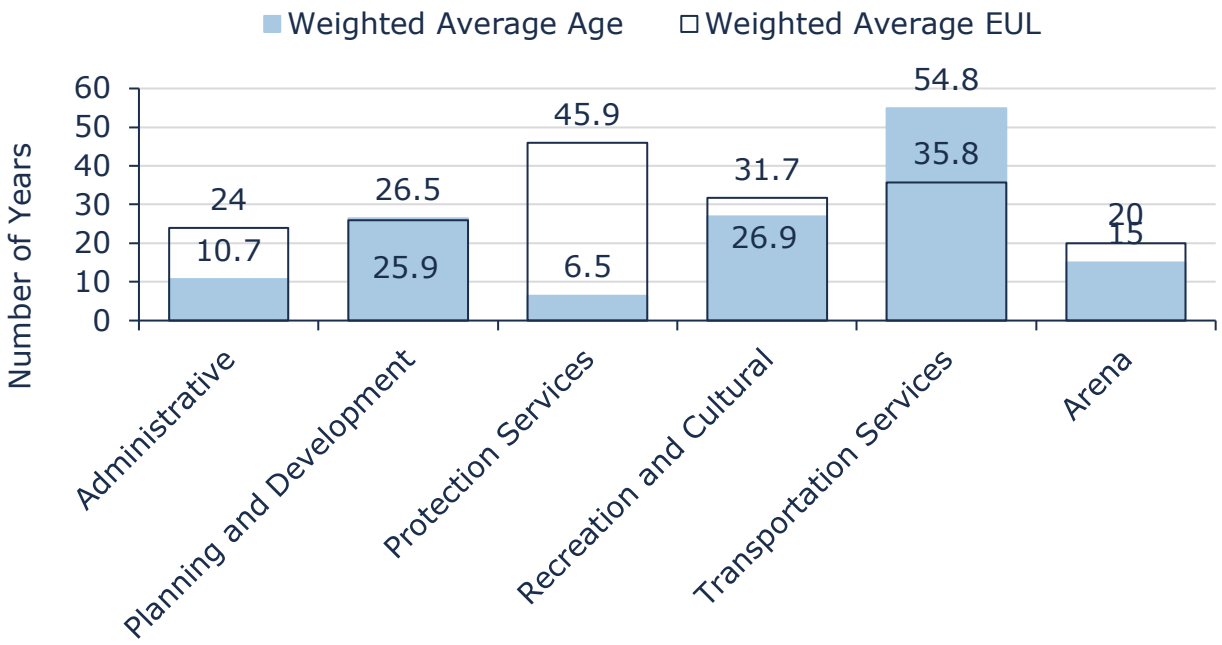
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Town's buildings inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Administrative	17	User-Defined	$1,241,693
Planning and Development	7	User-Defined	$1,162,036
Protection Services	39	User-Defined	$4,063,214
Recreation and Cultural	114	User-Defined	$41,287,174
Transportation Services	21	User-Defined	$2,036,141
Arena	1	CPI	$53,208
			$49,843,466

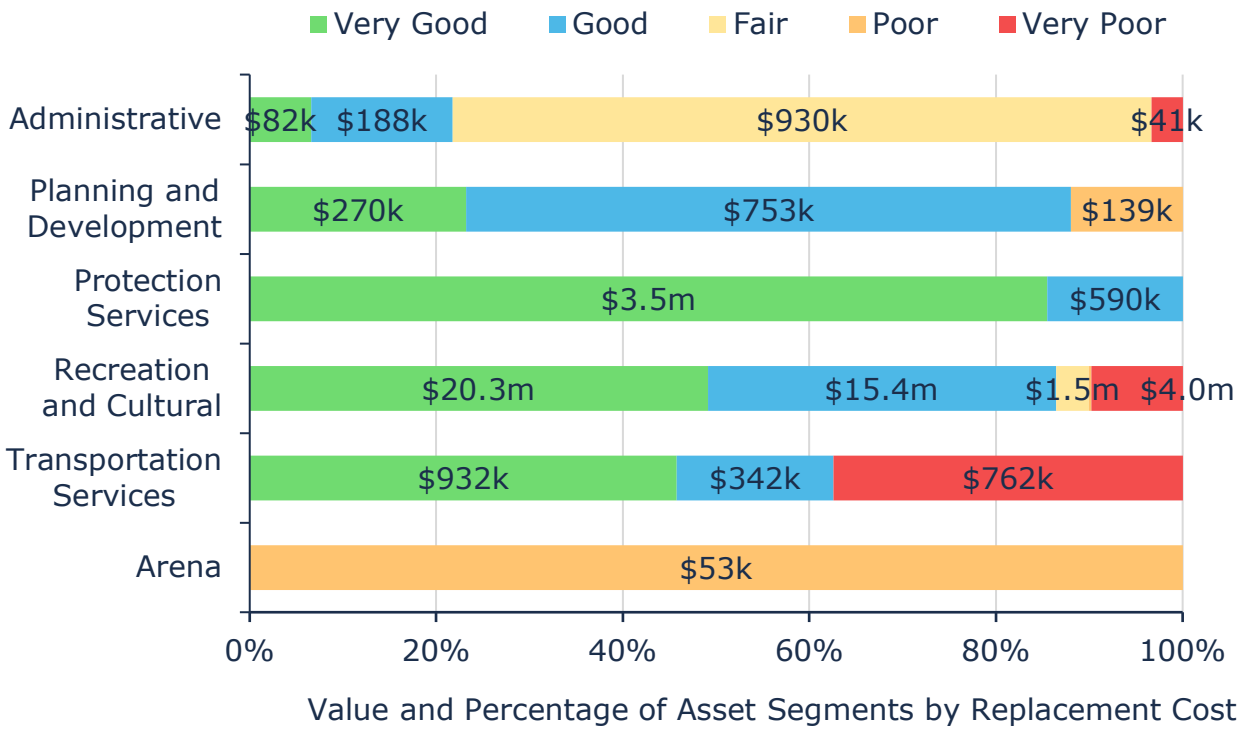


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



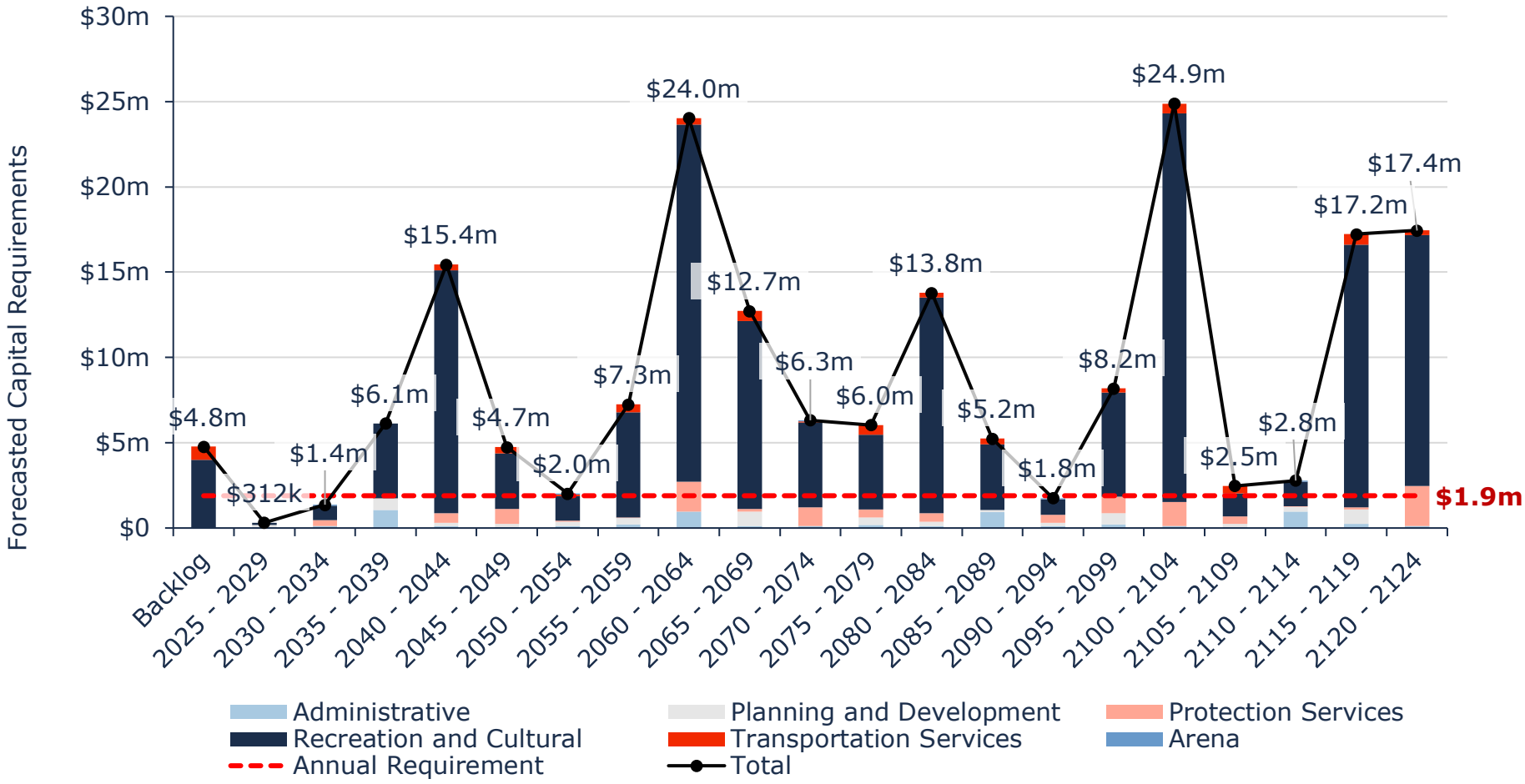
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's Buildings continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the buildings.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Lifecycle Management Strategies

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

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Municipal buildings are subject to regular inspections to identify health & safety requirements as well as structural deficiencies that require additional attention
	External contractors competes inspection and maintenance on the HVAC systems bi-annually
Replacement	The Township reviews the repair costs for buildings, and if the repair costs are significant, the facility or component will be replaced
	Service life remaining is also considered when determining which assets are eligible for replacement

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low $10,115,363 (20%)	5 - 7 Low $19,577,305 (39%)	8 - 9 Moderate $3,602,871 (7%)	10 - 14 High $13,084,992 (26%)	15 - 25 Very High $3,462,935 (7%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Asset Data Confidence

No regular inspections are performed on the Township's buildings, resulting in low confidence in the data available. This has impacted the ability to support asset management planning

Capital Funding Strategies

The Township has recently been dependent on funding from both the provincial and federal government for capital projects. Staff are always looking for other funding opportunities as the Township is heavily reliant on funding opportunities, and having these funds available is a risk. The recent hike in construction costs has also affected the ability to invest in reconstruction.

Growth

Staff in the Township are outgrowing the Town Hall building. Renovations or replacement will be required in order to accommodate the growing number of Township staff.

Current Levels of Service

The following tables identify the Township's current level of service for buildings. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by buildings.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the current condition of municipal facilities and the plans that are in place to maintain or improve the provided level of service	A Building Condition Assessment (BCA) was completed in 2020 for the most frequently used buildings
Quality	Description of initiatives that aim to make facilities more accessible	Staff are aiming to complete an accessibility audit for facility assets. The County's accessibility community identified a few steps prior to the Covid-19 outbreak, staff are working towards addressing these issues. The programs offered are suitable for most demographics. However, financial barriers may be preventing some services offered.
Safe and Accessible	Ensuring that all municipal spaces are compliant and accessible to all users	Accessibility upgrades are planned for municipal facilities, but they are largely dependent on grant funding to occur.

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by buildings.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	# of buildings that are energy efficient	1
Performance	% of the buildings in fair or better condition	90%
	% of the buildings in poor or very poor condition	10%
	Average Risk Rating associated with buildings	7.3 - Low
	Target vs. Actual Capital Reinvestment Rate	3.8% vs. 0.2%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term

sustainability of these service levels, and explain the Township's ability to afford the PLOS.

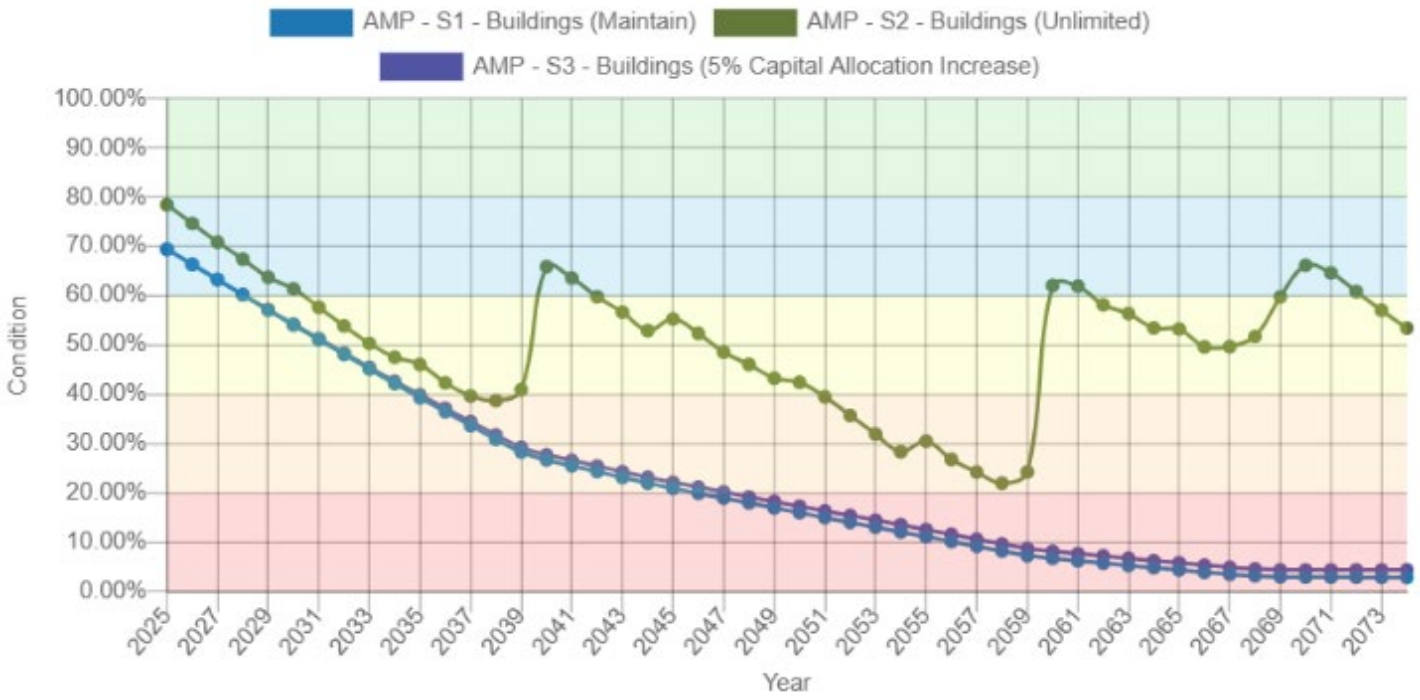
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for buildings. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Buildings funding is maintained at $120k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Buildings funding is gradually increased from $120k in 2025 to $195k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	69%	39%	16%
	Average Asset Risk	7.6	13.3	18.5
	Annual Investment Required		$120,000	
	Average Capital re-investment rate		0.2%	
Scenario 2 (Unlimited)	Average Condition	69%	46%	42%
	Average Asset Risk	7.6	12.5	14.2
	Annual Investment Required		$1,893,000	
	Average Capital re-investment rate		3.8%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	69%	40%	17%
	Average Asset Risk	7.6	13.3	18.4
	Annual Investment Required		$195,000	
	Average Capital re-investment rate		0.4%	


AMP - S1 - Buildings (Maintain)
AMP - S2 - Buildings (Unlimited)
AMP - S3 - Buildings (5% Capital Allocation Increase)
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Condition
2025
2027
2029
2031
2033
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2041
2043
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2073
Year

Land Improvements & Green Infrastructure

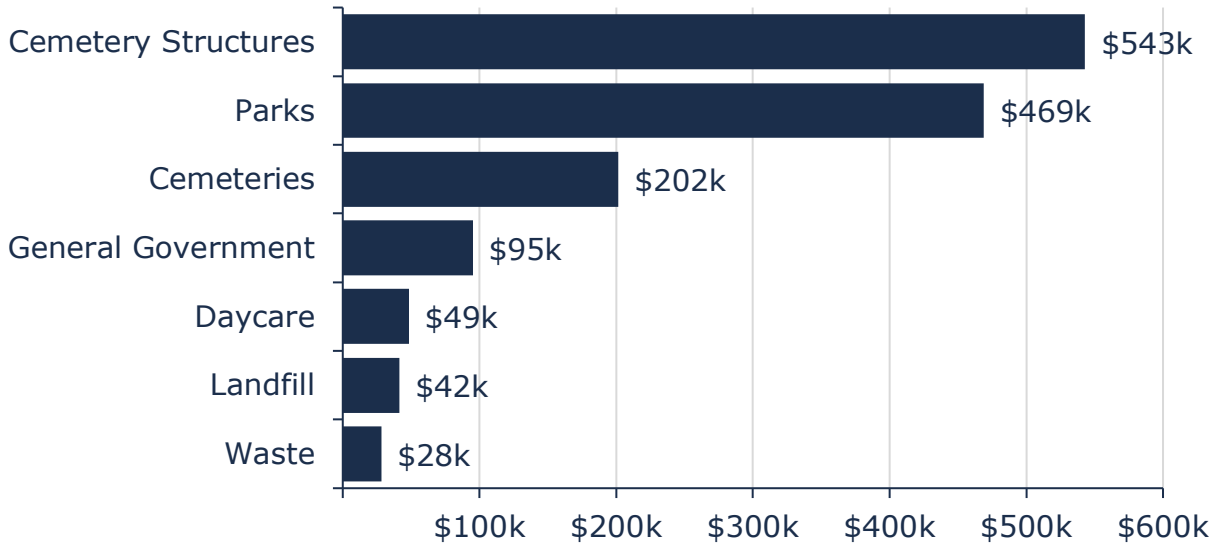
The Township of North Huron owns a small number of assets that are considered Land Improvements. This category includes:

- Municipal parking lots
- Fencing and signage
- Miscellaneous landscaping and other assets
- Infrastructure in parks and other green spaces
- North Huron Landfill
- Cemeteries

Asset Inventory & Replacement Cost

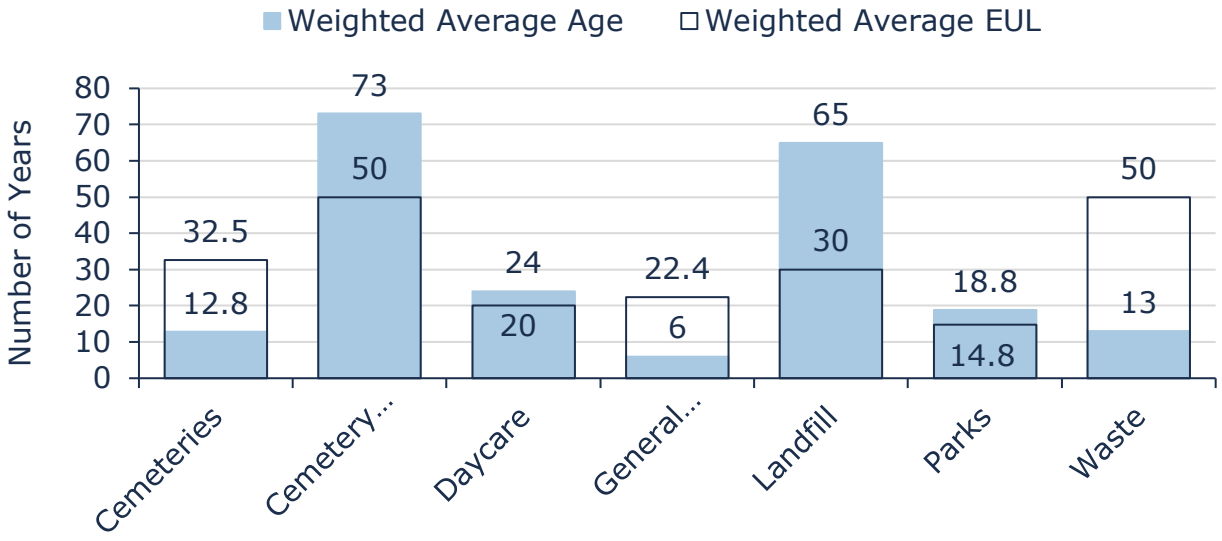
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Land Improvements inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Cemeteries	5	CPI	$201,637.00
Cemetery Structures	6	User-Defined	$543,045
Daycare	1	CPI	$48,527
General Government	6	CPI	$95,281
Landfill	1	User-Defined	$41,595
Parks	23	CPI	$468,923
Waste	1	CPI	$28,452
			$1,427,460

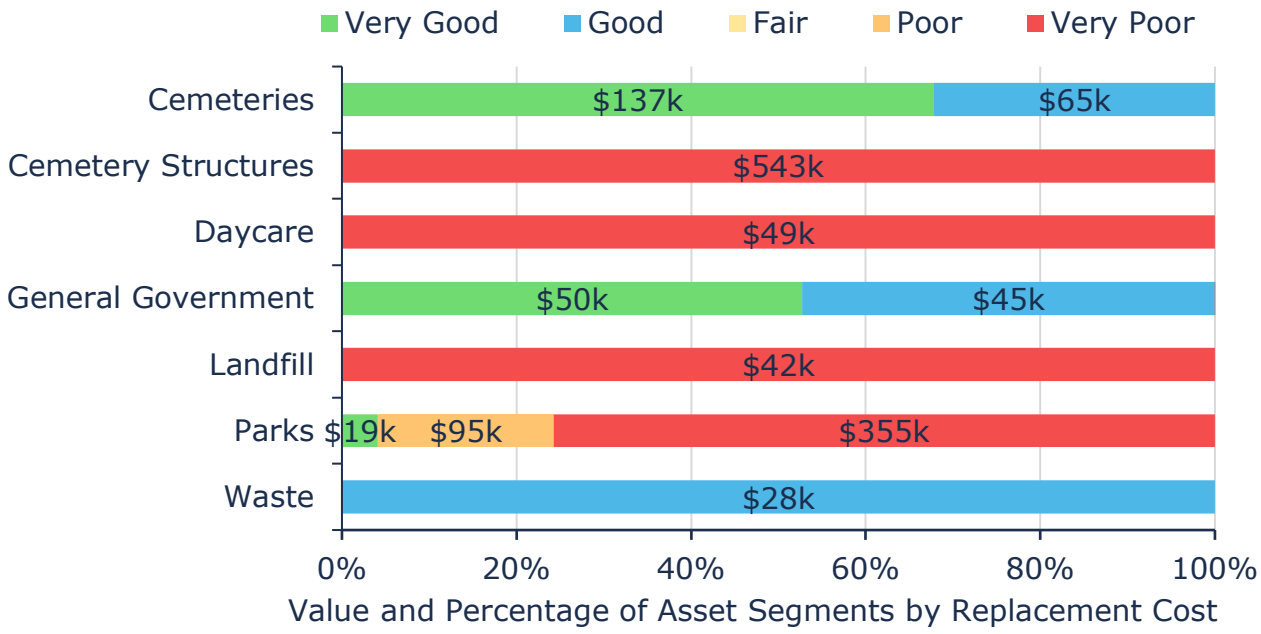


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



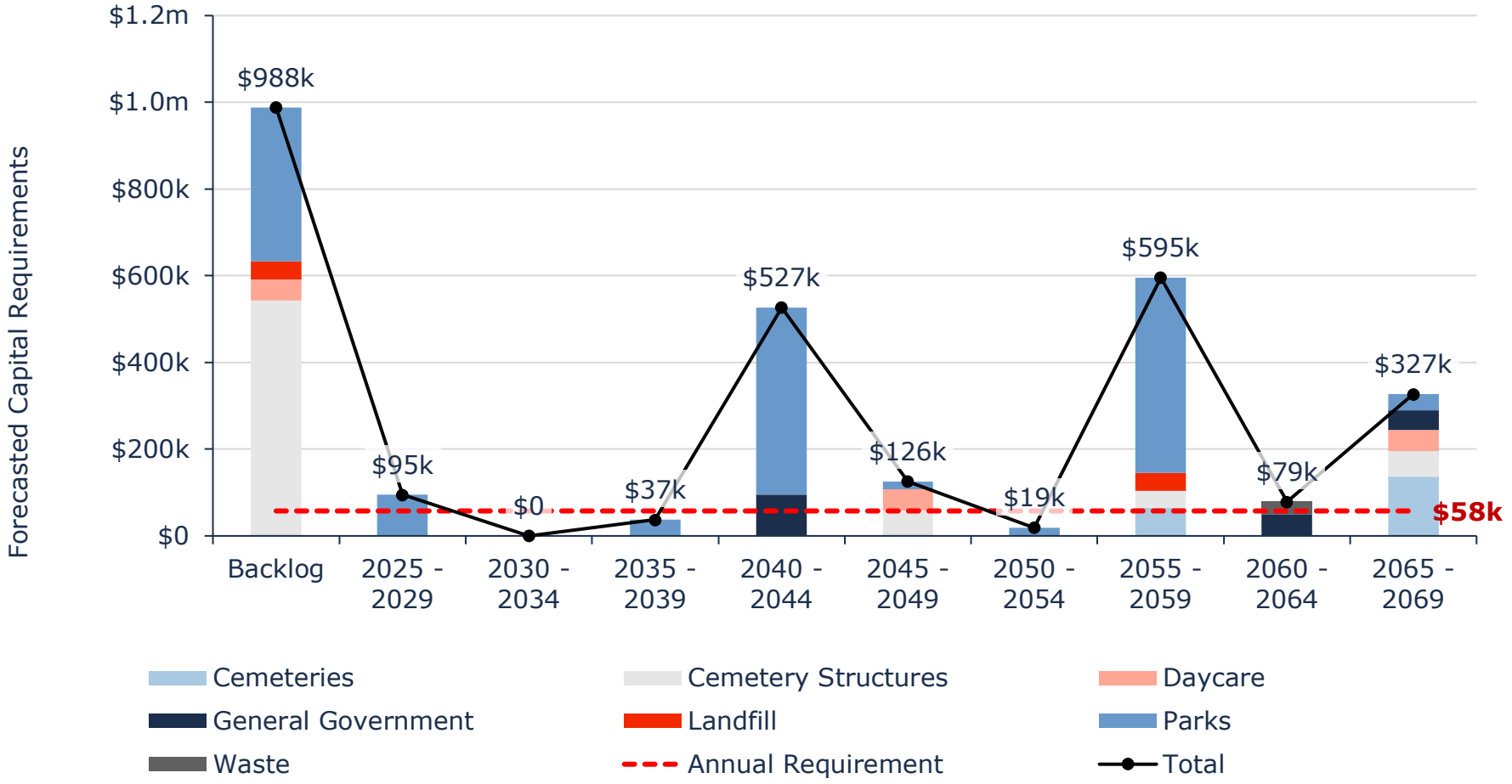
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's land improvements continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the Land Improvements.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Lifecycle Management Strategies

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

Activity Type	Description of Current Strategy
Maintenanace, Rehabilitation & Replacement	The land improvements asset category includes several unique asset types and lifecycle requirements are dealt with on a case-by-case basis.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$302,043 (21%)	$60,674 (4%)	- (0%)	$378,165 (26%)	$686,578 (48%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Capital Funding Strategies

Major capital rehabilitation and replacement projects are often entirely dependant on the availability of grant funding opportunities. When grants are not available, rehabilitation and replacement projects may be deferred. An annual capital funding strategy could reduce dependency on grant funding and help prevent deferral of capital works

Current Levels of Service

The following tables identify the Township's current level of service for land improvements. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by land improvements.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the current condition of municipal land improvement assets and the plans that are in place to maintain or improve the provided level of service	Playground assets are aging, and the ground is in need for a replacement. The airport has been sold to a private entity. Additionally, a cultural and recreation master plan has been developed.
Safe and Accessible	Ensuring that all municipal spaces are compliant and accessible to all users	Accessibility upgrades are planned for outdoor municipal spaces and assets, but they are largely dependent on grant funding to occur.

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by land improvements.

Service Attribute	Technical Metric	Current LOS (2024)
Performance	% of land improvement assets in fair or better condition	24%
	% of land improvement assets in poor or very poor condition	76%
	Average Risk Rating associate to IT assets	12.3 –High
	Target vs. Actual Capital Reinvestment Rate	4.0% vs. 2.8%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

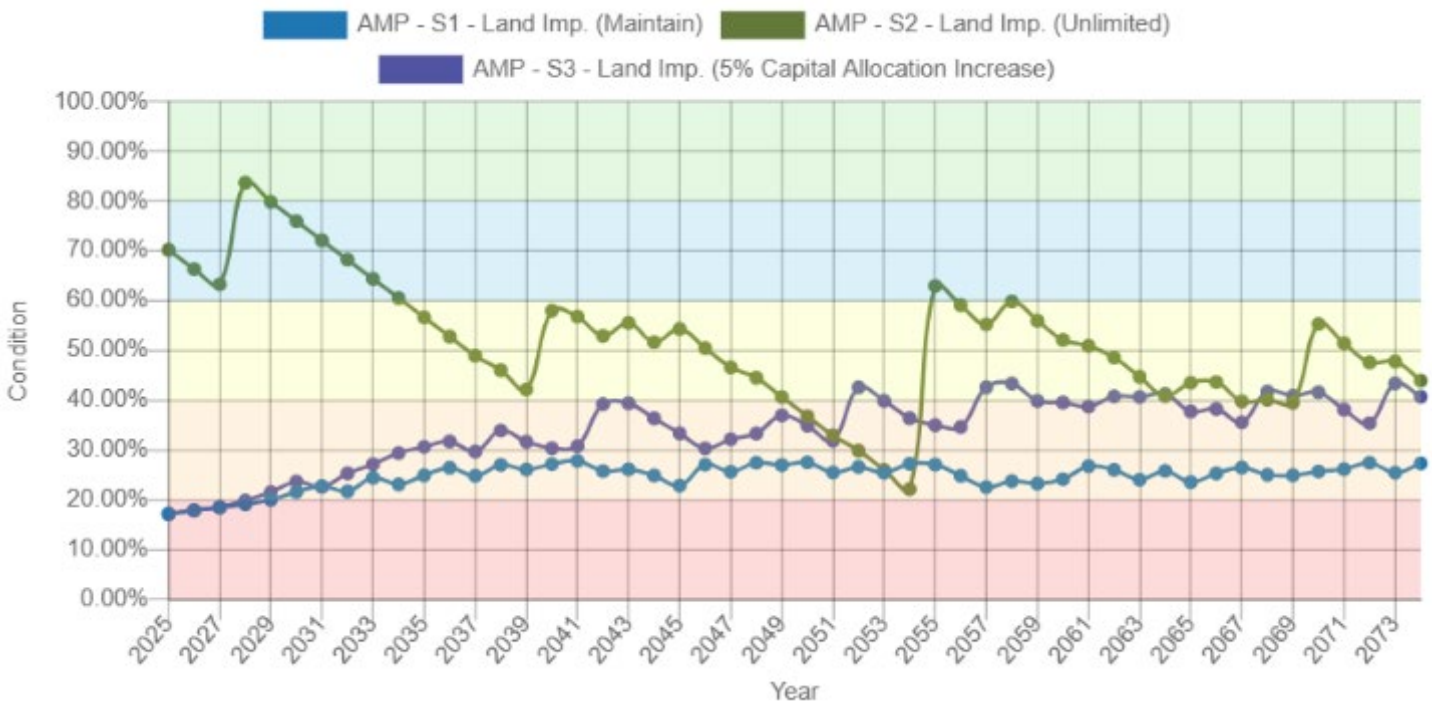
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for land improvements. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Land Improvement funding is maintained at $40k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Land Improvement funding is gradually increased from $40k in 2025 to $65k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	17%	25%	28%
	Average Asset Risk	14.6	13.5	13.0
	Annual Investment Required		$40,000	
	Average Capital re-investment rate		2.8%	
Scenario 2 (Unlimited)	Average Condition	17%	57%	37%
	Average Asset Risk	14.6	8.0	12.6
	Annual Investment Required		$58,000	
	Average Capital re-investment rate		4.0%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	17%	31%	35%
	Average Asset Risk	14.6	12.9	11.8
	Annual Investment Required		$65,000	
	Average Capital re-investment rate		4.6%	


AMP - S1 - Land Imp. (Maintain)
AMP - S2 - Land Imp. (Unlimited)
AMP - S3 - Land Imp. (5% Capital Allocation Increase)
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Condition
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2073
Year

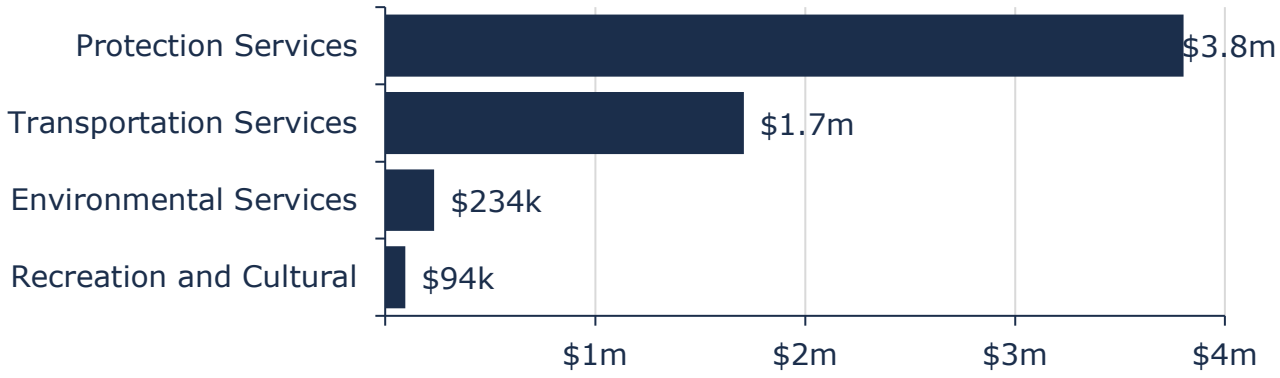
Vehicles

Vehicles allow staff to efficiently deliver municipal services and personnel. Municipal vehicles are used to support several service areas, including protection services, transportation services, environmental services, and recreation and cultural services.

Asset Inventory & Replacement Cost

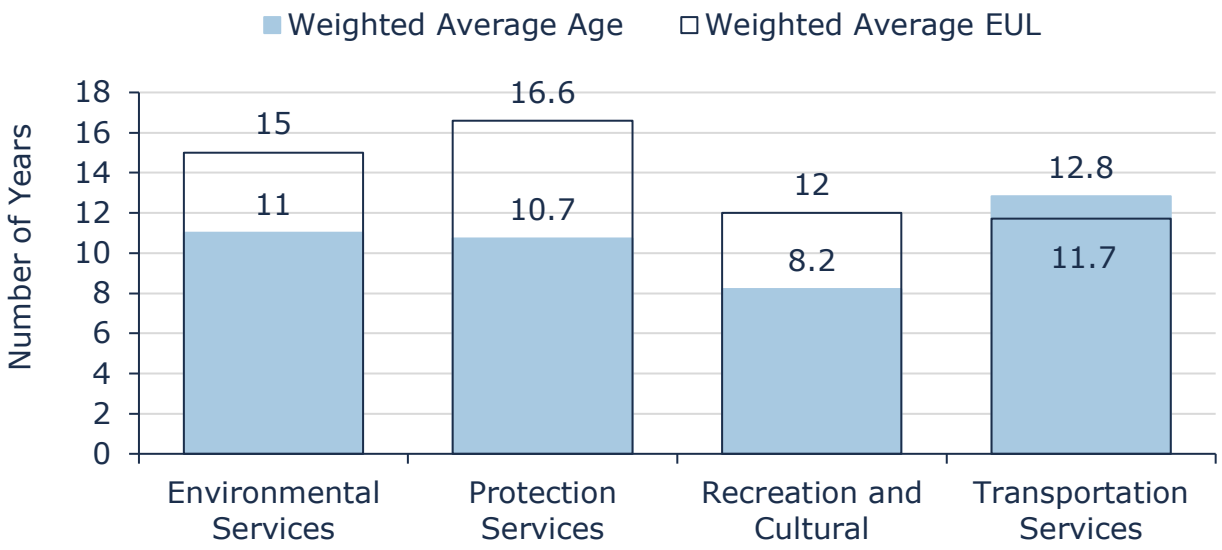
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's vehicles inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Environmental Services	1	User-Defined	$233,982
Protection Services	10	CPI	$3,803,713
Recreation and Cultural	2	CPI	$94,450
Transportation Services	15	CPI	$1,709,013
			$5,841,158

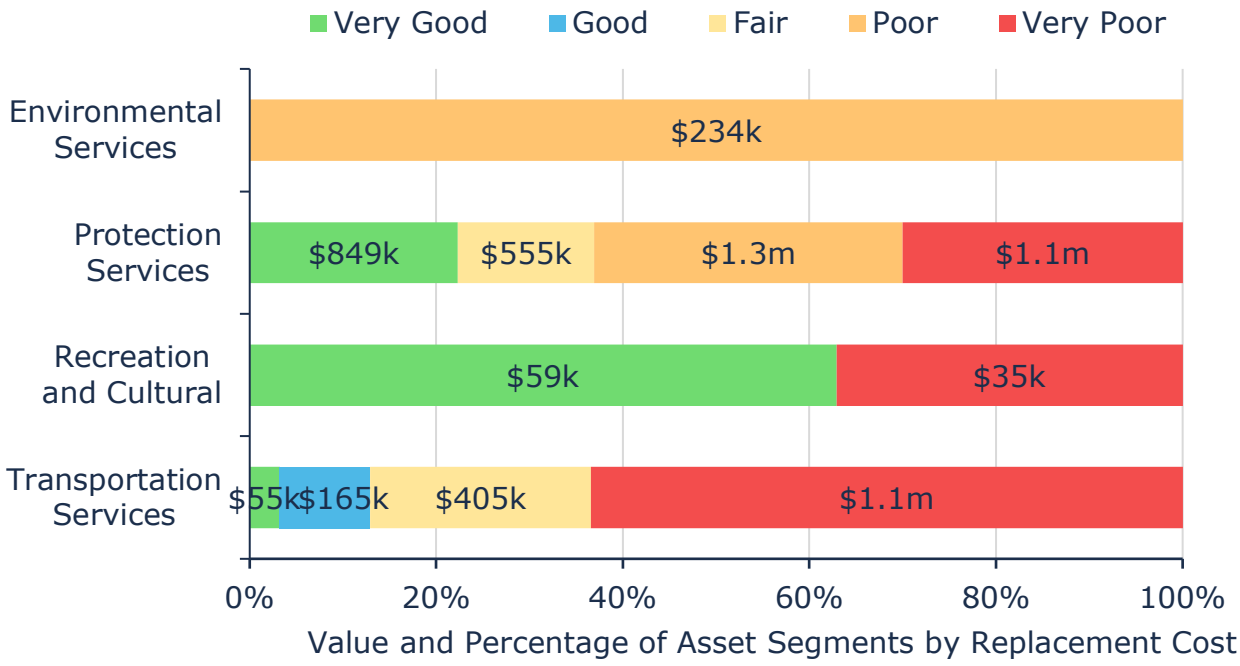


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



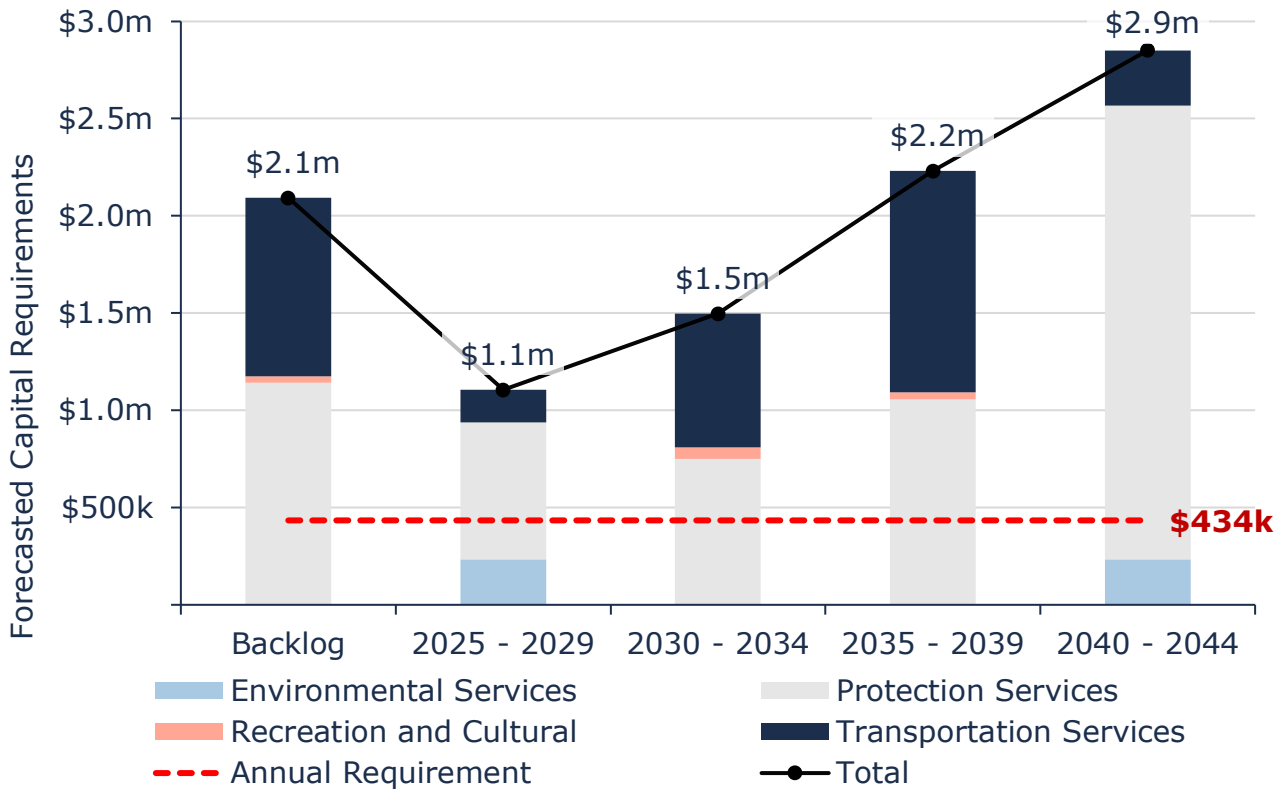
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's vehicles continue to provide an acceptable level of service, the Township should monitor the average condition of all assets.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Lifecycle Management Strategies

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

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Maintenance on vehicles is performed based on the typical maintenance activities outlined in the MOT standards
Replacement	Insurance policies dictate the age at which fire vehicles must be replaced. Other vehicles are replaced based on their estimated useful life or run near to failure

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$219,347 (4%)	$964,750 (17%)	- (0%)	$841,077 (14%)	$3,815,984 (65%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Regulatory Compliance

Insurance policy requirements dictate the age at which fire vehicles must be replaced. To comply with these regulations, fire vehicles are often replaced prematurely, prior to the end of their useful life. This requires significant funding to meet regulatory requirements.

Current Levels of Service

The following tables identify the Township's current level of service for vehicles. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by vehicles.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the current condition of municipal vehicles and the plans that are in place to maintain or improve the provided level of service	Aside from the fire department, Public Works presented a fleet management report to council to discuss EULs and conditions to better represent the real data. The fire department is following an insurance recommended guideline of 20 years for front-line vehicles and 25 years for non-front-line vehicles

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by vehicles.

Service Attribute	Technical Metric	Current LOS (2024)
Quality	% of vehicles where asset age exceeds estimated useful life (excluding fire vehicles)	46%
	% of fire vehicles where asset age exceeds estimated useful life	29%
Performance	% of vehicles that are in fair or better condition (excluding fire vehicles)	34%
	% of fire vehicles that are in fair or better condition	37%
	% of vehicles that are in poor or very poor condition (excluding fire vehicles)	66%
	% of fire vehicles that are in poor or very poor condition	63%
	Average Risk Rating associated to vehicles (excluding fire vehicles)	14.0 – High
	Average Risk Rating associate to fire vehicles	16.4 – Very High
	Target vs. Actual Capital Reinvestment Rate	7.4% vs. 7.0%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

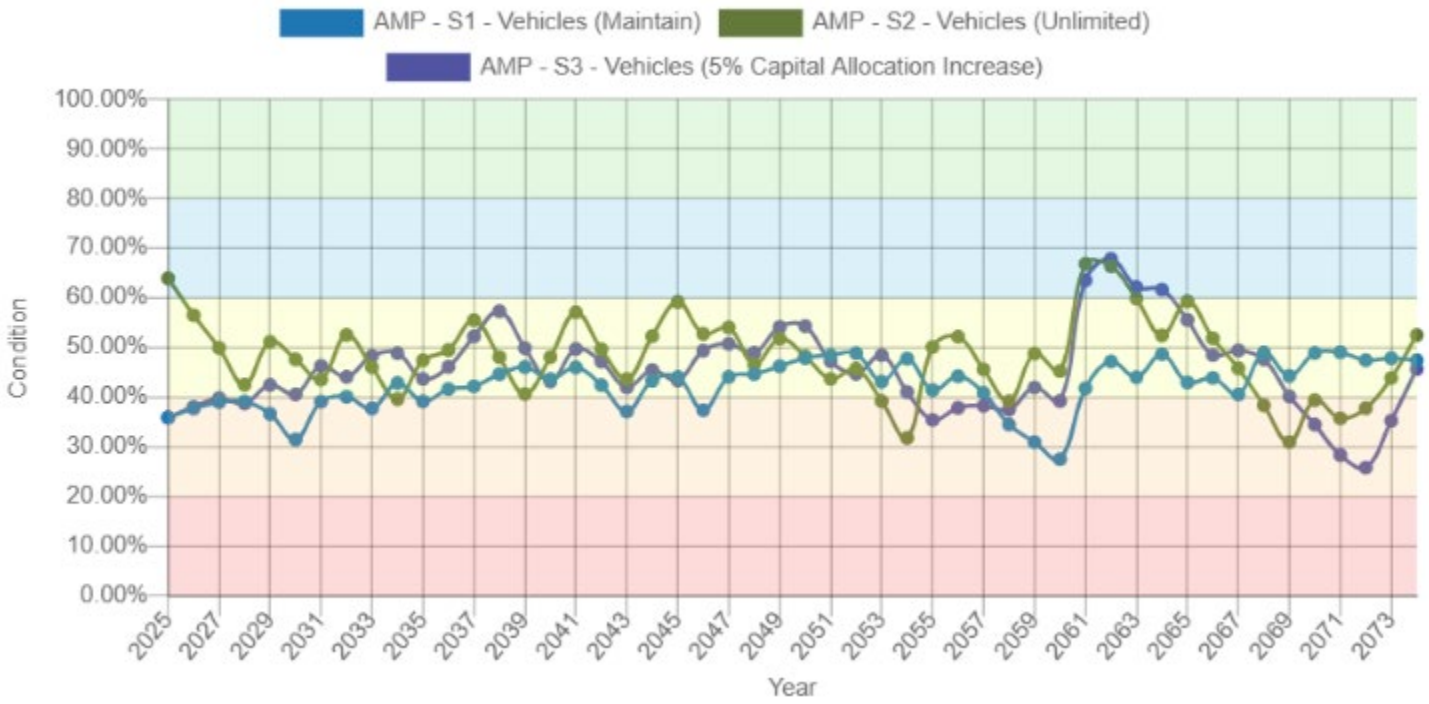
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for vehicles. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Vehicles funding is maintained at $410k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Vehicles funding is gradually increased from $410k in 2025 to $668k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	36%	39%	48%
	Average Asset Risk	15.5	15.0	12.4
	Annual Investment Required		$410,000	
	Average Capital re-investment rate		7.0%	
Scenario 2 (Unlimited)	Average Condition	36%	47%	48%
	Average Asset Risk	15.5	13.9	13.6
	Annual Investment Required		$434,000	
	Average Capital re-investment rate		7.4%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	36%	44%	54%
	Average Asset Risk	15.5	13.8	11.9
	Annual Investment Required		$668,000	
	Average Capital re-investment rate		11.4%	


AMP - S1 - Vehicles (Maintain)
AMP - S2 - Vehicles (Unlimited)
AMP - S3 - Vehicles (5% Capital Allocation Increase)
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Condition
2025
2027
2029
2031
2033
2035
2037
2039
2041
2043
2045
2047
2049
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2055
2057
2059
2061
2063
2065
2067
2069
2071
2073
Year

Machinery & Equipment

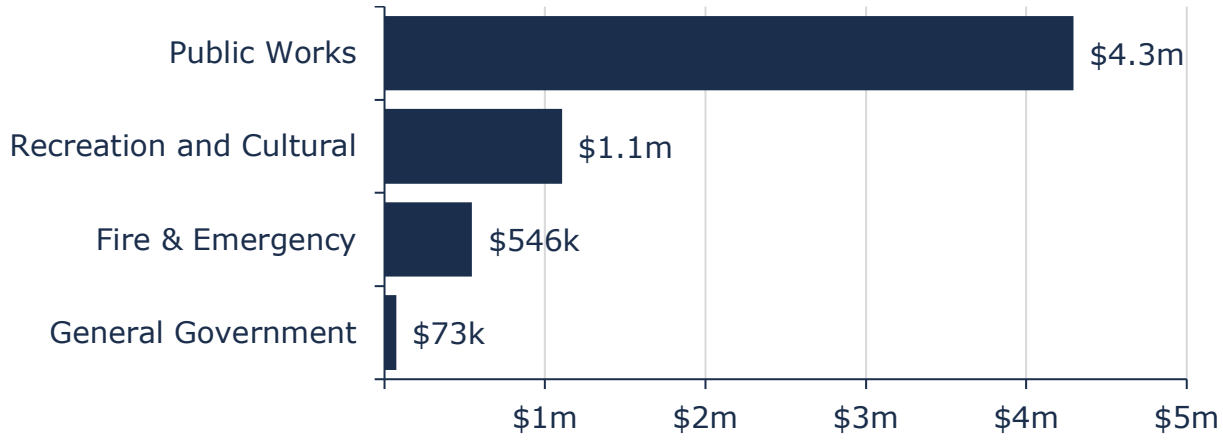
In order to maintain the high quality of public infrastructure and support the delivery of core services, Township staff own and employ various types of machinery and equipment. These include:

- Landscaping equipment to maintain public grassed spaces
- Fire equipment to support the delivery of emergency services
- Plows to provide winter control activities
- Road maintenance equipment
- Fitness and recreational equipment

Asset Inventory & Replacement Cost

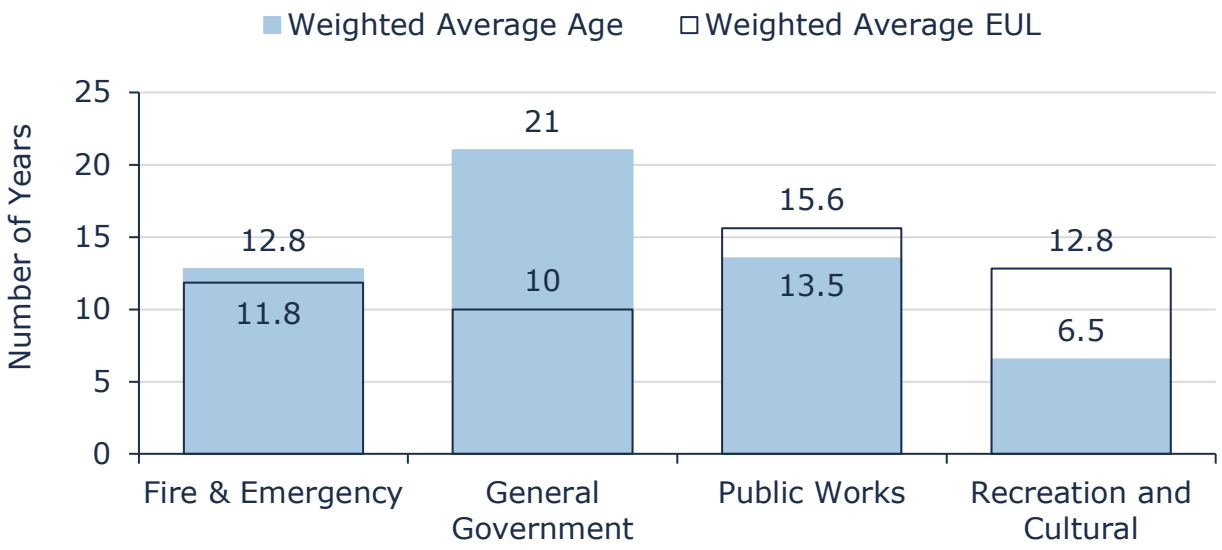
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Machinery and equipment inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Fire & Emergency	17	User-Defined	$546,017
General Government	1	User-Defined	$72,626
Public Works	51	User-Defined	$4,295,392
Recreation and Cultural	24	User-Defined	$1,106,806
			$6,020,841

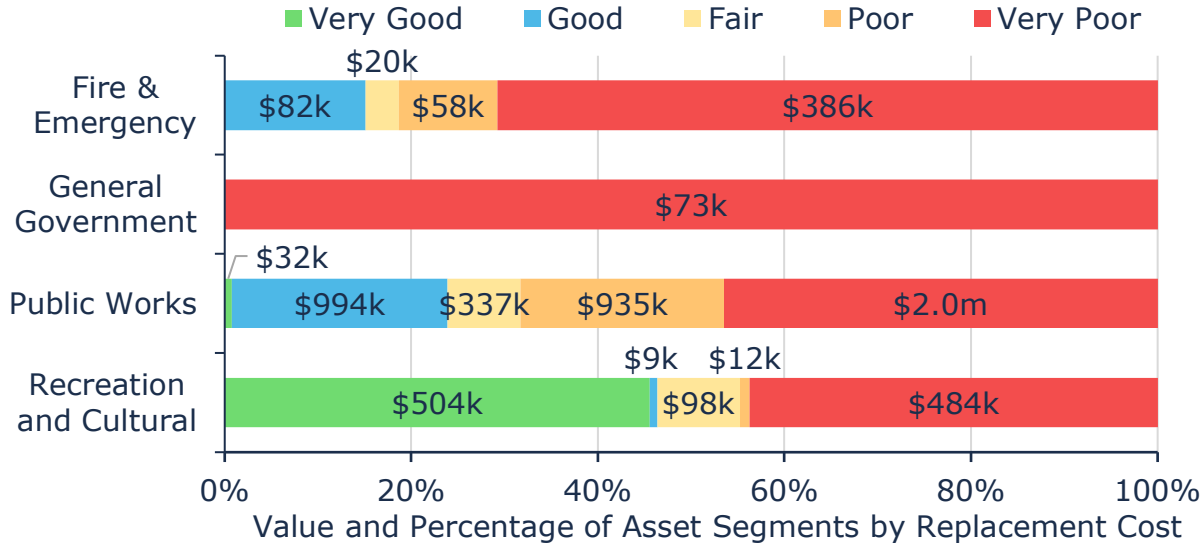


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



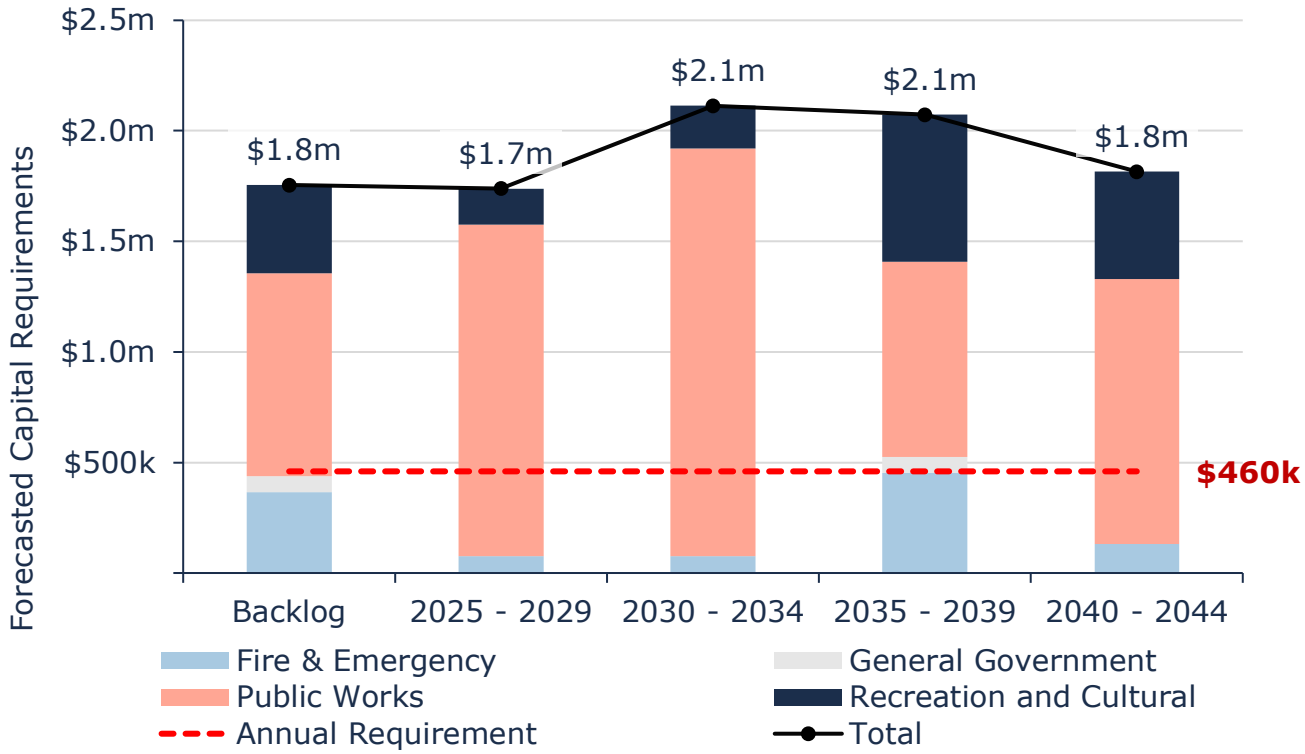
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's machinery and equipment continue to provide an acceptable level of service, the Township will monitor the average condition of all assets. If the average condition declines, staff will re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the machinery and equipment.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Lifecycle Management Strategies

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

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Maintenance programs vary by department
	Fire Protection Services equipment is inspected annually by an external contractor
	External contractors perform maintenance on the Arena equipment on a regular basis, and Fitness equipment is maintained by an external contractor on a quarterly basis. Public Works equipment is inspected before use.
Replacement	The replacement of machinery and equipment depends on deficiencies identified by operators and their EUL.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$975,081 (16%)	$591,226 (10%)	$387,841 (6%)	$1,220,880 (20%)	$2,845,813 (47%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Climate Change & Extreme Weather Events

Due to the change in humidity and higher temperatures, machinery and equipment have to work harder to start and run. The rapid and intermittent change in seasons is also causing more wear and tear to Township machinery & equipment.

Current Levels of Service

The following tables identify the Township's current level of service for machinery and equipment. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by machinery and equipment.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the current condition of municipal machinery & equipment and the plans that are in place to maintain or improve the provided level of service	Ice re-surfacers and Public Works machinery are usually run to failure. The fitness department has a replacement schedule for their fitness equipment and are seeking to implement it. Self-contained breathing apparatus (SCBA) units get replaced regularly, and all fire equipment is replaced according to regulations.

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by machinery and equipment.

Service Attribute	Technical Metric	Current LOS (2024)
Performance	% of machinery & equipment in fair or better condition	34%
	% of machinery & equipment in poor or very poor condition	66%
	Average Risk Rating associated with machinery & equipment	13.4 - High
	Target vs. Actual Capital Reinvestment Rate	7.6% vs. 5.9%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

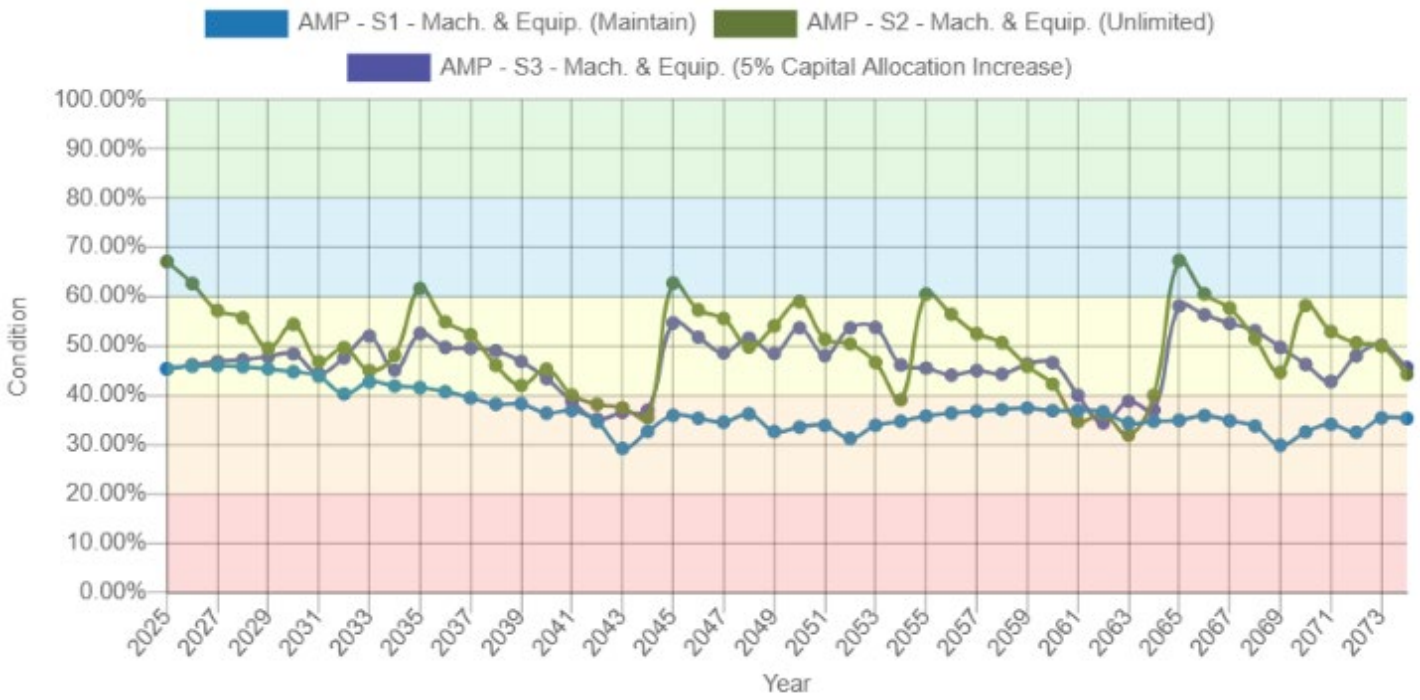
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for machinery and equipment. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Machinery and equipment funding is maintained at $355k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Mchinery and equipment funding is gradually increased from $355k in 2025 to $578k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	45%	42%	34%
	Average Asset Risk	11.1	11.3	13.6
	Annual Investment Required		$355,000	
	Average Capital re-investment rate		5.9%	
Scenario 2 (Unlimited)	Average Condition	45%	62%	59%
	Average Asset Risk	11.1	8.4	8.4
	Annual Investment Required		$460,000	
	Average Capital re-investment rate		7.6%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	45%	53%	54%
	Average Asset Risk	11.1	9.1	9.3
	Annual Investment Required		$578,000	
	Average Capital re-investment rate		9.6%	



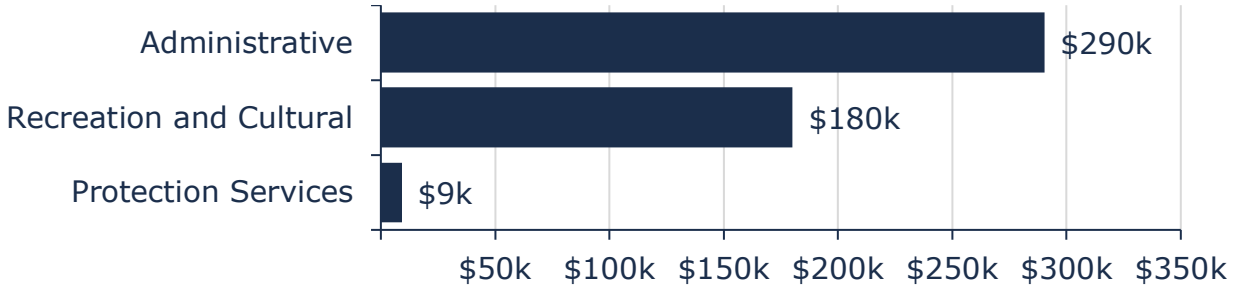
Information Technology

To maintain the high quality of public infrastructure and support the delivery of core services, Township staff own and employ various types of information technology.

Asset Inventory & Replacement Cost

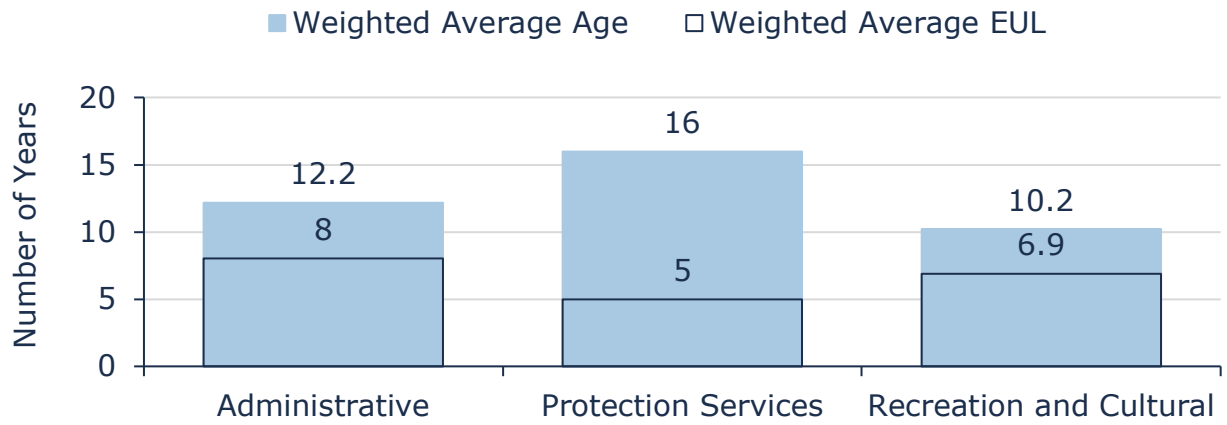
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's information technology inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Administrative	11	CPI	$290,299
Protection Services	1	CPI	$9,107
Recreation and Cultural	8	CPI	$180,122
			$479,528

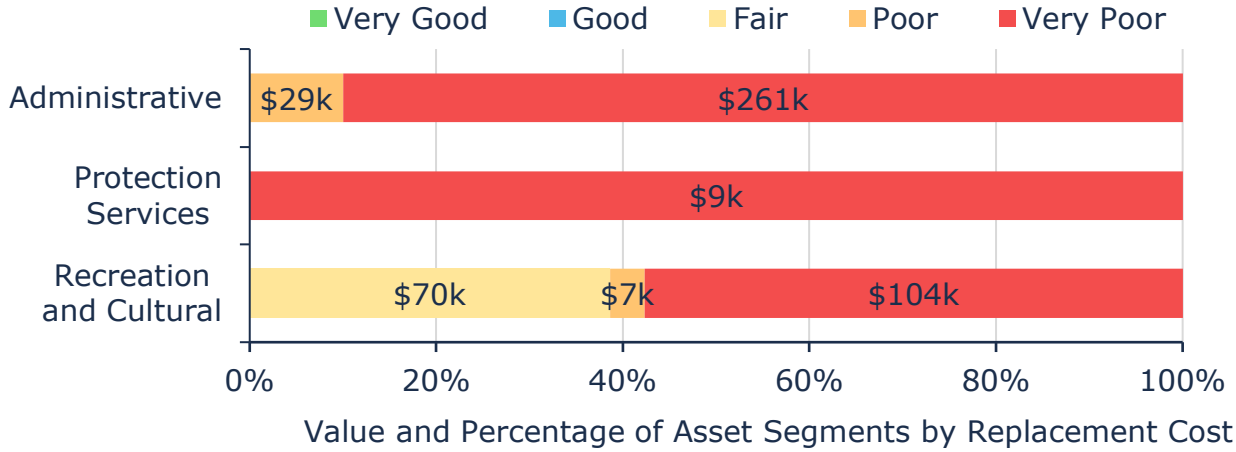


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



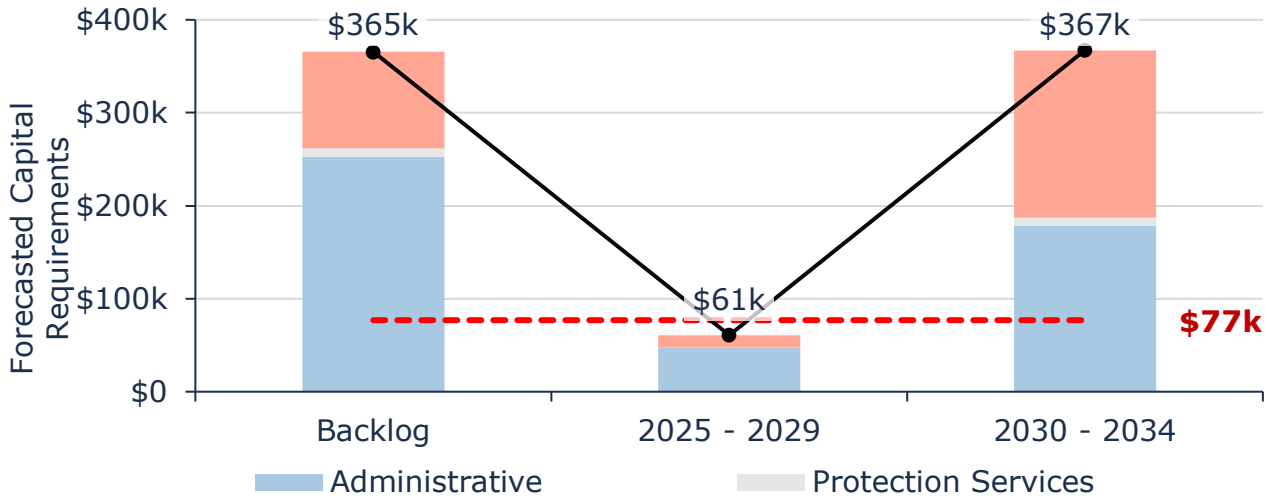
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's information technology continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff will re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the information technology.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Lifecycle Management Strategies

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

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation & Replacement	An independent contractor is responsible for all IT assets in the Township. The contractor provides reports on the EUL of Township I.T. assets and which assets require renewal or replacement.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4	5 - 7	8 - 9	10 - 14	15 - 25
Very Low	**Low**	**Moderate**	**High**	**Very High**
$6,731 (1%)	$162,252 (34%)	$29,193 (6%)	$209,371 (44%)	$71,981 (15%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Asset Data Confidence

The Information Technology inventor contains a pooled inventory of IT assets. To better understand the inventory, segmentation of the IT assets would be beneficial

Capital Funding Strategies

Sufficient funding is not available for additional software and technology adoption. As a result, the Township must work with outdated technology that does not best suit their needs.

Current Levels of Service

The following tables identify the Township's current level of service for information technology. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by information technology.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the current condition of municipal IT assets and the plans in place to maintain or improve the provided level of service	The Township has an IT strategic Plan with a 4-year cycle. The main server was upgraded in 2022.

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by information technology.

Service Attribute	Technical Metric	Current LOS (2024)
Performance	% of IT assets in fair or better condition	15%
	% of IT assets in poor or very poor condition	85%
	Average Risk Rating associate to IT assets	9.0 – Moderate
	Target vs. Actual Capital Reinvestment Rate	16.0% vs. 10.4%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

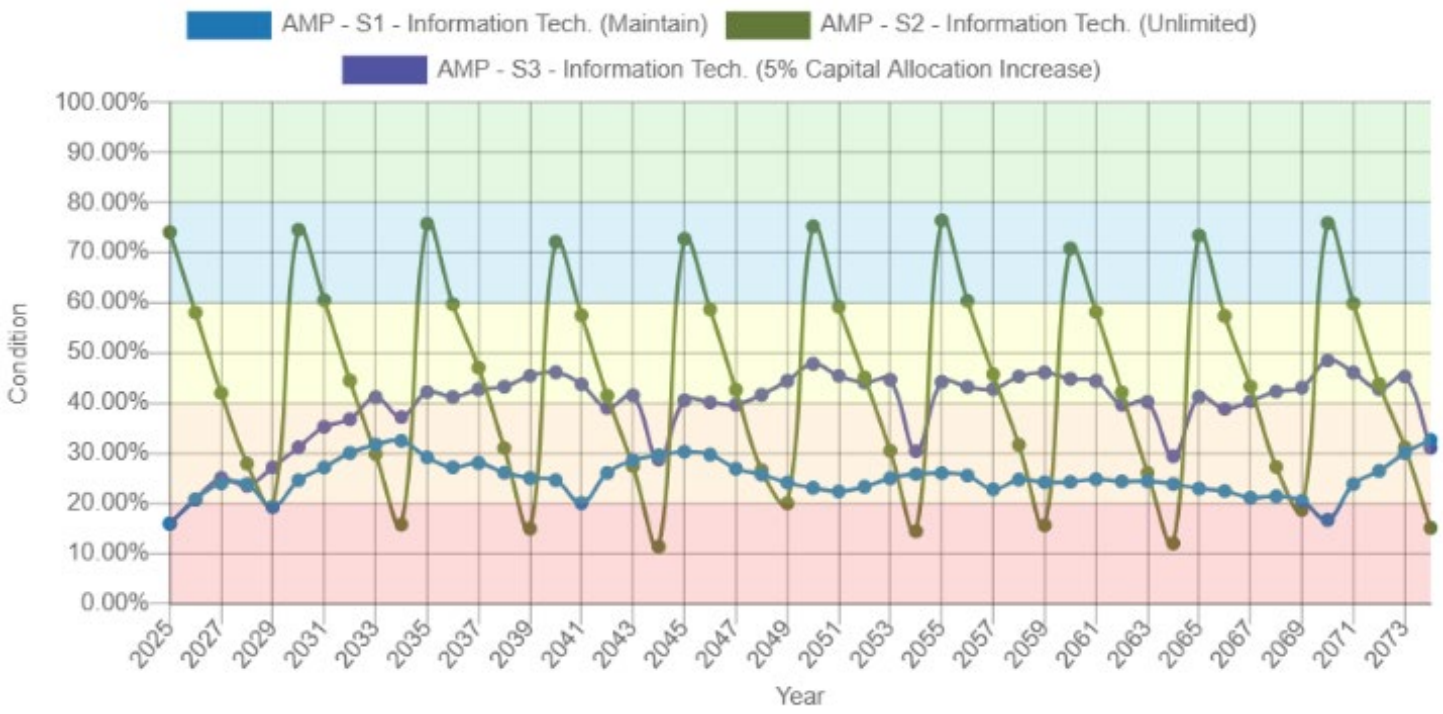
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for information technology. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • I.T. funding is maintained at $40k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • I.T. funding is gradually increased from $40k in 2025 to $65k in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	16%	29%	23%
	Average Asset Risk	8.6	7.1	8.1
	Annual Investment Required		$40,000	
	Average Capital re-investment rate		10.4%	
Scenario 2 (Unlimited)	Average Condition	16%	76%	75%
	Average Asset Risk	8.6	2.7	3.1
	Annual Investment Required		$77,000	
	Average Capital re-investment rate		16.0%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	16%	42%	48%
	Average Asset Risk	8.6	6.1	4.8
	Annual Investment Required		$65,000	
	Average Capital re-investment rate		13.5%	


AMP - S1 - Information Tech. (Maintain)
AMP - S2 - Information Tech. (Unlimited)
AMP - S3 - Information Tech. (5% Capital Allocation Increase)
Condition
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
2025
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2029
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2073
Year

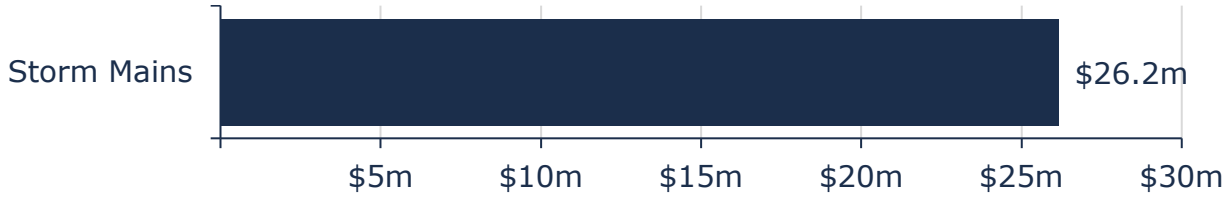
Storm Network

The Township owns and maintains a storm network of approximately 20km of storm mains.

Asset Inventory & Replacement Cost

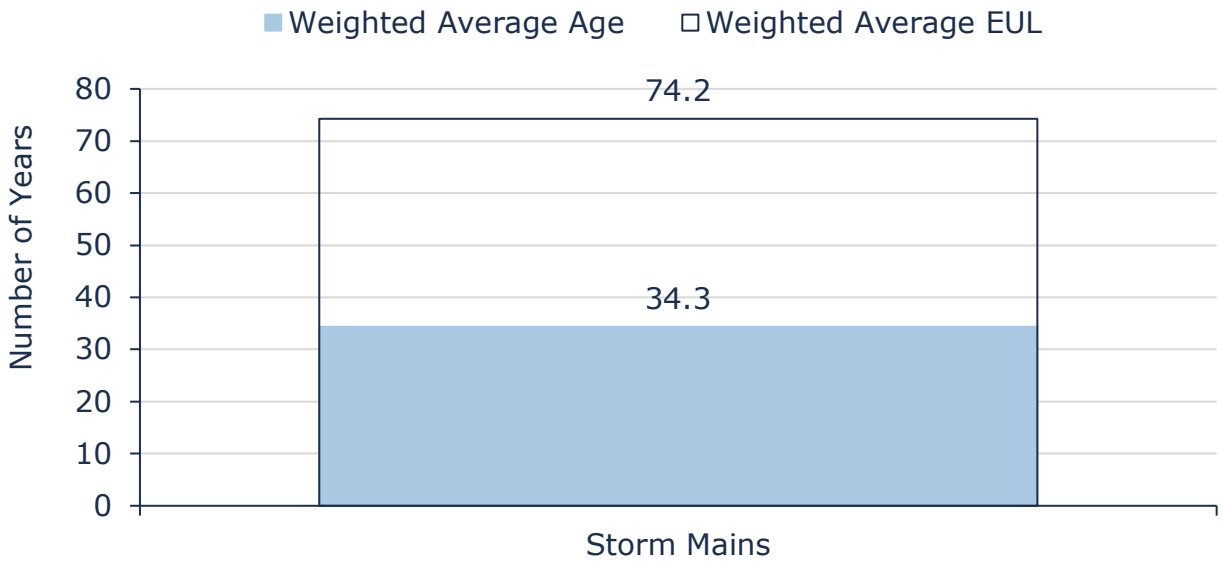
The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Storm Network inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Storm Mains	19,832 m	CPI	$26,170,343
			$26,170,343

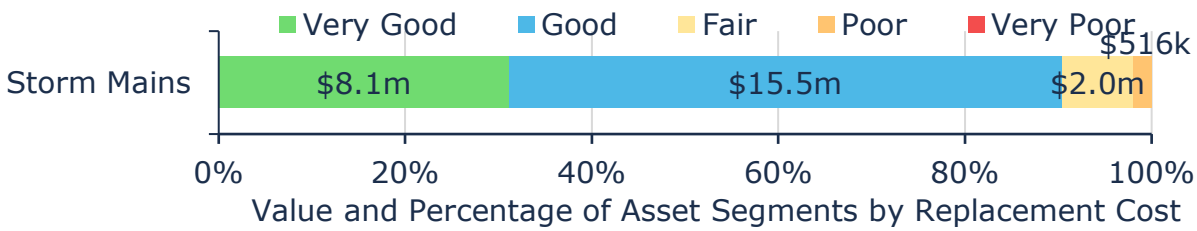


Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



Value and Percentage of Asset Segments by Replacement Cost

To ensure that the Township's Storm Network continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the Storm Network.

Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently. The following describes the Township's current approach:

- No formal regular inspection program is in place for the Township's storm network
- CCTV inspections of storm sewers are completed before large capital road reconstructions

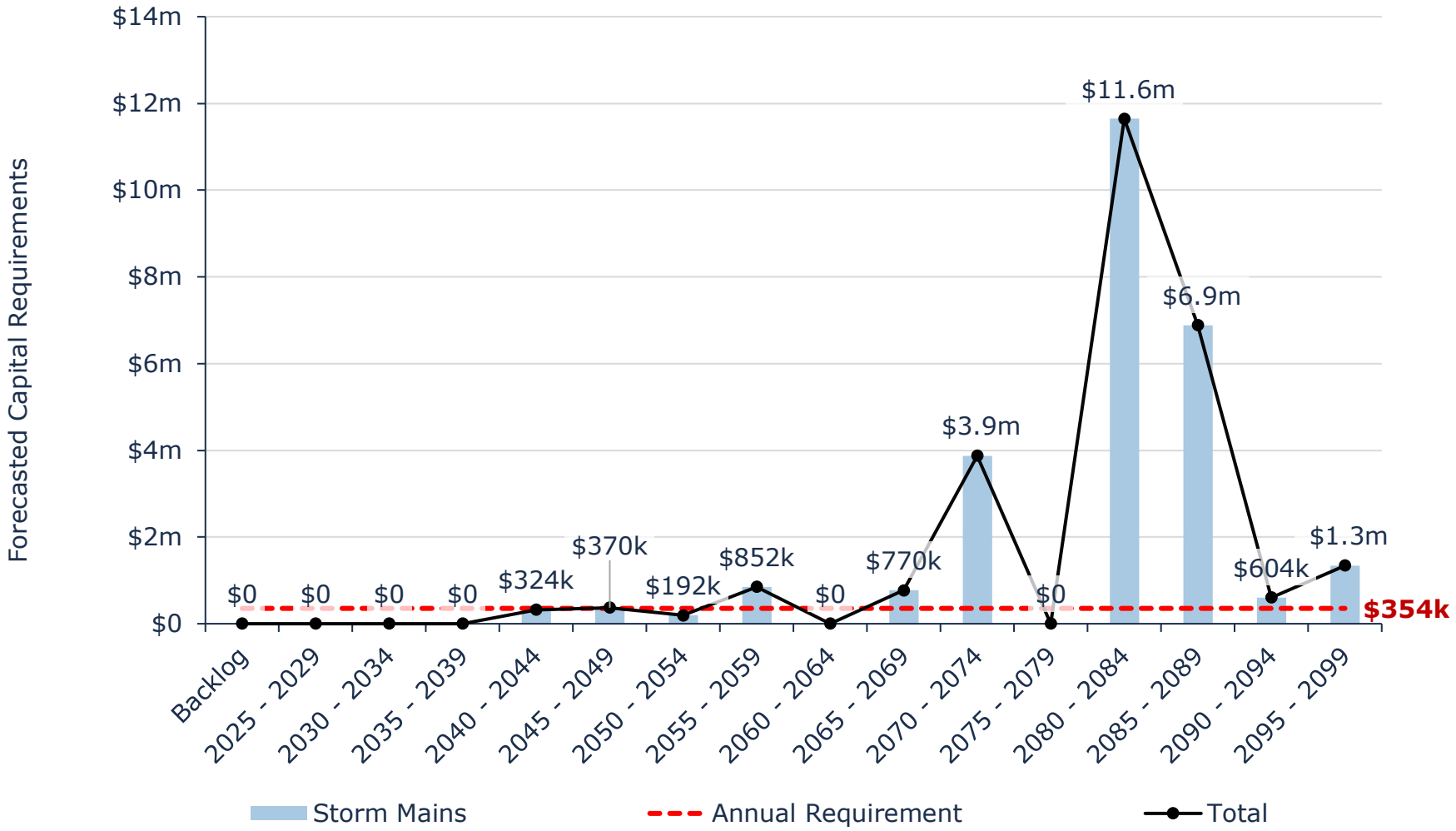
Lifecycle Management Strategy

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

Activity Type	Description of Current Strategy
Maintenance	Catch basin cleaning is completed yearly. Flushing occurs on an ad-hoc basis.
Rehabilitation	No formal rehabilitation program is in place for the storm network
Replacement	Replacement of the storm network is completed in alignment with water and sanitary renewals

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$17,879,422 (68%)	$3,497,169 (13%)	$1,802,684 (7%)	$2,991,068 (11%)	- (0%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Climate Change & Extreme Events

Increased storm intensity and extreme weather events resulting from climate change have created additional strain on the Municipality's storm network.

Asset Data Confidence

Township staff have very little confidence in the asset data available for the storm network. A lack of data and confidence in that data provides challenges to the Township’s asset management planning.

Infrastructure Design

Most of the material that has been used for the storm network does not have a long estimated useful life. This results in more frequent renewal and replacement required of the Township’s storm mains.

Current Levels of Service

The following tables identify the Township’s current level of service for Storm Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by Storm Network.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description and a map, of the Township's storm network, flood plain mapping of the Township, including the extent of protection provided by the municipal storm system	See Appendix B
Safe & Regulatory	Description of the level of storm intensity that the municipal stormwater network is designed to handle (e.g. 1 in 5-year storm).	Most of the system is designed to handle 1 in 5-year to 1 in 25-year storms. However, most of the system is not capable of handling a 1 in 100-year storm.
Quality	Description of the current condition of the stormwater network and the plans that are in place to maintain or improve the provided level of service	A Lidar Scan was completed by the municipality 7 years ago to assess the condition of the stormwater network. Overall, the storm network in the Township is in good condition.

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the Storm Water Network.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	% of properties in Township resilient to a 100-year storm	Approximately 25%
	% of the municipal storm management system resilient to a 5-year storm	Less than 5%
	% of storm main flushed/cleaned per year	To Be Determined
Performance	% of the storm network that is in fair or better condition	98%
	% of the storm network that is in poor or very poor condition	2%
	Target vs. Actual Capital Reinvestment Rate	1.4% vs. 0.5%

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

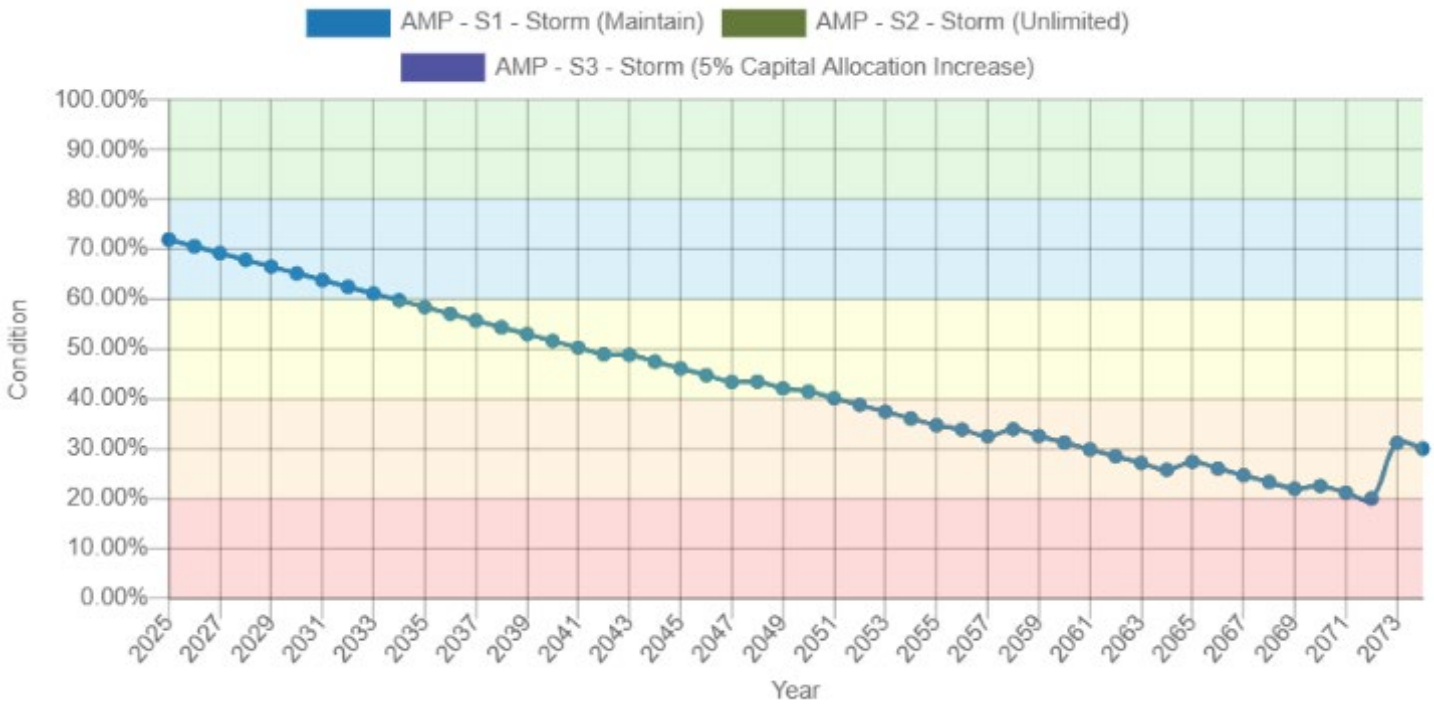
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for the storm network. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Storm network funding is maintained at $130k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 5% Tax Revenue Increase	Increase capital investment from tax revenues by 5% annually for a period of 10 years • Storm network funding is maintained at $130k due to no tax revenues being allocated to the storm network (solely funded by grant funding). • Note: while no dedicated tax funds are dedicated solely to stormwarer projects, stormwater upgrades are completed using the road network tax funding during major road replacements.

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	72%	58%	42%
	Average Asset Risk	4.9	7.6	10.0
	Annual Investment Required		$130,000	
	Average Capital re-investment rate		0.5%	
Scenario 2 (Unlimited)	Average Condition	72%	58%	42%
	Average Asset Risk	4.9	7.6	10.0
	Annual Investment Required		$354,000	
	Average Capital re-investment rate		1.4%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	72%	58%	42%
	Average Asset Risk	4.9	7.6	10.0
	Annual Investment Required		$130,000	
	Average Capital re-investment rate		0.5%	



Note: *Replacement events are only initiated in the models when the asset reaches a pre-determined trigger, such as a Condition Rating of 0. Regardless of funding, the system will not initiate a replacement prematurely. Due to the relatively high condition ratings of stormwater assets, combined with long estimated useful lives, large deviations in conditions between the different scenarios will not be seen until the 2080s (outside of the model timeframe).*

Analysis of Rate-funded Assets

Rate-funded assets are valued at $150.9 million with 85% of assets that are in fair or better condition. The average annual capital requirement to sustain the current level of service for rate-funded assets is approximately $2.2 million.

Water Network

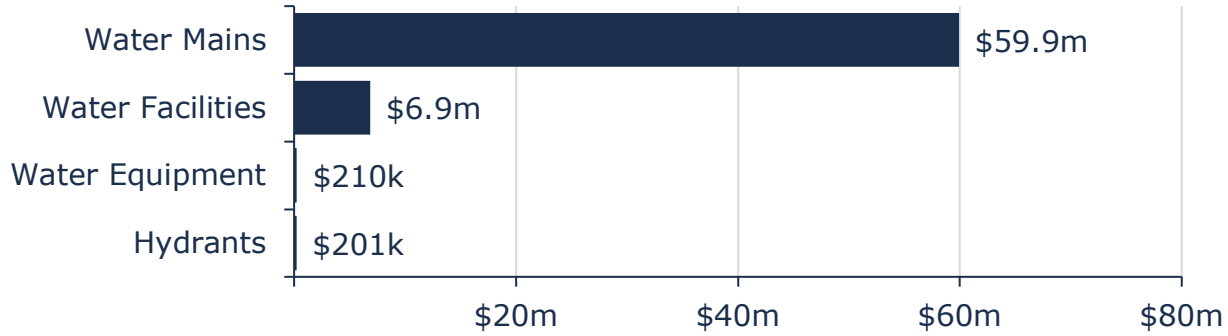
The water services provided by the Township include the following:

- Hydrants
- Water Equipment
- Water Facilities
- Water Mains

Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Water Network inventory.

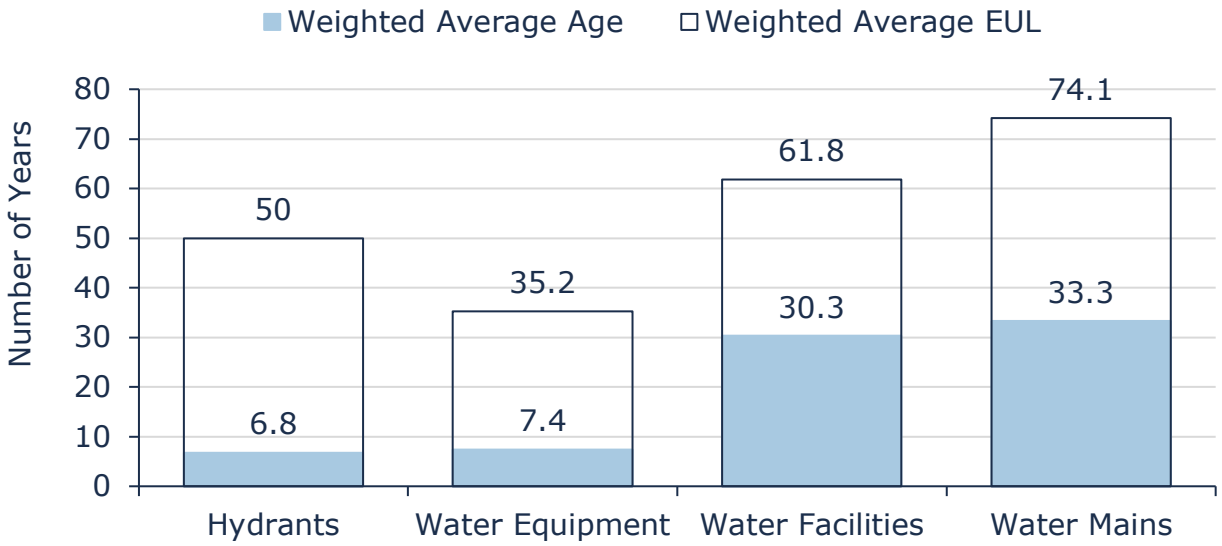
Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Hydrants	207	User-Defined	$201,026[4]
Water Equipment	6	CPI	$209,527
Water Facilities	16	CPI	$6,857,478
Water Mains	43,507 m	CPI	$59,939,630
			$67,207,661



[4] The replacement costs only accounts for 37 hydrants, as many hydrants are listed within the Townships asset management system as a $0 replacement cost.

Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.



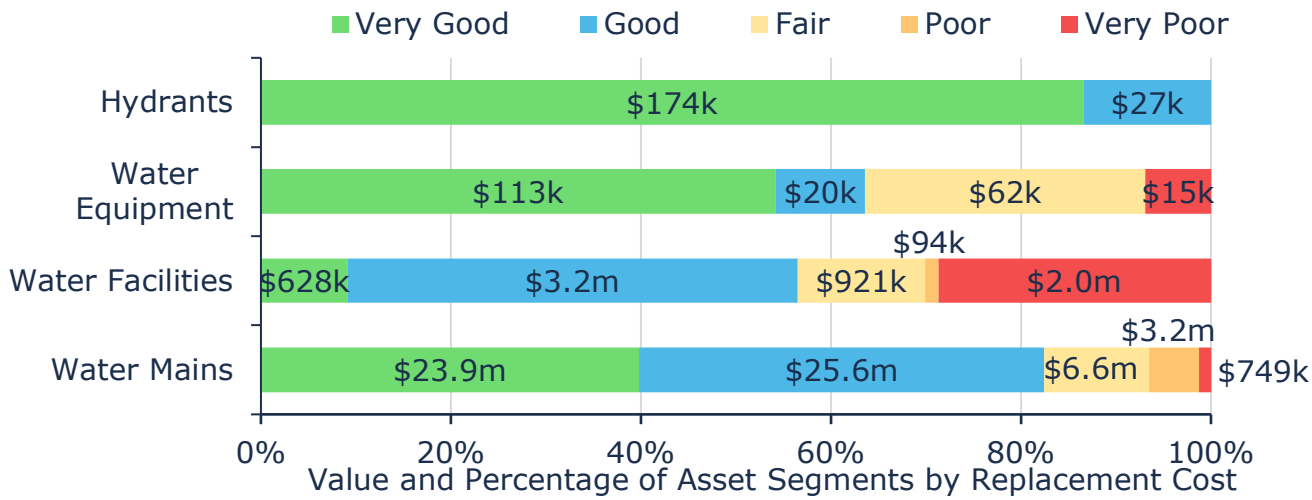
The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.

To ensure that the Township's Water Network continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the Water Network.

Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently. The following describes the Township's current approach:

- Water assets are assessed once a year based on the age of the asset and the number of complaints received to determine asset condition.
- Fire hydrants are flushed biannually
- Watermain repairs are done reactively based on recorded breaks



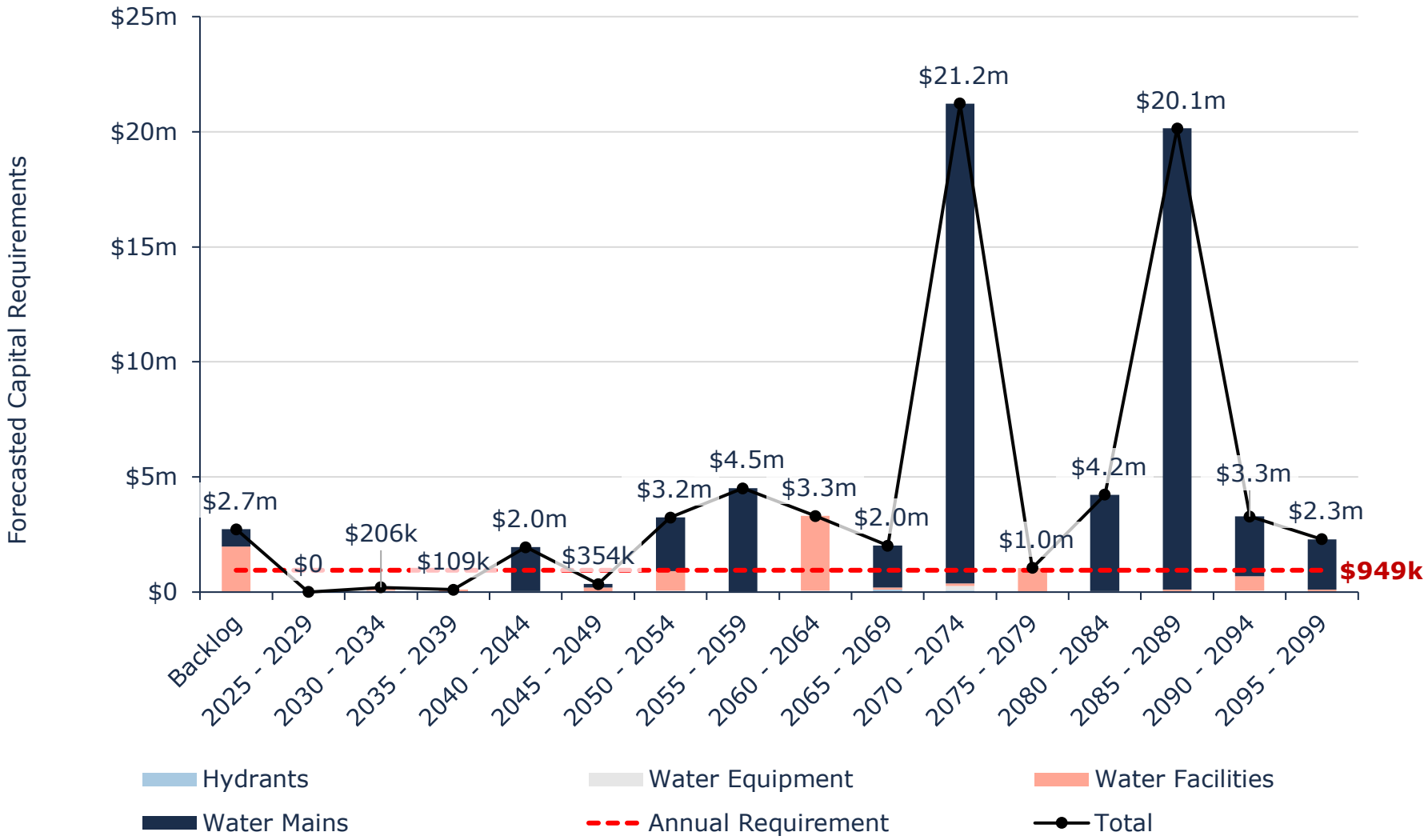
Lifecycle Management Strategy

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

Activity Type	Description of Current Strategy
Maintenance	Watermain flushing is completed every spring. Hydrant flushing is completed every Spring and Fall. Valve turning is also completed.
Repair	Watermain breaks and other water assets are repaired reactively dependent on servicing requirements or unexpected breaks.
Replacement	Replacement activities are identified based on the age and size of the water main and the age or condition of the associated water assets.

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low $7,020,614 (10%)	5 - 7 Low $9,584,416 (14%)	8 - 9 Moderate $38,673,369 (58%)	10 - 14 High $6,973,238 (10%)	15 - 25 Very High $4,956,024 (7%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Financial Reinvestment

There is not sufficient funding available in the Township to perform the required maintenance on the water network.

Climate Change & Extreme Events

Increased summer temperatures and irregular freeze-thaw cycles may place a strain on the water network.

Current Levels of Service

The following tables identify the Township's current level of service for the Water Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the Water Network.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps, of the user groups or areas of the Township that are connected to the municipal water system	See Appendix B
	Description, which may include maps, of the user groups or areas of the Township that have fire flow	See Appendix B
Reliability	Description of boil water advisories and service interruptions	No boil water advisories were issued during the time period covered by this AMP

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the Water Network.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	% of properties connected to the municipal water system	37%
	% of properties where fire flow is available	Greater than 95%
	% of water system that is in fair or better condition	91%
	% of water system that is in poor or very poor condition	9%
Reliability	# of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system	0
	# of connection-days per year where water is not available in a region of the municipality due to water main breaks compared to the total number of properties connected to the municipal water system	0[5]
	# of watermain breaks	6
Performance	Target vs. Actual Capital Reinvestment Rate	1.4% vs. 1.1%

[5] 2024 saw only 2.5 hours of lost water connection time

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

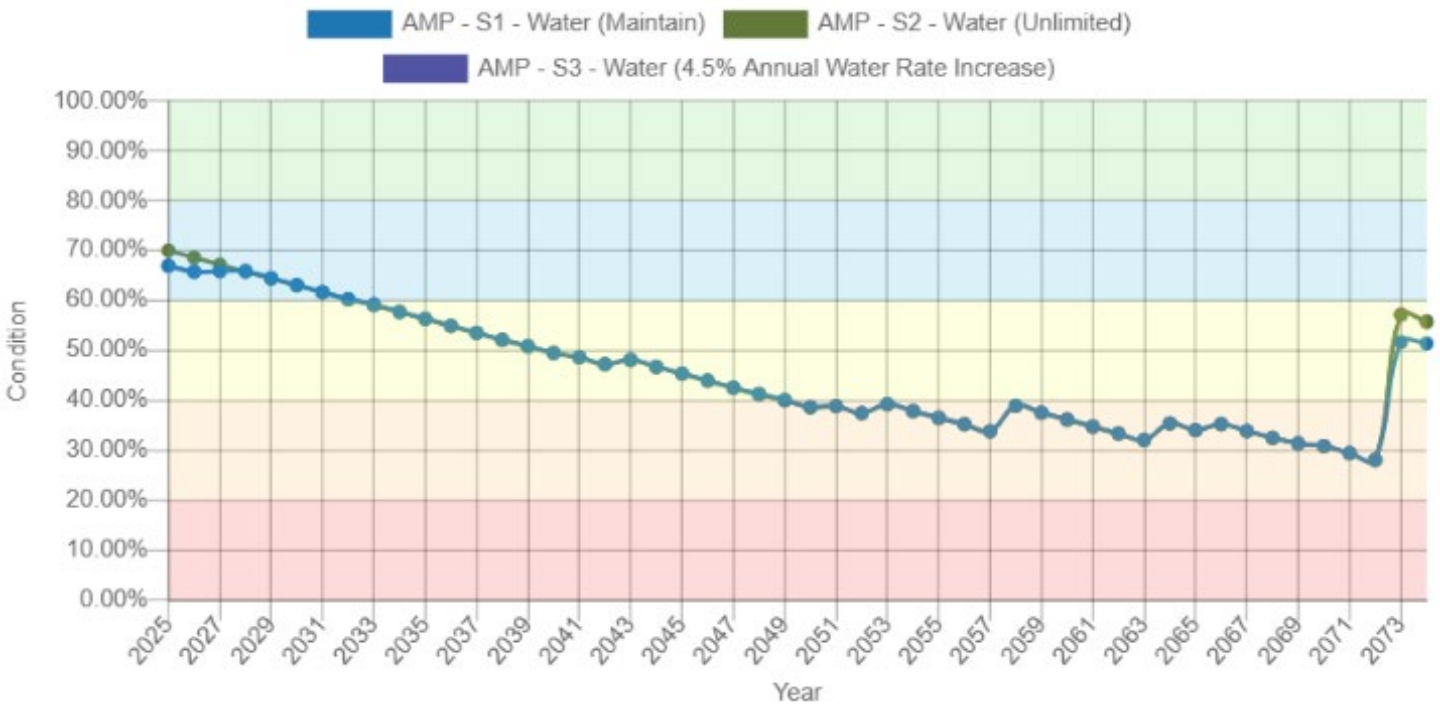
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for the water network. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Water network capital funding is maintained at $729k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 4.5% Water Rate Increases	Increase total revenues from water rates by 4.5% annually for a period of 10 years • Water network capital funding is gradually increased from $729k in 2025 to $1.9m in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	67%	56%	39%
	Average Asset Risk	9.0	8.9	9.6
	Annual Investment Required		$729,000	
	Average Capital re-investment rate		1.1%	
Scenario 2 (Unlimited)	Average Condition	67%	56%	39%
	Average Asset Risk	9.0	8.9	9.6
	Annual Investment Required		$949,000	
	Average Capital re-investment rate		1.4%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	67%	56%	39%
	Average Asset Risk	9.0	8.9	9.6
	Annual Investment Required		$1,941,000	
	Average Capital re-investment rate		2.9%	



Note: *Replacement events are only initiated in the models when the asset reaches a pre-determined trigger, such as a Condition Rating of 0. Regardless of funding, the system will not initiate a replacement prematurely. Due to the relatively high condition ratings of water assets, combined with long estimated useful lives, large deviations in conditions between the different scenarios will not be seen until the 2080s (outside of the model timeframe).*

Sanitary Network

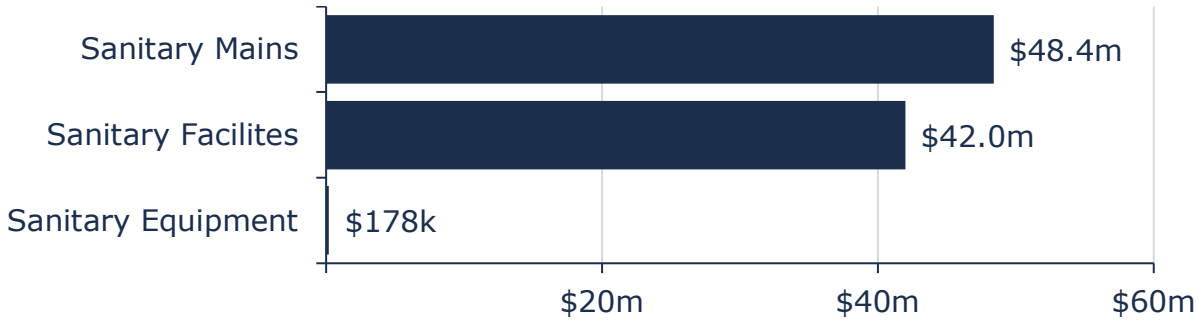
The sewer services provided by the Township include the following:

- Sanitary equipment
- Sanitary facilities
- Sanitary mains

Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Township's Sanitary Network inventory.

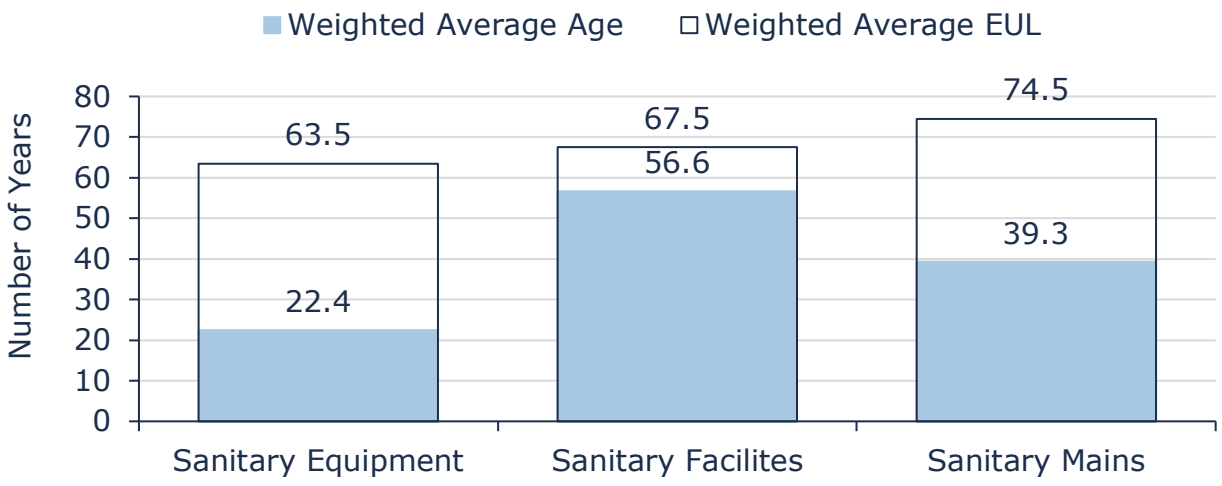
Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Sanitary Equipment	3	CPI	$178,274
Sanitary Facilites	4	CPI	$41,986,559
Sanitary Mains[6]	39,707 m	CPI	$48,382,851
			$90,547,684



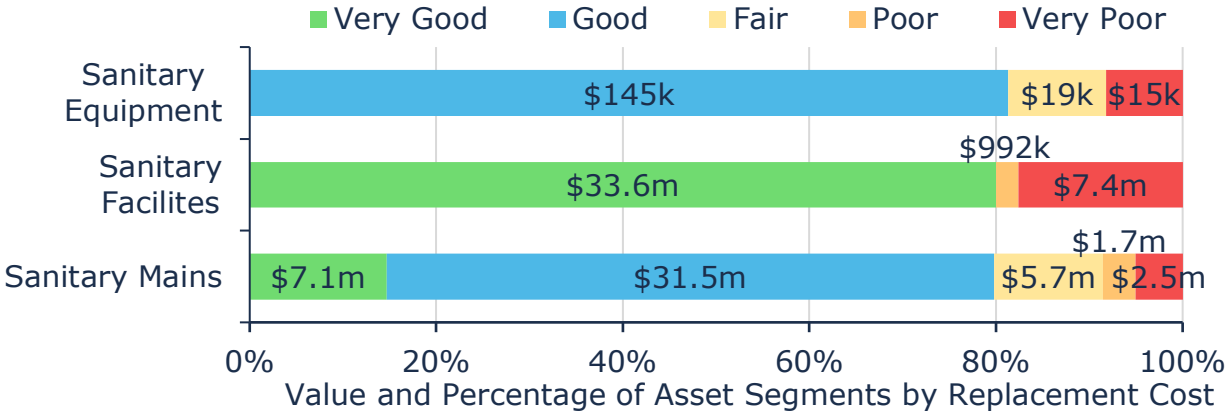
Asset Condition & Age

The table below identifies the current average condition and source of available condition data for each asset segment. The Average Condition (%) is a weighted value based on replacement cost.

[6] Sanitary Mains segment includes both gravity mains (37,564m) and forcemains (2,143m).



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's Sanitary Network continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the Sanitary Network.

Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently. The following describes the Township's current approach:

- CCTV inspections are completed for sanitary mains; 80% of the system was reviewed in 2015, another 32% of the system was assessed in 2019.
- CCTV inspections of sanitary mains are completed before large capital road reconstructions
- The Township plans to conduct CCTV inspections of sanitary mains every 5 years.

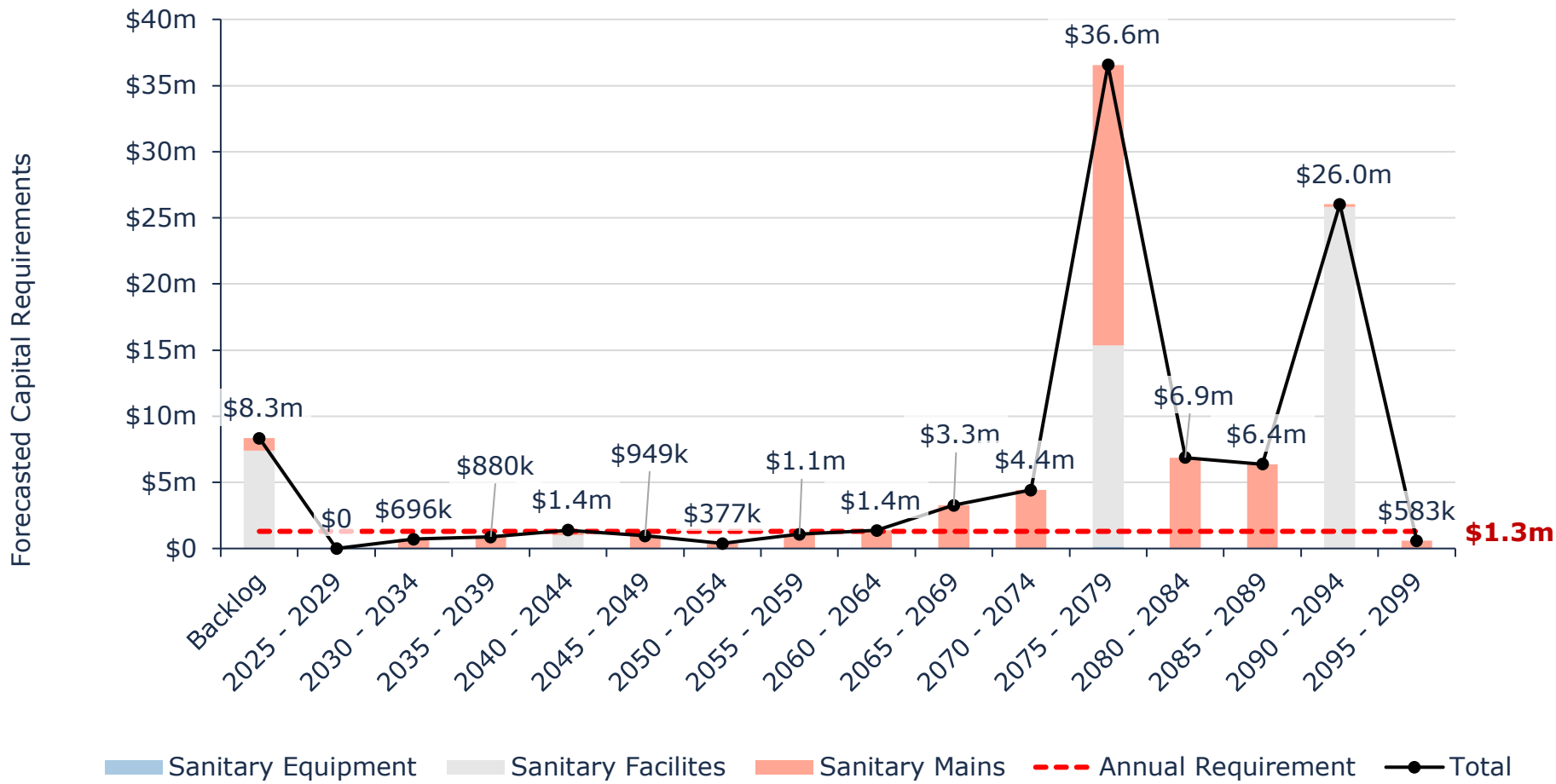
Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance	Full pipe system flushing is performed every 5 years based on an annual rotation
Rehabilitation	The Township is planning to adopt a relining program
Replacement	Age and historical issues determine when sanitary network assets should be replaced

Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

Risk & Criticality

The following figure provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2024 inventory data. See Appendix C for the criteria used to determine the risk rating of each asset.

1 - 4 Very Low $8,118,669 (9%)	5 - 7 Low $42,027,540 (46%)	8 - 9 Moderate $15,862,220 (18%)	10 - 14 High $9,040,147 (10%)	15 - 25 Very High $15,499,108 (17%)

This is a high-level model developed for the purposes of this AMP and Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

Risks to Current Asset Management Strategies

The following section summarizes key trends, challenges, and risks to service delivery that the Township is currently facing:

Asset Data & Information

No recent condition data is available for the sanitary network. Staff plan to complete CCTV inspections every 5 years going forward.

Lifecycle Management Strategies

There are currently no lifecycle management strategies in place for the sanitary network. It is a challenge to find the right balance between maintenance, capital rehabilitation, and the replacement of assets.

Current Levels of Service

The following tables identify the Township's current level of service for the Sanitary Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected for this AMP.

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the Sanitary Network.

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps, of the user groups or areas of the Township that are connected to the municipal wastewater system	See Appendix B
Reliability	Quality of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Quality testing is performed. The Township has seen significant issues in the Blyth area due to failures of the sewage treatment plant. Repairs planned for 2026.[7]

Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the Sanitary Network.

Service Attribute	Technical Metric	Current LOS (2024)
Scope	% of properties connected to the municipal wastewater system	36%
	% of sanitary sewers flushed annually	10%
	# of sanitary sewer backups annually	0
Reliability	# of connection-days per year having wastewater backups compared to the total number of properties connected to the municipal wastewater system	0
	# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	6[8]
	% of wastewater system that is in fair or better condition	86%
	% of wastewater system that is in poor or very poor condition	14%
Performance	Target vs. Actual Capital Reinvestment Rate	1.4% vs. 0.7%

[7] Blyth treatment plant is in a failing condition, with an expected full $4.5m replacement in 2026.

[8] All 6 effluent violations were bypass events at the Blyth location, lasting a total of 5,224 hours. No violations at the Wingham location.

Proposed Levels of Service

As per O. Reg. 588/17, by July 1, 2025, municipalities are required to consider proposed levels of service (PLOS), discuss the associated risks and long-term sustainability of these service levels, and explain the Township's ability to afford the PLOS.

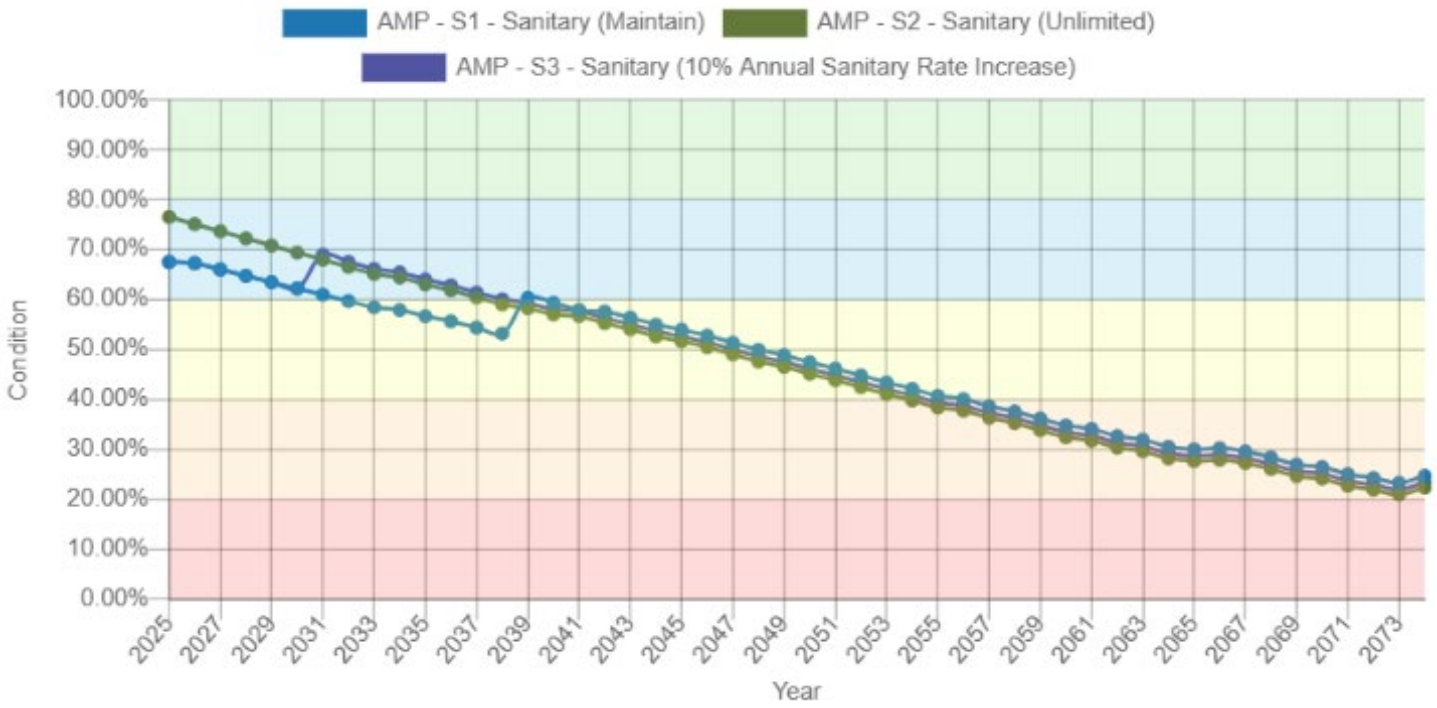
The below tables and graphs explain the proposed levels of service scenarios that were analyzed for the sanitary network. Further PLOS analysis at the portfolio level can be found in the previous section Proposed Levels of Service Analysis.

PLOS Scenarios Analyzed

Scenario	Description
Scenario 1: Maintain	Maintain 2025 capital investment levels and analyze resulting asset conditions over time. • Sanitary network funding is maintained at $650k per year
Scenario 2: Unlimited	Assume no limitation on capital investments and analyze the resulting conditions and annual spending recommendations over time.
Scenario 3: 10% Sanitary Rate Increases	Increase total revenues from sanitary rates by 10% annually for a period of 10 years • Sanitary network funding is gradually increased from $650k in 2025 to $3.2m in 2035

PLOS Analysis Results

Scenario	Technical LOS Outcomes	Initial Value (2025)	10 Year Projection (2035)	25 Year Projection (2050)
Scenario 1 (Maintain)	Average Condition	68%	57%	47%
	Average Asset Risk	8.8	10.6	11.2
	Annual Investment Required		$650,000	
	Average Capital re-investment rate		0.7%	
Scenario 2 (Unlimited)	Average Condition	68%	63%	45%
	Average Asset Risk	8.8	9.4	11.6
	Annual Investment Required		$1,295,000	
	Average Capital re-investment rate		1.4%	
Scenario 3 (5% Tax Revenue Increase)	Average Condition	68%	64%	46%
	Average Asset Risk	8.8	8.9	11.2
	Annual Investment Required		$3,210,000	
	Average Capital re-investment rate		3.5%	



Note: *Replacement events are only initiated in the models when the asset reaches a pre-determined trigger, such as a Condition Rating of 0. Regardless of funding, the system will not initiate a replacement prematurely. Due to the relatively high condition ratings of sanitary assets, combined with long estimated useful lives, large deviations in conditions between the different scenarios will not be seen until the late 2070s to 2080s (outside of the model timeframe).*

Impacts of Growth

Understanding the key drivers of growth and demand will allow the Township to plan for new infrastructure more effectively, and the upgrade or disposal of existing infrastructure. Small population and employment growth is expected. The costs of growth should be considered in long-term funding strategies that are designed to maintain the current level of service.

Description of Growth Assumptions

The demand for infrastructure and services will change over time based on a combination of internal and external factors. Understanding the key drivers of growth and demand will allow the Township to plan for new infrastructure more effectively, and the upgrade or disposal of existing infrastructure. Increases or decreases in demand can affect what assets are needed and what level of service meets the needs of the community.

Township of North Huron Official Plan (Consolidated December 2022)

The Township of North Huron adopted an Official Plan to provide a legislative basis to implement the community's visions and goals. The policies included in the Plan are consistent with the Provincial Policy Statement and conform with the County of Huron Official Plan. Such policies are intended to identify appropriate locations for residential, commercial, and industrial development, while ensuring the protection of resources and the community's health.

The Consolidated Official Plan was adopted by the Township on September 6th, 2022 and approved by the County of Huron on October 5th, 2022.

The Township of North Huron was formed by the amalgamation of three smaller municipalities, and consists of agricultural areas, a small village, one town and several small hamlets. The Official Plan considers the desire to preserve the natural features of the Township, while promoting the longer-term future and flexibility of agriculture, and strengthening the economy.

The desire to live, work and retire in small communities is a driving factor in directing future development in North Huron. The settlement areas of Wingham and Blyth are the primary focus for urban development and will provide increased employment opportunities. Any new residential development proposed outside of these areas will be directed to already existing hamlets and the settlement area of Hutton Heights. East Wawanosh will remain a rural area for agricultural activities.

The development of urban places is promoted based on the level of service they provide. All non-farm uses are directed to urban settlement areas, to minimize conflicts with the agricultural area. The Township also intends to provide adequate land for recreational services to serve the needs of the residents.

Huron County Official Plan (October 2023)

The Huron County Official Plan was consolidated on October 18th, 2023. Population growth for the Township of North Huron is defined in the County Plan. The population of North Huron is expected to reach 5,057 people by 2041, an increase of 125 people from 2016. Employment within the Township is expected to grow by 81 jobs between 2016 and 2041, resulting in a total number of 3,262 jobs by 2041.

The following table outlines the population and employment forecasts allocated to the Township of North Huron.[9]

	2016	2023	2026	2031	2036	2041
Forecasted Population	4,932	4,982	5,040	5,082	5,082	5,057
Forecasted Employment	3,181	3,213	3,251	3,278	3,278	3,262
% Increase over 2016 Baseline	*Baseline*	+ 1.0%	+ 2.2%	+ 3.0%	+ 3.0%	+ 2.5%

Impact of Growth on Lifecycle Activities

As no significant growth is projected in North Huron, it is recommended the Township maintain existing lifecycle activities and investigate optimization opportunities. No significant changes are anticipated as a result of population change.

[9] The above projections are based on 2016 census data. More recent population statistics from the 2023 Census is slightly higher than the suggested projections. The recorded population in the Township of North Huron is 5,052 in 2023.

Financial Strategy

Financial Strategy Overview

For an asset management plan to be effective and meaningful, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Township of North Huron to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

This report develops such a financial plan by presenting several scenarios for consideration and culminating with final recommendations. As outlined below, the scenarios presented model different combinations of the following components:

1. The financial requirements for:
    a. Existing assets
    b. Existing service levels
    c. Requirements of contemplated changes in service levels
    d. Requirements of anticipated growth
2. Use of traditional sources of municipal funds:
    a. Tax levies
    b. User fees
    c. Debt
    d. Development charges
3. Use of non-traditional sources of municipal funds:
    a. Reallocated budgets
    b. Partnerships
    c. Procurement methods
4. Use of Senior Government Funds:
    a. Canada Community Building Fund (CCBF)
    b. Ontario Communicty Infrastructure Fund (OCIF)
    c. Annual grants

Note: Periodic grants are normally not included due to Provincial requirements for firm commitments. However, if moving a specific project forward is wholly dependent on receiving a one-time grant, the replacement cost included in the financial strategy is the net of such grant being received.

Only reliable and predictable sources of capital funding are used to benchmark funds that may be available on any given year. The funding sources used in this financial strategy include:

- Revenue from taxation allocated for capital purposes
- Revenue from water and wastewater rates allocated for capital purposes
- The Ontario Community Infrastructure Fund (OCIF)

- The Canada Community Benefits Fund (CCBF), formerly the Federal Gas Tax Fund

If the financial plan component results in a funding shortfall, the Province requires the inclusion of a specific plan as to how the impact of the shortfall will be managed. In determining the legitimacy of a funding shortfall, the Province may evaluate the Township's approach to the following:

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

Annual Requirements & Capital Funding

This financial strategy is designed around two key elements: the average annual capital requirement, and the average annual capital funding currently available. The annual requirement is calculated based on the replacement cost and service life of each asset, and where possible, includes lifecycle modeling through proposed levels of service. These values are then aggregated to determine category-level funding needs.

Annual requirements may be calculated based on a "replacement only" scenario, in which capital costs are only incurred at the construction and replacement of each asset. However, for road surfaces, lifecycle management events and strategies have been developed to identify potential capital cost avoidances that are realized through strategic rehabilitation and renewal of the Township's main assets in these categories to achieve the desired levels of service if implemented.

The following outlines the difference between the two scenarios:

1. **Replacement Only Scenario**: Based on the assumption that assets deteriorate and – without regularly scheduled maintenance and rehabilitation – are replaced at the end of their service life.
2. **Lifecycle Strategy Scenario**: Based on the assumption that lifecycle activities are performed at strategic intervals to extend the service life of assets until replacement is required.

The annual requirements represent the amount the Township should allocate annually to each asset category to meet replacement needs as they arise, prevent infrastructure backlogs and achieve long-term sustainability based on the proposed levels of service outlined the *Proposed LOS* section.

The table below shows the total average annual capital requirements for existing assets in each category, based on a full funding strategy.

Asset Category	Annual Capital Requirements
Bridges & Culverts	248,000
Buildings & Facilities	1,893,000
Information Technology	77,000
Land Improvements	58,000
Machinery & Equipment	460,000
Road Network	1,249,000
Storm Network	354,000
Vehicles	434,000
Water Network	949,000
Sanitary Network	1,295,000
Total	**7,017,000**

Financial Profile: Tax Funded Assets

Current Funding Position

The following tables show, by asset category, North Huron's average Capital expenditure requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

Asset Category	Avg. Annual Requirement	Annual Funding Available				
		Taxes to Capital	CCBF	OCIF	Total Available	Annual Deficit
Bridges & Culverts	**248,000**	75,000	0	0	**75,000**	**173,000**
Buildings & Facilities	**1,893,000**	120,000	0	0	**120,000**	**1,773,000**
Information Technology	**77,000**	50,000	0	0	**50,000**	**27,000**
Land Improvements	**58,000**	40,000	0	0	**40,000**	**18,000**
Machinery & Equipment	**460,000**	355,000	0	0	**355,000**	**105,000**
Road Network	**1,249,000**	300,000	66,400	162,000	**528,400**	**720,600**
Storm Network	**354,000**	0	33,200	97,200	**130,400**	**223,600**
Vehicles	**434,000**	410,000	0	0	**410,000**	**24,000**
Total	**4,773,000**	**1,350,000**	**99,600**	**259,200**	**1,708,800**	**3,064,200**

The average annual investment requirement for the above categories is $4.77 million. Annual revenue currently allocated to these assets for capital purposes is $1.71 million leaving an annual deficit of $3.06 million. Put differently, these infrastructure categories are currently funded at 35.8% of their long-term requirements.

Proposed LOS Funding Requirements

In 2025, North Huron had annual budgeted tax revenues of $7.75 million. As illustrated in the following table, without consideration of any other sources of revenue or cost containment strategies, full funding of the annual requirements would require the following tax change over time:

Asset Category	Tax Change Required for Full Funding
Bridges & Culverts	2.2%
Buildings & Facilities	22.9%
Information Technology	0.3%
Land Improvements	0.2%
Machinery & Equipment	1.4%
Road Network	9.3%
Storm Network	2.9%
Vehicles	0.3%
Total	**39.5%**

Although a 39.5% total increase in taxes over time would be required to achieve full funding on an annual basis, the Township has instead chosen to adopt a straightforward, incremental funding approach that limits impact on taxpayers and builds financial resilience while continuing data collection and asset verification efforts. Rather than setting the annual contribution based solely on the calculated infrastructure gap, this strategy reflects a balanced approach to infrastructure sustainability, affordability, and taxpayer capacity.

The Township plans to increase annual tax contributions towards capital by 5.0% per year over the next 10 years. The corresponding annual tax rate increase to achieve this funding goal will be applied as opposed to a full funding strategy that would result in a much less preferable tax increase. Over the 10-year period, the cumulative effect of these 5.0% annual increases is expected to significantly reduce the funding deficit for tax-supported assets.

As shown in the Current Funding Position table, the Township is currently allocating $1.35 million towards capital from tax funding annually. A 5% annual increase in this allocation over 10 years will result in an annual contribution of $2.2 million from taxes annually after 10 years. Considering the Township had budgeted annual tax revenues of $7.75 million in 2025, in order to achieve this level of funding, this would equate to a 1.1% annual tax increase over the next 10 years.

Our scenario modeling includes capturing the above contributions towards capital and allocating them to the infrastructure deficit outlined above The annual infrastructure deficit for tax funded assets would decrease to about $2.2 million

after 10 years from this strategy. The table below presents how the recommended tax increase was calculated:

Annual Tax Impact for 10-Year Strategy	
Target Capital Funding from Taxes in 10 years (5% annual increase)	**$2,199,008**
Less: Current Funding from Taxes	($1,350,000)
Current Funding Gap	**849,008**
Total Tax Increase Required to Achieve Target Level of Funding	11.0%
Annually:	**1.1%**

Financial Strategy Recommendations

After considering all available options, the Township's preferred funding strategy is to increase the annual tax contribution toward capital by 5.0% per year over the next 10 years. In order to achieve this, it involves the Township increasing capital funding available through taxes and closing the infrastructure deficit by about $849 thousand in the next 10 years by:

a) increasing tax revenues by 1.1% each year for the next 10 years solely for the purpose of phasing in capital funding towards the proposed levels of service for asset categories covered in this section of the AMP.
b) allocating the current CCBF and OCIF revenue as outlined previously.
c) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

1. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. By Provincial AMP rules, this periodic funding cannot be incorporated into an AMP unless there are firm commitments in place. We have included OCIF formula-based funding, if applicable, since this funding is a multi-year commitment[10].
2. The Township plans to fill any funding gaps over the time period of this recommendation. Although most grants are not considered sustainable or predictable, the Township recognizes this risk and this funding strategy represents the Township's preferred and proactive approach to provide a

[10] The Township should take advantage of all available grant funding programs and transfers from other levels of government. While OCIF has historically been considered a sustainable source of funding, the program is currently undergoing review by the provincial government. Depending on the outcome of this review, there may be changes that impact its availability.

stable path to reducing the infrastructure deficit while maintaining affordability and predictability for taxpayers.

3. Comparatively, a 39.5% total increase in taxes over a 10-year time frame would equate to a 3.4% annual increase in taxes if the Township were to achieve full funding of the proposed levels of service. However, the Township's preferred approach allows for rates to increase in a controlled manner and limits the burden on taxpayers. With the selected 10-year strategy, the Township hopes to demonstrate a prudent balance between fiscal capacity and infrastructure sustainability.

While an infrastructure deficit of close to $2.2 million will still remain for tax funded assets at the end of the 10-year period, the gap will continue to narrow year-over-year as the annual capital transfer grows. The recommendations do require prioritizing capital projects to fit the resulting annual funding available.

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

Financial Profile: Rate Funded Assets

Current Funding Position

The following table shows, by asset category, North Huron's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding of the proposed levels of service for assets funded by rates.

Asset Category	Avg. Annual Requirement	Annual Funding Available					
		Rates (Total)	To Operations	CCBF	OCIF	Total Available	Annual Deficit
Water Network	949,000	2,193,000	-1,725,000	66,400	194,400	728,800	**220,200**
Sanitary Network	1,295,000	1,606,000	-1,150,000	0	194,400	650,400	**644,600**
Total	**2,244,000**	**3,799,000**	**-2,875,000**	**66,400**	**388,800**	**1,379,200**	**864,800**

The combined average annual investment requirement for the above categories is $2.24 million to meet the proposed levels of service. Annual revenue currently allocated to these assets for capital purposes is $1.38 million leaving an annual deficit of $864 thousand. Put differently, these infrastructure categories are currently funded at 61.5% of their long-term/ideal requirements.

Full Funding Requirements

In 2025, North Huron had budgeted annual water revenues of $2.19 million and budgeted annual sanitary revenues of $1.61 million. As illustrated in the table below, without consideration of any other sources of revenue, achieving the funding required for the proposed levels of service would require the following changes over time:

Asset Category	Rate Change Required for Full Funding
Water Network	10.0%
Sanitary Network	40.1%

Although the Township considered the above options, the North Huron has instead opted to take an alternative funding strategy for both the Water and Sanitary Networks. The Township intends to implement a 4.5% flat annual water rate increase and a 10.0% flat annual wastewater rate increase over the next 10 years. This proactive approach will allow the Township to exceed the minimum 100% funding level required to sustain its existing infrastructure well within 10 years.

The Township recognizes that these annual increases will result in total revenues surpassing the 100% sustainable funding thresholds for each system within the planning horizon. This is intentional and reflects the significant infrastructure backlog and the anticipated capital demands associated with the wastewater treatment and pumping infrastructure over the coming decade.

In addition, the Township has low confidence in certain asset condition and cost data, which limits the precision of model-based funding targets at this time. Rather than risk underfunding critical assets while data quality improves, the Township has chosen to implement a structured rate increase to ensure financial stability and readiness for upcoming infrastructure demands. To offset risk of reliability in current data for each system, the Township intends to be proactive in this rate setting strategy while working to improve internal data in coming years.

As a result of both strategies, the water network will achieve full funding of the proposed levels of service within 3 years and the sanitary network will achieve full funding within 4 years. The resulting surplus after these years specified and beyond to year 10 of this strategy for each network will be dedicated to address the infrastructure backlog and future anticipated capital demands for each system. The additional revenue generated will provide the necessary funding flexibility to manage both the backlog and future high-cost capital projects without over-reliance on external debt or one-time funding sources if current data proves to be unreliable.

Financial Strategy Recommendation

Considering all options, the Township's preferred funding approach for the water and sanitary will be to apply a consistent annual increase to rates for each system over the next 10 years. This involves the proposed levels of service being achieved the following way:

a) increasing rate revenues by 4.5% for the Water network and 10.0% for the Sanitary network each year for the next 10 years solely directed towards capital reinvestment to the asset categories covered in this section of the AMP.
b) allocating the current CCBF and OCIF revenue as outlined previously.
c) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

1. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. This periodic funding should not be incorporated into an AMP unless there are firm commitments in place.

2. We realize that raising rate revenues for infrastructure purposes will be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.
3. Any increase in rates required for operations would be in addition to the above recommendations. The Township plans to dedicate all incremental rate revenues from this strategy towards capital funding.
4. The Township is committed to demonstrating proactive financial planning and continuous improvement in asset management data accuracy with the steps taken in this strategy.

The following table summarizes the projected funding position for both networks as a result of these funding strategies over the 10-year period:

North Huron 10-Year Funding Impact

Asset Category	Annual Rate Increase	# of Years until Full Funding of Annual Req	Total Annual Require-ments	Capital Funding Available in Year 10	Surplus in Year 10*
Water Network	4.5%	3	$949,000	$1,941,462	$992,462
Sanitary Network	10.0%	4	$1,295,000	$3,209,950	$1,914,950

Use of Debt

Debt can be strategically utilized as a funding source within the long-term financial plan. The benefits of leveraging debt for infrastructure planning include:

a) the ability to stabilize tax & user rates when dealing with variable and sometimes uncontrollable factors
b) equitable distribution of the cost/benefits of infrastructure over its useful life
c) a secure source of funding
d) flexibility in cash flow management

Debt management policies and procedures with limitations and monitoring practices should be considered when reviewing debt as a funding option. In efforts to mitigate increasing commodity prices and inflation, interest rates have been rising. Sustainable funding models that include debt need to incorporate the now current realized risk of rising interest rates

The revenue options outlined in this plan do not require North Huron to issue any debt.

Use of Reserves

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

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

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

Asset Category	Balance at December 31, 2023[11]
Information Technology	$24,220
Land Improvements	$230,791
Machinery & Equipment	$104,153
Storm Network	$1,114,662
Total Reserves:	**$1,473,816**

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

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

These reserves are available for use by applicable asset categories during the phase-in period towards achieving the proposed levels of service. This allows the scenarios to assume that, if required, available reserves and debt capacity can be used for high priority and emergency infrastructure investments in the short- to medium-term.

[11] 2024 year-end balances were unavailable at time of publication, therefore, year-end 2023 balances are represented.

Recommendations

Financial Strategies

- Review the financial targets set for proposed levels of service for the asset categories analyzed. This involves:
  - For tax-funded assets, increasing taxes by 1.1% annually for a period of 10 years
  - For water rate-funded assets, increasing the water flat rate by 4.5% annually for a period of 10 years
  - For sanitary rate-funded assets, increasing the sanitary flat rate by 10% annually for a period of 10 years

- Continued allocation of OCIF and CCBF funding as previously outlined

- Using risk frameworks and staff judgement to prioritize projects, particularly to aid in elimination of existing infrastructure backlogs

- Although difficult to capture, inflation costs, supply chain issues, and fluctuations in commodity prices will also influence capital expenditures.

Asset Data

1. Continuously review, refine, and calibrate lifecycle and risk profiles to better reflect actual practices and improve capital projections. In particular:
   - the timing of various lifecycle events, the triggers for treatment, anticipated impacts of each treatment, and costs
   - the various attributes used to estimate the likelihood and consequence of asset failures, and their respective weightings
2. Asset management planning is highly sensitive to replacement costs. Periodically update replacement costs based on recent projects, invoices, or estimates, as well as condition assessments, or any other technical reports and studies. Material and labour costs can fluctuate due to local, regional, and broader market trends, and substantially so during major world events. Accurately estimating the replacement cost of like-for-like assets can be challenging. Ideally, several recent projects over multiple years should be used. Staff judgement and historical data can help attenuate extreme and temporary fluctuations in cost estimates and keep them realistic.
3. Like replacement costs, an asset's established serviceable life can have dramatic impacts on all projections and analyses, including condition, long-range forecasting, and financial recommendations. Periodically reviewing and

updating these values to better reflect in-field performance and staff judgement is recommended.

Risk and Levels of Service

1. Risk models and matrices can play an important role in identifying high-value assets, and developing an action plan which may include repair, rehabilitation, replacement, or further evaluation through condition assessments. As a result, project selection and the development of multi-year capital plans can become more strategic and objective. Initial models have been built into Citywide for all asset groups. These models reflect current data, which was limited. As the data evolves and new attribute information is obtained, these models should also be refined and updated.
2. Available, data on current performance should be centralized and tracked to support any calibration of service levels ahead of O. Reg. 588's 2025 requirements on proposed levels of service.
3. Staff should monitor evolving local, regional, and environmental trends to identify factors that may shape the demand and delivery of infrastructure programs. These can include population growth, and the nature of population growth; climate change and extreme weather events; and economic conditions and the local tax base. This data can also be used to revise service level targets.

Appendix A – 10-year Capital Requirements

Capital Requirements for Current LOS

The tables below summarize the projected cost of lifecycle activities (rehabilitation and replacements) that may be undertaken over the next 10 years to support current levels of service. They do not consider any proposed levels of service, or available funding, and are projected based on ideal conditions. ***Note: These projections do not consider the availability of funding.***

These projections are generated in Citywide and rely on the data available in the asset register.

The projections can be different from actual capital forecasts. Consistent data updates, particularly condition, replacement costs, and regular upkeep of lifecycle models, will improve the alignment between the system generated expenditure requirements, and the Township's capital expenditure forecasts.

Road Network											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Gravel	-	-	-	-	-	-	-	-	-	-	-
HCB	-	$97k	$127k	$124k	$126k	$117k	$122k	$123k	$127k	$121k	$117k
LCB	-	-	-	-	$2k	$16k	-	-	-	$13k	-
Sidewalks	$25k	$25k	-	-	-	-	-	-	-	-	$15k
Streetlights	$17k	$25k	-	-	-	-	-	-	-	-	-
	$42k	**$148k**	**$127k**	**$124k**	**$128k**	**$132k**	**$122k**	**$123k**	**$127k**	**$135k**	**$132k**

Bridges & Culverts											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Bridges	-	-	-	-	-	$388k	-	-	-	-	-
Culverts	-	-	-	-	-	-	-	-	-	-	-
	-	**-**	**-**	**-**	**-**	**$388k**	**-**	**-**	**-**	**-**	**-**

Storm Water Network											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Storm Mains	-	-	-	-	-	-	-	-	-	-	-
	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Buildings & Facilities											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Administrative	-	-	$16k	-	-	-	-	$23k	$25k	-	-
Planning and Development	-	-	-	-	-	-	-	-	-	-	-
Protection Services	-	-	-	-	-	-	-	-	-	-	-
Recreation and Cultural	$4.0m	$89k	$72k	$5k	$11k	$89k	$87k	$65k	$7k	$96k	$89k
Transportation Services	$762k	-	-	$81k	$81k	-	-	-	-	-	-
Arena	-	-	-	-	-	-	-	-	$53k	-	-
	$4.8m	**$89k**	**$88k**	**$86k**	**$92k**	**$89k**	**$87k**	**$88k**	**$85k**	**$96k**	**$89k**

Vehicles											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Environmental Services	-	-	-	-	-	$234k	-	-	-	-	-
Protection Services	$1.1m	$43k	$338k	-	$121k	-	$21k	$639k	-	$729k	-
Recreation and Cultural	$35k	$35k	-	-	-	-	-	-	-	-	$59k
Transportation Services	$916k	$310k	$42k	$403k	$271k	$57k	-	$123k	$114k	$46k	-
	$2.1m	**$388k**	**$380k**	**$403k**	**$392k**	**$291k**	**$21k**	**$762k**	**$114k**	**$775k**	**$59k**

Machinery & Equipment											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Fire & Emergency	$366k	$284k	$60k	$6k	$37k	-	$23k	$14k	$83k	$14k	-
General Government	$73k	-	$73k	-	-	-	-	-	-	-	-
Public Works	$916k	$41k	$127k	$342k	$99k	$292k	$255k	$297k	$142k	$329k	$278k
Recreation and Cultural	$399k	$17k	$83k	-	$203k	$57k	$69k	$23k	$40k	$68k	$63k
	$1.8m	**$342k**	**$344k**	**$348k**	**$339k**	**$349k**	**$347k**	**$334k**	**$265k**	**$411k**	**$341k**

Land Improvements											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cemeteries	-	-	-	-	-	-	-	-	-	-	-
Cemetery Structures	$543k	-	-	-	-	-	-	-	-	-	-
Daycare	$49k	-	-	-	-	-	-	-	-	-	-
General Government	-	-	-	-	-	-	-	-	-	-	-
Landfill	$42k	-	-	-	-	-	-	-	-	-	-
Parks	$355k	-	-	-	-	-	-	-	-	-	-
Waste	-	-	-	-	-	-	-	-	-	-	-
	$988k	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Information Technology											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Administrative	$252k	-	-	-	-	-	-	-	-	-	-
Protection Services	$9k	-	-	-	-	-	-	-	-	-	-
Recreation and Cultural	$104k	-	-	-	-	-	-	-	-	-	-
	$365k	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Water Network											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Hydrants	-	-	-	-	-	-	-	-	-	-	-
Water Equipment	$15k	$15k	-	-	-	-	$15k	-	-	$62k	-
Water Facilities	$2.0m	-	-	-	-	$1.0m	-	$951k	-	$79k	-
Water Mains	$749k	$375k	$374k	-	-	-	-	-	-	$51k	-
	$2.7m	**$390k**	**$374k**	**-**	**-**	**$1.0m**	**$15k**	**$951k**	**-**	**$192k**	**-**

Sanitary Sewer Network											
Segment	Backlog	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sanitary Equipment	$15k	$15k	-	-	-	-	$15k	-	-	$19k	-
Sanitary Facilities	$7.4m	-	-	-	-	-	-	-	-	-	-
Sanitary Mains	$927k	-	-	$927k	-	-	-	-	-	-	$663k
	$8.3m	**$15k**	**-**	**$927k**	**-**	**-**	**$15k**	**-**	**-**	**$19k**	**$663k**

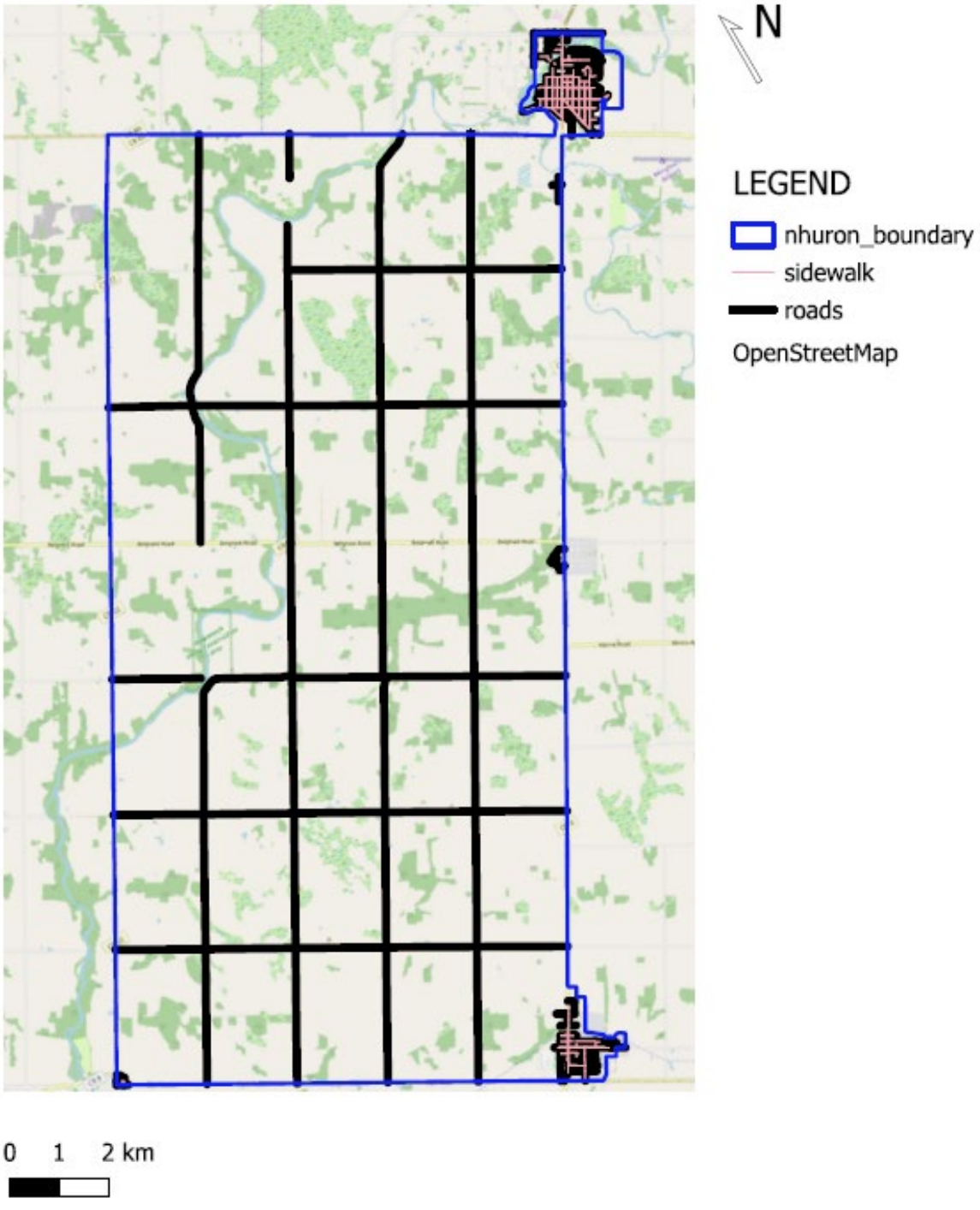
Capital Requirements for Proposed LOS

The following capital forecasts are based on gradually increasing funding according to the criteria determined by the Township in their preferred Proposed LOS. ***Note: These projections do consider the availability of funding.*** Any additions funds not needed to fund a specific year should be placed in reserves for future use for higher requirement years.

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Bridges & Culverts	-	-	-	-	$388k	-	-	-	-	-
Buildings & Facilities	$117k	$127k	$133k	$140k	$146k	$154k	$156k	$167k	$177k	$188k
Information Technology	$46k	$51k	$60k	$40k	$72k	$70k	$65k	$61k	$80k	$51k
Land Improvements	$39k	$39k	$38k	$46k	$49k	$60k	-	$76k	$64k	$76k
Machinery & Equipment	$353k	$373k	$390k	$407k	$432k	$455k	$179k	$614k	$695k	$35k
Road Network	$555k	$590k	$621k	$632k	$1.1m	$739k	$400k	$918k	$1.0m	$350k
Storm Network	-	-	-	-	-	-	-	-	-	-
Vehicles	$409k	$424k	$459k	$329k	$639k	$276k	$755k	$286k	$654k	$465k
Water Network	$655k	$109k	$1.0m	$951k	-	$15k	-	-	$192k	-
Sanitary Network	$15k	$927k	-	-	-	$15k	$7.4m	-	$19k	$663k
	$2.2m	**$2.6m**	**$2.7m**	**$2.5m**	**$2.8m**	**$1.8m**	**$9.0m**	**$2.1m**	**$2.9m**	**$1.8m**

Appendix B: Level of Service Maps

Road Network Map



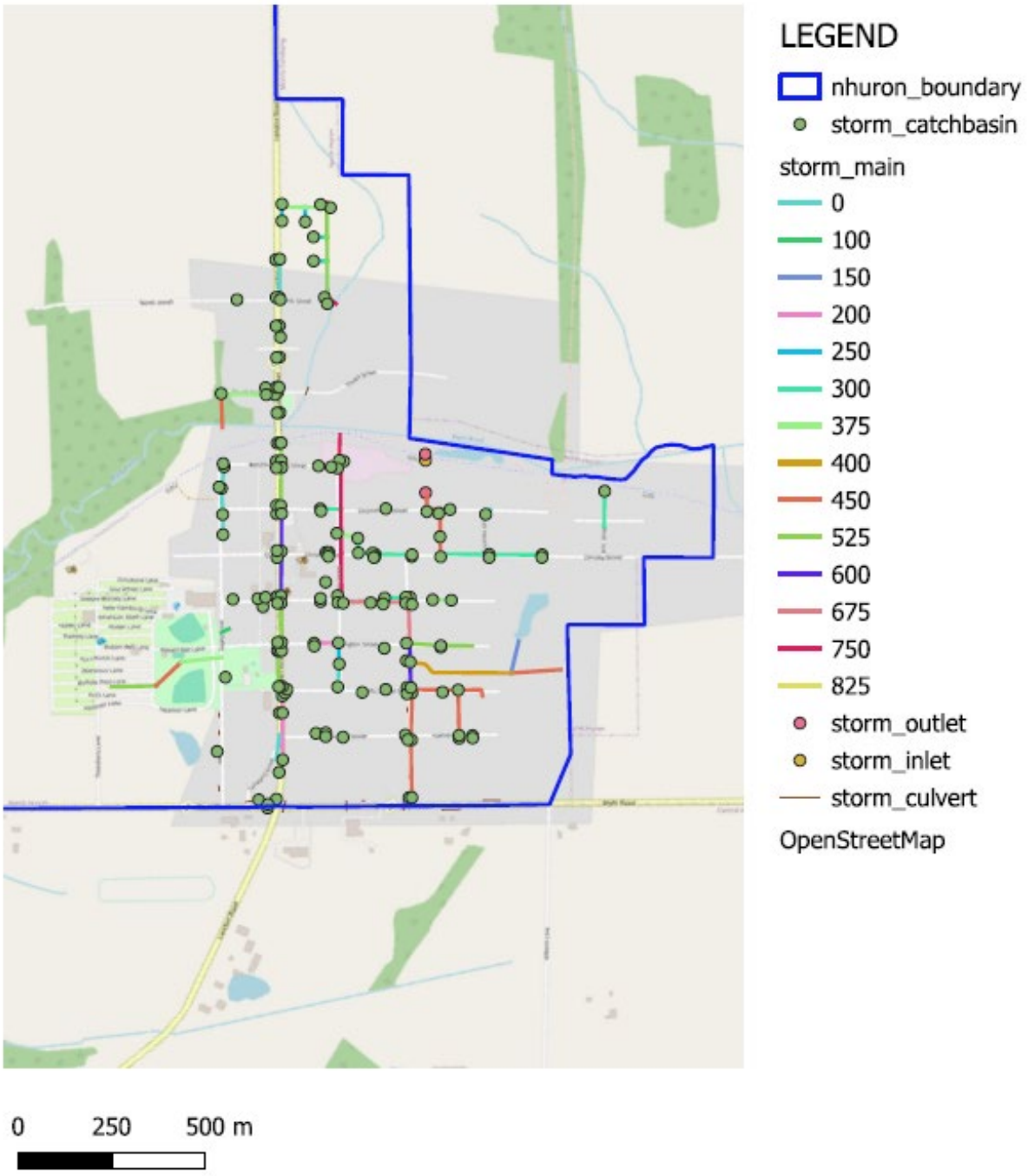
Images of Bridges in Excellent Condition

10th Line with a BCI of 96

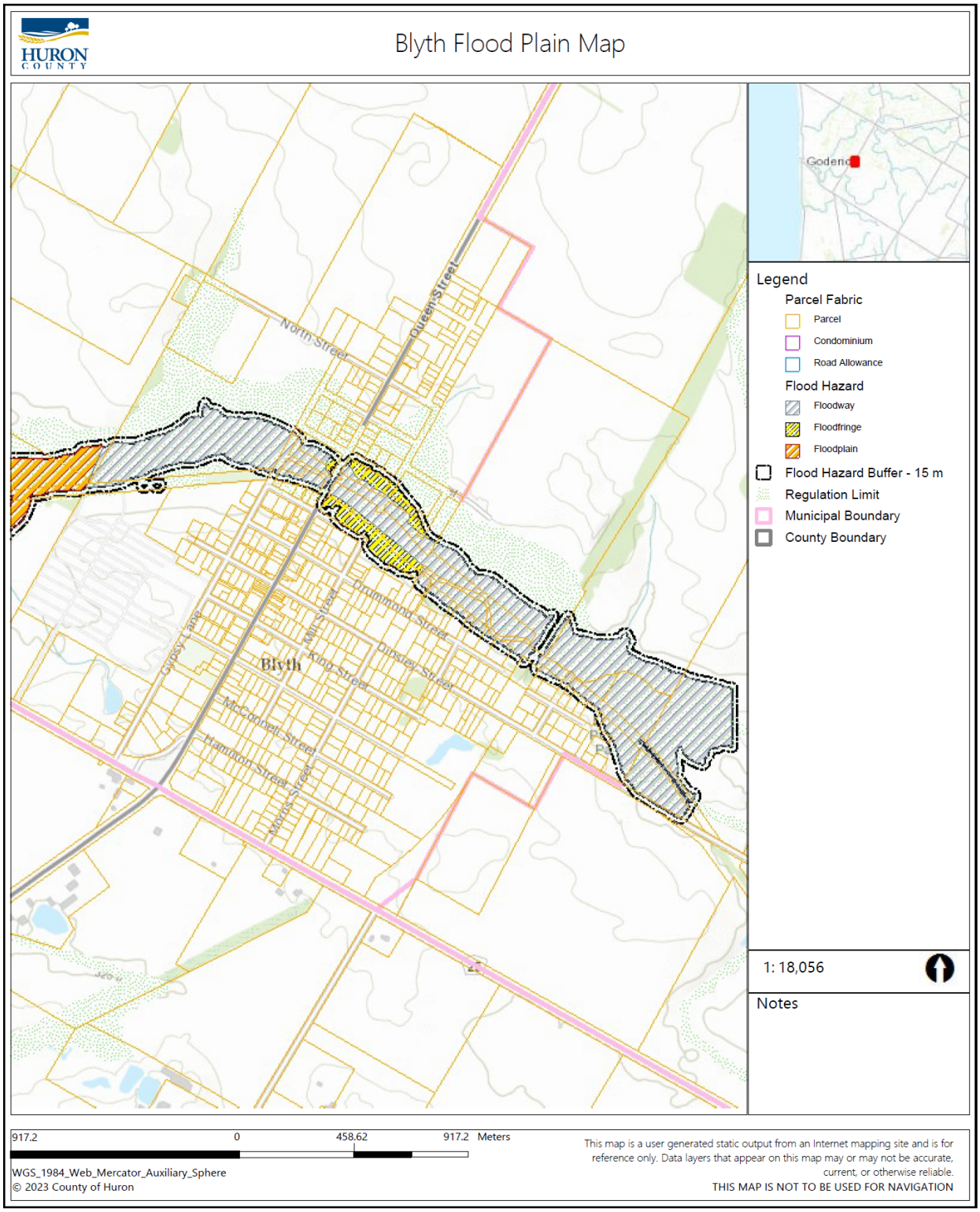
Images of Bridges in Poor Condition

Taylor Bridge with a BCI of 37

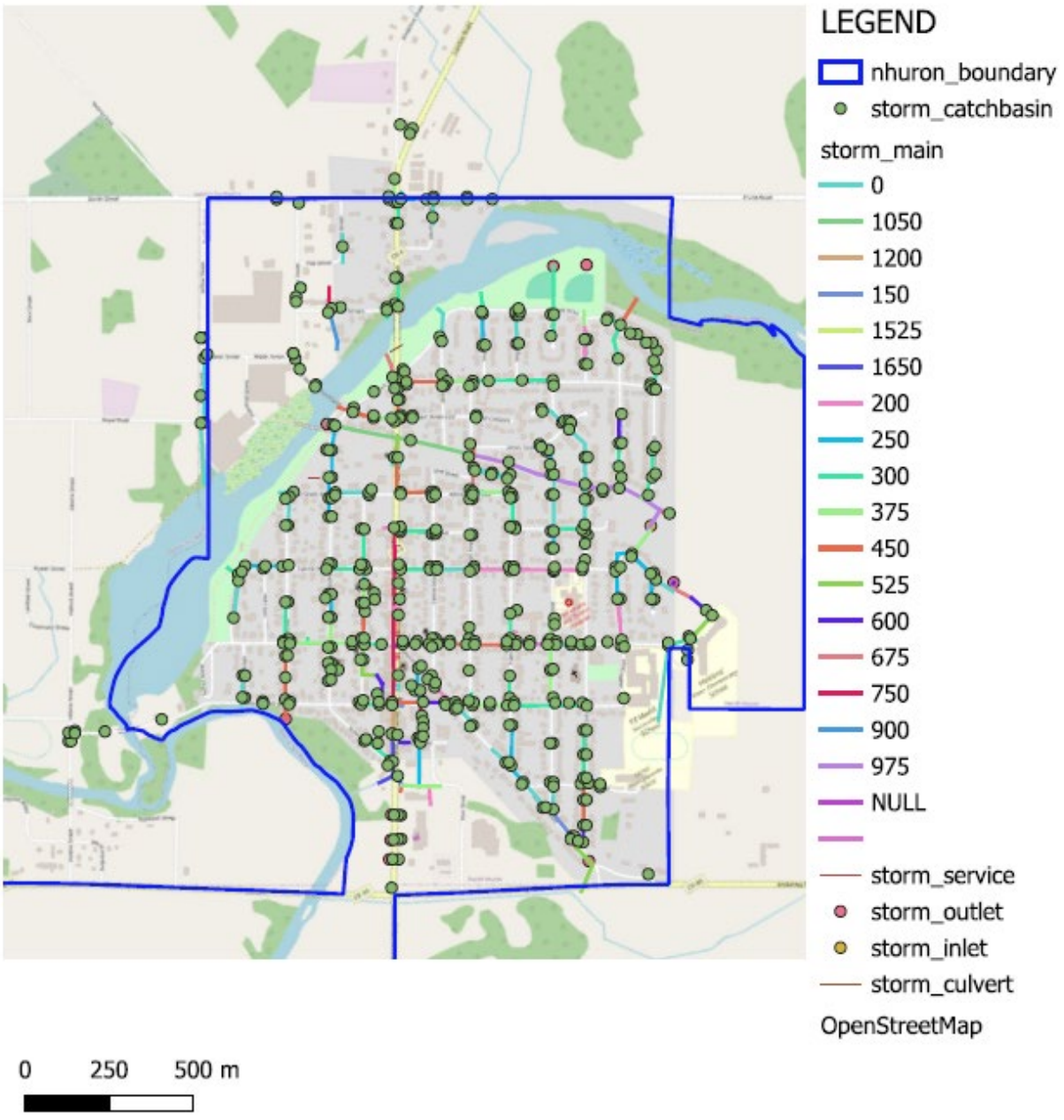
Storm Water Network Map (Blyth)



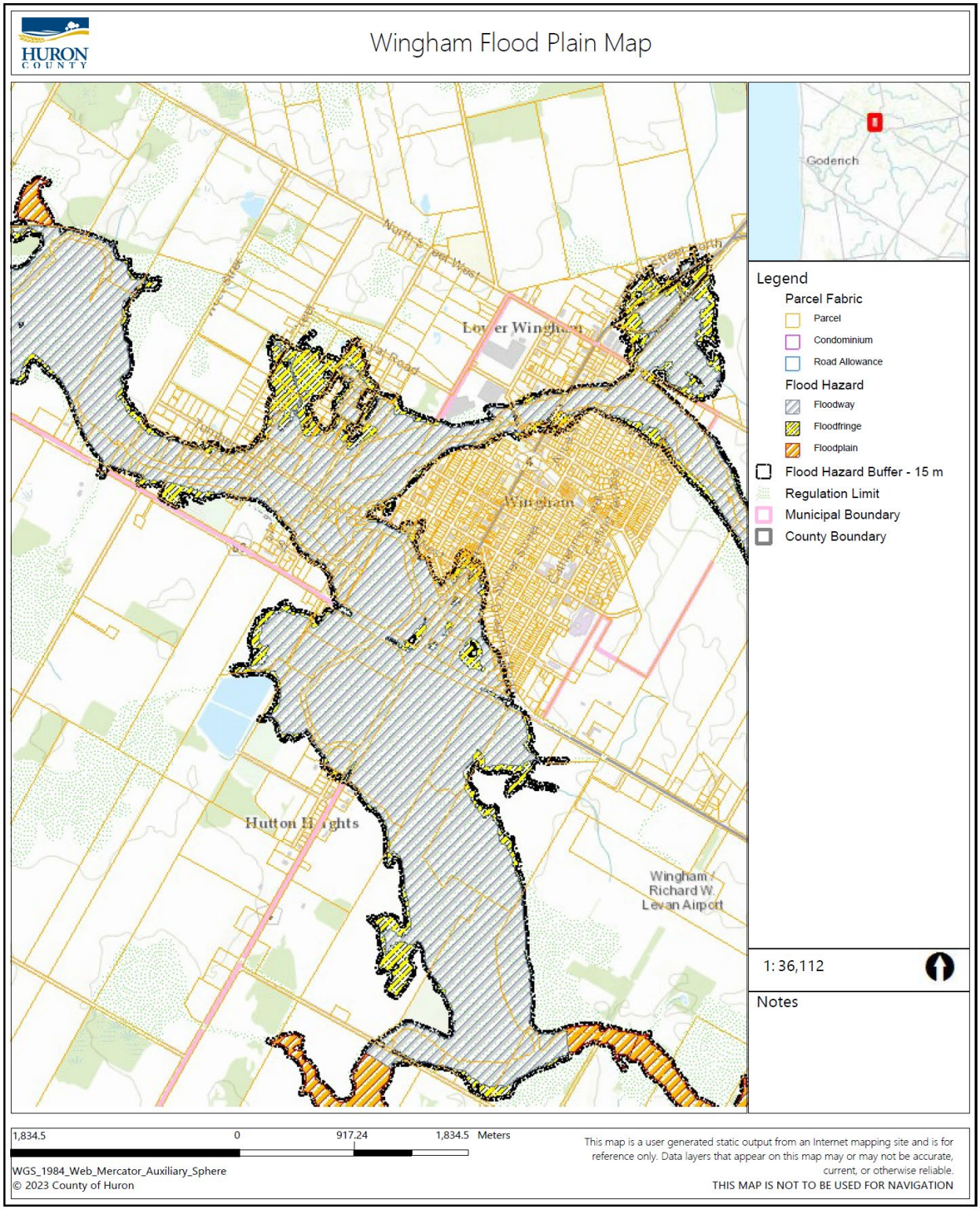
Flood Plain Map (Blyth)



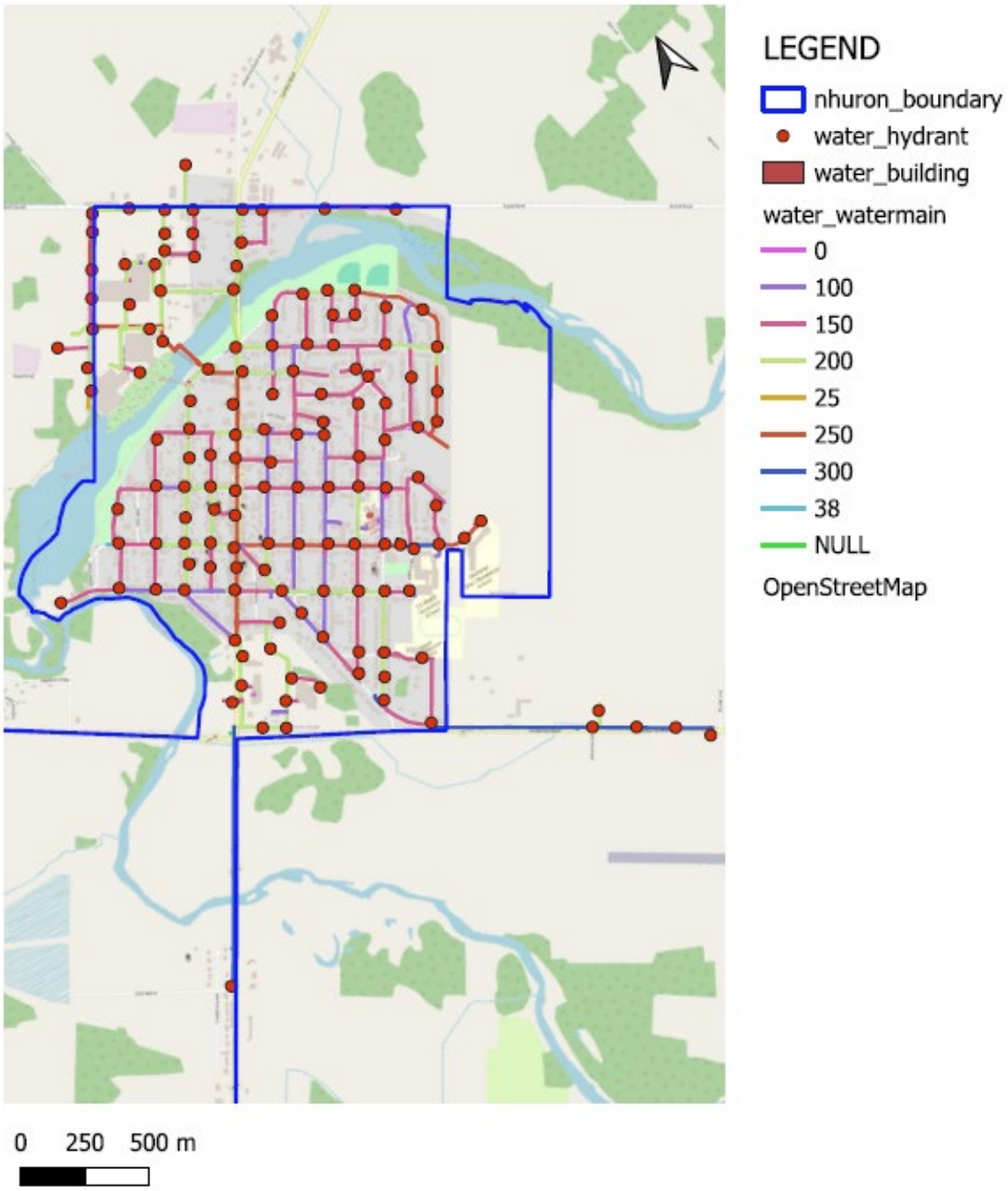
Storm Network Map (Wingham)



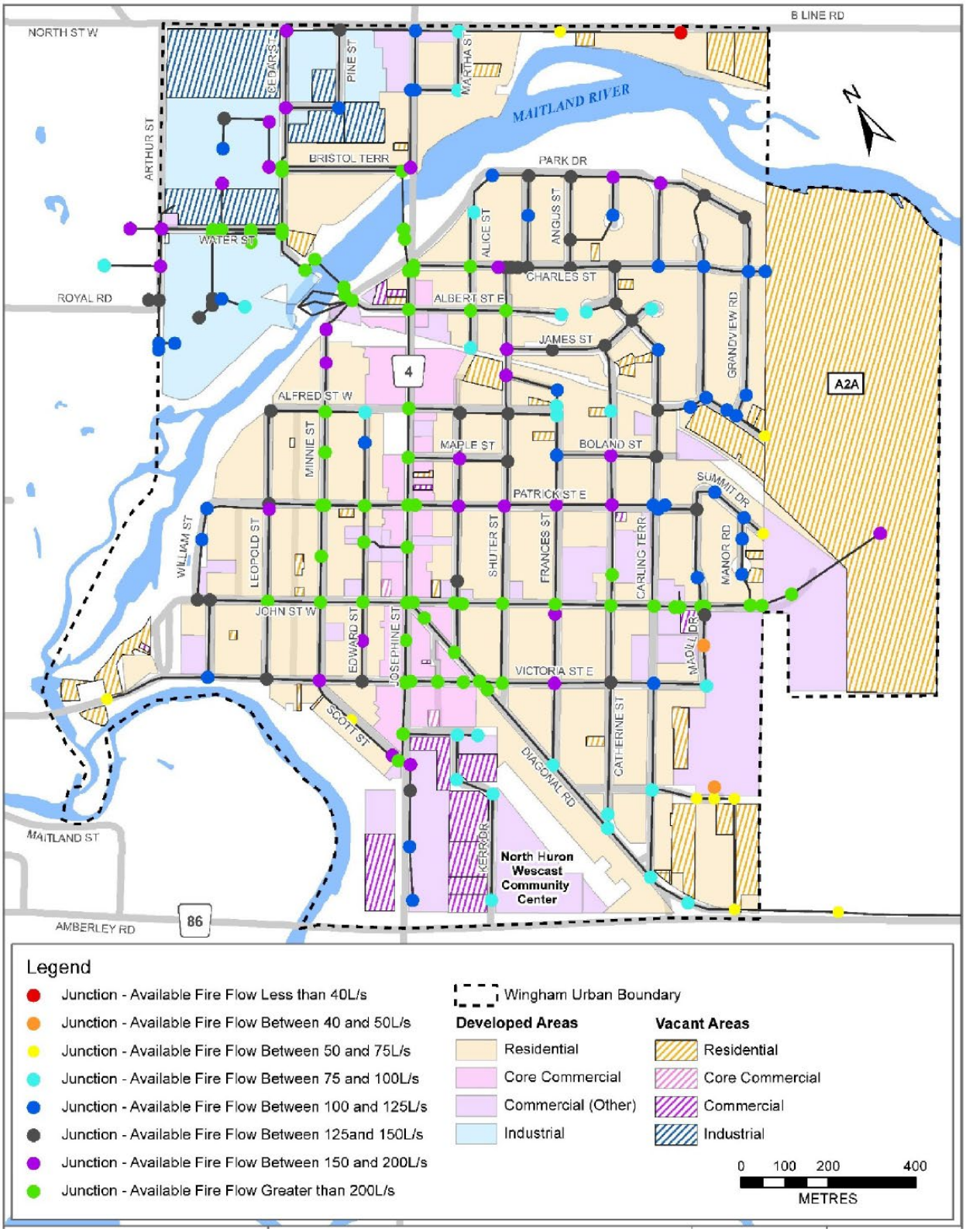
Flood Plain Map (Wingham)



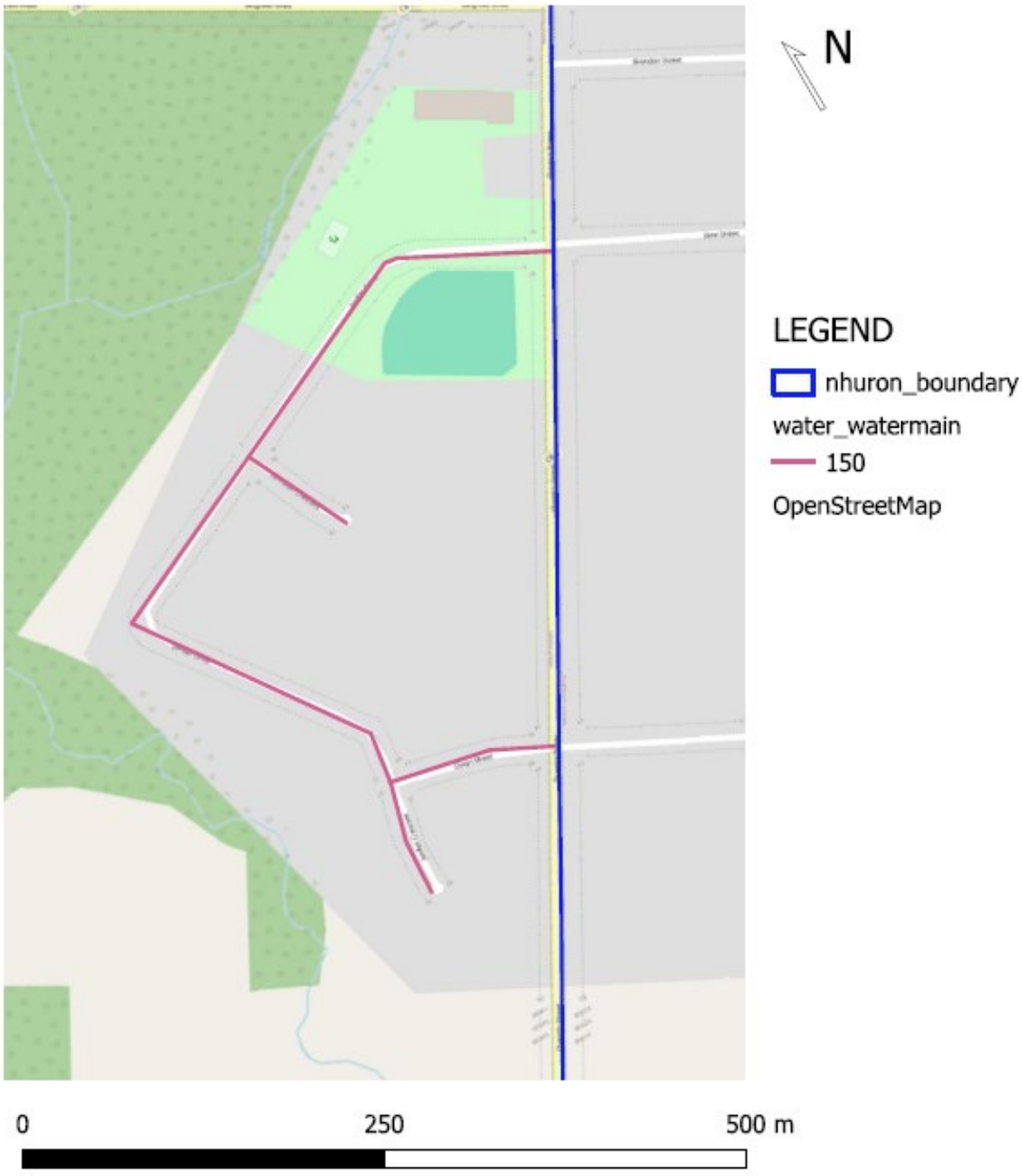
Water Network Map (Wingham)



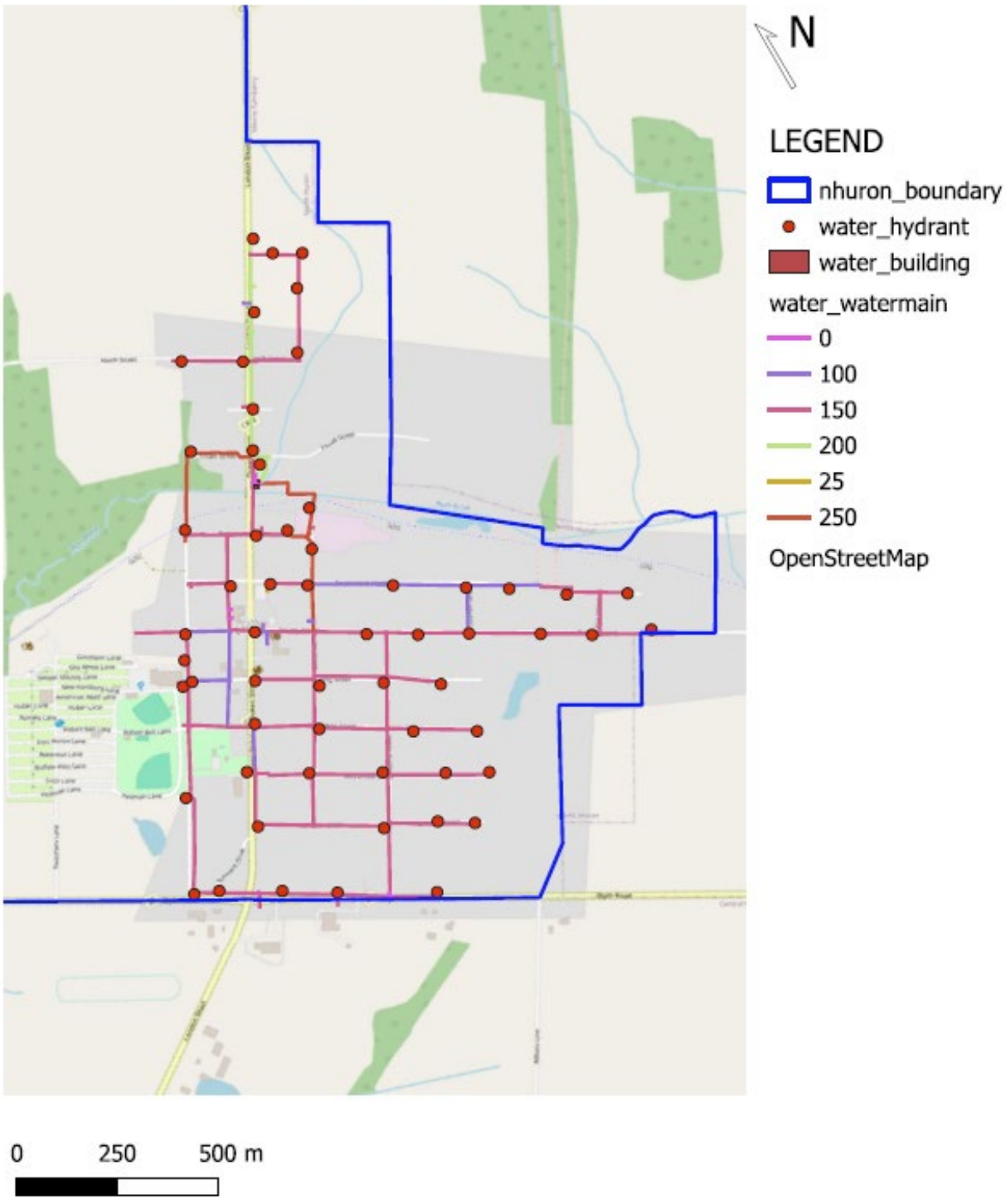
Fire Flow Map (Wingham)



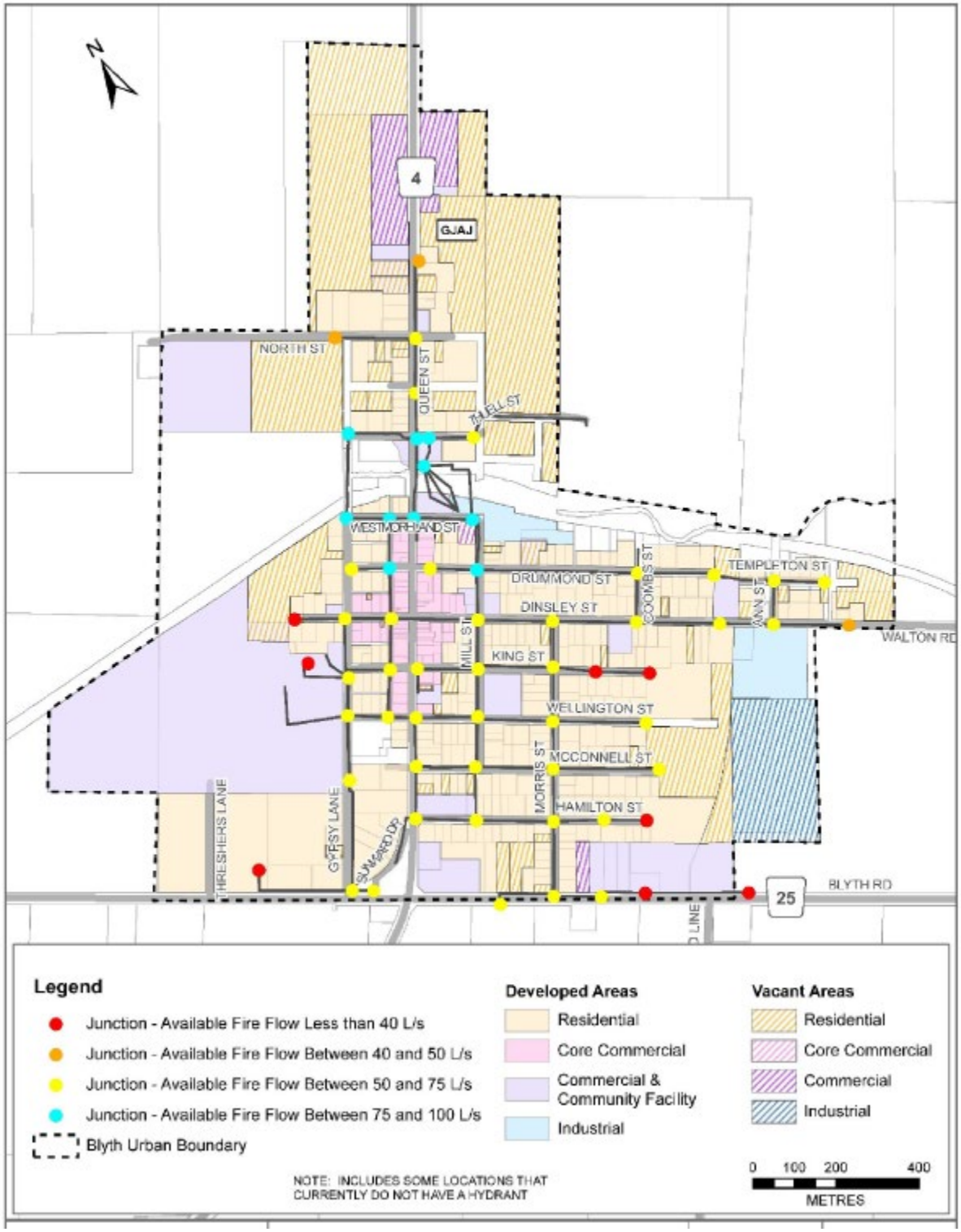
Water Network Map (Belgrave)



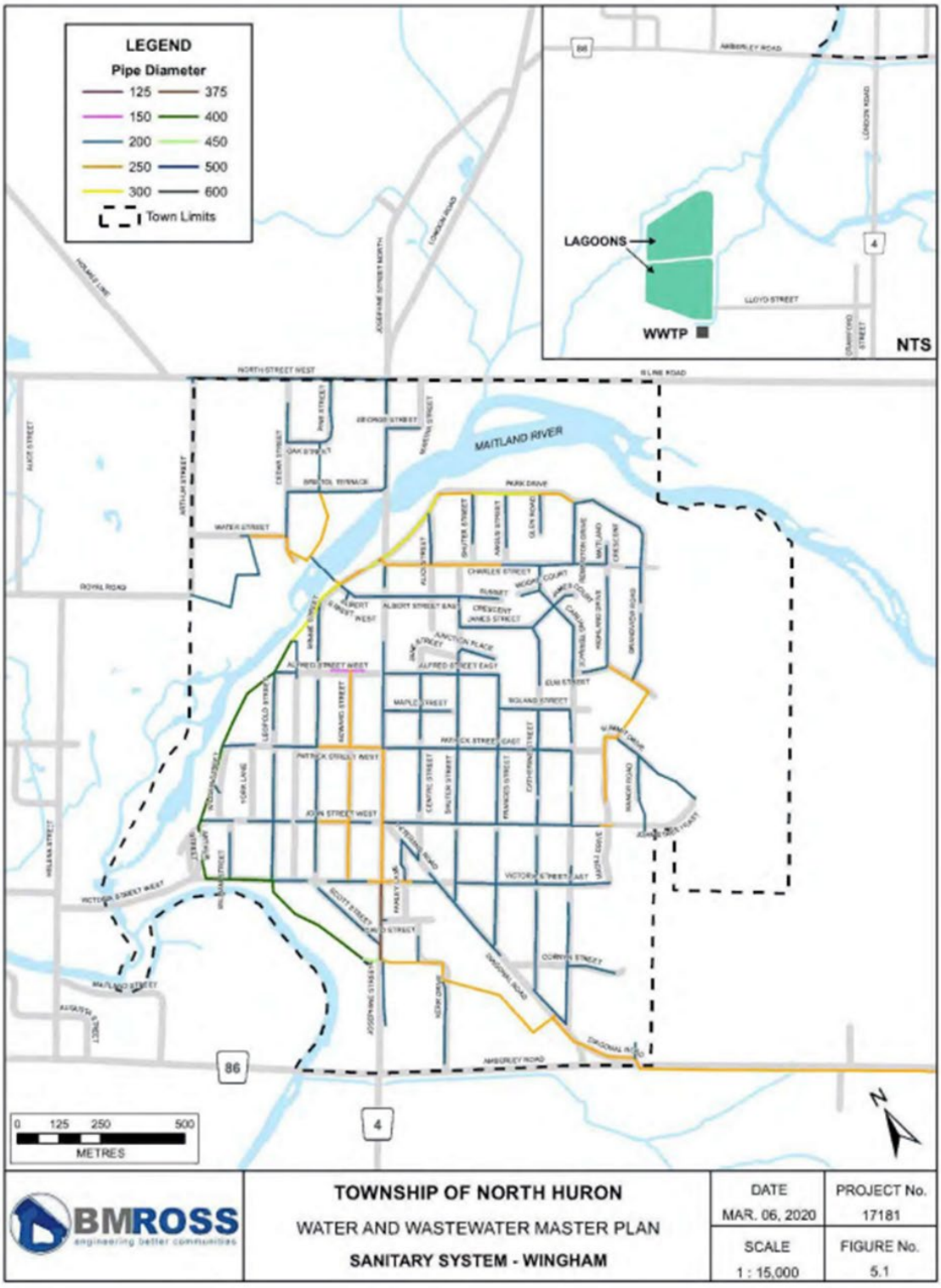
Water Network Map (Blyth)



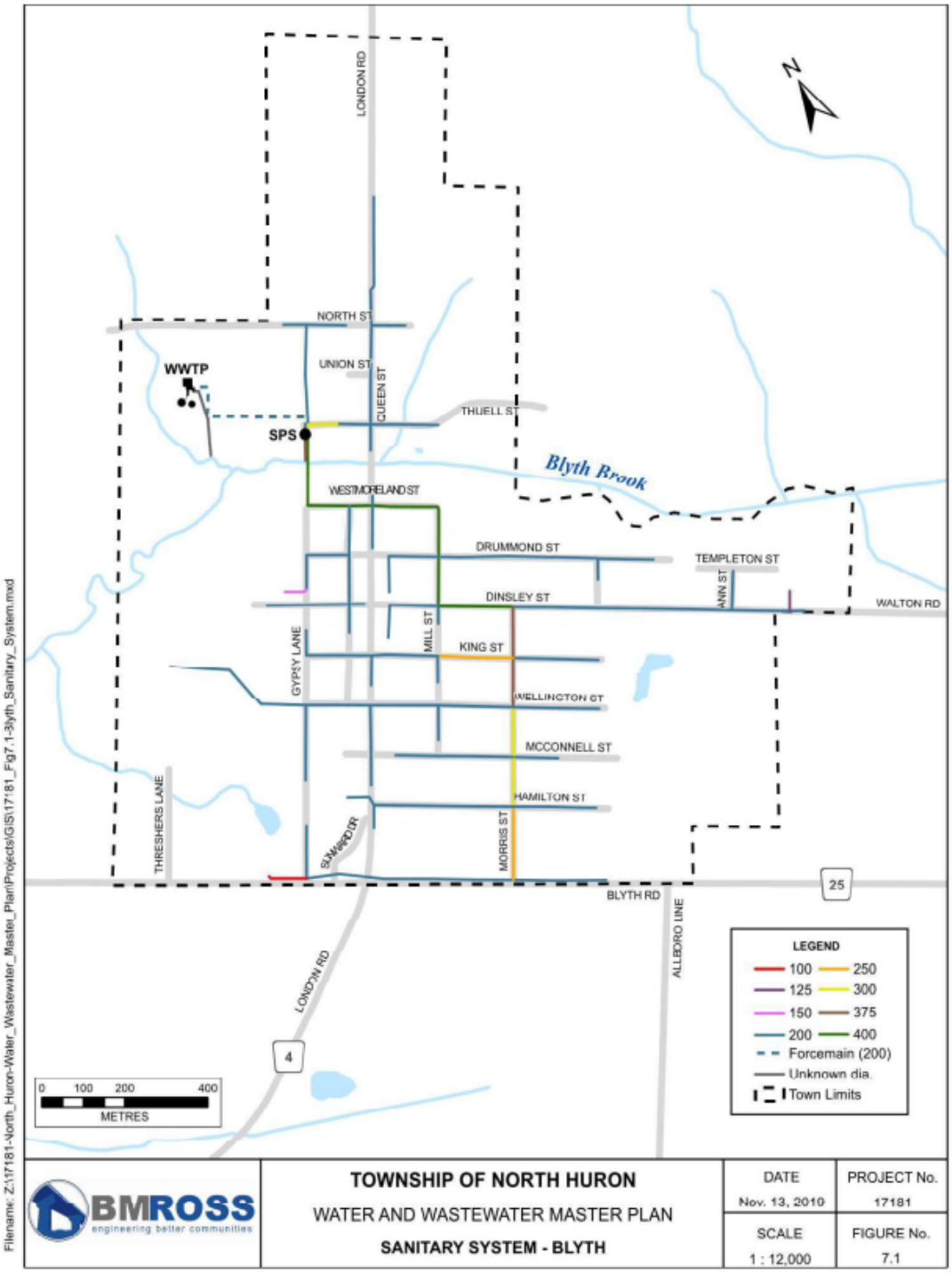
Fire Flow Map (Blyth)



Sanitary Network (Wingham)



Sanitary Network (Blyth)



Appendix C: Risk Rating Criteria

Probability of Failure

Asset Category	Risk Criteria	Criteria Weighting	Value/Range	Probability of Failure Score
Road Network Bridges Buildings Machinery & Equipment Vehicles Information Technology Land Improvements	Condition	100%	80-100	1
			60-79	2
			40-59	3
			20-39	4
			0-19	5
Sanitary Network (Mains)	Condition	80%	80-100	1
			60-79	2
			40-59	3
			20-39	4
			0-19	5
	Pipe Material	20%	PVC	1
			AC	2
			Concrete	2
			Clay	5
Water Network (Mains)	Condition	80%	80-100	1
			60-79	2
			40-59	3
			20-39	4
			0-19	5
	Pipe Material	20%	Ductile Iron	3
			Plastic	3
			PVC	3
			Cast Iron	4

Asset Category	Risk Criteria	Criteria Weighting	Value/Range	Probability of Failure Score
Storm Network (Mains)	Condition	80%	80-100	1
			60-79	2
			40-59	3
			20-39	4
			0-19	5
	Pipe Material	20%	AC	2
			Cast Iron	2
			Ductile Iron Concrete	2
			PVC	2

Consequence of Failure

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
Road Network Bridges Buildings Machinery & Equipment Vehicles Information Technology Land Improvements	Economic (100%)	Replacement Cost (100%)	$0-$25,000	1
			$25,000-$100,000	2
			$100,000-$250,000	3
			$250,000-$500,000	4
			$500,000+	5
Storm Network	Economic (80%)	Replacement Cost (100%)	$0-$25,000	1
			$25,000-$100,000	2
			$100,000-$250,000	3
			$250,000-$500,000	4
			$500,000+	5

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
Storm Network	Operational (20%)	Pipe Diameter (100%)	0-200mm	1
			200-300mm	2
			300-525mm	3
			525-750mm	4
			750mm+	5
Water Network (Water Mains)	Economic (80%)	Replacement Cost (100%)	$0-$25,000	1
			$25,000-$100,000	2
			$100,000-$250,000	3
			$250,000-$500,000	4
			$500,000+	5
	Operational (20%)	Pipe Material (100%)	0-50mm	1
			50-100mm	2
			100-200mm	3
			200-250mm	4
			250mm+	5
Sanitary Network (Sanitary Mains)	Economic (80%)	Replacement Cost (100%)	$0-$25,000	1
			$25,000-$100,000	2
			$100,000-$250,000	3
			$250,000-$500,000	4
			$500,000+	5

	Operational (20%)	Pipe Diameter (100%)	0-100mm	1
			100-200mm	2
			200-300mm	3
			300-375mm	4
			375mm+	5

Appendix D: Condition Assessment Guidelines

The foundation of good asset management practice is accurate and reliable data on the current condition of infrastructure. Assessing the condition of an asset at a single point in time allows staff to have a better understanding of the probability of asset failure due to deteriorating condition.

Condition data is vital to the development of data-driven asset management strategies. Without accurate and reliable asset data, there may be little confidence in asset management decision-making which can lead to premature asset failure, service disruption and suboptimal investment strategies. To prevent these outcomes, the Township's condition assessment strategy should outline several key considerations, including:

- The role of asset condition data in decision-making
- Guidelines for the collection of asset condition data
- A schedule for how regularly asset condition data should be collected

Role of Asset Condition Data

The goal of collecting asset condition data is to ensure that data is available to inform maintenance and renewal programs required to meet the desired level of service. Accurate and reliable condition data allows municipal staff to determine the remaining service life of assets, and identify the most cost-effective approach to deterioration, whether it involves extending the life of the asset through remedial efforts or determining that replacement is required to avoid asset failure.

In addition to the optimization of lifecycle management strategies, asset condition data also impacts the Township's risk management and financial strategies. Assessed condition is a key variable in the determination of an asset's probability of failure. With a strong understanding of the probability of failure across the entire asset portfolio, the Township can develop strategies to mitigate both the probability and consequences of asset failure and service disruption. Furthermore, with condition-based determinations of future capital expenditures, the Township can develop long-term financial strategies with higher accuracy and reliability.

Guidelines for Condition Assessment

Whether completed by external consultants or internal staff, condition assessments should be completed in a structured and repeatable fashion, according to consistent and objective assessment criteria. Without proper guidelines for the completion of condition assessments there can be little confidence in the validity of condition data and asset management strategies based on this data.

Condition assessments must include a quantitative or qualitative assessment of the current condition of the asset, collected according to specified condition rating

criteria, in a format that can be used for asset management decision-making. As a result, it is important that staff adequately define the condition rating criteria that should be used and the assets that require a discrete condition rating. When engaging with external consultants to complete condition assessments, it is critical that these details are communicated as part of the contractual terms of the project.

There are many options available to the Township to complete condition assessments. In some cases, external consultants may need to be engaged to complete detailed technical assessments of infrastructure. In other cases, internal staff may have sufficient expertise or training to complete condition assessments.

Developing a Condition Assessment Schedule

Condition assessments and general data collection can be both time-consuming and resource-intensive. It is not necessarily an effective strategy to collect assessed condition data across the entire asset inventory. Instead, the Township should prioritize the collection of assessed condition data based on the anticipated value of this data in decision-making. The International Infrastructure Management Manual (IIMM) identifies four key criteria to consider when making this determination:

1. **Relevance**: every data item must have a direct influence on the output that is required
2. **Appropriateness**: the volume of data and the frequency of updating should align with the stage in the asset's life and the service being provided
3. **Reliability**: the data should be sufficiently accurate, have sufficient spatial coverage and be appropriately complete and current
4. **Affordability**: the data should be affordable to collect and maintain

Appendix E: Stakeholder Engagement Results

Public Engagement

Proposed Levels of Service Public Engagement Survey

This section summarizes the findings from the Township of North Huron's public engagement survey on proposed levels of service. A total of 81 responses were received, representing approximately 1.6% of the township's population of 5,052. While the sample size is modest, the results offer meaningful insights into the priorities, satisfaction levels, and willingness to pay among engaged residents and property owners.

Demographic Profile of Respondents

Survey respondents were predominantly full-time property owners (91.4%), with most residing in Wingham (56.8%), followed by Blyth (30.9%) and East Wawanosh (12.3%). The majority were middle-aged or older, with 42.0% aged 45–64 and 29.6% aged 30–44. Families with children made up the largest household type (51.9%). Overall, the responses reflect a population of older, family-oriented, permanent residents, with lower participation from younger adults, renters, and seasonal property owners.

Top Infrastructure and Service Priorities

Residents emphasized core services that support daily safety, affordability, and quality of life. The highest-rated community features were affordable living and community safety (73 respondents each), followed by safe and well-maintained roads (71), moderate tax rates (68), and outdoor spaces, parks, and trails (67). In terms of municipal services, roads and bridges and reliable water and sewer were top ranked (68 each), with emergency services (62) and outdoor spaces (63) also scoring highly. Additionally, 63 respondents prioritized attracting new businesses as a key spending factor.

Satisfaction with Municipal Services

Residents reported high satisfaction with essential services, particularly emergency response, utilities, and bridges. For emergency vehicles and equipment, over 50 respondents expressed satisfaction with availability, condition, and safety. Similarly, water and sewer services received strong ratings, with 49 satisfied with condition and 47 with safety. Bridges also performed well, with 45 satisfied with both availability and safety. Other well-rated areas include outdoor parks and trails (44 satisfied with both availability and condition) and stormwater management, which was viewed positively across all dimensions.

In contrast, roads and sidewalks emerged as major areas of concern. For roads, 28 respondents were dissatisfied with condition, and 22 with safety. Sidewalks followed a similar trend, with 24 dissatisfied with condition and 21 with safety. These findings highlight a clear divide in service satisfaction. While core infrastructure and emergency services are meeting expectations, surface infrastructure like roads and sidewalks is a consistent source of resident dissatisfaction.

Service Level Preferences and Willingness to Pay

Residents generally support maintaining current service levels, especially for emergency services (60), water and sewer (59), stormwater management (63), and arts, culture, and heritage (57). At the same time, there is strong support for increasing service in specific areas, including municipal communication (52), roads and bridges (40), economic development (34), and recreation programs (33).

When it comes to paying for improvements, essential and visible services attracted the most support. Roads and bridges received the highest willingness to pay, with 69 respondents either willing or somewhat willing, matched by outdoor spaces and trails (69), emergency services (66), and special events (61). Conversely, bylaw and building services (31 not willing), arts and heritage (30 not willing), and municipal communication (30 not willing) had the lowest willingness to pay, reflecting lower public appetite for funding less direct or administrative functions.

Perceptions of Municipal Spending

Some residents acknowledge that the municipality is striving to maintain existing service levels despite budget challenges. A minority express support for current investments, recognizing efforts to provide community programs and manage core infrastructure. However, only about 35% of respondents have reviewed the Asset Management Plan, indicating limited detailed engagement. While some feel the council is responsible, others note that complex issues require strong leadership and difficult financial decisions. Approximately 44% agree or strongly agree that overspending is occurring, reflecting mixed views on fiscal management.

The majority of respondents express concern over spending priorities. More than half (54%) disagree or strongly disagree that the right investments are being made for current residents, with a similar share (52%) for future residents. Key criticisms focus on excessive administrative costs, including high salaries and too many staff relative to services provided. Recreation and special projects are viewed as overfunded or underutilized, while essential infrastructure like roads and sidewalks suffers from neglect despite poor conditions. Many comments highlight frustration with high property taxes perceived as disproportionate to service quality. Additional concerns include unnecessary spending on municipal buildings, frequent studies without action, and a perceived imbalance between expenditures and community needs.

General Comments

In general, residents express significant concern about high property taxes compared to neighboring municipalities, noting that excessive taxes and poor management may discourage new residents and businesses. Many highlight challenges with spending priorities, including deteriorating infrastructure such as sidewalks and roads, overinvestment in municipal buildings, and underutilized recreational facilities with

rental costs that may be too high. Some feel there is a lack of community activities, limited communication, safety concerns related to homelessness and crime, and a perceived gap between tax dollars collected and the benefits received. However, others appreciate the good upkeep of certain areas and recognize the importance of maintaining services for current residents. Encouragingly, community members show interest in better planning, increased accountability, and a stronger focus on core infrastructure and events that foster local engagement, suggesting that with improved management and communication, the township can become a more attractive and vibrant community.

Summary of public engagement from the 2024 Community Improvement Plan (CIP)

This summary captures feedback from the 2024 CIP Amendment Survey and related engagement efforts, reflecting community expectations around municipal service levels tied to infrastructure and economic development incentives. The survey gathered input from a diverse group of businesses and property owners across North Huron, including commercial, industrial, residential, agricultural, and development sectors.

Respondents demonstrated a strong desire for expanded service levels in the form of broader access to financial support programs across the Township. While just over half were aware of previous CIP grants, nearly 89 % supported extending these programs township-wide, signaling community interest in equitable and accessible business development services.

There was notable support for new grant programs, with the highest interest in Development Charges Grants (69 %), followed by Planning Application, Building Permit, and Site Study Grants (40 %), as well as Agri-Tourism and Start-up Space Leasehold Improvement Grants (each around 37 %). This reflects community expectations for targeted financial assistance to reduce barriers to business growth and encourage investment in property and infrastructure.

Complementary insights from the 2022 Huron County BR+E Survey emphasize the critical role of ongoing business support services throughout the business lifecycle. The majority of local businesses, predominantly owner-operated, prioritize access to information on grants, funding, and loans, linking these directly to their ability to grow, relocate, or sustain operations within the community. Challenges such as municipal property tax rates further underscore the need for accessible financial incentives and clear communication of available programs.

Together, these engagement efforts highlight that community members expect the Municipality to deliver robust service levels in economic development, focusing on grant programs, funding support, and responsive communication. This approach is viewed as essential to fostering a vibrant local economy and supporting sustainable infrastructure improvements that benefit all residents and businesses across North Huron.

Summary of public engagement from the 2021 Parks, Recreation & Culture master plan

The 2021 Parks, Recreation and Culture Master Plan engaged over 1100 residents from 484 households, 27 community organizations, Township staff, and Council members through surveys, virtual sessions, and interviews. This broad outreach provided valuable insights into the community's use of parks and cultural facilities, revealing popular activities such as walking and hiking (81%), visiting parks (63%), and fitness classes (42%). Cultural participation was also strong, with 86% attending special events, 73% visiting farmers markets, and 66% enjoying live theatre.

Key infrastructure priorities identified include trails, indoor and outdoor recreation facilities, and open spaces. There is a strong public demand for flexible, unstructured activities that accommodate all ages, alongside increased outdoor space use during the COVID-19 pandemic. Inclusion and accessibility emerged as vital themes, with the community emphasizing the need for facilities and programs that serve residents of all abilities, backgrounds, and income levels.

Barriers to participation were noted, including inconvenient program timing, limited availability, cost, and lack of information. Residents expressed interest in new opportunities such as dog parks, skateboarding and BMX facilities, walking trails, fitness classes, music in the park, and more cultural programs and festivals. Stakeholders highlighted the importance of optimizing existing assets, supporting volunteers, and enhancing youth programming and trail connectivity.

Overall, the community is committed to maintaining and improving a diverse range of parks, recreation, and cultural services. There is strong support for improving accessibility, expanding inclusive and unstructured activities, and thoughtful planning to ensure facilities meet evolving needs. Enhancing communication and volunteer involvement will be key to delivering services that reflect community priorities and expectations.

Staff Engagement

This section summarizes staff engagement insights on the condition, management, and investment needs of key municipal infrastructure asset categories.

Bridges and Culverts

Bridges are currently seen as being in good condition with adequate safety features and minimal closures or restrictions. However, there is significant concern that existing funding is limited to mandatory inspections, with little allocated for proactive maintenance or repair. This is viewed as a risk to long term safety and infrastructure performance. While current service levels may appear acceptable, there is strong support for increased investment to prevent deterioration. Establishing a dedicated reserve fund for bridge repairs is recommended.

Buildings

Municipal buildings are broadly viewed as being in poor condition, with key facilities identified as aging and in need of upgrades. Although facility staff are responsive, outdated infrastructure limits their ability to provide reliable service. There is consistent feedback that available resources are insufficient, both in terms of staffing and capital funding. While there was one indication that the service level may be adequate, the overall message is a clear recommendation to increase investment. Enhanced funding is expected to improve overall operations and reduce future costs through greater efficiency.

Information Technology

Information technology systems are recognized as critical to day-to-day operations. However, staff expressed concerns about the lack of coordinated management and planning across the organization. Current practices are described as fragmented and reactive, with equipment often replaced only when it fails. There is a strong desire for a more centralized and planned approach that reflects the growing importance of cybersecurity and modern digital tools. All feedback points to the need for increased investment and improved lifecycle planning. Confidence in existing data varies and further measurement improvements are needed.

Land Improvements

There is a high level of uncertainty regarding the condition and management of land improvement assets. Although some resources may be available, processes for reporting and tracking issues are underdeveloped. Staff emphasized the need for a formal system to submit issues and receive confirmation when they are resolved. This would increase accountability and responsiveness. The value of this service is seen as needing improvement through increased investment and more structured internal systems. Some feedback references aging municipal assets more broadly, suggesting a need to clarify how land improvements are distinguished from buildings.

Sanitary Sewer System

The sanitary sewer system is performing reliably with few reported blockages or disruptions at the mainline level. However, aging infrastructure, especially at the Blyth sewage treatment facility, is a major concern. Existing reinvestment levels are considered too low, and several reported service metrics are believed to understate actual conditions. For instance, there have already been multiple effluent violations this year, despite a reported total of zero. Increased capital investment is strongly recommended, along with a shift toward condition-based maintenance strategies such as CCTV inspections. Improvements in data access and accuracy are also needed.

Water Distribution System

Water services are generally managed well, with minimal service outages and very few boil water advisories. Despite this operational strength, infrastructure conditions remain a concern. Key metrics, such as fire flow coverage and system condition, are believed to overstate actual performance, particularly in areas like Blyth and the Wingham standpipe. Confidence in current data is low, and staff note

that age-based assessments do not capture the full picture. Increased investment is recommended to address aging infrastructure and improve service reliability. Tools such as water main break tracking could support better planning and maintenance.

Council Engagement

This summary presents feedback from five Council members and provides a detailed view of their perspectives on Proposed Levels of Service (PLOS) and the related financial and operational challenges.

Council members generally recognize the importance of maintaining high service quality but express a variety of opinions on the amount of financial commitment needed. A common theme is that while many current services meet expectations, especially road network availability and responsiveness to water issues there are concerns about having enough resources such as staffing and funding as well as the long-term sustainability of infrastructure.

Funding and Prioritization: Opinions differ on the target reinvestment rates outlined in the Asset Management Plan. Some support achieving these targets within ten to twenty years even if this results in increased taxes to maintain service levels. Others prefer more gradual funding increases or reductions in service quality in order to limit tax impacts. There is agreement on prioritizing capital funding for the most critical asset categories first and then allocating remaining resources to other areas.

Asset Specific Feedback:

- Road Network is widely viewed as essential but there are concerns about limited resources and the effects of ongoing underfunding on rural mobility and future population growth.
- Administration, Operations Facilities, and Technology & Communication drew criticism for inefficient administrative processes inconsistent messaging and difficulties with the Township’s website usability.
- Recreational and Cultural Facilities received mixed views. While some satisfaction exists regarding availability there are concerns about high fees, staff turnover and community engagement. Calls were made for more programs improved staff attitudes and a review of the cost recovery approach.
- Sanitary Network, Stormwater Infrastructure, and Water Network are generally seen as adequately responsive, but face challenges related to insufficient capital reinvestment and the long-term sustainability of infrastructure in line with the Asset Management Plan funding targets.

Communication and Community Involvement: Council emphasized the need for clearer more consistent and timely communication with residents. Suggestions included regular email updates inserts with tax bills and centralizing information to reduce confusion and improve responsiveness. It was also noted that fostering

stronger community involvement through volunteer work promoting civic pride and encouraging residents to share responsibility for funding and maintaining local amenities is important. This approach aims to improve public understanding while building a culture of shared stewardship.

Financial Impacts and Resident Perspectives: Council members understand that tax increases are unpopular but necessary. Acceptable annual increases ranged from under one percent to four or five percent. Some members are willing to pay more to sustain services while others favor reduced service levels in order to keep taxes lower. Key challenges include inflation, rising infrastructure costs, wage pressures and demographic factors such as a high proportion of pensioners in some areas.

Suggestions for Service Enhancements and Final Comments:
Recommendations included exploring operational efficiencies sharing services with neighboring municipalities reconsidering the size of Council and possibly divesting underused municipal properties. Emphasis was placed on balancing current service demands with future infrastructure needs while including resident input and fostering a collaborative approach to community development.

Overall Council’s feedback reflects the complex balance between fiscal responsibility service delivery expectations communication and long-term planning required by O Reg 588 17. These insights provide valuable guidance for refining funding strategies, improving engagement and prioritizing asset management decisions for North Huron’s sustainable future.