

## Staff Report

Department:	Finance
То:	Mayor and Members of Council
Meeting Date:	July 10, 2024
Report No.:	CSR-2024-70
Report Title:	2024 Asset Management Plan

#### **Recommendation:**

That Staff Report CSR-2024-70, 2024 Asset Management Plan, dated July 10, 2024, be received; and

- 1. That Council accepts this report for information; and
- 2. That Council adopts the Asset Management Plan in accordance with Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure.

#### Background:

Ontario Regulation 588/17 was made under the Infrastructure for Jobs and Prosperity Act, 2015. The regulation outlines Asset Management milestones for municipalities, progressively building upon each other to bolster and integrate asset management practices.

In 2019 the municipality created an Asset Management Policy which outlines a process in which Asset Management is considered in the budgetary process. As well as a commitment to consider the impacts of climate change on infrastructure and the associated costs and alignment with other regulations such as the Safe Drinking Water Act and the Planning Act.

In 2022, an Asset Management Plan for all core infrastructure assets was created. This plan included current levels of service as well as qualitative and quantitative metrics for all road, storm, water, and wastewater network assets.

The milestone for 2024 is the creation of an Asset Management Plan (AMP) for all noncore infrastructure assets. The plan is to cover current levels of service as well as qualitative and quantitative metrics outlined within the regulation for all municipally owned buildings, vehicles, equipment, land and land improvements. A summary of each asset category including age, condition and replacement cost of all components is required as well.

#### Analysis:

With successful funding through the Municipal Modernization Fund Intake Stream 2, the municipality was able to purchase a new asset management software, Citywide, that has allowed us to appropriately track and maintain our Tangible Capital Assets. This software was utilized for the creation of our 2022 and our 2024 Asset Management Plan.

The attached Asset Management Plan includes all requirements under Ontario Regulation 588/17 for both core (completed in 2022) and non-core assets.

#### Asset Portfolio Summary

The asset categories included in this AMP have a total replacement cost of \$584 million based on inventory data from 2022. 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.



The current condition of the assets is central to all asset management planning. Collectively, 69% of assets in Midland are in fair or better condition.

This AMP relies on assessed condition data of assets where available; 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.

This comprehensive plan works in unison with the Town's 10-year Capital Plan. With the identification of asset-specific lifecycle strategies that include the timing and cost of future capital events, the Town can continue to refine the long-term capital forecast to meet our service levels.

To meet these long-term replacement needs, the Town should be allocating approximately \$17.4 million annually, for a target reinvestment rate of 3%. Actual annual capital funding on infrastructure totals approximately \$7.8 million, for an actual reinvestment rate of 1.3%. The graph below depicts the annual funding gap by comparing target vs actual reinvestment rate.



#### Stakeholder Consideration/Impacts:

To ensure the AMP is current and meets the legislative requirements as set out in O.Reg.588/17, staff are committed to continue to refine the data points included in this plan. These continued efforts will ensure that an accurate and timely representation of the Town's future obligations is provided to the community and decision makers. The AMP will continue to assist Town staff to make appropriate decisions regarding the acquisition, operation, maintenance, renewal, and disposal of our core infrastructure assets and be used annually to inform our 10-year capital plan.

Acceptance of this plan allows the Town to continue to be eligible for grant opportunities, which historically have provided much needed funding for the

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replacement of our aging infrastructure, thereby reducing the Town's reliance on rates and the tax base.

#### **Options/Alternatives:**

There are no options/alternatives to present for consideration. In compliance with O. Reg. 588/17, once the AMP is adopted by Council, a copy will be accessible through the Town's website.

#### Financial Impact:

The total replacement cost of our asset portfolio is \$584 million dollars, that is to fully reconstruct all assets today. Currently we are investing \$7.8 million dollars annually towards our infrastructure replacement needs, funded by taxation and water and wastewater user-rates.

Given the forecasted annual capital requirements to maintain our levels of service we are experiencing about a \$9.6 million dollar funding gap, a gap that will only grow larger if we fail to plan for these replacements in a methodical manner. This equates to approximately \$1,335 per property for property owners on both water and wastewater services.

With the majority of these assets in good to fair condition, now is the time to begin planning for their replacement by adopting best practices, new technologies and a sound financial strategy to overcome the identified funding gap. Current projections included in this plan indicate that the Town could become financially sound within 15-years if the current reserve strategy as identified in the Town's 10-year Capital Plan is maintained. This funding strategy will be further explored as part of the 2025 AMP update.

#### Council's Strategic Priorities:

This recommendation is consistent with the following Council Strategic Priorities:

Infrastructure Management

#### Conclusions:

The creation of O.Reg 588/17 was for municipalities to really start focusing on and appropriately planning for infrastructure costs. To begin to consider our ageing infrastructure and the stress that climate change has began to add to our ageing infrastructure. The exercise of creating the Asset Management Plan brings to light our true costs of infrastructure ownership and the need to invest more tax dollars into capital reconstruction and rehabilitation projects if we wish to maintain the current levels of services enjoyed by our community.

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#### Attachment(s):

2024 Asset Management Plan



# Town of Midland Asset Management Plan

Date: July 10, 2024

## **Key Statistics**



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## Introduction and Context

#### 1.1 An 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 an essential element of 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.

#### 1.2 Asset Management Policy

An asset management policy represents a statement of the principles guiding the municipality'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 Town adopted its Asset Management Policy on June 19, 2019, in accordance with Ontario Regulation 588/17.

The objectives of the policy include:

- Fiscal Responsibilities
- Delivery of Services/Programs
- Public Input/Council Direction
- Risk/Impact Mitigation

#### 1.3 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 Town plans to achieve asset management objectives through planned activities and decision-making criteria. The Town'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.

#### 1.4 Asset Management Plan

The asset management plan (AMP) presents the outcomes of the Town'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 assets and financial data becomes available. This will allow the Town to re-evaluate the state of infrastructure and identify how the organization's asset management and financial strategies are progressing.

#### 1.5 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.

#### 1.6 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 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	Crack Seal	\$
	deteriorations from occurring		
Rehabilitation/	Activities that rectify defects or	Re-surface	\$\$
Renewal	deficiencies that are already present		
	and may be affecting asset		
	performance		
Replacement/	Asset end-of-life activities that often	Full	\$\$\$
Reconstruction	involve the complete replacement of	Reconstruction	
	assets		

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 Town'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.

#### 1.7 Risk Management Strategies

Municipalities generally take 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 rural 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. 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.

#### 1.8 Levels of Service

Level of service (LOS) is a measure of what the Town 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 Town as worth measuring and evaluating. The Town measures the level of service provided at two levels: Community Levels of Service, and Technical Levels of Service.

#### **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 & culverts, stormwater network, water system, and sanitary sewer network) 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 (buildings, land improvements, equipment, and vehicles), the Town 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 Town'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 & culverts, stormwater network, water system, and sanitary sewer network), 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 (facilities, land improvements, machinery & equipment, and vehicles), the Town has determined the technical metrics that will be used to determine the technical level of service provided. These metrics can be found in the Levels of Service subsection within each asset category.

#### **Current and Proposed Levels of Service**

This AMP focuses on measuring the current level of service provided to the community. Once current levels of service have been measured, the Town plans to establish 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 Town. 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, and prior to July 2025, the Town must identify a lifecycle management and financial strategy which allows these targets to be achieved.

#### 1.9 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 (O. Reg 588/17). 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.

The diagram below outlines key reporting requirements under O. Reg. 588/47 and the associated timelines.



Strategic Asset Management Policy

#### 2024

Asset Management Plan for Core and Non- Core assets (same components as 2022) and Asset Management Policy update

#### 2022

Asset Management Plan for Core Assets with the following Components:

- 1. Current levels of service
- 2. Inventory analysis
- 3. Lifecycle activities to sustain LOS
- 4. Cost of lifecycle activities
- 5. Population and employment Forecasts
- 6. Discussion of growth Impacts

#### 2025

Asset Management Plan for all assets with the following additional components:

- 1. Proposed levels of service for the next 10 years
- 2. Updated inventory analysis
- 3. Lifecyle management strategy
- 4. Financial strategy and addressing shortfalls
- Discussion of how growth assumptions impacted lifecycle and financial strategies

#### 1.10 O. Reg 588/17 Compliance Review

The following table identifies the requirements outlined in Ontario Regulation 588/17 for municipalities to meet by July 1, 2024. Next to each requirement a page or section reference is included in addition to any necessary commentary.

Requirement	O. Reg. Section	AMP Section Reference	Status
Summary of assets in each category	S.5(2), 3(i)	4.1.1 - 6.7.1	Complete
Replacement Cost of assets in each category	S.5(2), 3(ii)	4.1.1 - 6.7.1	Complete
Average age of assets in each category	S.5(2), 3(iii)	4.1.3 - 6.7.3	Complete
Condition of assets in each category	S.5(2), 3(iv)	4.1.2 - 6.7.2	Complete
Description of Town's approach to assessing the condition of assets in each category	S.5(2), 3(v)	4.1.2 - 6.7.2	Complete
Current levels of service in each category	S.5(2), 1(i-ii)	4.1.6 - 6.7.6	Complete
Current performance measures in each category	S.5(2), 2	4.1.6 - 6.7.6	Complete
Lifecycle activities needed to maintain current levels of service for 10 years	S.5(2), 4	4.1.4 - 6.7.4	Complete
Costs of providing lifecycle activities for 10 years	S.5(2), 4	Appendix C	Complete
Growth Assumptions	S.5(2), 5(i-ii) S.5(2), 6(i-vi)	7.1 – 7.3	Complete

### Scope and Methodology

#### 2.1 Asset Categories included in this Asset Management Plan (AMP)

This AMP summarizes the state of the municipality's infrastructure assets, establishes current levels of service, addresses community and technical level of services as outlined in the regulation and, outlines current lifecycle strategies to optimize asset performance for the asset categories listed below.

Asset Category	Type of Asset	Funding Source
Road Network	Core	Tax Levy
Stormwater Network	Core	Tax Levy
Water Network	Core	User Rates
Wastewater Network	Core	User Rates
Municipal Buildings	Non-core	Tax Levy
Community Buildings	Non-core	Tax Levy
Municipal Fleet	Non-core	Tax Levy/User Rates
Fire and Emergency Services Fleet	Non-core	Tax Levy
Transit Fleet	Non-core	Tax Levy
Land and Land Improvements	Non-core	Tax Levy
Equipment	Non-core	Tax Levy

#### 2.2 Determining 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 and insured asset values.

CPI tables: Historical cost of the asset 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 used in the absence of reliable replacement cost data. It is considered reasonably reliable for recently purchased or constructed assets where the total cost is reflective of what the municipality actually incurred. As assets age, and new technologies become available, cost inflation becomes a less reliable method.

#### 2.3 Estimated Useful Life and Service Life Remaining

The estimated useful life (EUL) of an asset is the period in which the municipality expects the asset to remain in service and be available for use before requiring replacement. The EUL assigned in this AMP was determined by staff expertise and industry standards.

The service life remaining can be calculated by using the assets acquisition date and the EUL. Using both the service life remaining and any available condition data, staff can better determine when the asset might need to be replaced. User-defined costs based on reliable sources are a reasonably accurate and reliable way to determine asset replacement costs.

Service Life Remaining (SLR) = In Service Date + Estimated Useful Life(EUL) - Current Year

#### 2.4 Reinvestment Rate

The reinvestment of capital funds through asset renewals, rehabilitation, or replacement is necessary to sustain an adequate level of service. As assets age over time, they require additional funding to maintain a state of good repair. The reinvestment rate is a measurement of funding relative to total replacement cost.

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

#### Target Reinvestment Rate = <u>Annual Capital Requirement</u> Total Replacement Cost

Actual Reinvestment Rate = <u>Annual Capital Funding</u> Total Replacement Cost

#### 2.5 Asset Condition

Accurate and reliable condition data ensures that lifecycle activities occur at the right time to prevent premature and costly replacement. Timely lifecycle activities help to maximize the useful life of the asset. A standardized condition assessment rating system allows for benchmarking across the Town's assets.

The table below outlines the condition rating system used in this AMP. It is a default within the Citywide Software used by the Town for asset management and is aligned with the Canadian Core Public Infrastructure Survey. When an assessed condition rating is not available, service life remaining is used to approximate 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, 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 B includes additional information on the role of asset condition data and provides basic guidelines for the development of a condition assessment program.

## Analysis of Asset Portfolio

#### 3.1 Total Replacement Cost of Asset Portfolio

The asset categories analyzed in this AMP have a total replacement cost of \$583.7 million based on inventory data from 2022. 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.



#### 3.2 Target vs. Actual Reinvestment Rate

To meet the long-term replacement needs, the Town should be allocating approximately \$17.4 million annually, for a target reinvestment rate of 3.0%. Actual annual spending on infrastructure totals approximately \$7.8 million, for an actual reinvestment rate of 1.3%. The graph below depicts funding gaps or surpluses by comparing target vs actual reinvestment rate.



#### 3.3 Condition of Asset Portfolio

The current condition of the assets is central to all asset management planning. Collectively, 69% of assets in Midland are in fair or better condition. This estimate relies on both age-based and field condition data.



#### 3.4 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 Town can produce an accurate long-term capital forecast.

The Town's 10-Year Capital Plan is updated annually based on the asset inventory. Staff review this data and use their professional judgement to look at the Town's replacement needs at the detailed asset-level. In total, the 2024-2033 10-Year Plan indicates that our replacement needs over the next 10-years are approximately \$204 million. This means that 35% of our replacement needs come due within the next 10 years. This excludes the \$24 million in approved projects carried forward from previous budgets. The 2024-2033 10-Year Capital Plan is included as Appendix C.

The following graph identifies the annual capital requirement for each category of asset and compares it to the funding available. This annual requirement is based on the defined replacement cost and the assigned useful life of asset category and therefore is used for asset management planning purposes only.



## Analysis of Core Tax -Funded Assets

#### 4.1 Road Network

The Road Network is a critical component for safe and efficient transportation services. It includes all municipally owned and maintained roadways. The roads are maintained by Operations - Roads department who are also responsible for all winter maintenance operations including snow plowing, ice control and snow removal.

#### 4.1.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the road network.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement
		Method	COSt
Paved Roads	115.1 km	Replacement Cost	\$114.4 million
Sidewalks	99.7 km	Replacement Cost	\$11.8 million
Surface Treated Roads	4.28 km	Replacement Cost	\$3.4 million
Gravel Roads	1.41 km	Replacement Cost	\$1 million
		Total	\$130.6 million

#### 4.1.2 Asset Condition

The table below identifies the current condition and source of available condition data for each asset segment. We do not perform condition assessments on surface treated or gravel roads.

Asset Segment	Average Condition Rating	Condition Source
Paved Roads	Good	100 % Assessed
Sidewalks	Poor	100 % Assessed
Surface Treated Roads	Good	Internal Inspection
Gravel Roads	Good	Internal Inspection



#### Current Approach to Asset Condition

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. The following describes the municipalities current approach:

• A Road Needs study was completed in 2018 that included a detailed assessment of the condition of each paved road segment.

- Currently waiting for report on 2022 Roads Needs. Trying to budget in capital plan for every 5 years to complete full network study. This year's report will also include sidewalks.
- Sidewalks, gravel, and surface treated roads were assessed internally, and this information is stored within our GIS or Asset Management software.
- Pothole patching is applied as per Minimum Maintenance Standards (MMS) requirements to repair and prevent pothole formations.
- Annual Winter Operations activities including snow plowing and snow removal are performed at Minimum Maintenance Standards (MMS).
- Staff have dedicated annual crack sealing program of \$158,000.
- Staff have dedicated annual resurfacing budget equal to the annual OCIF grant which is approximately \$500,000.
- Rehabilitation is prioritized using Pavement Condition Index (PCI), cost and socio-economic factors. Resurfacing projects are determined by PCI and deteriorating surfaces to extend the useful life of the asset and prolong the need for full reconstruction.

#### 4.1.3 Estimated Useful Life & Average Age

The estimated useful life for Road Network assets has been determined according to industry standards and staff knowledge. The average age for each asset has been determined based on the assessed condition as in service dates are not available for the majority of our Road Network. The following assumptions were determined by our engineering staff.

Assessed Condition	Assumed Age (Years)
95%	< 5
85%	10
75%	15
50%	20
30%	25
Less than 30%	30 or >

The average service life remaining represents the difference between the Estimated Useful Life and the Average Age.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining.
Road Surface	25	20	-
Road Base	70	-	-
Sidewalks	40	45	5
Surface Treated Roads	12	6	6
Gravel Roads	100	-	-

#### 4.1.4 Lifecycle Management Strategy

The following lifecycle strategies have been developed as a proactive approach to managing our road network. 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.

Event Name	<b>Event Description</b>	Event Class	Added Useful Life	Event Trigger
Crack Sealing	Route and Seal roads with light cracking	Preventative Maintenance	7	5-10 Years after resurfacing as needed
Tar and Chip (spot repair)	Spray with tar, cover with limestone chip	Preventative Maintenance	2	10-15 years after resurfacing as needed
Shave and Pave	Single Mill & Pave 50mm	Rehabilitation	15	15 Years after resurfacing
Full Depth Paving	Full Depth Mill & Pave 90mm	Rehabilitation	15	25 Years after resurfacing
Asphalt Granular Base (no excavation)	Pulverize, add 150mm gran 'a', 90mm asphalt (When base granular is poor)	Reconstruction	25	35 - 45% Condition
Asphalt Granular Base (excavation required)	Excavate 600mm, gran 'b', gran 'a', 90mm asphalt (When base granular is poor)	Reconstruction	25	35 - 45% Condition



#### Forecasted Capital Requirements

Based on the lifecycle strategies identified, the following graph forecasts capital requirements for the Road Network. The annual capital requirement represents the average amount per year that the municipality should allocate towards funding rehabilitation and replacement needs to meet current Level of Service.



Average Annual Capital Requirement \$6,000,000

The spike in year 2025 is due to a time-based lifecycle event, Crack Sealing and a Tar & Chip event creates the 2029 spike, this is due to a large number of assets having an in-service date of 2009. In future plans these lifecycle events need to be condition based rather time-based.

#### 4.1.5 Risk and Criticality

The following risk matrix is a visual representation of the relationship between the probability of failure and consequence of failure. Assets with a higher risk should be prioritized during rehabilitation and reconstruction projects.

5	49 Assets 🚱	39 Assets ()	23 Assets	0 Assets 📀	0 Assets Q
	17,764.66 m	16,732.32 m	8,812.23 m	-	-
	\$9,450,801.04	\$8,901,592.40	\$4,688,108.31	\$0.00	\$0.00
4	119 Assets	84 Assets 📀	29 Assets 📀	1 Asset 📿	0 Assets 🚱
	15,324.92 m	10,790.95 m	3,584.14 m	126.13 m	-
	\$8,152,859.98	\$5,740,782.87	\$1,906,763.98	\$67,099.74	\$0.00
Consequence	44 Assets ()	45 Assets 🛛 🏵	24 Assets	4 Assets Q	0 Assets 🚱
	3,070.89 m	3,109.64 m	1,624.20 m	253.39 m	-
	\$1,633,715.50	\$1,654,325.92	\$864,075.36	\$134,802.73	\$0.00
2	10 Assets	4 Assets	1 Asset 🛛 🏵	0 Assets	0 Assets
	9,550.80 m	1,866.43 m	30.60 m	-	-
	\$2,329,485.76	\$470,336.35	\$16,278.00	\$0.00	\$0.00
1	864 Assets	104 Assets	55 Assets	75 Assets ()	260 Assets
	145,324.07 m	22,159.20 m	9,647.38 m	16,113.26 m	53,104.84 m
	\$34,237,836.18	\$2,868,179.15	\$1,110,474.55	\$1,853,025.24	\$6,688,755.58
	1	2	3 Probability	4	5

#### 4.1.6 Levels of Service

The following tables identify the municipalities' 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.

#### Community Level 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 2022
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity.	See Appendix A
Quality	Description or images that illustrate the different levels of road class pavement condition	<ul> <li>The municipality completed a Roads Needs study in 2018 all paved sections received PCI rating between 1-100.</li> <li>&lt;40 Pavement has endured significant structural damage and full reconstruction is required.</li> <li>40-70 Pavement needs some form of resurfacing to mitigate the effects of rutting, cracking and other distresses.</li> </ul>

70-85 Pavement is in the early stages of its life cycle. This is when repairs are most affordable, fastest and have greatest long-term benefit.
>85 Pavement is in good condition and does not require maintenance.

#### Technical Level 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 (2018)
Scope	Lane km of arterial roads (MMS classes 1 & 2) per land area (km/km <sup>2</sup> )	71
Scope	Lane km of collector (MMS classes 3 & 4) per land area (km/km <sup>2</sup> )	1.99
Scope	Lane km of local (MMS classes 5 & 6) per land area (km/km <sup>2</sup> )	5.51
Quality	Average pavement condition index for paved roads in municipality	77.6
Affordability	Actual Reinvestment Rate	1.9%
	Target Reinvestment Rate	4.6%

#### 4.2 Bridges & Culverts

The municipality does not own or maintain any bridges or structural culverts.

#### 4.3 Stormwater Network

The municipality is responsible for owning and maintaining a stormwater network consisting of storm sewer mains, catch basins, culverts (less than 3m diameter) and other supporting infrastructure.

#### 4.3.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the municipalities Storm Network Inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Catch Basins	1,825	Replacement Cost	\$17.5 million
Culverts	4,490 m	Replacement Cost	\$1.6 million
Mains	62,028.5 m	Replacement Cost	\$44.5 million
Manholes	1,039	Replacement Cost	\$16.2 million
Stormwater Ponds	17	CPI Tables	\$1.7 million
		Total	\$81.5 million

\*note Stormwater Pond replacement value does not take into consideration land costs

#### 4.3.2 Asset Condition

The table below identifies the current average condition and source of available condition data for each asset segment.

Asset Segment	Average Condition Rating	Condition Source
Catch Basins	Poor	Age Based
Culverts	Fair	Age Based
Mains	Poor	Age Based
Manholes	Poor	Age Based
Stormwater Ponds	Fair	Age Based

\*Information above is only as accurate as current data available.



#### 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. The following describes the municipalities current approach:

- Flushing and Cleaning 25% of the total network per year
- CCTV/Zoom Camera Inspection 6.5% of total network per year.
- Trenchless re-lining activities are completed on select sewer mains in tandem with CCTV inspections.
- Catch basins are cleaned annually.
- Currently working with Sewer Rat technology to gain a full condition analysis of our storm sewer mains. Current condition age based.

#### 4.3.3 Estimated Useful Life & Average Age

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining
Catch Basins	50	53	-3
Culverts	30	109	-79
Mains	37	40	-3
Manholes	50	65	-15
Stormwater Ponds	20	20	-

\*Information above is only as accurate as current data available.

As part of our current Asset Management project, we are working on disaggregating all these asset categories as they are currently pooled.

#### 4.3.4 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.

Event Name	Event Description	Event Class	Added Useful Life	Event Trigger
Storm Main	25% of total	Preventative	No Impact	Every 4 years
Flushing &	network per year	Maintenance		
Cleaning				
Storm Main CTV/	6.5% of the total	Preventative	No Impact	Every 15 years
Zoom Camera	network per year	Maintenance		
Inspection				
Storm Main	Allow for 2.9% of	Preventative	No Impact	As required
Rodding/Boring	total network per	Maintenance		
	year			
Relining	One time	Rehabilitation	37 years	0-10% condition
	rehabilitation			
	event			
Catch basin	Basins vacuumed	Preventative	No Impact	Annually
cleaning		Maintenance		
Catch Basin	Replace catch	Preventative	20 years	As required
replace frame and	basin frame and	Maintenance		
grate	grate when found			
	faulty			
Culverts	Flushed	Preventative	No Impact	Every 10 years
		Maintenance		
Storm Ponds	Cleaning	Maintenance		1 per year
Manholes	Inspected	Preventative		25% of total
	annually (visually	Maintenance		network per year
	& with zoom			
	cameras)			



#### Forecasted Capital Requirements

Based on the lifecycle strategies identified the following graph forecasts capital requirements for the Storm Network. The annual capital requirement represents the average amount per year that the municipality should allocate towards funding rehabilitation and replacement needs to meet the current Level of Service.



Annual Average Capital Requirement \$2,140,000

#### 4.3.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category. Assets with higher risk should be prioritized for rehabilitation or reconstruction projects.



#### 4.3.6 Levels of Service

The following tables identify the municipalities current level of service for the Storm Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17.

#### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2022
Scope	Description, which may include maps, of user groups or areas of the municipality that are protected from flooding, including the extent of protection provided by the municipal stormwater system.	See Appendix A

#### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2022
Scope	% of properties in municipality	Information not available
	resilient to a 100-year storm	
Scope	% of the municipal stormwater	100%
	management system resilient to 5-	
	year storm	
Affordability	Actual Reinvestment Rate	0.3%
	Target Reinvestment Rate	2.6%

## Analysis of Core Rate-funded Assets

#### 5.1 Water Network

The water services provided by the municipality are managed by the Environmental Services department. This department is responsible for watermains, hydrants, wells, pump houses, storage facilities and all drinking water related assets.

#### 5.1.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the municipalities Water Network Inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Hydrants	684	Replacement Cost	\$10.1 million
Mains	118 Km	Replacement Cost	\$70.3 million
Pump Houses	5	CPI Tables	\$4.1 million
Wells & Water Storage Facilities	16	CPI Tables	\$15 million
Valves	1,209	Replacement Cost	\$4.1 million
		Total	\$103.6 million

#### 5.1.2 Asset Condition

The table below identifies the current average condition and source of available condition data for each asset segment.

Asset Segment	Average Condition Rating (out of 100)	Condition Source
Hydrants	Poor	Age Based
Mains	Good	Age Based
Pump Houses	Good	Age Based
Wells & Water Storage	Good	Age Based
Valves	Very Poor	Age Based

\*Information above is only as accurate as current data available.



#### 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. The following describes the municipalities current approach:

Staff primarily rely on pipe age, material & break history to determine the projected condition of watermains. Uni-directional flushing of 100 % of the network is completed annually.

Valve turning is completed at 70% per year and Hydrant valves are exercised regularly.

#### 5.1.3 Estimated Useful Life & Average Age

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining.
Hydrants	40	43	-3
Mains	80	41	39
Pump Houses	50	34	16
Reservoir & Wells	48	38	10
Valves	40	45	-5

\*Information above is only as accurate as current data available.

As part of our current Asset Management project, we are working on disaggregating all asset categories as they are currently pooled.

#### 5.1.4 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.

Event Name	Event Description	Event Class	Added Useful Life	Event Trigger
Uni Directional	100% of total	Preventative	No Impact	Annually
Flushing	network per year	Maintenance		
Hydrant Valves	100% of total	Preventative	No Impact	Annually
	network per year	Maintenance		
Valves	70% of total	Preventative	No Impact	Annually
	network per year	Maintenance		
Well Maintenance	Inspected every 4	Preventative	No Impact	Every 4 years
	years	Maintenance &		
		Cleaning		
Reservoir	Dewatered &	Preventative	No Impact	Every 2 years for
Cleaning	cleaned	Maintenance		older facilities and
				every 3 for newer



#### Forecasted Capital Requirements

Based on the lifecycle strategies identified the following graph forecasts capital requirements for the Water Network. The annual capital requirement represents the average amount per year that the municipality should allocate towards funding rehabilitation and replacement needs to meet current Level of Service.



#### Average Annual Capital Requirement \$1,693,000

#### 5.1.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category. Assets with a higher risk should be prioritized for rehabilitation and reconstruction projects.

	5	4 Assets 🔇 737.72 m, unit(s) \$7,876,841.95	4 Assets 1,285.75 m, unit(s) \$6,713,339.51	0 Assets 🛛 🚱 - \$0.00	0 Assets 🛛 🤄 - \$0.00	0 Assets - \$0.00
	4	43 Assets 12,450.72 m, unit(s) \$9,973,838.95	25 Assets 6,996.45 m, unit(s) \$6,388,646.76	11 Assets 3,439.62 m \$1,891,792.54	3 Assets 656.17 m \$360,893.30	0 Assets 📀 - \$0.00
Consequence	3	233 Assets 29,761.27 m \$16,368,699.72	185 Assets 23,363.89 m, unit(s) \$13,604,181.22	42 Assets 5,607.12 m, unit(s) \$3,631,706.34	42 Assets 5,526.03 m \$3,039,318.82	3 Assets 518.05 m \$284,925.76
	2	750 Assets 13,966.97 m, unit(s) \$8,592,307.75	496 Assets 11,710.39 m, unit(s) \$6,670,548.67	141 Assets 4,532.11 m \$2,492,658.61	118 Assets 3,055.76 m \$1,680,670.31	11 Assets (2) 1,156.00 m, unit(s) \$876,720.19
	1	87 Assets 🔇 🏵 813.75 unit(s), m \$1,133,113.47	463 Assets () 1,788.80 unit(s), m \$3,671,352.45	340 Assets () 735.38 unit(s), m \$2,979,509.10	224 Assets 547.29 unit(s), m \$2,437,572.81	1,184 Assets () 1,312.34 unit(s), m \$9,020,502.02
		1	2	3 Probability	4	5

#### 5.1.6 Levels of Service

The following tables identify the municipalities' 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.

#### Community Level 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 2022
Scope	Description, which may include maps,	See Appendix A
	of user groups or areas of the	
	municipality that are connected to the	
	municipal water system	
Scope	Description, which may include maps,	See Appendix A
	of the user groups or areas of the	
	municipality that have fire flow	
Reliability	Description of boil water advisories	No boil water advisories were issued
	and service interruptions	within the last 2 years.

#### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2022
Scope	% of properties connected to the municipal water system	90%
Scope	% of properties where fire flow is available	90%

Reliability	# of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system	0
Reliability	# of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system	0
Performance	# of water quality customer complaints related to the water system	23
Performance	% of water network in good or very good condition	74%
Performance	% of water network in poor or very poor condition	17%
Affordabilit <b>y</b>	Actual Reinvestment Rate Target Reinvestment Rate	1.2% 1.6%

#### 5.2 Wastewater Network

The wastewater services provided by the municipality are managed by the Environmental Services department. This department is responsible for sewer mains, sanitary pump stations, manholes and the Pollution Control Plant.

#### 5.2.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the municipalities Wastewater Network Inventory.

Asset Segment	Quantity	Replacement Cost Method	Total Replacement Cost
Mains	95 Km	Replacement Cost	\$64.3 million
Pump Stations	5	CPI Tables	\$8.5 million
Manholes	1237	Replacement Cost	\$20.2 million
Pollution Control Plant	1	CPI Tables	\$41.8 million
		Total	\$134 million
# 5.1.2 Asset Condition

The table below identifies the current average condition and source of available condition data for each asset segment.

Asset Segment	Average Condition Rating (out of 100)	Condition Source
Mains	Poor	Age Based
Pump Stations	Good	Age Based
Manholes	Very Poor	Age Based
Pollution Control Plant	Fair	Age Based

\*Information above is only as accurate as current data available.



### 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. The following describes the municipalities current approach:

Acoustic Rapid Assessment of 100% of gravity sewer per year.

Pole Camera Inspection dependent on the results of the rapid assessment.

Flushing dependent on the results of the rapid assessment.

CCTV Camera inspection 1.5% network annually, completed before relining event.

Pumping stations are inspected on a daily basis by internal staff. The stations were also assessed by an external consultant in 2019.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining
Mains	61	42	19
Pump Stations	50	18	32
Manholes	50	42	8
<b>Pollution Control Plant</b>	50	25	25

### 5.1.3 Estimated Useful Life & Average Age

As part of our current Asset Management project, we are working on disaggregating all of these asset categories as they are currently pooled.

# 5.1.4 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.

Event Name	Event Description	Event Class	Added Useful Life	Event Trigger
Acoustic Rapid	100% of total	Preventative	No Impact	Annually
Assessment	network per year	Maintenance		
Pole Camera	Dependent on	Preventative	No Impact	Poor Rating on
Assessment	results of Rapid Assessment	Maintenance		Rapid Assessment
Flushing	Dependent on	Preventative	No Impact	Poor Rating on
	results of Rapid	Maintenance		Rapid Assessment
	Assessment			
CCTV Camera	1.5% complete	Preventative	No Impact	Suspected Defect
Inspection	before relining	Maintenance		
Manholes	Inspected	Preventative	No Impact	Annually
	annually during	Maintenance		
	Acoustic Rapid			
	Assessment			
Pump Stations	Station Checks	Preventative	No Impact	Daily
		Maintenance		



### Forecasted Capital Requirements

Based on the lifecycle strategies identified the following graph forecasts capital requirements for the Wastewater Network. The annual capital requirement represents the average amount per year that the municipality should allocate towards funding rehabilitation and replacement needs to meet current Level of Service.



Average Annual Capital Requirement \$1,619,000

### 5.1.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category. Assets with higher risk should be prioritized for rehabilitation and reconstruction projects.



### 5.1.6 Levels of Service

The following tables identify the municipalities current level of service for the Wastewater Network. These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17.

# Community Level 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 2022
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater systems	See Appendix A.
Reliability	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Town is replacing combined sewers with separate sanitary and storm systems as reconstruction of the street occurs. Currently there are 24 combined systems remaining.
Reliability	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes	Stormwater can enter sanitary sewers due to cracks in sanitary mains, manholes, private services or through indirect connections (e.g. weeping tiles). In the case of heavy rainfall events, sanitary sewers may experience a volume of water and sewage that exceeds its designed capacity. In some cases, this can cause water and/or sewage to backup into homes. The disconnection of weeping tiles from sanitary mains and the use of sump pumps and pits directing storm water to the storm drain system can help to reduce the chance of this occurring.
Reliability	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid stormwater infiltration	If influent flow to the plant exceeds the primary treatment rated capacity, there is a storm detention/overflow tank with an approximate volume of 1400 m3 for combined sewage flow detention. The headworks has an overflow chamber with a motorized sluice gate and bypass sewer line which discharges to the tank in a storm event where flows exceed 290 L/s.

Reliability	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Effluent refers to water pollution that is discharged from a wastewater treatment plant and may include suspended solids or total phosphorous. The Midland WWTC is operated in accordance with the Environmental Compliance Approval (ECA) Number
		5708-A72SPG, dated July 20, 2016.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2022
Scope	% of properties connected to the 82%	
	municipal wastewater system	
Reliability	# of events per year where	1
	combined sewer flow in the	
	municipal wastewater system	
	exceeds system capacity compared	
	to the total number of properties	
	connected to the municipal	
D all a latter		Not Date A stickly
Reliability	# of connection-days per year due to	Not Data Available
	the total number of properties	
	connected to the municipal	
	wastewater system	
Reliability	# of effluent violations per year due	0
,	to wastewater discharge compared	
	to the total number of properties	
	connected to the municipal	
	wastewater system	
Performance	% of wastewater system in good or	36%
	very good condition	
Performance	% of wastewater system in poor or	51%
	very poor condition	
Affordability	Actual Reinvestment Rate	0.8%
	Target Reinvestment Rate	1.2%

# Analysis of Non-Core Assets

# 6.1 Municipal Buildings

The Municipal Buildings category of municipally owned buildings encompasses facilities that support the administrative, operational, and emergency services functions of local government. Municipal buildings play a crucial role in ensuring the efficient and effective delivery of public services, safety, and infrastructure management within the community. This category includes:

Municipal Office: Location of the administrative functions of the municipality, including offices for elected officials, council chambers, departmental offices, and public service areas.

Operations Complex: Facility used for the maintenance and management of municipal infrastructure and services, including the roads and parks departments, fleet and equipment garages, materials storage, fuel tanks and pumps, and a multi-bay mechanics shop.

Fire Hall: The fire hall serves as the base for the fire department, providing space for firefighting fleet and equipment, personnel, and emergency response operations.

Storage and Leased Buildings: Buildings used for storage, offices, or leased rental space.

# 6.1.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the municipal building inventory.

Asset	Quantity	Replacement Cost Method	Total Replacement Cost
Municipal Office	1	User Defined	\$10.4 million
<b>Operations</b> Complex	1	User Defined	\$9.7 million
Fire Hall	1	User Defined	\$6.1 million
Storage	3	User Defined	\$0.1 million
Leased	2	User Defined	\$4.4 million
		Total	\$30.7 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

# 6.1.2 Asset Condition

Asset Segment	gment Average Condition (%) Average Condition Rating		Condition Source
Municipal Office	58%	Fair	Assessed
<b>Operations</b> Complex	79%	Good	Not Assessed (New)
Fire Hall	36%	Poor	Assessed
Storage	18%	Very Poor	Assessed
Leased	56%	Fair	Assessed
Weighted Average	60%	Good	

To ensure that the Town's municipal buildings continue to provide an acceptable level of service, the Town 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.

### **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 Town's current approach:

• Detailed assessments were completed for all buildings owned and managed by the Town. These assessments were performed by McIntosh Perry (2020). The study included an on-site inspection of the development which was carried out on October 3, 2019. The inspection focused on structure, building exterior, building interior and the electrical, mechanical and fire safety systems.

•Inspection logs and deficiency lists are routinely reviewed by staff.

# 6.1.3 Estimated Useful Life & Average Age

The Estimated Useful Life for municipal buildings has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Municipal Office	17	11	7
Operations Complex	37	2	35
Fire Hall	19	13	6
Storage	26	24	2
Leased	50	33	17
Average	30	17	13

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

# 6.1.4 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 Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Municipal buildings are subject to internal staff inspections to identify health & safety and accessibility requirements. Routine maintenance is conducted on an as needed basis.
Replacement	Building condition assessment studies are conducted periodically. These studies assess buildings at a component level, suggesting a replacement schedule for components nearing the end of life. Replacement activities are conducted based on necessity and availability of funding.

# 6.1.5 Risk and Criticality

### **Risk Matrix**

The following risk matrix provides a visual representation of the risk rating, which is the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data.

1 - 4	5 - 7	8 - 9	10 - 14	15 - 25
19 Components	5 Components	0 Component	4 Components	15 Components
14.9 million	7.7 million	\$0.00	0.3 million	7.8 million

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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of buildings are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Service Life Remaining % (Social)

The identification of critical assets allows the Town 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 Town is currently facing:

### **Capital Funding Strategies**

Major capital rehabilitation and replacement projects are often largely 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 by increasing reserve capacity.

### 6.1.6 Levels of Service

The following tables identify the current level of service for Municipal Buildings. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Accessibility	Description of accessibility measures in place	The Municipal Office is equipped with a ground level entrance, wide automatic doors, and an elevator. All other municipal buildings are equipped with automatic door openers.
Safety	Description of building / facility inspection process	Monthly inspections are performed on all municipal buildings by the Joint Health and Safety Committee.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Accessibility	% of buildings / facilities that comply with AODA	70%
Safety	Frequency of building / facility inspections	100% of buildings are inspected each month
Affordability	Actual Reinvestment Rate Target Reinvestment Rate	0.00% 1.9%

# 6.1.7 Recommendations

### **Risk Management Strategies**

• Use risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

• Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

### Lifecycle Management Strategies

•Continue to execute upon rehabilitation and replacement activities recommended in the condition assessment reports.

### Levels of Service

•Continue measuring current levels of service in accordance with the metrics that the Town has established in this AMP. Additional metrics can be established as they are determined to provide meaningful and reliable inputs into asset management planning.

•Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

# 6.2 Community Buildings

The Community Buildings category refers to municipally owned public facilities designed to serve the social, educational, and recreational needs of the community. Community Buildings aim to enhance the quality of life for residents by providing programming and spaces that foster education, personal development, social interaction, and physical well-being. This category includes the Midland Public Library, the North Simcoe Sports and Recreation Centre, the Harbour office and washrooms, the Huronia Museum, various public washrooms, several pavilion structures, and the buildings leased by the Lawn Bowling Club and the Bridge Club.

# 6.2.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset in the Community Buildings category.

Asset	Quantity	Replacement Cost	Total Replacement
		Method	Cost
Midland Public Library	1	User Defined	\$12.1 million
North Simcoe Sports	1	User Defined	\$23.3 million
and Recreation Centre			
Midland Cultural	1	User Defined	\$13.5 million
Centre*			
Harbour Facility	1	User Defined	\$0.5 million
(Office & Washroom)			
Huronia Museum	1	User Defined	\$2.0 million
Bridge Club Building	1	User Defined	\$0.4 million
Lawn Bowling Building	1	User Defined	\$0.3 million
Bus Shelters	9	User Defined	\$0.1 million
Park Washrooms	6	User Defined	\$1.0 million
Pavilions	6		\$0.6 million
		Total	\$53.8 million

\*The Midland Cultural Centre building is owned by the Town of Midland, although the Town is not involved in the operations of the MCC

### 6.2.2 Asset Condition

Asset Segment	Average Condition (%)	Average Condition	Condition Source
		Rating	
Midland Public Library	50%	Fair	Assessed
North Simcoe Sports	61%	Good	Assessed
and Recreation Centre			
Midland Cultural	79%	Good	Assessed
Centre*			
Harbour Facility	58%	Fair	Assessed
(Office & Washroom)			
Huronia Museum	0%	Very Poor	Age Based
Bridge Club Building	24%	Poor	Age Based
Lawn Bowling Building	47%	Fair	Assessed
Bus Shelters	35%	Good	Assessed
Park Washrooms	39%	Good	Assessed
Pavilions	63%	Good	Assessed
Weighted Average	60%	Good	

To ensure that the Town's community buildings continue to provide an acceptable level of service, the Town 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.

### **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 Town's current approach:

• Detailed assessments were completed for all buildings owned and managed by the Town. These assessments were performed by McIntosh Perry (2020). The study included an on-site inspection of the development which was carried out on October 3, 2019. The inspection focused on structure, building exterior, building interior and the electrical, mechanical and fire safety systems.

•Inspection logs and deficiency lists are routinely reviewed by staff.

# 6.2.3 Estimated Useful Life & Average Age

The Estimated Useful Life for municipal buildings has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining
Midland Public Library	28	15	13
North Simcoe Sports and Recreation Centre	19	9	10
Midland Cultural Centre*	50	10	40
Harbour Facility (Office & Washroom)	25	27	-2
Huronia Museum	0	46	-46
Bridge Club Building	50	45	5
Lawn Bowling Building	0	53	-53
Bus Shelters	20	16	4
Park Washrooms	12	19	-7
Pavilions	17	27	-10
Average	22	27	-5

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

### 6.2.4 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 Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Municipal buildings are subject to internal staff inspections to identify health & safety and accessibility requirements. Routine maintenance is conducted on an as needed basis.
Replacement	Facility condition assessment studies are conducted periodically. These studies assess facilities at a component level, suggesting a replacement schedule for components nearing the end of life. Replacement activities are conducted based on necessity and availability of funding

# 6.2.5 Risk and Criticality

The following risk matrix 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 2022 inventory data.



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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of buildings are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)	
Condition	Replacement Cost (Economic)	
	Service Life Remaining % (Social)	

The identification of critical assets allows the Town 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 Town is currently facing:

### **Capital Funding Strategies**

Major capital rehabilitation and replacement projects are often largely 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 by increasing reserve capacity.

### 6.2.6 Levels of Service

The following tables identify the current level of service for Community Buildings. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Capacity / Availability	Description of facility and services provided	Community Buildings provide services that enhance the quality of life for users. This category includes the Midland Public Library, the North Simcoe Sports and Recreation Centre, the Harbour office and washrooms, the Huronia Museum, various public washrooms, several pavilion structures, and the buildings leased by the Lawn Bowling Club and the Bridge Club.
Convenience	Description of convenience of location of facility	Community buildings are centrally located in the Town of Midland, within walking, cycling, or driving distance of many residential neighbourhoods and local businesses.
Affordability	Description of affordability from resident's perspective	Most community buildings and the services they provide are tax rate supported, with low-cost services available.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Capacity / Availability	Description of facility hours of operation	Community buildings are generally open to the public during normal business hours, from 8:30am to 6:00pm. This schedule varies by building and may include evening and weekend hours depending on the services provided (NSSRC, Pavilions and buildings operated by service clubs).
Convenience	Proportion of population living within X km of facility	95% of population living within 16 square km of the Town's Community Buildings.
Affordability	% of O&M costs recovered from user charges	23%
	Actual Reinvestment Rate	0.7%
	Target Reinvestment Rate	2.8%

### 6.2.7 Recommendations

### **Risk Management Strategies**

• Use risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

• Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

### Lifecycle Management Strategies

•Continue to execute upon rehabilitation and replacement activities recommended in the condition assessment reports.

### **Levels of Service**

•Continue measuring current levels of service in accordance with the metrics that the Town has established in this AMP. Additional metrics can be established as they are determined to provide meaningful and reliable inputs into asset management planning.

•Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

# 6.3 Land and Land Improvements

The Town of Midland owns a considerable number of assets categorized as Land Improvements. This category includes:

Land - owned by the municipality

Parklands – land designated as parkland

Sports fields and courts - ball diamonds, basketball, tennis and pickleball courts, volleyball courts, soccer fields Boat launch and harbour docks – docks at the harbour and Pete Pettersen Park boat launch

Dog park – fencing, signage and other infrastructure associated with the dog park

Skateboard park – equipment and hardscaping features at the skateboard park

Paving and landscaping – parking lots, paving, and other landscaping features

Trails – asphalt, concrete and gravel trails

# 6.3.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the land improvements category.

Asset	Quantity	Replacement Cost	Total Replacement
		Niethod	Cost
Land	252 hectares	N/A	N/A
Parkland	237 hectares	N/A	N/A
Sports Fields & Courts	26	CPI	\$2.9 million
Boat Launch & Harbour Docks	45	CPI	\$0.7 million
Dog Park	1	CPI	\$.01 million
Skateboard Park	1	CPI	\$0.2 million
Paving & Landscaping		CPI	\$7.6 million
Trails	46 km	CPI	\$3.5 million
		Total	\$14.9 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

# 6.3.2 Asset Condition

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.

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Sports Fields & Courts	48%	Fair	Age-Based
Boat Launch & Harbour Docks	64%	Good	Age-Based
Dog Park	60%	Good	Age-Based
Skateboard Park	60%	Good	Assessed
Paving & Landscaping	63%	Good	Age-Based
Trails	68%	Good	Age-Based
Weighted Average	61%	Good	

To ensure that the Town's land improvements continue to provide an acceptable level of service, the Town 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.

### **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 Town's current approach:

Staff complete regular visual inspections of land improvements assets to ensure they are in a state of fair to good repair.

Staff conduct formal inspections of outdoor play space, fixed play structures and surfacing in accordance with CAN/CSA-Z614 and required as per O. Reg. 137/15.

# 6.3.3 Estimated Useful Life & Average Age

The Estimated Useful Life for Land Improvement assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Sports Fields & Courts	13	21	-8
Boat Launch & Harbour Docks	22	10	12
Dog Park	15	10	5
Skateboard Park	20	23	-3
Paving & Landscaping	34	13	21
Trails	23	10	13
Average	21	15	6

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

# 6.3.4 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 community, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

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

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation & Replacement	The land improvements asset category includes several unique asset types and lifecycle requirements are dealt with on a case-by-case basis. Regular inspections are carried out according to Canadian Standards Association (CSA) guidelines

# 6.3.5 Risk and Criticality

Risk Matrix

The following risk matrix 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 2022 inventory data.

1 - 4	5 - 7	8 - 9	10 - 14	15 - 25
83 Components	23 Components	1 Component	6 Components	27 Components
3.2 million	3.2 million	0.3 million	1.7 million	6.8 million

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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of land improvements are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Service Life Remaining % (Social)

The identification of critical assets allows the Town 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 Town is currently facing:

### **Organizational Capacity**

Both short- and long-term planning requires the regular collection of infrastructure data to support asset management decision-making. Staff find it challenging to allocate appropriate resources towards data collection and condition assessments to ensure that asset condition and attribute data is regularly reviewed and updated. A standardized approach to data gathering and condition assessments with achievable goals can enable the Town to regularly update their asset data and information.

### 6.3.6 Levels of Service

The following tables identify the current level of service for Land Improvements. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by assets categorized as Land Improvements.

Service Attribute	Qualitative Description	Current LOS 2024
Capacity / Availability	Description of services provided	Assets in the land improvements category provide outdoor spaces and features that enhance quality of life for users. This category includes sports fields and courts located in community parks, the boat launch and harbour docks, the dog park and skateboard park, the extensive recreational trail system, and hardscaping such as paving, retaining walls, monuments, and water features.
Affordability	Description of affordability from resident's perspective	Most land improvements and the services they provide are tax rate supported, with low-cost services available.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Capacity /	Utilization %	100%
Availability		
Affordability	Annual net O&M costs per property	\$319
	Actual Reinvestment Rate	2.1%

Target Reinvestment Rate	3.7%	
--------------------------	------	--

# 6.4 Municipal Fleet

The municipal vehicles category of vehicles includes all vehicles used in the routine operations and maintenance tasks performed by municipal departments. The types of vehicles in this category are classified as heavy, medium, or light duty. The Heavy Duty category includes plough trucks. Medium Duty includes ¾ ton vehicles and those used to tow trailers with maintenance equipment. Light Duty includes passenger vehicles and light duty trucks.

# 6.4.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the municipal vehicle inventory.

Asset	Quantity	Replacement Cost Method	Total Replacement Cost
Heavy Duty	9	User Defined	\$3.5 million
Medium Duty	14	User Defined	\$1.8 million
Light Duty	28	User Defined	\$2.1 million
		Total	\$7.4 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

# 6.4.2 Asset Condition

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.

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Heavy Duty	38%	Poor	Age-Based
Medium Duty	49%	Fair	Age-Based
Light Duty	48%	Fair	Age-Based
	43%	Fair	

To ensure that the Town's vehicles continue to provide an acceptable level of service, the Town 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 vehicles.

### **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 Town's current approach:

•Staff complete regular visual inspections of vehicles via circle checks to ensure they are in state compliant with MTO regulations prior to operation.

•The age, mileage and use of vehicles is used as a proxy to determine remaining useful life and relative vehicle condition.

# 6.4.3 Estimated Useful Life & Average Age

The Estimated Useful Life for vehicle assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Heavy Duty	10	7	3
Medium Duty	10	5	5
Light Duty	9	6	3
Average	10	6	4

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

# 6.4.4 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 the Town, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy	
Maintenance / Rehabilitation	Visual inspections completed and documented on a regular basis.	
	Annual preventative maintenance activities include system components check and additional detailed inspections.	
Replacement	Vehicle age, kilometres and annual repair costs are taken into consideration when determining appropriate treatment options.	

# 6.4.5 Risk and Criticality

The following risk matrix 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 2022 inventory data.



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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of vehicles are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Department (Operational)

The identification of critical assets allows the Town 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 Town is currently facing:

### **Capital Funding Strategies**

The timely replacement of the Town's vehicles is critical to the community. With multiple assets scheduled for replacement in the coming years (refer to appendix C), the Town must ensure that appropriate funding is in place to avoid a disruption in critical services provided to the community.

# 6.4.6 Levels of Service

The following tables identify the current level of service for the municipal vehicles. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Safety	Description of routine maintenance and inspection procedures	The municipal fleet undergoes critical visual, operational, and mechanical inspections on a regular basis.
Sustainability	Description of implemented sustainability measures	Vehicle telematics contributes to sustainability by optimizing various aspects of vehicle and fleet operations, leading to reduced environmental impact. Here are the key ways in which vehicle telematics aids sustainability: fuel efficiency, emissions reduction, reduced resource consumption.
Affordability	Description of affordability from resident's perspective	Municipal vehicle replacement is based on age, mileage and use. Heavy-use vehicles are moved to lighter-use areas of operation to prolong the vehicle's life.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Safety	Frequency of vehicle inspections	Operational Checks – Daily
		Safety Certifications – Annually
Sustainability	Fuel efficiency of fleet (L/100km)	24.56 L
Affordability	Annual Vehicle O&M costs per	\$119
	property	
	Actual Reinvestment Rate	8.5%
	Target Reinvestment Rate	9.5%

# 6.5 Fire and Emergency Services Fleet

The fire and emergency services fleet is a specialized collection of vehicles dedicated to protecting the community through rapid response to a wide variety of emergencies, including fires, medical incidents, and various rescue operations. This fleet is essential for ensuring public safety and maintaining efficient emergency services. It includes pumpers, tanker trucks, an aerial ladder truck, rescue units equipped with specialized tools and gear, and command vehicles used to coordinate and manage emergency response operations.

# 6.5.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the emergency services fleet inventory.

Asset	Quantity	Replacement Cost Method	Total Replacement Cost
Pumper Trucks	2	User Defined	\$2.6 million
Tanker Trucks	1	User Defined	\$0.9 million
Aerial Trucks	1	User Defined	\$2.0 million
Rescue Vehicles	1	User Defined	\$1.2 million
Command Vehicles	3	User Defined	\$0.2 million
		Total	\$6.9 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

### 6.5.2 Asset Condition

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.

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Pumper Trucks	42%	Fair	Age-Based
Tanker Trucks	40%	Fair	Age-Based
Aerial Trucks	85%	Very Good	Age-Based
Rescue Vehicles	15%	Very Poor	Age-Based
Command Vehicles	83%	Very Good	Age-Based
Weighted Average	51%	Fair	Age-Based

To ensure that the Town's vehicles continue to provide an acceptable level of service, the Town 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 vehicles.

### **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 Town's current approach:

•Staff complete regular visual inspections of vehicles via circle checks to ensure they are in state compliant with MTO regulations prior to operation.

•The age, mileage and use of vehicles is used as a proxy to determine remaining useful life and relative vehicle condition.

# 6.5.3 Estimated Useful Life & Average Age

The Estimated Useful Life for fleet assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Pumper Trucks	15-20	12	3 to 8
Tanker Trucks	15-20	12	3 to 8
Aerial Trucks	15-20	3	12 to 17
Rescue Vehicles	15-20	17	-2 to 3
Command Vehicles	10	2	8
Average	14 - 19	9	5-10

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

### 6.5.4 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 the Town, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Visual inspections completed and documented on a
	regular basis.
	Annual preventative maintenance activities include
	system components check and additional detailed
	inspections.
Replacement	Vehicle age, kilometres and annual repair costs are
	taken into consideration when determining
	appropriate treatment options.

# 6.5.5 Risk and Criticality

The following risk matrix 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 2022 inventory data.



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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of vehicles are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Department (Operational)

The identification of critical assets allows the Town 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 Town is currently facing:

### **Capital Funding Strategies**

The timely replacement of the Town's vehicles is critical to the community. With multiple assets, scheduled for replacement in the coming years (refer to appendix C), the Town must ensure that appropriate funding is in place to avoid a disruption in critical services provided to the community.

### 6.5.6 Levels of Service

The following tables identify the current level of service for the fire and emergency services fleet. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the fire and emergency services fleet.

Service Attribute	Qualitative Description	Current LOS 2024
Capacity	Description of capacity from resident's perspective	The Fire and Emergency Services Department is available 24/7 365 days a year.
Safety	Description of routine maintenance and inspection procedures	Vehicles in the Fire and Emergency Services fleet undergo critical visual, operational, and mechanical inspections on a regular basis.
Affordability	Description of capacity from resident's perspective	Fire and Emergency Services are largely funded by the tax-rate. Services are generally available to residents, businesses, and neighbouring communities at no extra cost to the user. Replacement of fire vehicles is based on age, condition, and use.

### Technical Level of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the fire and emergency services fleet.

Service Attribute	Qualitative Description	Current LOS 2024
Capacity	Average response time (for all calls - 2020)	11 minutes 32 seconds
Safety	Frequency of vehicle inspections	Operational Checks – Daily Safety Certifications – Annually
Affordability	Annual vehicle O&M costs per property Actual Reinvestment Rate Target Reinvestment Rate	\$16 4.9% 5.1%

# 6.6 Transit Fleet

Midland collaborates with the neighbouring municipality of Penetanguishene to provide a shared transit service benefitting riders in both communities, known as Mid-Pen Transit Service. The traditional fixed-route transit services offered by Mid-Pen Transit are serviced by standard buses that are accessible to wheelchairs and mobility scooters.

Community Reach operates the Midland Accessible Transit service for residents of Midland. This service offers specialized accessible vans for people unable to access traditional transit routes due to disabilities.

The transit fleet assets included in this AMP are all owned by the Town of Midland.

# 6.6.1 Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the public transit fleet.

Asset	Quantity	Replacement Cost Method	Total Replacement Cost
Bus (30')	3	User Defined	\$1.5 million
Accessible Van	4	User Defined	\$0.5 million
		Total	\$2.0 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

### 6.6.2 Asset Condition

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.

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Bus (30')	84%	Very Good	Age-Based
Accessible Van	60%	Good	Age-Based
Weighted Average	78%	Good	Age-Based

To ensure that the Town's Transit vehicles continue to provide an acceptable level of service, the Town 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 vehicles.

### **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 Town's current approach:

•Staff complete regular visual inspections of vehicles via circle checks to ensure they are in state compliant with MTO regulations prior to operation.

•The age, mileage and use of vehicles is used as a proxy to determine remaining useful life and relative vehicle condition.

# 6.6.3 Estimated Useful Life & Average Age

The Estimated Useful Life for transit assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Bus (30')	9	2	7
Accessible Van	9	3	6
Average	9	3	7

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

# 6.6.4 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 the Town, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy	
Maintenance / Rehabilitation	Visual inspections completed and documented on a regular basis.	
	Annual preventative maintenance activities include system components check and additional detailed inspections.	
Replacement	Vehicle age, kilometres and annual repair costs are taken into consideration when determining appropriate treatment options.	

### 6.6.5 Risk and Criticality



The following risk matrix 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 2022 inventory data.

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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of vehicles are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Department (Operational)

The identification of critical assets allows the Town 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 Town is currently facing:

### **Capital Funding Strategies**

The timely replacement of the Town's vehicles is critical to the community. With multiple assets, scheduled for replacement in the coming years (refer to appendix C), the Town must ensure that appropriate funding is in place to avoid a disruption in critical services provided to the community.

### 6.6.6 Levels of Service

The following tables identify the current level of service for the transit fleet. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Capacity	Description of service provided.	Conventional and Accessible Transit service is available to the community 6 days a week.
Safety	Description of safety and security measures in place	Vehicles in the Transit fleet undergo critical visual, operational, and mechanical inspections on a regular basis.
Affordability	Description of affordability from the resident's perspective	Transit fares are \$3 for adults, \$2.50 for students, \$2.50 for seniors, and children under 6 ride for free. Seniors with a transit card ride for free. For an average

annual period, this program results in approximately 18,875 free rides for seniors.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Capacity	Number of days service was down	0 days (2023)
Safety	Frequency of safety inspections	Operational Checks – Daily
		Safety Certifications – Semi-annually
Affordability	% of O&M costs recovered from user charges	37%
	Actual Reinvestment Rate	2.8%
	Target Reinvestment Rate	11.3%

# 6.7 Equipment

To maintain the high quality of public infrastructure and support the delivery of core services, Town staff employ various types of equipment. This includes:

Heavy - heavy rolling equipment

Fire and Emergency Services - equipment to outfit staff and vehicles

Maintenance - public works equipment and heavy rolling equipment

Administration - equipment to serve the Town's IT and office needs

Sports and Play - playground equipment, netting, shot clocks and scoreboards.

Parking Meters – parking meters in lots and on streets

Library – books and computers

Keeping equipment in a fair to good state of repair is important to maintain a high level of service.

### 6.7.1 Asset Inventory & Replacement Cost

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

Asset	Quantity	Replacement Cost Method	Total Replacement Cost
Неаvy	5	User Defined	\$2.6 million
Fire and Emergency Services	53	User Defined	\$1.8 million
Maintenance	95	User Defined	\$4.8 million
Administration	178	CPI	\$5.1 million
Sports & Play	25	User Defined	\$1.6 million
Parking Meters	70	CPI	\$1.1 million
Library	13	CPI	\$1.3 million
		Total	\$18.3 million

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

### 6.7.2 Asset Condition

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.

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Heavy	22%	Poor	Age-Based
Fire and Emergency Services	53%	Fair	Age-Based
Maintenance	52%	Fair	Age-Based
Administration	29%	Poor	Age-Based
Sports & Play	43%	Fair	Age-Based
Parking Meters	95%	Very Good	Age-Based
Library	27%	Poor	Age-Based
Weighted Average	42%	Poor	Age-Based

To ensure that the Town's equipment continues to provide an acceptable level of service, the Town 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 equipment.

### **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 Town's current approach:

- Fire and emergency equipment is inspected routinely as adherence to legislation
- Heavy and maintenance related equipment is inspected routinely as adherence to safety regulations

Staff conduct formal inspections of fixed play structures in accordance with CAN/CSA-Z614 and required as per O. Reg. 137/15.

# 6.7.3 Estimated Useful Life & Average Age

The Estimated Useful Life for equipment assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service.

Asset Segment	Average Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Heavy	13	13	0
Fire and Emergency Services	11	6	5
Maintenance	10	7	3
Administration	10	8	2
Sports & Play	6	11	-5
Parking Meters	14	1	13
Library	8	7	1
Average	10	7	3

Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

# 6.7.4 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 the Town, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

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

Activity Type	Description of Current Strategy
Maintenance/ Rehabilitation	Maintenance program varies by department
	Equipment is maintained according to manufacturer recommended actions and supplemented by the expertise of municipal staff.
Replacement	The replacement of equipment depends on age and noted deficiencies.

# 6.7.5 Risk and Criticality

### **Risk Matrix**

The following risk matrix 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 2022 inventory data.



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

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of equipment are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (Economic)
	Department (Operational)

The identification of critical assets allows the Town 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 Town is currently facing:

### Lifecycle Management Strategies

The current lifecycle management strategy for equipment is considered more reactive than proactive. It is a challenge to find the right balance between maintenance, capital rehabilitation, and the replacement of assets. Staff hope to develop better defined strategies that will extend asset lifecycles and result in a lower total cost to the Town. These strategies will require sustainable annual funding to minimize the deferral of capital works.

### **Organizational Capacity**

Both short- and long-term planning requires the regular collection of infrastructure data to support asset management decision-making. Staff find it challenging to allocate appropriate resources towards data collection and condition assessments to ensure that asset condition and attribute data is regularly reviewed and updated. A standardized approach to data gathering and condition assessments with achievable goals can enable the Town to regularly update their asset data and information.

# 6.7.6 Levels of Service

The following tables identify the current level of service for equipment. These metrics include the technical and community levels of service that are required as part of O. Reg. 588/17.

### Community Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Safety	Description of routine playground inspection procedures	Inspections are performed weekly, monthly, and annually based on the CSA requirements.
Affordability	Description of affordability from the resident's perspective	Equipment replacement is based on age, condition, and use. Changes to government regulations/standards may trigger replacements ahead of the useful life.

### Technical Level of Service

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

Service Attribute	Qualitative Description	Current LOS 2024
Safety	Number of playgrounds passed annual inspection	12
Affordability	Annual equipment O&M costs per property	\$91
	Actual Reinvestment Rate	2.6%
	Target Reinvestment Rate	9.3%

### 6.7.7 Recommendations

### **Condition Assessment Strategies**

• Identify condition assessment strategies for high value and high-risk equipment.

•Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

### **Risk Management Strategies**

•Use risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

• Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

### Levels of Service

•Continue measuring current levels of service in accordance with the metrics that the Town has established in this AMP. Additional metrics can be established as they are determined to provide meaningful and reliable inputs into asset management planning.

•Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

# **Growth Assumptions**

The demand for infrastructure services will change with time based on a combination of factors. Understanding the drivers for growth and demand will allow the municipality to plan for new infrastructure more efficiently as well as 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.

# 7.1 Midland Official Plan (February 2021) and Growth Forecast

The first Official Plan of the Town of Midland was approved in 1961, the sixth and latest Official Plan was adopted and approved February 2021. The Official Plan is intended to reflect and build upon the character, identify and cultural and natural features of the community and surrounding area. This plan is also intended to provide guidance, encouragement and security concerning economic development and investment to the year 2031.

In addition, the County have provided population and employment forecasts for all lower tiers, which is currently under review by the province. Per the anticipated growth allocations, the Town of Midland is projected to grow to a total population of 24,290, with an employment target of 13,170 jobs within the next 20 years.

Year	2021	2051	Growth	Growth %	
Residential	18,250	24,290	6,040	33%	
Population					
Employment	10,760	13, 170	2,410	23%	

# 7.2 Water Servicing Master Plan (July 2019)

Moderate near- and long-term growth is expected in the Town of Midland. As such, there is a need for improving water production/supply and servicing in a sustainable manner that can be logically phased. Additional infrastructure and improvements to the existing system must be in place in a timely and orderly manner to service approved growth.
To improve storage capacity, a new water storage facility in the East pressure zone is required to provide sufficient fire, equalization and emergency storage in the future. To improve pump capacity, fire pumps at Hanly Booster Pump Station and Everton Booster Pump Station are required to provide sufficient fire flow supply. Lastly, to improve the overall security of groundwater supply, additional well supply is required. It is important to note that because the West pressure zone relies on the transfer of flow from the East Pressure zone, securing a groundwater well supply in the West pressure zone would significantly increase the security of water supply.

# 7.3 Impact of Growth on Lifecycle Activities

By July 1, 2025, the Town's asset management plan must include a discussion of how the assumptions regarding future changes in population and economic activity informed the preparation of the lifecycle management and financial strategy.

Planning for growth will require the expansion of existing infrastructure and services. As growth-related assets are acquired, they should be incorporated into the municipalities AMP so lifecycle planning and costing can begin. These additional costs will need to be considered in long-term funding to maintain the current level of service, at a minimum. While there will be an additional assessment base to help fund the lifecycle costing, a full analysis should be completed prior to development approval.

# **Financial Strategy**

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 Town to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

# 8.1 Financial Strategy Overview

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

The financial requirements for:

- a) Existing assets
- b) Existing service levels

Use of traditional sources of municipal funds:

- a) Tax levies
- b) User fees
- c) Reserves
- d) Debt
- e) 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) 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.

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 a Town's approach to the following:

To reduce financial requirements, consideration has been given to revising service levels downward.

All asset management and financial strategies have been considered. For example: If a zero-debt policy is in place, is it warranted? If not the use of debt should be considered. Do user fees reflect the cost of the applicable service? If not, increased user fees should be considered.

# 8.1.1 Annual Requirements & Capital Funding

#### **Annual Requirements**

The annual requirements represent the amount the Town should allocate annually to each asset category to meet replacement needs as they arise, prevent infrastructure backlogs, and achieve long-term sustainability. In total, the Town must allocate approximately \$17.4 million annually to address capital requirements for the assets included in this AMP.



For most asset categories the annual requirement has been calculated based on a "replacement only" scenario, in which capital costs are only incurred at the construction and replacement of each asset.

However, for the Road Network, Bridges & Culverts, and Facilities, lifecycle management strategies have been developed to identify capital costs that are realized through strategic rehabilitation and renewal of the Town's assets. The development of these strategies allows for a comparison of potential cost avoidance if the strategies were to be implemented. The following compares two scenarios for the categories:

**1. Replacement Only Scenario:** Based on the assumption that assets deteriorate and – without regularly scheduled maintenance and rehabilitation –replaced at the end of their service life.

**2. Lifecycle Strategy Scenario:** Based on the assumption that lifecycle activities performed at strategic intervals to extend the service life of assets until replacement is required.

The implementation of a proactive lifecycle strategies for various asset categories leads to cost avoidance.

#### **Reinvestment Rate**

To meet the long-term replacement needs, the Town should be allocating approximately \$17.4 million annually, for a target reinvestment rate of 3.0%. Actual annual spending on infrastructure totals approximately \$7.8 million, for an actual reinvestment rate of 1.3%. The graph below depicts funding gaps or surpluses by comparing target vs actual reinvestment rate. Section 8.3 below details the tax funded annual deficit of \$8.7 million, and Section 8.4 details a rate funded annual deficit of \$934,000, for a combined funding gap of \$9.6 million annually.



# 8.2 Funding Objective

We have developed a scenario that would enable the Town to achieve full funding within 10 to 15 years for the following assets:

Tax Funded Assets: Road Network, Stormwater Network, Buildings, Equipment, Land Improvements, and Vehicles

Rate Funded Assets: Water System and Sanitary Sewer Network

For each scenario developed we have included strategies, where applicable, regarding the use of cost containment and funding opportunities.

### 8.3 Financial Profile: Tax Funded Assets

### 8.3.1 Current Funding Position

The following tables show, by asset category, the Town's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

				Annual Fu	unding Available		
Asset	Avg. Annual	Gra	nts	Taxes to	Total	Annual Deficit	
Category	Requirement			Reserves	Available		
		CCBF	OCIF				
<b>Road Network</b>	6,000,000		795,000	1,706,235	2,501,235	3,498,765	
Stormwater	2,140,000			265,000	265,000	1,875,000	
Network							
Municipal	930,000					930,000	
Buildings							
Community	1,512,000	560,000		303,500	863,500	648,500	
Buildings							
Land and Land	552,000			306,500	306,500	245,500	
Improvements							
Equipment	1,703,000			484,000	484,000	1,219,000	
Municipal	706,000			629,000	629,000	77,000	
Vehicles							
Fire Vehicles	351,000			336,000	336,000	15,000	
Transit	225,000			55 <i>,</i> 000	55,000	170,000	
Vehicles							
Total	14,119,000	560,000	795,000	4,085,235	5,440,235	8,678,765	

The average annual investment requirement for the above categories is \$14.1 million. Annual revenue currently allocated to these assets for capital purposes is \$5.4 million leaving an annual deficit of \$8.7 million. Put differently, these infrastructure categories are currently funded at **39% of their long-term requirements.** 

# 8.3.2 Full Funding Requirements

In 2024, the Town has annual tax revenues of \$28.9 million. As illustrated in the following table, without consideration of any other sources of revenue or cost containment strategies, full funding would require the following tax change over time:

Asset Category	Tax Change Required for Full Funding
Road Network	12%
Stormwater Network	6%
Buildings	5%
Land and Land Improvements	1%
Equipment	4%
Vehicles	1%
Weighted Average Total	30%

Staff recommendations include capturing the above changes and allocating them to the infrastructure deficit outlined above. The table below outlines this concept and presents several options:

	Tax-Funded Asset Categories									
	5 Years	10 Years	15 Years	20 Years						
Infrastructure Deficit	\$8,678,765	\$8,678,765	\$8,678,765	\$8,678,765						
Tax Increase Required	30%	30%	30%	30%						
Annually	6%	3%	2%	2%						

### 8.3.3 Financial Strategy Recommendations:

Considering all the above information, staff recommends the 10 to 15-year option. This involves full funding being achieved over 15 years by:

a) increasing tax revenues by 2 to 3% each year for the next 10 to 15 years solely for the purpose of phasing in full funding to the asset categories covered in this section of the AMP.

b) allocating the current gas tax (CCBF), and OCIF revenue as outlined previously.

c) reallocating appropriate revenue from categories that may become in a surplus position to those in a deficit position.

d) 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 phasein 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.

2. Staff recognize that raising tax revenues by the amounts recommended above for infrastructure purposes may be difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.

Although this option achieves full funding on an annual basis in 10 to 15 years and provides financial sustainability over the period modeled, the recommendations do require prioritizing capital projects to fit the resulting annual funding available.

# 8.4 Financial Profile: Rate Funded Assets

# 8.4.1 Current Funding Position

The following tables show, by asset category, the Town's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by water and wastewater user rates.

			Ann	ual Funding Availa	ble	
Asset Category	Avg. Annual Requirement	Rates	Grants	Rates to Operations	Total Available	Annual Deficit
Wastewater Network	1,619,000	4,141,266		- 3,020,791	1,120,475	498,525
Water Network	1,693,000	3,593,601		- 2,335,812	1,257,789	435,211
Total	3,312,000	7,734,867	-	- 5,356,603	2,378,264	933,736

The average annual investment requirement for the above categories is \$3.3 million. Annual revenue currently allocated to these assets for capital purposes is \$2.4 million leaving an annual deficit of \$934 thousand. Put differently, these infrastructure categories are currently funded at 72% of their long-term requirements.

# 8.4.2 Full Funding Requirements

In 2024, the Town has annual rate revenues of \$7,734,867. As illustrated in the following table, without consideration of any other sources of revenue or cost containment strategies, full funding would require the following rate change over time:

Asset Category	Rate Change Required for Full Funding
Wastewater Network	12%
Water Network	12%
Weighted Average Total	24%

Staff recommendations include capturing the above changes and allocating them to the infrastructure deficit outlined above. The table below outlines this concept and presents several options:

	Rate-Funded Asset Categories										
	5 Years	10 Years	15 Years	20 Years							
Infrastructure Deficit	\$ 933,736	\$ 933,736	\$ 933,736	\$ 933,736							
Rate Increase Required	24%	24%	24%	24%							
Annually	5%	2%	2%	2%							

### 8.4.3 Financial Strategy Recommendations:

Considering all the above information, staff recommends the 5-year option. This involves full funding being achieved over 5 years by:

a) increasing rate revenues by 5% each year for the next 5 years solely for the purpose of phasing in full funding to the asset categories covered in this section of the AMP. This recommendation is consistent with the analysis done by staff annually as part of the annual budget process.

b) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

#### Notes:

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 realize that continuing to raise rate revenues by the amounts recommended above for infrastructure purposes is difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.

The Town is currently in the process of applying for substantial funding that will impact the wastewater network. Although not yet approved, the related project is expected to run from 2024 to 2027, in which the Town would receive approximately \$40 M of funding for those asset classes. This will impact the Town's financial strategy as it relates to those asset categories starting with the 2025 compliant AMP.

Any increase in rates required for operations would be in addition to the above recommendations.

Although this option achieves full funding on an annual basis in 5 years and provides financial sustainability over the period modeled, the recommendations do require prioritizing capital projects to fit the resulting annual funding available.

### 8.5 Use of Debt

The Town has approximately \$20 million in debt on the assets included in this Asset Management Plan. The revenue phasing in options outlined in this plan will require the Town to use debt to fully fund its long-term infrastructure requirements. The amount of debt required will be dependent on the actual timing of the asset replacements and the chosen rate change model to achieve full funding.

#### 8.6 Use of Reserves

#### 8.6.1 Available 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

The table below outlines the reserves currently available to the Town for asset replacement.

Reserves Available for Asset Replacement	2022 Balance (\$)
Capital Reserves	- 4,975,047
MBL Capital Reserve	4,252,871
<b>Total Tax-Supported Reserves</b>	- 722,176
MPUC Legacy Reserve*	- 11,485,066
Community Wide Initiatives	- 10,317,045
Reserve**	
Total Other Reserves	- 21,802,111
Provincial Gas Tax	- 529,504
Federal Gas Tax	- 1,215,873
OCIF Reserve	- 961,622
<b>Total Obligatory Reserves</b>	- 2,706,999
Water Capital Reserve	- 8,701,683
Wastewater Capital Reserve	- 4,294,334
<b>Total Rate-Supported Reserves</b>	- 12,996,017

Note: A negative balance represents reserve funding available. A positive balance indicates the reserve is overdrawn.

- \* Principle to be held in perpetuity, per Investment Policy
- \*\* May be used for Interim borrowing, per Investment Policy

#### 8.6.2 Reserve Guidelines

There is considerable debate in the municipal sector as to the appropriate level of reserves that a Town should have on hand. There is no clear guideline that has gained wide acceptance.

Factors that municipalities should consider 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 to full funding. This coupled with the Town's use of debt in the past, allows the scenarios to assume that, if required, available reserves and debt capacity can be used for high priority and emergency infrastructure investments.

#### 8.6.3 Recommendation

In 2025, Ontario Regulation 588/17 will require the Town to integrate proposed levels of service for all asset categories in its asset management plan update. Staff recommends that future planning should reflect adjustments to service levels and their impacts on reserve balances.

# Appendices

Appendix A: Service Maps











# Appendix B: 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 Town'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 Town'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 Town 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 Town 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 Town 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 Town 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 assets 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 C: 10-Year Capital Requirements (Approved Long-term Plan)

				Ten Year Capi 2024 -	tal Program 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
				1		· · · · · · · · · · · · · · · · · · ·	1	1	1	1	
CAO	Performance Analytics	50.000									
	Terrormance Analytics										
Total CAO		50,000	-	-	-	-	-	-	-	-	-
Finance											
Fillance	Procurement Bids and Tenders Module		10,000								
	Development Charges Study					45,000					45,000
Total Einance			10.000			45.000					45.000
rotarrinance			10,000	-	-	45,000	-			-	45,000
Information Technolog	y Services										
	Network Infrastructure	30,000	10,000	10,000	10,000	36,000	10,000	10,000	1,000	1,000	38,000
	Equipment Replacements	33,000	40,000	57,000	97,000	35,000	58,000	100,000	37,000	60,000	101,000
	Mobile & End Node Upgrades	44,000	36,000	41,000	60,000	40,000	44,000	62,000	42,000	47,000	60,000
	Internet Connectivity			150,000			F 000			5.000	
	Council Chamber Improvements			5,000		50.000	5,000			5,000	
	Announcement Monitor for Town Hall Lobby	5,000	5,000								
	Outdoor Electronic Message Boards		80,000	35,000							
	New Council Devices		11,000	11,000				11,000			
	Planning Application Optimization Software	25,000	100,000								
	Online Booking Software			50,000							
	New Budget Software		50,000								
	Human Resources Information System (HRIS)		25,000								
Total Information Tech	nology Services	143,000	443,000	370,000	178,000	172,000	128,000	194,000	91,000	124,000	210,000
Human Resources											
	Employer of Choice Strategic Plan		60,000								
l otal Human Resource		-	60,000	-	-	-	-	-	-	-	-
Corporate Assets											
	Upgrade HVAC Control System						25,000				
	Keplace HVAC Units Window Replacements	29,000	30,000	31,000	32,000	33,000	67,000				
	Carpet Replacement		40,000	40,000			25,000				
	Parking Lot Paving (both town hall lots)				150,000					75,000	
	Outside Railings				50.000					65,000	
	Electrical Panel, switches & transformer upgrades				47,000						
	Sectioned Roof Restoration					81,000	80,000				
	Town hall building improvements contingency	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	Domestic water neater replacement Design Consultation for Town Hall expansion / reportion					20,000					
	Lobby meeting area	30,000				250,000					
	LED lighting conversion	30,000									
	Sound Mitigation	5,000	15,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	AED Replacements	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Total Town Hall		109,000	120,000	126,000	304,000	419,000	222,000	35,000	25,000	165,000	35,000
By-Law											
	Patrol Bikes (2)								10,000		
	Ford By-law Vehicle	E7.000								60,000	61.000
	TOYON OF NW VEHICLE	57,000									01,000
Total By-Law		57,000	-	-	-	-	-	-	10,000	60,000	61,000
Darking											
rarking	Lot Paving			30.000		19.000	22.000				
	Rails and Bollards			25,000	5,000	20,000	,000				
Total Parking		-	-	30,000	5,000	19,000	22,000	-	-	-	-
Planning											
	Official Plan/Conformity Review	25,000				100,000				100,000	
	Comprehensive Zoning By-law/Community Planning Permit System	30,000									100,000
	Waterfront Master Plan	75,000									

				Ten Year Cap 2024 -	ital Program 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	Housing Needs Assessment	30.000									
	Midland Bay Landing OPA	50,000	100,000								
	Implementation of Service Delivery Review Recommendations		25,000								
Total Planning		182.000	125 000		-	100.000			-	100.000	100.000
		102,000	125,000			100,000				100,000	100,000
Building											
	Inspector Vehicle									60,000	61.000
											01,000
Total Building		-	-	-	-	-	-	-	-	60,000	61,000
Culture											
Culture	Public Art (Grant Contingent)	300,000	200,000	100,000	100,000	200,000	100,000	100,000	100,000	100,000	100,000
	Public Art Conservation	25,000	100,000	100,000	100,000	100,000					
Total Culture		325,000	300,000	200,000	200,000	300,000	100,000	100,000	100,000	100,000	100,000
Tourism & Special Eve	ents										
	Sound equipment for Music in the Park	15,000									
Tatal Taurian & Casa	tel Franke	15.000									
Total Tourism & Spec	al Events	15,000	-	-	-	-	-		-	-	•
Fire Services											
	Building Additions and Improvements										
	Roof Refurbishing/Replacement	10.000	40.000			100,000					
	Garage Door Replacements	75,000	40,000								
	Electrical Panel and Switch Replacements		37,000								
	Carpet Replacement				25,000		50.000				
	Floor Maintenance and Upgrades						50,000	50.000			
	Firehall Design					350,000		50,000			
	Construction of New Firehall										14,000,000
	Crew Room Furniture Replacement	5,000	5,000				10,000				
	Training Room Furniture Replacement		10,000								
	Lower Level Room Renovations / Additional Window		20,000								
	E. Sanada akan										
	Equipment Purchases Bunker Gear Set	120.000					140.000				
	Boots every 5 years and Helmets every 10 years	,		30,000					32,000		
	Major Overhaul of Air Refilling Station		35,000								
	Washer Extractor Machine Replacement	30,000				30.000					
	Communications Equipment Replacement (Pagers)			30,000		50,000			35,000		
	Breathing Apparatus Replacement			325,000							
	Aging Portable Fire Equipment Upgrades	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	
	lce Water Rescue Equipment Replacement	85,000			30.000					30.000	
	RIT Bottles and Packs			15,000							
	Shared Drone Program - Penetang Fire Dept.						60,000				
	Hazard House Public Education Tool - Shared with Penetang Generator Replacement	15,000			75.000						
	Apparatus Hose Replacement	70,000			75,000						
	Auto Extrication Equipment Replacement						75,000				
	Mobile Radio Repeaters	14,000	5.000	5 000	5 000						
	Exercise and Wellness Equipment	5,000	10.000	5,000	5,000						
	Portacount Fit Tester replacement		30,000								
	(Pump 1) Pumper Truck	500.000									1 700 000
	(Pump 2) Pumper Truck	1,300,000									1,700,000
	(Rescue 1) Rescue Truck		1,100,000								
	(Tanker 1) Tanker Truck				00.000	900,000					
	(Command 1) SUV (Command 2) 1/2 ton Utility/Training Pickun Truck				80,000						75 000
	(Command 3) 3/4 Ton Public Education/Fire Prevention Pickup Truck						85,000				. 5,000
	Master Fire Plan Midland Penetanguishene Consolidation Feasibility Analysis (co-funded)	30.000			80,000					85,000	
	Emergency Services Campus Feasibility Study	50,000		150,000							
Total Fire Services		2,286,500	1,326,500	577,500	317,500	1,402,500	442,500	72,500	89,500	137,500	15,775,000

				Ten Year Capit 2024 - 2	al Program 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
OPP Detachment											
	Window Replacements			20,000							
	Flooring Replacement		25,000								
	Painting		12,000							15,000	
	Changeroom/Washroom/Shower Upgrades	15.000	20,000								
	Overnead Door Replacements	45,000									
Total OPP Detachn	nent	45.000	57.000	20.000						15.000	
Library											
	Building Additions and Improvements										
	Rubber Stair Treads	5,000									
	Building Testing and Report	25,000		40.000							
	Domestic water Supply	3 500	F 000	18,000	F 000	10.000	F 000	10.000	F 000	F 000	F 000
	Dassenger Elevators	3,500	5,000	10,000	5,000	10,000	5,000	10,000	5,000	5,000	5,000
	Wall painting		10.000		10.000		10.000				50,000
	Foundation Drainage		300.000								
	Wall and Ceiling Repairs								10,000		
	Bathroom Renovations	15,000				10,000					10,000
	Basement Carpet Replacement	15,000									
	Window and Door Refurbishments	25,000									
	Refurbish Wood Flooring					20,000					
	Repair and Replace Electrical Panels						30,000	20.000			
	Cabinet Replacements							20,000		20.000	
	Coffee Shop					40.000				20,000	
						40,000					
	Computer Hardware										
	Audio & Video for Assembly room		20,000								
	New computer lab			75,000							
	Loanable technology				35,000						
	Newcomer services					40,000					
	Staff & Public Access Computers	9,000	9,000	9,000	9,000	9,000					
	Faultament Durahasan fan MAKEDEDAGE										
	Visually Impaired Machine Replacement										
	Laser Cutter										20.000
	3D Printers		6,500								
Total Library		97,500	350,500	112,000	59,000	129,000	45,000	30,000	15,000	25,000	85,000
Public Works											
	Building Additions and Improvements										
	Building Demolition - Old Public Works Facility Replacement fuel tank monitoring	60.000	300,000								
	Replacement fuel tank monitoring	00,000									
	Small Equipment Purchases										
	Salt Management Upgrades/GPS System		50,000			50,000			55,000		
	Trench Box	30,000									
	Equipment Purchases										
	#7839 Asphalt Crack Sealer				65,000						
	#7942 Grader/Snow Plow					1,000,000				220.000	
l	#7992 Sluewalk Flow #7098 Single Ayle Dlow		200.000							230,000	210.000
	#7998 Single Axle Plow #7970 Single Axle Plow		290,000	205.000							310,000
	#7976 Tandem Sander	340.000		253,000						310.000	
	#7975 Tri Axle Dump Truck			285.000						,	
	#7858 Power Broom for Loader				28,000						
	#7811 Finishing Mower for Sidewalk Machine		22,000								
	#7943 Sewer Flusher		300,000								
	#7855 Asphalt Hot Box										
	#7825 Sweeper	400,000							275,000		
	#/934 Loader #7838 Room Floil	40.000			335,000					E0.000	
-	#7823 Asphalt Maintenance Kettle	40,000								50,000	
	#7991 Sidewalk Machine	300,000				225 000					
	#7997 Sidewalk Machine		218.000			225,000					
	#7854- Asphalt/gravel Roller/packer		,000		100,000						
	Flail Mower			15,000							
	#7973 Tandem Plow Truck			350,000						355,000	
	#7974 Tandem Plow Truck		330,000								
	#7930 Loader			410,000							
	#7933 Loader					425,000					
	#7876 Detachable Snow Blower				440.000	305,000					
L	#7917 BOOM TRUCK				440,000						

				Ten Year Cap 2024 -	ital Program 2033						
Division	Project Name	2024 BUDGET	2025 EORECAST	2026 EORECAST	2027 FORECAST	2028 FORECAST	2029 EORECAST	2030 FORECAST	2031 EORECAST	2032 EORECAST	2033 EORECAST
Division	Fioject Name	DODGET	FORECAST	FORECAST	FORECAST	FORECAST	FORLCAST	FORECAST	FORECAST	FORECAST	FORECAST
	#7833 Asphalt Cold Planer							45,000	24.000		
	#7837 Trackless Stump Grinder				218.000				24,000		
	#7995 Sidewalk Tractor	315.000			218,000						
	#7550 Sidewark Tractor #22-402 - Street Sweeper RAV/O	213,000						320.000			
	#22-301 - Tandem Plow Truck						345.000	520,000			
	#22-302 - Tandem Plow Truck						345,000				
	Vehicle and Equipment contingency	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000
	Backhoe #21					.,	.,	225.000		.,	
	2022-602 Detachable snowblower									350,000	
	Digital Radio Upgrade (All departments)	145,000									
	Vehicle Purchases										
	#7908 Pickup Truck							80,000			
	#7909 Pickup Truck							80,000			
	#7916 Pickup Truck			115,000							
	#7902 Pickup Truck							80,000			
	#7918 Pickup Truck								82,000		
	1-Ton Dump Truck								120,000		
	#7903 - Pickup Truck							80,000			
	Operations Complex										
	Building Additions and Improvements	100,000	200,000	50,000		60,000	250,000		70,000	120,000	
Total Public Works		1.650.000	1.730.000	1.540.000	1.206.000	2.085.000	960.000	930.000	646.000	1.435.000	330.000
		_,,	-,,			_,,	,		,	2,100,000	,
Roads	Road Resultaring Program										
	Curry Bd (Midland Point Rd- Simpresca Bd)	175.000									
	Victoria (Fourth St- Sixth St)	235.000									
	Victoria St (Eighth St- 55m W of Edmond St)	200.000									
	Fourth St (Bay St- Hugel Ave)		110,000								
	King St (Galloway Blvd- Little Lake Park Road)		790,000								
	Hugel Ave (William St-George St)			160.000							
	Hugel Ave (Woodland Dr- Fighth St)			640.000							
	Angela Schmidt Foster Road (Marshall Rd- Hwy 12)				780.000						
	William St (Galloway Blvd- Hwy 12)					590,000					
	Easy St (Fourth St- Third St))					110,000					
	King St (Little Lake Park Rd- Yonge St)						365.000				
	Midland Point Rd (Portage Park Rd- Glenbrook Dr)						305,000				
	Manhy St. (Gloucester St. Bayshore Dr.)						115 000				
	Manay St (Globicester St- Bayshore Br)						115,000				
	Midland Point Rd (Glenbrook Dr- Mundy's Bay Rd)							405.000			
	Gawley Dr (Midland Point Rd- Parkview Crt)							170.000			
	Wilson Rd (Balm Beach- Bottom of Hill)							220.000			
	Flizabeth St (William St- Midland Ave)							220,000	365.000		
	Yonge St (Queen St- Russel St)								400,000		
	Vindin St (93- Penetanguishene Rd Allowance )									500.000	
	Colborne St ( Irwin St- Johnson St)									250,000	
	King St (Hwy 12- Galloway Blvd)										835,000
	Traffic Lights										
	Controller Upgrades	60,000	40,000	80,000	45,000	85,000	47,000	87,000	50,000	50,000	50,000
	Pedestrian Cross Walks										
	General Electrical Maintenance										
	Tree Replacement Brogram	14.000	14.000	12 000	11.000	11.000	10.000	8.000	8 000	8 000	8 000
	Road & Sidewalk Condition Assessment Study	14,000	14,000	13,000	11,000	11,000	10,000	8,000	a,000 115.000	8,000	8,000
	Road & Sidewark condition Assessment Study		100,000			110,000			115,000		
	Parking Lots										
	Asphalt, Concrete, Drainage and Lighting Repairs		55,000	60,000	60,000	65,000	65,000	70,000	70,000	70,000	70,000
Total Roads		684,000	1,109,000	953,000	896,000	971,000	932,000	960,000	1,008,000	878,000	963,000
Sidowalks & Curbs											
Sidewalks & Curbs	Slab Jacking & Grouting: Various Locations		10.000		10.000		10.000		10.000		10 000
	Spot Repairs: Various Location	10.000	10.000	15.000	15,000	20.000	20.000	25.000	25,000	30.000	30.000
	Various Locations		-,		,,	1,000	-,	.,,	.,		,
	Midland Ave E (Yonge St- Hugel Ave)	195,000								Í	
	Dominion Ave N/S (King- Midland Ave Spot Repairs)	20,000									
	Sidewalk Condition Assessment	25,000									

				Ten Year Capi 2024 -	ital Program 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	month with other ways mit										
	First St. W. (Hugel Ave- Yonge St)		165,000								
	Elizabeth St N (King St. Oueen St)		40,000	115 000							
	Midland Ave W (Vonge St- Elizabeth St)			115,000							
	First St F (Flizabeth St- Fasy St)			10,000							
	*NEW Bayyiew Dr. N (696 Bayyiew Dr- William St)			50,000							
	First St F (Hugel Ave- Bay St)			50,000	80.000						
	Midland Ave W (Elizabeth St- Dominion Ave)				140.000						
	Galloway Blvd S (King St- Kirk Dr)				.,	60.000					
	Fifth St E (Quebec St- Ontario St)					190.000					
	*NEW Sidewalk Section TBD					100.000					
	Fourth St W (Bay St- Victoria St)					,	230.000				
	Elizabeth St S (Princess St- Borden St)							45,000			
	Borden St E (Beauchamp Crt- Elizabeth St)							55,000			
	Bay St S (Russel St- Charles St)							60,000			
	George St E (Bay St- Gloucester St)							50,000			
	*NEW Sidewalk TBD							100,000			
	Bay St S (Lindsay St- William St)								60,000		
	Bay St S (Third St- Second St)								60,000		
	Ontario St S (Fourth St- Fifth St)								55,000		
	Easy St S (Third St- French Ln)								50,000		
	Bay St N (William St- Lindsay St)									60,000	
	Bay St N (Fourth St- Third St)									45,000	
	Hugel Ave N (Midland Ave- King St)									60,000	
	William St W (Bay St- Gloucester St)									45,000	
	King St E (Hannah St- Yonge St)									60,000	
	*NEW Sidewalk TBD									100,000	
	Luckport Cres N (Montreal St- Montreal St)										125,000
	Elizabeth St N (George St- Russell St)										130,000
	Pedestrian & Cyclist Network (Mid term)		150,000								
	Pedestrian & Cyclist Network (Long Term)				100,000						
Total Sidewalks & Curbs		250,000	375,000	295,000	345,000	370,000	260,000	335,000	260,000	400,000	295,000
Transit	<ul> <li>Mathematical and the second structure of the second structure of</li></ul>										
	Building Additions and Improvements										
	Bus Shelter Replacements		35,000					45.000			
	GPS and Online Mapping					45.000		45,000			
	Fare System Upgrades					45,000					
	Fare Boxes Replacement								15,000		
	AIF HOISTS		22,000								
	AUDA Upgrades										
	Transit Cameras										
	Vakiala Durahasaa										
	Venicie Purchases								500.000		
	Replace 30 Foot Bus						475.000		500,000		
	Replace 30 Foot Bus	50.000					475,000		120.000		
	Accessible Transit - Replace Van #64	50,000	440.000						120,000	120.000	
	Accessible Transit - Replace Van #63		110,000	111.000						120,000	420.000
	Accessible Transit - Replace Van #61			111,000	442.000						120,000
	Accessible fransit - Replace Vall #62				112,000						
Total Transit		E0 000	167.000	111.000	112.000	45.000	475.000	45.000	625 000	120.000	120.000
		30,000	107,000	111,000	112,000	43,000	475,000	40,000	033,000	120,000	120,000
Street Lighting											
	Downtown Core Lighting: Side Streets										
	Additional Lighting as Requested	35.000	35.000	40.000	42.000	45.000	45.000	50.000	50.000	50.000	51.000
	Replacement Lights: Various Locations		25.000		25.000		25.000		25.000		
	Street Lighting Assessment		100.000								
Total Street Lighting	·	35,000	160,000	40,000	67,000	45,000	70,000	50,000	75,000	50,000	51,000
16984 Highway 12											
	Piping and Plumbing	15,840									
	Various Building Testing and Reporting		15,000								
	Exhaust System	1,200									
	MPUC Building Improvement		27,340								
	Various Upgrades				30,000		40,000		50,000		
	Janitor's Closet Installation			30,000							
	Windows and door seals				30,000						
	Painting					15,000					
	Heating & Cooling Replacements/Upgrades						30,000				
Total 16984 Highway 12		17,040.00	42,340.00	30,000.00	60,000.00	15,000.00	70,000.00		50,000.00	-	
Storm Sewers											

				Ten Year Cap 2024 -	ital Program - 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	Storm Pond Maintenance Plan	165.000	169 500	175 125	170.010	185 826	100 801	107 108	202.481	209.016	214 716
	Clean Storm Chamber A-Harbour	105,000	105,500	175,155	175,510	150,000	150,051	157,100	202,401	205,010	175.000
	Storm Outfall Maintenance		35,000		40,000		45,000		50,000		55,000
	Stormwater Utility Concept Review	200,000									
	Storm Outfall #20 Rehab	100,000									
	Storm Outfall #56 Rehab	250,000									
	Storm Outfall #64 Rehab	55,000									
	Javelin Storm Outlet Repairs	350,000									
Total Storm Sewers		1 120 000	204 500	175 135	219 910	335 826	235 891	197 108	252 481	209.016	444 716
Total Storm Sewers		1,120,000	204,500	175,155	213,510	555,620	233,031	157,100	232,401	203,010	444,710
Harbour											
	Dock Replacement		55,000		60,000		65,000		70,000		75,000
	Shelter Replacement / Repairs		20,000		10,000		20.000				
	Pier Paving			22.000			20,000				
	Washroom/Shower Renovations	20.000		22,000		35.000	35.000	35.000			
	Gardens on Piers	32,000				55,000	55,000	55,000			
	Rub Rail Replacement	25,000									
	Pedestrian Area resurfacing		180,000								
	Center Pier Upgrades		400,000								
	Security Cameras	40,000									
	Dock Replacement - Pete Pettersen Park	40,000	40,000								
	Total Harbour	157.000	60E 000	22.000	70.000	35.000	120.000	25.000	70.000		75.000
		137,000	695,000	22,000	70,000	35,000	120,000	33,000	70,000		75,000
PARKS											
	Minor Park Improvements	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
	Parks Contingency	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
	Old Parks Depot Demolition - Main Building	90,000									
	Old Parks Depot Site Cleanup	30,000									
	CSA playground improvements			190,000		100.000	190,000				190,000
	Shaue Bisula Desking		15.000			100,000					
	Signage & Wayfinding		13,000								
	Urban Forestry Plan		50,000	70.000							
				,							
	Equipment Purchases										
	#7727 Kubota				44,000					47,000	
	#7701 Garbage Truck		160,000								
	#7731 Kubota				44,000					47,000	
	#7729 Kubota	42,000				45,000					
	#7713 Kubota		45.000			50,000	45.000				
	#7/14 KUDOTa		45,000	46.000			46,000				
	#7715 Tractor			46,000			40,000				
	#P70 Mini Loader			170.000							
	Dethatching and Overseeding Unit	53.000		170,000							
	#7718 Kubota		43.000					46.000			
	Venicie Purchases								CE 005		
	#4 PICKUP I FUCK Supervisor SLIV - Roy4 #22-104							56 000	65,000		
	#7705 Pickup Truck							90,000			
	#7704 Pickup Truck							64.000			
	#7710 Pickup Truck							01,000	57.000		
	#7707 Pickup Truck		95,000								95,000
	#7711 Pickup Truck									75,000	
	#7708 Pickup Truck							56,000			
	Little Lake Park										
	Bathroom Improvements	27.000				20.000					
	Install New Drainage System			7,500		.,					
	Tennis Court Resurfacing										225,000
	Beach Volleyball Court Upgrades			18,000							
	Pulverizing and Regrade Parking Lots			47,000			49,000			51,000	
	Rotary Stage Roof Addition	149,900									
I	Stairs and Garden Bed Reconstruction	50,000									
	Guide Rail Replacement	150,000				250.005					
	Kesurracing LLP Koad	10.000	10.000			250,000					20.000
	Dog Park Lingrades	10,000	10,000			40.000					30,000
	Stairs and Retaining Walls Renairs		30.000		35.000	40,000	35,000		38,000		
	Playeround #2 - West Playeround Replacement		55,000		55,000		300.000		30,000		
	Bleachers replacement					22,000	222,000				
	TIM - D. J										
1	Littin Park										

				Ten Year Capita 2024 - 20	l Program 033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	Tennis Court Resurfacing				225,000						
	Bathroom Upgrades		2,000								
	Ballfield Warning Track Rejuvenation	70,000					15,000				
	Bleachers replacement		19,000								
	Pate Peterson Park										
	Ball Diamond Refurbish and Redress					18.000					
	Bathroom Improvements		2,000				7,500				
	Mac McAllen Park										
	Road and Parking Lot Upgrades				45.000						
	Basketball Court Replacement			110,000							
	Baseball Field Redress			15,000							
	Edgehill Park										
	Refurbish Staircase and Stonework				75,000						
	Parking Expansion		130,000								
	Sports Fields										
	Irrigation Upgrades		15,000								
	Netting				18,000						
	Bathroom Upgrades	6,000	3,000								
	Bayview Park										
	Fence Upgrades				30,000						
	Stone Repairs					120,000					
	Gawley Park										
	Playground Replacement				225,000						
	Harbourcide Park										
	Irrigation Upgrades				50.000						
	Rubber Surfacing									450,000	
	Quota Park										
	Playeround Replacement		185.000								
			,								
	Pavilion Repairs				20.000		40.000		20.000		
					20,000		40,000		20,000		
	Waterfront Trail	45.000		45.000		45.000		45.000		45.000	
	Aspnait Patches	45,000	260.000	45,000	260.000	45,000	260.000	45,000	260.000	45,000	265.000
			200,000		200,000		200,000		200,000		203,000
	Splash Pad - Construction		1,250,000								
	Little Lake Park Master Plan Backs Master Plan Stream 1 Broject Shada		120,000		195.000						
	Tarks Waster Han Stream 1 Hoject - Shade		105,000		105,000						
Total Parks		772,900	2,709,000	848,500	1,306,000	760,000	1,038,500	407,000	490,000	765,000	855,000
NSSRC											
	Building Additions and Improvements										
	Door Replacements							35,000			
	Flooring Replacement		5,000	000.000	10,000		10,000				
	Dressing Rooms - Construction of Addition		E 000	900,000				20.000			
	AODA Door Openers		5,000					20,000			
	HVAC Unit Replacements	45,000							50,000		
	Window Replacements					40,000					
	Sky Light Repairs						20,000				
	Garage Doors				25.000	10,000					
	Kitchen Ungrades including Flooring		10.000		25,000						
	Dehumidifier Platform Expansion		10,000								
	Eavestroughs, Gutter and Downspouts Repair/Replacement									25,000	
	Reseal Concrete floors			50,000							
	Interior Doors	28.000						50.000			
	Ceiling Painting	56,000	20.000					50,000			
	Slab on Grade Restoration		10,000								
	Parking Lot Paving		10,000		10,000		15,000				600,000
	Exterior Overhead Door Replacement				24,000						
	Resilient Flooring Replacement					30,000					
	Hot water boiler replacement				32,000				100.000		
	Rink 2 Cooling Tower Replacement								25 000		
	Suspended Metal Ceiling Replacement							50,000	23,000		
	Roof Repair	580,000		500,000		575,000					
	Green Energy Upgrades				100,000					300,000	
	Equipment Durahases										
1	Equipment Purchases										

				Ten Year Capi 2024 -	tal Program 2033						
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	Debumidifier Replacements							30.000			
	Tables and Chairs			10,000		10,000		10,000			
	Kitchen Equipment		4,000								
	Water Heaters						25,000				
	Cleaning Equipment				10,000			6,000			
	SCISSOF LITT Battery Powered Ice Edger				35,000						12 500
	Condenser Pumps			5,000							12,500
	Compressor Replacements						45,000	45,000			
	Ice Resurfacer Replacements		150,000								
	Stage Replacements		100.000								43,000
	Condenser replace (MMHA)		160,000	120.000			126.000				
	Portable Bars Replacement			120,000			4,000				
	Irrigation System				12,000						
	Portable Generator		500,000								
			074.000	4 505 000	250.000	CCE 000	245.000	250.000	175.000	225.000	CEE 500
Total NSSRC / Arena		663,000	874,000	1,585,000	258,000	665,000	245,000	256,000	175,000	325,000	655,500
Engineering											
	Equipment Purchases		3,000		3,000		4,000		3,000		3,000
	Transportation Master Plan				150,000						
	Town Asset Management Program	200.000	100.000	100.000	15 000 000	50,000					
	Yonge St (King to Hwy 93)	650,000	9 000 000	100,000	15,000,000	100,000					
	Community Energy Plan	050,000	5,000,000	80,000							
	Vindin and Harbourview Realignment	2,000,000	1,000,000								
	Fuller Avenue Realignment		2,495,000								
	Dominion St Reconstruction (Fourth to Eighth)			5,625,000							
	Dominion St Reconstruction (King to Fourth) Bay St Reconstruction - King St - Aberdeen Blvd		4,575,000				400.000	1 950 000			
	Fuller Ave / Brunelle Roundabout						400,000	1,550,000		150.000	1.250.000
	Pillsbury Rd and William St. Intersection Improvements						150,000	1,050,000			, ,
	Fourth St and Bay St Intersect. Improvements								150,000	1,190,000	
	William St Cross Section Upgrades	275 000	2 050 000					250,000	5,150,000		
	Ellen St Reconstruction - King St - Johnson St	275,000	3,850,000	2 850 000							
	Montreal St Reconstruction - Fourth - Fifth		200,000	150.000	1.340.000						
	Fifth St (Ottawa to Victoria)			,	150,000	1,350,000					
	Fourth St Reconstruction - Montreal to Victoria									200,000	3,850,000
	Third St Reconstruction - Hugel to Montreal								200,000	2,950,000	
	Manly St Reconstruction (Yonge to Hugel)			225,000	3,450,000	3 050 000					
	Eighth St Reconstruction (Yonge to Hugel) Bay St East Reconstruction - King St to Queen St				200,000	3,050,000	2 150 000				
	Bay St West Reconstruction - Borsa Lane to Second St					175,000	1,800,000				
	Dominion Ave Reconstruction - King St to Russell St					.,	250,000	4,075,000			
	Water Main at Midland Bay Landing for Cruise Ships	175,000									
	Pedestrian Crosswalks - 2024 and 2025 Projects	220,000	220,000		500.000						
	Electric Venicle Charging Stations	300,000			500,000						
	Splash Pad Design and Consultation	50,000									
Total Engineering		4,370,000	21,443,000	9,030,000	20,793,000	4,925,000	4,754,000	7,325,000	5,503,000	4,490,000	5,103,000
Wastowator											
wastewater	Pump Station #1		103.000	1.000.000							
	Relining		267,200	,,	267,200						
	Wastewater Master Plan		250,000					275,000			
	Leachate Pre-treatment Facility										
	Emergency Equipment Replacement	71,400	72,828	74,284	75,770	77,285	79,831	80,408	82,016	83,656	
	Portable Gas Detector Replacement			3.000			3.000				
	Digester Covers		2,000,000	5,000			3,300				
	Insulation Repair/Replacement										
	Ultra Violet Treatment Effluent						103,000	2,255,700			
	Collection System Condition		200.000								
	New Fine Bubble Aeration	1,104,600	500,000								
	Headworks Upgrade	1,104,000	4,000,000								
	Replace Second Clarifier V-Notch										
	WWTP Raw Sludge Pump Replacement										
	WW I P Safety Railing Upgrades										
	Samuary Collection System U&M Manual										2 303 000
	Replacement Snow Blower						3,863				2,505,000
	Return Activated Sludge Pump Replacement		61,800								
	Chlorine Contact Tank - Lifecycle Capital Upgrades			11,845							

				Ten Year Capi	ital Program							
	2024 - 2033											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Division	Project Name	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	
	Dichlorination Building - Lifecycle Capital Upgrades		2,678									
	Sludge Building - Lifecycle Capital Upgrades		197,142									
	Digesters & Digester Control Building - Lifecycle Capital Upgrades		207,339									
	New Primary Clarifier		1,800,000									
	Hwy 12 / CR 93 Sanitary Pumping Station											
Total Wastewater		1,176,000	9,261,987	1,089,129	342,970	77,285	189,694	2,611,108	82,016	83,656	2,303,000	
Water												
	Master Plan Update		178.750					188.750				
	Well Rehabilitation	23,000	46,350	49,440	8,240	26,780	64,890	41,200				
	Well #12 Replacement											
	Emergency Equipment Replacement	63,200	64,424	65,673	66,946	68,245	69,570	70,921	72,300	73,706		
	Sundowner Online Feasibility		300,000									
	Upgrade Pump Capacity											
	East Pressure Zone: Tank		8,740,000									
	Radio Meter Upgrades	129,103										
	Well #15 Replacement											
	Hanly Treatment System UV Replacement											
	Penetang Rd Treatment System UV Replacement											
	County Rd 93 FDR Main		267,800	309,000								
	Montreal Tank Relocation						103,000	969,500				
	First Street Watermain Replacement			257,500								
	New Pressure Zone with new Booster Pump Station					150,000	6,182,533					
	Hanly Tower Interior Painting			257,500			257,500					
	Feed from Bayport to Gawley			515,000								
	Irwin St Distribution Dead-End		154,500									
	Replacement of Utility Van W#16		70,000									
	Replacement of Utility Van W#22	70,000										
	Replacement of Tractor Backhoe W#21							225,000				
	Billing & Leak Detection Software		300,000									
Total Water		205 202	10 121 924	1 454 112	75 196	245 025	6 677 492	1 405 271	72 200	72 706		
Total water		285,303	10,121,824	1,454,115	/5,180	245,025	6,677,495	1,495,371	72,300	73,706		
Total 2024 - 2033 Capi	tal Plan	14,540,243.00	51,684,651.00	18,608,377.00	26,814,566.00	13,160,636.00	16,987,078.00	15,078,087.00	9,649,297.00	9,615,878.00	27,667,216.00	