

FINAL REPORT

PREPARED BY HEMSON FOR THE MUNICIPALITY OF TRENT LAKES

ASSET MANAGEMENT PLAN

May 24, 2024



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EXECUTIVE SUMMARY

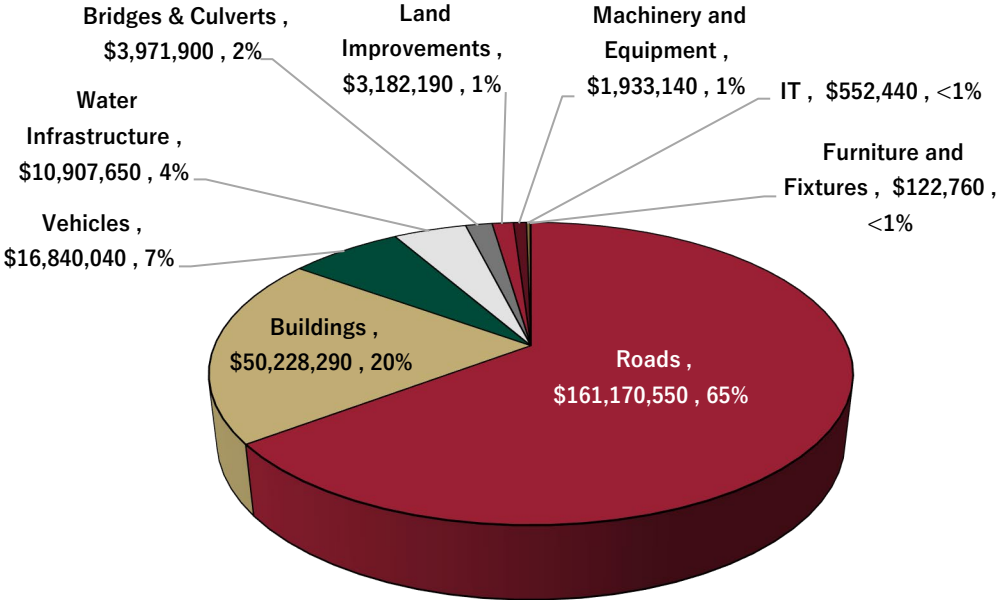
The following summarizes the findings of the Municipality of Trent Lakes' Asset Management Plan (2024 Plan). The 2024 Plan follows the format set out in the *Building Together: Guide for Municipal Asset Management Plans* and it has also been developed to be consistent with the requirements of *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure (O Reg. 588/17)* with consideration to the Municipality's Strategic Asset Management Policy. This 2024 Plan defines the current levels of service for all core and non-core assets in compliance with the asset management regulation.

The 2024 Plan incorporates all of the Municipality's infrastructure assets to provide a comprehensive overview. All figures are in constant 2024 dollars and should be adjusted annually to account for the effects of inflation.

A. ASSET REPLACEMENT VALUE

The Municipality's infrastructure has an estimated total replacement value of \$248.9 million. The largest portion is made up of roads with a value of about \$161.2 million (65%). Buildings make up about \$50.2 million (20%). The remaining assets make up about \$37.5 million (15%).

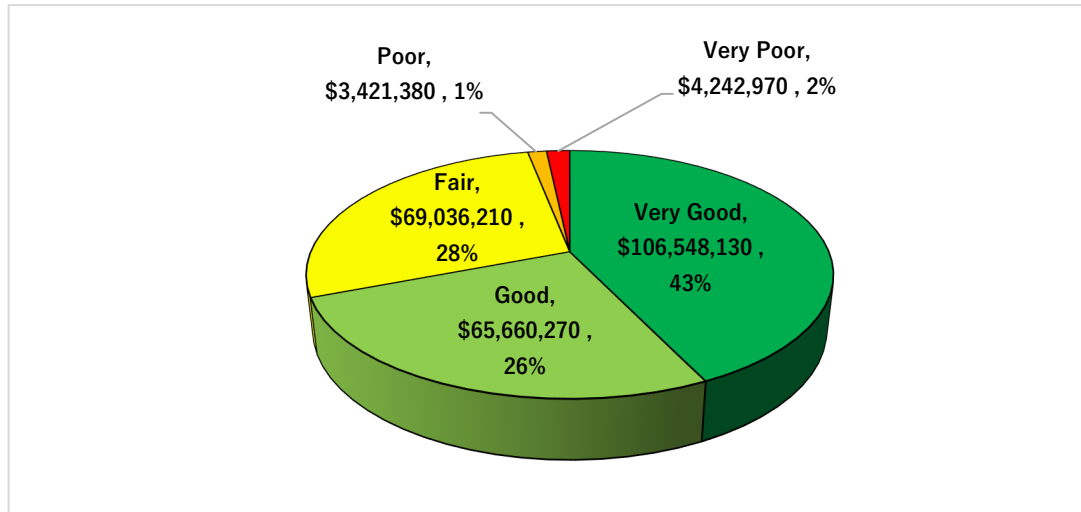
Summary of Replacement Value (2024 dollars)



B. ASSET CONDITION

Overall, the Municipality’s assets are considered to be in Good condition. About \$172.2 million (69%) of the assets are considered to be in Good or Very Good condition. Conversely, about \$7.7 million (3%) of the infrastructure is considered to be in Poor to Very Poor condition. Most of the assets in this category relate to roads, and buildings. The remaining \$69.0 million (28%) is in Fair condition.

Summary of Asset Condition (2024 dollars)



C. LEVELS OF SERVICE

As per O. Reg 588/17 the Municipality is required to develop and track levels of service for the assets that have been included in the 2024 AMP. The table, outlines the levels of service for the Municipality’s core assets of roads, bridges and culverts and water infrastructure. It also includes levels of service for buildings and vehicles (levels of service for all assets are included in Section 3). The levels of service have been developed with reference to the condition of assets combined with the regulatory requirements. The Municipality has identified that the proposed level of service is to maintain the current level of service going forward.

Summary of Current and Proposed Level of Service

Summary of Current and Proposed Levels of Service			
Asset Category	Technical LOS (Description)	Current LOS	Proposed LOS
Roads	Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality (O. Reg. 588/17).		
	Arterial	0.00%	0.00%
	Collector	0.00%	0.00%
	Local	34.06%	34.06%
	1. For paved roads in the municipality, the average pavement condition index value (O. Reg. 588/17).	Very Good 83	Very Good 83
	2. For unpaved roads in the municipality, the average surface condition (O. Reg. 588/17).	Good 74.5	Good 74.5
Bridges & Culverts	Percentage of bridges in the municipality with loading or dimensional restrictions (O. Reg. 588/17).	No structures currently have load limits (0%)	No structures currently have load limits (0%)
	1. For bridges in the municipality, the average bridge condition index value (O. Reg. 588/17).	Very Good	Very Good
	2. For structural culverts in the municipality, the average bridge condition index value (O. Reg. 588/17).	Fair	Fair
	Average weighted condition assessment for small culverts ("Very Poor" to "Very good")	Fair	Fair
Water Infrastructure	Percentage of properties connected to the municipal water system.	318 properties serviced for the two water systems with 13 undeveloped lots. All pay the flat charge (96% connected).	318 properties serviced for the two water systems with 13 undeveloped lots. All pay the flat charge (96% connected).
	Percentage of properties where fire flow is available.	Fire services provides emergency services	Fire services provides emergency services
	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system.	Only 1 recorded in 2023, 4 days (ended)	0 Connection-days per year where a boil water advisory is in place
	The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.	0 Water Main Breaks	0 Water Main Breaks
	Average weighted condition assessment ("Very Poor" to "Very good")	Good	Fair
	Buildings	Average weighted condition assessment ("Very Poor" to "Very good")	Fair
Vehicles	Average weighted condition assessment ("Very Poor" to "Very good")	Good	Good
	Frequency of vehicle replacement	Vehicles are replaced when they are at their end of useful life.	Vehicles are replaced when they are at their end of useful life.

D. FINANCING STRATEGY

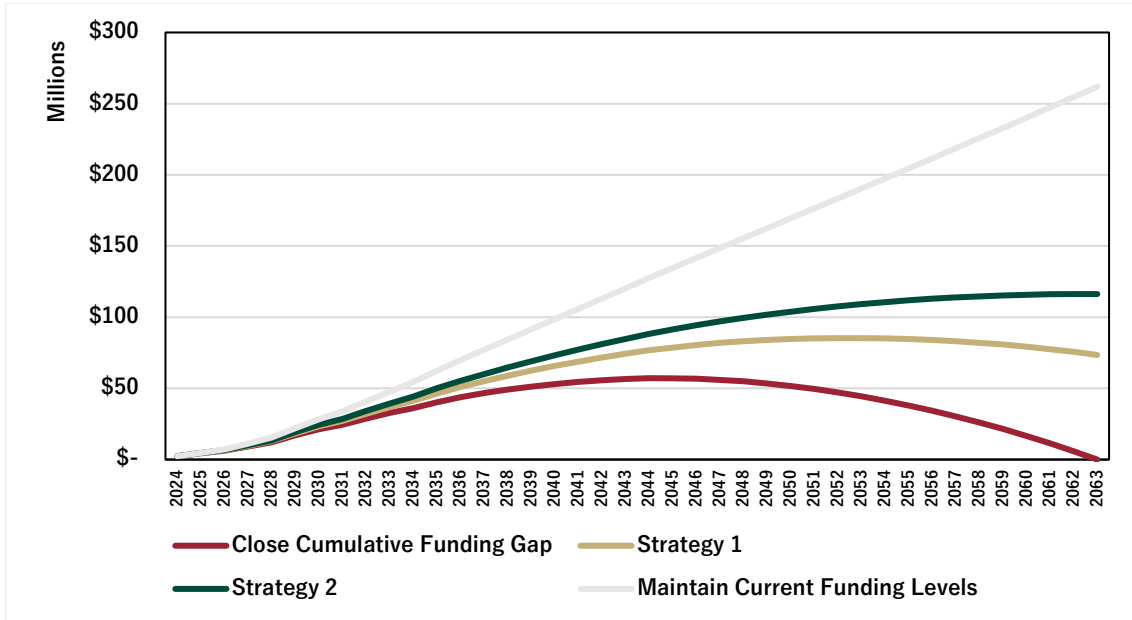
The analysis indicates a spending need of about \$496.8 million for tax supported assets and about \$29.3 million for rate supported assets – this figures represent the cumulative 40-year lifecycle needs across the service areas (in constant 2024 dollars).

- It is unrealistic in the current fiscal context to expect the Municipality to fully address the infrastructure gap in the short-medium term;
- Four financing strategies were developed to determine what capital contributions would be required to meet asset replacement needs (Note: in any given year, actual capital expenditures may be greater or less than the noted capital contributions, as reserves are assumed to accommodate variances between the contributions and actual expenditures);
- The increases calculated would be in addition to the 2024 budgeted funding identified and should be adjusted annually to account for the effects of inflation. The Financing Strategy section of this 2024 AMP provides further details on each strategy.
- Of the financing strategies identified, maintaining current funding levels poses the greatest risk to the Municipality as the infrastructure deficit continues to grow to 2063. Strategy 1 and 2 demonstrate the infrastructure deficit being controlled over the planning period. Detailed tables of each strategy are provided in Appendix C; however, the tax and rate supported cumulative infrastructure gaps are summarized here.

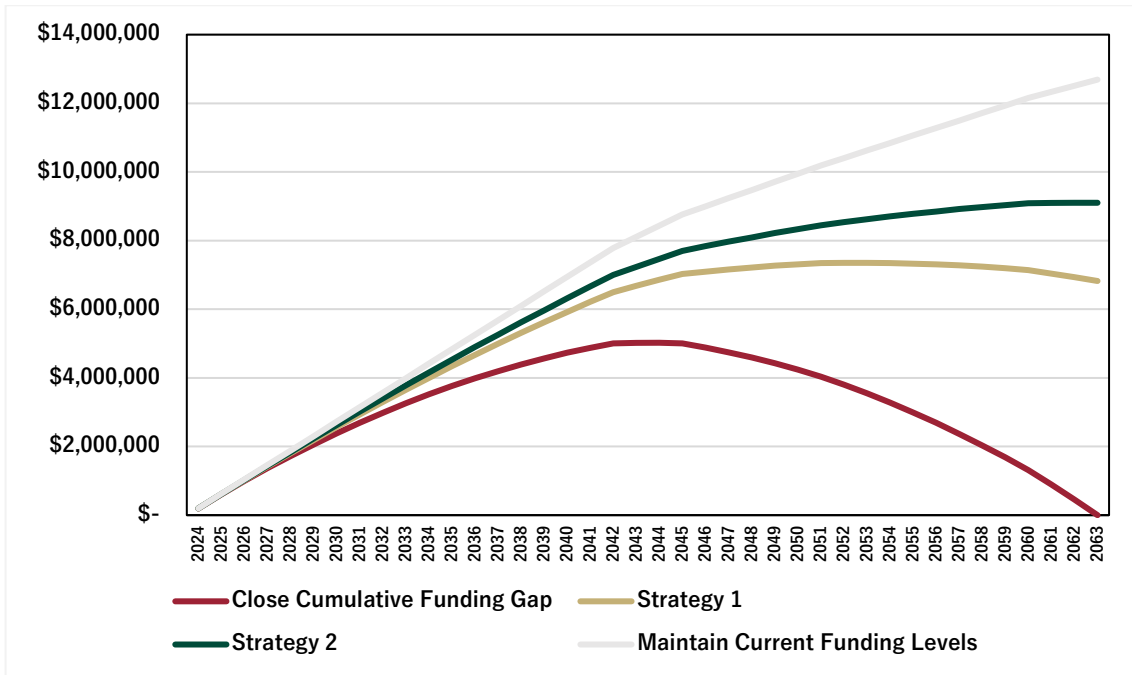
Summary of Financing Strategies

Financing Strategy	Tax Supported	Rate Supported
Close Cumulative Funding Gap by 2063	Increase annual capital contributions by approximately \$320,900 per year.	Increase annual capital contributions by approximately \$16,300 per year.
Strategy 1 Close in-year Funding Gap by 2053 (30 years)	Increase annual capital contributions by approximately \$241,500 per year.	Increase annual capital contributions by approximately \$7,500 per year.
Strategy 2 Close in-year Funding Gap by 2063 (40 years)	Increase annual capital contributions by approximately \$186,700 per year.	Increase annual capital contributions by approximately \$4,600 per year.
Maintain Current Funding Levels	Maintain current annual capital contributions.	Maintain current annual capital contributions

Funding Gap for Tax Supported Assets under Each Financing Strategy



Funding Gap for Rate Supported Assets under Each Financing Strategy



1. INTRODUCTION

The Municipality of Trent Lakes' 2024 Asset Management Plan (2024 AMP) provides the Municipality with a tool to assist in asset management financing decisions. The Plan covers all municipal assets: buildings, vehicles, machinery and equipment, land improvements, IT, furniture and fixtures, bridges and culverts, roads, and water infrastructure.

The 2024 Plan follows the format set out by the Ministry of Infrastructure through the Building Together: Guide for Municipal Asset Management Plans and it has also been developed to be consistent with the requirements of *Ontario Regulation 588/17* Asset Management Planning for Municipal Infrastructure (*O Reg. 588/17*) and the Municipality's Strategic Asset Management Policy. All dollar figures reported in this 2024 Plan are in constant 2024 dollars and therefore should be adjusted annually to account for the effects of inflation.

An Excel based asset management financial model has been developed as part of the 2024 AMP. The model contains the Municipality's asset inventory and it is intended to be updated on a regular basis to inform future capital investment decisions. The model contains the information required to update the State of the Local Infrastructure Report Cards presented in Appendix B, which can be reproduced annually to help Council and the public understand the state of assets and overall funding levels.

A. ASSET MANAGEMENT OVERVIEW

Well-managed public infrastructure is vital to the prosperity and quality of life of communities. Given the range and scope of services provided, Ontario municipalities have a special responsibility in ensuring that infrastructure is planned, built, and maintained in a sustainable way. A detailed asset management plan is essential to carry out this responsibility. Asset management has several benefits, including:

- Municipality can make informed and traceable decisions;
- Municipality has the opportunity to coordinate and plan accordingly by taking a risk-based approach to asset management;
- Higher customer satisfaction is possible;
- Documents a funding plan and strategy to manage infrastructure; and
- Demonstrates compliance with regulations and legislation.

Asset management is an ongoing practice in the Municipality of Trent Lakes. Council and staff have applied sound asset management principles to maintain records on tangible capital assets, monitor asset performance, and plan for infrastructure acquisition, repair, rehabilitation, and replacement over the long-term.

The purpose of the 2024 AMP is to build on existing practices by identifying how best to manage municipal infrastructure over the planning period to 2063. A strategy for maintaining infrastructure so that existing service levels are maintained is an important element. In this respect, the 2024 AMP has been prepared to be consistent with the Municipality's Strategic Asset Management Policy. Ultimately, the 2024 AMP will provide Council with information that can guide sustainable infrastructure investment decisions.

B. ONTARIO'S ASSET MANAGEMENT REGULATION (*ONTARIO REGULATION 588/17*)

In 2015, the Province of Ontario established the Infrastructure for Jobs and Prosperity Act. The purpose of this Act is to establish mechanisms to encourage principled, evidence-based and strategic long-term infrastructure planning that supports job creation and training opportunities, economic growth, protection of the environment, and incorporate design excellence into infrastructure planning.

In December 2017, Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure (O Reg. 588/17) was passed under the Infrastructure for Jobs and Prosperity Act. The regulation requires municipalities to develop a Strategic Asset Management Policy, which will help municipalities document the relationship between their Asset Management Plan and existing policies and practices as well as provide guidance for future capital investment decisions. Municipality Council approved the Strategic Asset Management Policy in 2019.

The regulation also contains more specific requirements on the type of analyses municipal asset management plans should include. The aim is to provide guidance to municipalities so that asset management plans are more consistent across the Province. Furthermore, in March 2021 the Province amended the regulation to extend the regulatory timelines by one year. Table 1 provides a summary of the key regulatory timelines as outlined by O Reg. 588/17 and where the Municipality currently stands in the timeline.

Table 1 – O Reg. 588/17 Timeline

Regulation Timeline	Requirement	Progress
July 1, 2019	<ul style="list-style-type: none"> ▪ Municipalities shall prepare their first strategic asset management policy. ▪ Municipalities shall review, and if necessary, update the policy every 5 years. 	<ul style="list-style-type: none"> ▪ Municipal Council approved the Strategic Asset Management Policy in May 2019. ▪ The next review is expected in 2024. Earlier reviews are encouraged whenever a change in policy directives occurs. ▪ The policy is available here.
July 1, 2022	<ul style="list-style-type: none"> ▪ Every municipality shall prepare an asset management plan in respect of its core municipal infrastructure assets. ▪ The current levels of service must be defined for all core assets. 	<ul style="list-style-type: none"> ▪ The Municipality has met this requirement through its last AMP and has included all core assets as part of this requirement. ▪ A Water AMP was also completed in 2020. ▪ The 2024 AMP builds on these previous iterations and includes an update to the analysis for core assets of roads, bridges and culverts and water infrastructure.
July 1, 2024	<ul style="list-style-type: none"> ▪ Every municipality shall prepare an asset management plan in respect of all other municipal infrastructure assets. ▪ The current levels of service must be defined for all other municipal assets 	<ul style="list-style-type: none"> ▪ This 2024 AMP has incorporated non-core assets contained in the Municipality’s inventory. Some of these assets include condition assessments based on municipal reports and internal staff review. ▪ Current level of service measures have been identified through this plan.
July 1, 2025	<ul style="list-style-type: none"> ▪ Municipalities must establish proposed levels of service for a minimum of 10 years. ▪ A lifecycle management and financial strategy that covers a minimum of 10 years. 	<ul style="list-style-type: none"> ▪ The 2024 AMP includes a discussion on proposed levels of service for all assets. ▪ The Municipality has identified that the proposed level of service is to maintain the current level of service for all assets.

C. ASSET MANAGEMENT PLAN STRUCTURE

The 2024 AMP is developed to be consistent with the structure recommended through the *2013 Building Together: Guide for Municipal Asset Management Plans*. At the same time, it has been developed to meet the requirements of O Reg. 588/17. Table 2 provides a guide to the sections of the 2024 AMP.

Table 2 - Guide to the 2024 Asset Management Plan

Section	Requirement
Section 2 - State of Local Infrastructure	Summarizes the state of the Municipality's infrastructure with reference to infrastructure quantity and quality. Additional details are provided in Appendix B.
Section 3 - Level of Service	A summary of the current levels of service is presented as well as recommendations on additional metrics the Municipality can look to track in the future.
Section 4 - Asset Management Strategy	Sets out several strategies that will assist the Municipality in maintaining assets so that current service levels are maintained. This section also includes a risk analysis of Municipality assets.
Section 5 - Financing Strategy	Establishes how asset management can be delivered in a financially sustainable way for both tax and utility rate supported services. Additional details are provided in Appendix C.
Section 6 – Continuous Improvements and Updates	Provides key recommendations on how to administer the 2024 AMP and keep it up to date.
Section 7 - Conclusions and Recommendations	Provides recommendations based on the analysis undertaken.

Note: Please refer to Appendix A for a list of definitions for commonly used terms throughout this 2024 AMP.

2. STATE OF LOCAL INFRASTRUCTURE

This section provides a summary of the Municipality's assets with reference to asset quantity and quality. Some assets have condition assessments based on engineering inspections (roads, bridges and culverts, and buildings) while the balance of assets considered are based on the useful life of the asset relative to its age as well as Hemson and Municipal staff assumptions. Detailed technical information on the asset inventory, remaining useful life and conditions for each asset category is provided in Appendix B.

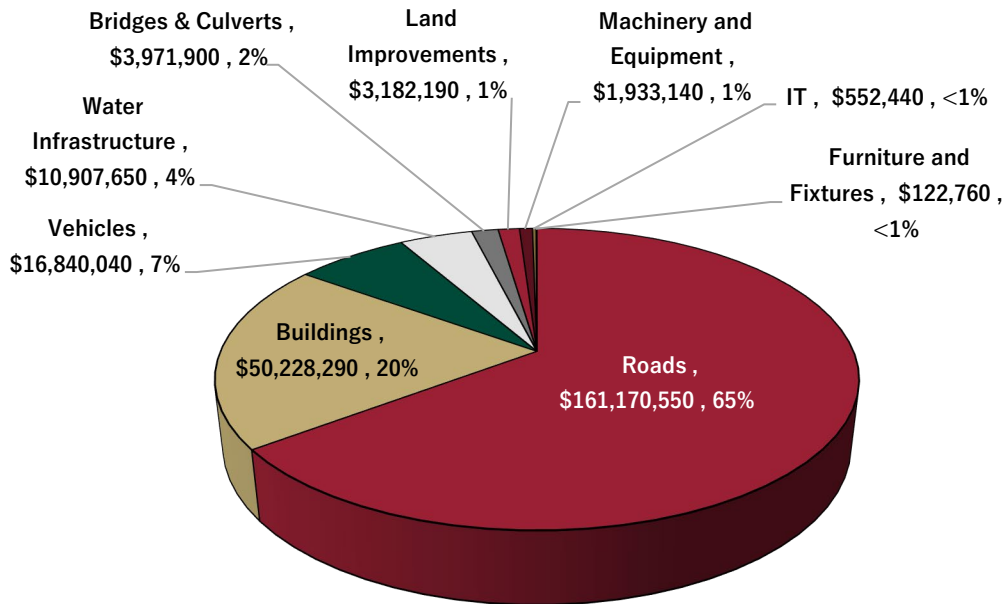
A. REPLACEMENT COST OF INFRASTRUCTURE

The replacement cost for all Municipality assets considered in the 2024 AMP is estimated at \$236.9 million (represented in constant 2024 dollars). The largest share is related to roads and accounts for about \$161.2 million (65%) of the total replacement cost. The next highest share is attributed to buildings at \$50.2 million (20%) and this is followed by the vehicles at \$16.8 million (7%).

The other asset categories in the Municipality's asset portfolio make up the remaining \$20.6 million (8%). These are made up of \$10.9 million (4%) for water infrastructure, \$4 million (2%) for bridges and culverts, \$3.2 million (1%) for land improvements, \$1.9 million (1%) for machinery and equipment, \$552,400 (less than 1%) for IT assets, and \$122,800 (less than 1%) for furniture and fixtures.

The replacement costs have been developed based on historical information maintained by staff in the asset inventory, costs in recent engineering studies, recent benchmark costs and costs based on the 2024 Development Charges Background Study. Where information was not available, historical acquisition costs were inflated to current 2024 dollars at a rate of 3%. Detailed replacement costs for each asset category is provided in Appendix B.

Figure 1 - Summary of Assets by Total Replacement Value (\$2024)



Note: Total replacement value amounts to about \$248.9 million. Replacement costs are expressed in constant 2024 dollars.

B. SUMMARY OF STATE OF LOCAL INFRASTRUCTURE

Table 3 provides a summary of the state of local infrastructure for all asset categories considered in this study which is valued at \$248.9 million. The weighted remaining useful life (WRUL) and weighted average condition (WAC) for each asset category has been derived relative to the replacement value of each asset. Detailed information is provided in Appendix B. The table illustrates several key findings:

- Weighted Remaining Useful Life:** the WRUL of the Municipality’s assets is approximately 9 years. Note, gravel roads do not have a remaining useful life as they are not replaced in the analysis, however gravel road maintenance costs are considered in the Financing Strategy (see Section 5).
- Weighted Condition:** Overall, the Municipality’s assets are determined to be in Good condition. This is largely attributed to the Municipality’s roads generally assessed to be in Good to Very Good condition. Bridges and Large Culverts are considered to be in Good condition overall, while all other assets are in the Fair condition range. Only IT and Furniture and Fixtures are considered to be in Very Poor condition as the conditions are based on the age of the asset relative to the useful life.

Table 3 - Summary of State of Local Infrastructure

Asset Type	Replacement Cost 2024	Remaining Useful Life (Weighted Average)	Condition (Weighted Average)
Buildings	\$50,228,290	17	Fair
Vehicles	\$16,840,040	5	Good
Machinery and Equipment	\$1,933,140	3	Good
Land Improvements	\$3,182,190	14	Fair
IT	\$552,440	Overdue	Fair
Furniture and Fixtures	\$122,760	Overdue	Fair
Small Culverts	\$2,761,200	19	Fair
Bridges and Large Culverts	\$1,210,700	10	Good
Water Facilities	\$2,682,000	6	Good
Water Network	\$8,225,650	13	Fair
Paved Roads	\$110,069,380	7	Very Good
Gravel Roads	\$51,101,170	Not Applicable	Good
Grand-Total	\$248,908,960	10	Good

C. CONDITION ASSESSMENTS

Consistent with the Canadian National Infrastructure Report Card, as well as other major organization and institution reporting formats, a five-point rating scale was used to assign a condition to all assets. This methodology provides a standard and easy to understand way of reporting on the condition of assets. Table 4 summarizes the assumed parameters.

Table 4 - Condition Assessment Parameters

Condition Rating	Definition
Very Good	<ul style="list-style-type: none"> Well maintained, good condition, new or recently rehabilitated asset.
Good	<ul style="list-style-type: none"> Good condition, few elements exhibit existing deficiencies.
Fair	<ul style="list-style-type: none"> Some elements exhibit significant deficiencies. Asset requires attention.
Poor	<ul style="list-style-type: none"> A large portion of the system exhibits significant deficiencies. Asset mostly below standard and approaching end of service life.
Very Poor	<ul style="list-style-type: none"> Widespread signs of deterioration, some assets may be unusable. Service is affected.

Assets were categorized in the 5-tier rating system on an asset by asset basis. Three approaches have been utilized for the assets considered in this asset management plan.

1. Condition rating systems based on engineered and professional standards. These measures can then be translated into a 5-tier rating system. The municipality should continually update the conditions in the asset inventory to reflect changes in conditions or when assets are replaced.
 - a. Condition assessments for the roads, bridges and large culverts, water infrastructure, and some buildings are based on the engineered assessments developed through independent studies: 2023 Roads Needs Study, 2021 Bridge OSIM Report, 2013 Culverts Study, 2020 Water AMP, and 2019 Facilities Master Plan. These conditions were adapted to the 5-tier system where appropriate.
2. Estimates based on Hemson and staff opinion. This approach is important where there is low confidence that age and useful life represents a particular set. This method has been used for a series of assets in this 2024 AMP particularly for fire services related assets which have been assumed to be in Good condition wherever their age was not a good representation of their condition. Other asset conditions were determined in consultation with staff and were rated in Fair to Good condition (see Appendix B).
3. Estimates based on age and the remaining useful life of the asset. This was used for all assets, which the Municipality was not able to provide a condition assessment based on existing knowledge or inspection. It is the intention that the Municipality move towards a condition assessment methodology using approach 1 and 2 as needed. With this said, this methodology is suitable for lower valued assets that have a shorter useful life.

3. LEVEL OF SERVICE

Asset management decisions must be made with reference to the level of service planned for by the Municipality. Current service levels in Trent Lakes have been developed based on a combination of internal asset management practices, community expectations, statutory requirements, and industry operation and safety standards. Typically, the level of asset investment made by the Municipality in any one year has been determined by funding availability. That said, the Municipality has in the past been responsive to repair needs to address immediate needs. The Municipality has therefore done a good job in assessing and maintaining levels of service.

The community expects that services be delivered in a cost effective and efficient way. Generally, community expectations revolve around the Municipality's accessibility of "soft" services (e.g. recreation facilities; libraries; fire stations) within neighbourhoods. However, safety and performance are also important for core services such as roads and water infrastructure.

Developing levels of service and tracking over time is essential to measuring the success of service delivery and the asset management strategy overall. This section outlines current levels of service as they relate to the requirements outlined in O Reg. 588/17.

A. CURRENT LEVEL OF SERVICE

The Municipality has determined the current levels of service through the analysis and model developed in this 2024 AMP. The current level of service measures for each asset category are summarized in Table 5. It is noted that the information in Table 5 represents a blended approach of levels of service and performance measures which represent the best available information at this time:

- **Weighted Condition:** The Municipality's assets are determined to be in Good condition. This is largely attributed to the Municipality's roads generally assessed to be in Good to Very Good condition. Bridges and large culverts, vehicles, machinery and equipment and water facilities are considered to be in Good condition overall, while all other assets are in the Fair condition range.

It is important to note that assets in Fair condition may transition into the Poor or Very Poor category in the near future and may require attention in the short to medium term, if proper asset maintenance and rehabilitation is not achieved. It will be important for the Municipality to determine which assets in the Fair category should be prioritized to ensure that current levels of service do not decline.

Finally, it is important to note that O Reg. 588/17 includes a prescribed set of level of service measures. Table 5 includes these level of service measures as required in the regulation, a brief summary is provided below:

- **Roads:** Out of a 100 rating scale, the average pavement condition index value of the paved roads is 83 (or Very Good condition) while the average condition of gravel roads is 75 (or Good condition). It is noted however, that the condition of gravel roads will vary significantly over time depending on factors such as weather conditions. Therefore, these conditions reflect a point in time. The information was obtained from the 2023 Roads Needs Study.
- **Bridges and Culverts:** Based on the 2021 OSIM Report bridges in the municipality are overall in Very Good condition and Large Culverts are overall in Fair condition. No structures have been identified to have loading or dimensional restrictions at this time.
- **Water System:** The Municipality has developed the levels of service based on staff assessment and the Annual Water Reports for the Alpine Village/Pirates Glen and Buckhorn Lake Estates systems. Overall 96% of customers are connected in the service areas. No fire flow is available in the system, however the Municipality provides fire emergency services using tanker trucks. Only 1 water boil advisory was recorded in 2023 (only lasted 4 days) and no water main breaks have occurred.
- For all other asset categories, the level of service is related to the general condition of assets. Section 5 discusses in detail the costs associated to maintaining the current level of service.

B. PROPOSED LEVEL OF SERVICE

The Municipality has identified that the proposed level of service is to maintain the current level of service wherever possible. The Municipality has a Level of Service Policy for Municipal Roads which outlines the maintenance standard guidelines that are to be undertaken. Furthermore, the Municipality maintains bridges and culverts based on the recommendations of the OSIM report. For water services, the Municipality maintains the system based on the management recommendations undertaken through the OCWA contract and regulatory requirements.

Furthermore, to ensure that the proposed level of service is met, the Municipality would be required to emplace new infrastructure to service development. The Municipality's 2024 DC Study has identified approximately \$45.0 million in new capital works needed to service growth, of which approximately \$2.5 million is eligible for development charge funding

(excluding post-period benefit). Furthermore, as this infrastructure is constructed or acquired, the Municipality will need to undertake additional operating and maintenance costs as well as savings for long-term replacement to ensure the infrastructure is maintained in state of good repair (see Section 5). These expenditures are required to ensure that the Municipality can continue to maintain service levels.

**Table 5
Municipality of Trent Lakes
Level of Service Tracker**

Asset Category	Customer LOS	Technical LOS (Description)	Source of Information	Current LOS	Proposed LOS	Lifecycle Activities to Maintain LOS	Cost Associated to Current LOS	Proposed LOS and Potential Costs
Roads	Maintain safe and reliable roads and to meet reporting requirements of O. Reg. 588/17.	Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality (O. Reg. 588/17).				Regular maintenance undertaken on an ongoing basis. Repair and rehabilitation undertaken based on Road Needs Study. Maintain roads based on Municipality's Level of Service Policy for Municipal Roads.	Costs associated to lifecycle activities as identified in 2024 budget. Budget O&M: \$ 3,076,563 Capital from Tax: \$ 1,176,356 <i>Note: Capital from tax is associated to all asset categories with the exception of water infrastructure.</i>	Maintain the current level of service based on the Municipality's Level of Service Policy for Municipal roads and investment needs from the RNS. Approximately \$3.1 million in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		Arterial	AMP/RNS 2023	0.00%	0.00%			
		Collector	AMP/RNS 2023	0.00%	0.00%			
		Local	AMP/RNS 2023	34.06%	34.06%			
		1. For paved roads in the municipality, the average pavement condition index value (O. Reg. 588/17).	AMP/RNS 2023	Very Good	Very Good			
		2. For unpaved roads in the municipality, the average surface condition (O. Reg. 588/17).	AMP/RNS 2023	Good	Good			
Bridges & Culverts	Maintain safe and reliable bridges and culverts and to meet reporting requirements of O. Reg. 588/17	Percentage of bridges in the municipality with loading or dimensional restrictions (O. Reg. 588/17).	OSIM Report 2021	No structures currently have load limits (0%)	No structures currently have load limits (0%)	Regular maintenance, repair and replacement is undertaken based on recommendations from OSIM reports.	Costs associated to lifecycle activities are identified in 2024 budget and combined with roads.	Maintain the current level of service based on the Municipality's Level of Service Policy for Municipal roads and investment needs from the OSIM report. Approximately \$3.1 million in maintenance per year (combined with roads) and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		1. For bridges in the municipality, the average bridge condition index value (O. Reg. 588/17).	AMP/OSIM Report 2021	Very Good	Very Good			
		2. For structural culverts in the municipality, the average bridge condition index value (O. Reg. 588/17).	AMP/OSIM Report 2021 (excludes small culverts)	Fair	Fair			
		Bridges and culverts are kept in a state of good repair.	AMP	Fair	Fair			
		AMP	61%					
		AMP	18%					

**Table 5
Municipality of Trent Lakes
Level of Service Tracker**

Asset Category	Customer LOS	Technical LOS (Description)	Source of Information	Current LOS	Proposed LOS	Lifecycle Activities to Maintain LOS	Cost Associated to Current LOS	Proposed LOS and Potential Costs
Water Infrastructure	To provide safe drinking water to residents and to meet reporting requirements of O. Reg. 588/17	Percentage of properties connected to the municipal water system.	Municipal Staff	318 properties serviced for the two water systems with 13 undeveloped lots. All pay the flat charge (96% connected).	318 properties serviced for the two water systems with 13 undeveloped lots. All pay the flat charge (96% connected).	Regular maintenance, repair and replacement is undertaken based on OCWA recommendations.	Costs associated to lifecycle activities as identified in 2023 budget (shown for both systems combined). Budget O&M: \$ 432,098 Transfers to Reserves for Capital: \$ 15,412	Maintain the current level of service based on OCWA recommendations. Approximately \$393,000 in maintenance per year and capital spending in line with capital program needs and to ensure full-cost recovery of system costs.
		Percentage of properties where fire flow is available.	Municipal Staff	Fire services provides emergency services	Fire services provides emergency services			
		The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the	2023 Annual Water Report	Only 1 recorded in 2023, 4 days (ended)	0 Connection-days per year where a boil water advisory is in place			
		The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.	2023 Annual Water Report (Assumed based on 0 non-compliance issues)	0 Water Main Breaks	0 Water Main Breaks			
	Water infrastructure is kept in a state of good repair.	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Good	Fair			
	% of assets at or above "Good" or "Very Good" condition	AMP	25%					
	% of assets beyond their useful life	AMP	3%					
Buildings	Buildings are kept in a state of good repair	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Fair	Fair	Regular maintenance and repairs as needed.	Budget Maintenance: \$ 175,500	Maintain the current level of service. Approximately \$175,500 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		% of assets at or above "Good" or "Very Good" condition	AMP	42%				
		% of assets beyond their useful life	AMP	8%				

**Table 5
Municipality of Trent Lakes
Level of Service Tracker**

Asset Category	Customer LOS	Technical LOS (Description)	Source of Information	Current LOS	Proposed LOS	Lifecycle Activities to Maintain LOS	Cost Associated to Current LOS	Proposed LOS and Potential Costs
Vehicles	Vehicles are kept in a state of good repair	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Good	Good	Regular maintenance and inspections. Vehicles are replaced on an as needed basis.	Budget Maintenance: \$ 378,900	Maintain the current level of service. Approximately \$378,900 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		% of assets at or above "Good" or "Very Good" condition	AMP	57%				
		% of assets beyond their useful life	AMP	21%				
		Frequency of vehicle replacement	Municipal Staff	Vehicles are replaced when they are at their end of useful life.	Vehicles are replaced when they are at their end of useful life.			
Machinery and Equipment	Machinery and Equipment is kept in a state of good repair.	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Good	Fair	Regular maintenance and inspections. Machinery and equipment are replaced on an as needed basis.	Budget Maintenance: \$ 356,351	Maintain the current level of service. Approximately \$356,300 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		% of assets at or above "Good" or "Very Good" condition	AMP	72%				
		% of assets beyond their useful life	AMP	20%				
Land Improvements	Land Improvements are kept in a state of good repair.	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Fair	Fair	Regular maintenance.	Budget Maintenance: \$ 66,500	Maintain the current level of service. Approximately \$66,500 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy.
		% of assets at or above "Good" or "Very Good" condition	AMP	39%				
		% of assets beyond their useful life	AMP	0%				
IT	IT assets kept in a state of good repair.	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Fair	Fair	Regular maintenance and replacement as needed.	Budget Maintenance: \$ 16,504	Maintain level of service in the Fair range. Approximately \$16,500 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy. A more detailed assessment of these assets may result in a better condition than the age based approach used, this is a non-infrastructure cost with no additional costs.
		% of assets at or above "Good" or "Very Good" condition	AMP	6%		Non-Infrastructure Solution		
		% of assets beyond their useful life	AMP	72%				
		Frequency of computer replacement	Municipal Staff	Computers are replaced every 5 years or as needed.	Computers are replaced every 5 years or as needed.			
Furniture and Fixtures	Furniture and Fixtures assets kept in a state of good repair.	Average weighted condition assessment ("Very Poor" to "Very good")	AMP	Fair	Fair	Regular maintenance and replacement as needed.	Budget Maintenance: \$ 2,500	Maintain level of service in the Fair range. Approximately \$2,500 in maintenance per year and additional capital spending in line with strategies 1 or 2 in the financing strategy. A more detailed assessment of these assets may result in a better condition than the age based approach used, this is a non-infrastructure cost with no additional costs.
		% of assets at or above "Good" or "Very Good" condition	AMP	5%		Non-Infrastructure Solution		
		% of assets beyond their useful life	AMP	99%				

4. ASSET MANAGEMENT STRATEGY

This section sets out an action plan that will assist the Municipality in maintaining assets so that current service levels are maintained. The asset management strategy relates to a set of actions that, taken together, has the lowest total cost to maintain assets in a state of good repair as defined in the Building Together: Guide for Municipal Asset Management Plans.

The asset management strategy includes current practices and potential future practices related to non-infrastructure solutions, maintenance activities, renewal/rehabilitation, disposal, and expansion activities. The final component of this section includes a risk analysis, which can be used to assist Municipal staff and Council measure and manage risks to assets to maintain current levels of service.

A. OVERVIEW OF FULL LIFE-CYCLE COST MODEL

As part of the Asset Management Plan, the Municipality, along with Hemson, have identified the total full life cycle costs that corresponds to the requirements of the regulation. This would entail a cost estimation throughout the assets life including planning, design, construction, acquisition, operation, maintenance, renewal (and disposal). In addition, the analysis also takes into consideration the inclusion of expansion related infrastructure into the lifecycle management strategy. This approach ensures that the additional lifecycle costs associated with newly constructed/acquired assets are accounted for in the long-term forecast.

A “lifecycle management approach” in asset management planning not only includes estimating future lifecycle costs, but also embeds the process of monitoring how the asset performs over its life while providing affordable services.

These lifecycle activities can be segmented into six (6) categories: non-infrastructure solutions, operations/maintenance, renewal/rehabilitation, replacement, disposal, and expansion activities. While this AMP looks to address the various cost elements, it is important to recognize that as the maturity level increases, the costs associated with each lifecycle activity will strengthen and improve the expenditure outlook. Table 5 provides a description of each lifecycle category and the specific approach used to forecast expenditures in this AMP. The Municipality undertakes all the activities described in Table 5, however, the Municipality’s budget generally accounts for these expenditures in different categories. It is recommended that the Municipality continue to track the asset management activities required to continue to maintain levels of service.

Table 5 - Overview of the Full Life Cycle Activities and AMP Approach

Category	Description	AMP Approach
Non-Infrastructure Solutions	<ul style="list-style-type: none"> ▪ Actions or policies that can lower costs or extend asset life (e.g., better integrated infrastructure planning and land use planning, demand management, insurance, process optimization, managed failures, etc.). 	<ul style="list-style-type: none"> ▪ Provision of \$50,000 per annum included for tax supported assets and \$5,000 per annum for rate supported assets has been assumed.
Maintenance Activities	<ul style="list-style-type: none"> ▪ Servicing assets on a regular basis in order to fully realize the original service potential. Maintenance will not extend the life of an asset or add to its value. Not performing regular maintenance may reduce an asset’s useful life. 	<ul style="list-style-type: none"> ▪ Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific maintenance. ▪ In most instances, does not include general operating costs associated to staffing (exp. staff that carry out recreational programs). ▪ Annual capital related maintenance activities of \$4.1 million per year for tax supported assets (2024 budget) and \$432,100 (2024 budget) for rate supported assets. These figures are deemed appropriate to use in the forecast moving forward as it generally represents the costs from previous year’s budgets.
Renewal/Rehabilitation Activities	<ul style="list-style-type: none"> ▪ Mostly associated to significant repairs designed to extend the useful life of an asset. These types of activities are typically done at key points in the lifecycle of an asset to ensure the asset reaches it designed useful life. 	<ul style="list-style-type: none"> ▪ Renewal expenditures calculated based on those costs identified in the 2023 Road Needs Study.

Category	Description	AMP Approach
Replacement Activities	<ul style="list-style-type: none"> ▪ Activities that are expected to occur once an asset has reached the end of its useful life and renewal/ rehabilitation is no longer an option. 	<ul style="list-style-type: none"> • Incorporating the average annual investment required to replace assets when they reach the end of their useful life (age/condition/risk replacement schedule). • Future provision for road replacement has been included beyond the 10-year period covered by the Road Needs Study.
Disposal Activities	<ul style="list-style-type: none"> ▪ The activities associated with disposing of an asset once it has reached the end of its useful life, or is otherwise no longer needed. Typically, disposal costs are accounted under replacement activities. Some assets, such as landfills, may have perpetual maintenance costs. 	<ul style="list-style-type: none"> ▪ Analysis assumes any costs associated with “disposal” is included for in the replacement value and captured in the capital replacement requirements.
Expansion Activities	<ul style="list-style-type: none"> ▪ Planned activities required to extend or expand municipal services to accommodate the demands of growth. 	<ul style="list-style-type: none"> ▪ New “first-round” capital expenditures are excluded from the calculation as development charges are used to fund this capital. Approximately \$2.5 million based on the 2024 Development Charges Background Study (excluding post-period benefit). ▪ Additional growth-related expenditure patterns similar to 10-year DC eligible expenditures are assumed beyond the 10-year period. ▪ Additional maintenance and contributions to capital are assumed as new growth-related infrastructure is emplaced.

B. RISK ANALYSIS

It is important to assess the risk associated with each asset and the likelihood of asset failure. Asset failure can occur as the asset reaches its limits and can affect the level of service. In addition, certain assets have a greater consequence of failure than others. A risk matrix can help prioritize which assets should be repaired/replaced, even those which the Municipality has already identified to be in Poor or Very Poor condition. The evaluation rating is then linked to the condition assessment parameter discussed in Section 2. The formula to determine asset risk is as follows:

$$(\text{Likelihood of Failure}) \times (\text{Consequence of Failure}) = (\text{Risk Rating})$$

Each of the components of the Risk Rating methodology is defined as follows:

- **Likelihood of Failure:** is directly linked to the condition of an asset. For example, an asset in Very Poor condition would have the probability of asset failure in the short-term be high. This type of asset may be near the end of its useful life or has deteriorated significantly. Conversely, it would be considered rare for an asset to fail in the short-term if it is considered to be in Good or Very Good condition. Table 6 outlines the definition of likelihood of failure used for the Municipality's assets.

Table 6 - Probability of Failure

Condition	Probability of Failure	Description
Very Good	1	Rare
Good	2	Unlikely
Fair	3	Possible
Poor	4	Likely
Very Poor	5	Almost Certain

Note: Definitions are based on the MFOA Asset Management Framework.

Consequence of Failure: refers to the impact on the Municipality if an asset were to fail to provide the desired level of service. The consequence of failure has been determined separately for each asset category, as the impact to the Municipality differs greatly by asset type. For example, if a fire emergency vehicle was not available for service, the potential impact could be severe compared to a vehicle used for administrative purposes. For the purposes of this analysis, assets were assigned a consequence of failure based on the consequence ratings developed through the Municipality's asset management software. Table 7 below outlines the definition of consequence of failure used for the Municipality's assets. The consequence of failure, rated on a 1-5 scale, was weighted relative to each category in Table 7 depending on how impactful the consequence may be to the Municipality.

Table 7 - Consequence of Failure

Consequence of Failure	Description
1 - Insignificant	No impact to operations.
2 - Minor	Minor impact to operations, all major operations can continue to function.
3 - Moderate	Moderate impact to operations some critical operations may need to stop functioning temporarily.
4 - Major	Major operations seize and some damage control necessary.
5 - Significant	All operations seize to function and major damage control is necessary.

Note: The consequence of failure was developed based on the Municipality’s asset management software.

- **Risk Rating:** categorizes assets based on the level of risk to the Municipality. The risk rating provides a guide to prioritize assets by determining which assets require attention first and which capital works can be deferred. Higher risk assets should be prioritized for attention in the short term by determining which of the lifecycle actions is required to be performed on the asset. Table 8 below provides a summary of the risk matrix.

Table 8 - Risk Matrix

Evaluation Rating		Consequence of failure					Color Code
		1	2	3	4	5	
Likelihood of Failure	1	1	2	3	4	5	Very Low Risk
	2	2	4	6	8	10	Low Risk
	3	3	6	9	12	15	Moderate Risk
	4	4	8	12	16	20	High Risk
	5	5	10	15	20	25	Very High Risk

Table 9 presents the findings of the risk analysis and illustrates the Municipality’s asset risk rating. Most of the Municipality’s assets continue to have relatively low risk, an indication of good maintenance practices overall. Only water facilities are considered to have moderate risk due to the relatively high consequence assumed for this asset category.

The risk of each asset and asset category has been determined with reference to the parameters outlined in Table 8. It is important to note, that the Municipality will need to continue regular maintenance activities and capital works moving forward to maintain current levels of service – this ensures assets do not further deteriorate posing greater risk to the Municipality. Please note that roads have been excluded from the risk analysis in Table 9 as the infrastructure needs and timing of repair and replacement has been informed based on detailed engineered assessments outlined through the 2023 Roads Needs Study. The 2023 Roads Needs Study identifies the recommended works for each road segment on a case-by-case basis considering: surface type, average annual daily traffic, structural adequacy and drainage.

Table 9 - Summary Risk Assessment

Asset Type	Replacement Cost 2024	Risk (Weighted Average)
Assets with Risk Rating Developed in 2024 AMP		
Buildings	\$50,228,290	Low
Vehicles	\$16,840,040	Low
Machinery and Equipment	\$1,933,140	Very Low
Land Improvements	\$3,182,190	Low
IT	\$552,440	Very Low
Furniture and Fixtures	\$122,760	Very Low
Small Culverts	\$2,761,200	Very Low
Bridges and Large Culverts	\$1,210,700	Low
Water Facilities	\$2,682,000	Moderate
Water Network	\$8,225,650	Low
Total	\$87,738,410	Low

Note: Roads is excluded from the risk analysis as risk factors and prioritization have been addressed through the 2023 Road Needs Study.

Further to Table 9, the 2024 AMP includes an estimate of the timing for replacement of all assets. Using the risk assessment, a schedule for the replacement of assets has been developed on an asset by asset basis. Assets with a higher risk rating are prioritized earlier in the schedule to reflect a higher priority, while assets with lower risk ratings are moved further out into the future forecast to reflect a more “smoothed” expenditure outlook. The timing is based on a percentage of the useful life of the asset. Table 10 below provides a summary of the risk thresholds used to calculate timing of replacement needs. Section 5 discusses the results of the lifecycle cost analysis and financing strategy.

Table 10 - Risk Threshold for Asset Life Extension

Percentage of Useful Life Added					Color Code
100%	80%	60%	40%	20%	Very Low Risk
80%	65%	50%	30%	16%	Low Risk
60%	50%	35%	25%	10%	Moderate Risk
40%	30%	25%	15%	2%	High Risk
20%	16%	10%	2%	0%	Very High Risk

C. MANAGING RISK

It is important to recognize the risk associated with the Municipality’s ability to deliver the plan while recognizing that any deviation may affect the overall ability to deliver service. Table 11 below provides a summary of the identified risks, potential impacts and mitigating

actions associated with the asset management program. Table 11 is intended to provide the Municipality with a framework that can be continually update to track potential asset related risks and document mitigation actions so that they can be implemented into the Municipality’s asset management practices.

Table 11 -Risk Associated to the Plan

Risk Associated to the Plan		
Identified Risk	Potential Impact	Mitigating Action
Failed Infrastructure	<ul style="list-style-type: none"> ▪ Delivery of service ▪ Asset and equipment damage 	<ul style="list-style-type: none"> ▪ Repair and rehabilitate as necessary ▪ Increase investment
Inadequate Funding	<ul style="list-style-type: none"> ▪ Delivery of service ▪ Increased risk of failure ▪ Shorten asset life ▪ Defer funding to future generations 	<ul style="list-style-type: none"> ▪ Reductions of service by reviewing the current level of service ▪ Find additional revenue sources
Regulatory Requirements	<ul style="list-style-type: none"> ▪ Non-compliance ▪ Mandatory investments ▪ Increased costs 	<ul style="list-style-type: none"> ▪ Find additional revenue sources ▪ Lobby actions
Plan is not followed or not undertaking required lifecycle activities	<ul style="list-style-type: none"> ▪ Shorten asset life ▪ Inefficient investments ▪ Prioritization process failure ▪ Failure to deliver service 	<ul style="list-style-type: none"> ▪ Monitor and review levels of service ▪ Implement process to implement AMP ▪ Investigate alternative lifecycle management options

D. CLIMATE CHANGE INTEGRATION

The management of a municipal assets plays a fundamental role in the delivery of services, which depends on the infrastructure available to deliver the service. Corporate asset management in municipalities largely relates to the management of existing assets to keep them in a state of good repair while planning for future repair and/or replacement of their assets across all service areas. Impacts of climate change are already being experienced around the world, including Canada. It is important for municipalities to begin considering and planning for future climates to ensure the delivery of services, especially as it pertains to the maintenance of key municipal infrastructure. As per *Ontario Regulation 588/17* s3(5), municipalities must include a commitment in their asset management planning to address the vulnerabilities of climate change with respect to operations, levels of service and lifecycle management. There must also be consideration for anticipated costs, mitigation and adaptation approaches and disaster planning to meet all regulatory requirements in

Ontario municipal asset management. In response to the regulatory requirements, the Municipality of Trent Lakes adopted its first Strategic Asset Management Policy and committed to integrating climate change as part of its asset management planning.

Expected climate change impacts include hotter, drier summers, warmer winters with increased precipitation, increased frequency and intensity of storms and increased intensity of extreme winds. These changes in climate will likely lead to increased risks associated with flooding, heatwaves, risk of infrastructure damage, health and safety of residents, the alteration or loss of habitats, etc.

Many of these risks are associated with municipal assets and may impact the levels of service. Climate change mitigation and adaptation planning is an important step for municipalities to take to begin managing risks associated with climate change. Therefore, the Municipality is taking steps towards the integration of climate change considerations into their asset management planning framework moving forward.

The table below considers municipal owned and operated assets, although, regional critical infrastructure related to roads or public health may also be impacted by the noted hazards. Table 12 provides a risk summary at this time for information purposes to help further propel climate change integration with asset management, although, recognizing the full utilization would still need to be applied and understood at the staff level. In asset management terms, this table shows the big picture effects that climate change hazards may have on the LOS for various service areas. The specific climate change impacts on levels of service could vary considerably, and will need to be monitored over a longer time period.

Through further understanding of the anticipated extent of climate change events, climate change adaptation projects at the Municipality will provide additional parameters as to the likelihood and severity of events. At its most simplistic form, the table below provides a range from a “rare” occurrence to “almost certain”. A rare occurrence could be correlated to falling into the tenth percentile of probability, with an almost certain occurrence falling into the ninetieth percentile of probability.

Table 12 - Framework for Climate Change Integration with Risk

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Freezing Rain / Ice Storm	Rare to almost certain	<ul style="list-style-type: none"> ▪ Roads ▪ Bridges and Culverts ▪ Buildings 	<ul style="list-style-type: none"> ▪ Reduced road and bridge conditions, potential for closures ▪ Potential impact to access to facilities or closures

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Extreme Temperatures – Cold Wave	Rare to almost certain	<ul style="list-style-type: none"> ▪ Roads ▪ Bridges and Culverts ▪ Water ▪ Buildings ▪ Land Improvements 	<ul style="list-style-type: none"> ▪ Closures of outdoor amenities due to extreme weather conditions ▪ Increased strain on indoor heating systems leading to reduced service life and functionality of components and systems
Tornado	Rare to almost certain	<ul style="list-style-type: none"> ▪ All Services 	<ul style="list-style-type: none"> ▪ Potential damage to various municipal assets due to high winds
Intense Rain	Rare to almost certain	<ul style="list-style-type: none"> ▪ Roads ▪ Bridges and Culverts ▪ Buildings 	<ul style="list-style-type: none"> ▪ Flooding of bridges and roadways leading to closures ▪ Disruptions to service due to flooding of roads, leading to decreased levels of service ▪ Potential impact to access to facilities or closures
Flood – Urban	Rare to almost certain	<ul style="list-style-type: none"> ▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Land Improvements 	<ul style="list-style-type: none"> ▪ Flooding of bridges and roadways leading to closures ▪ Disruptions to service due to flooding of roads, leading to decreased levels of service ▪ Potential impact to access to facilities or closures ▪ Flooding of parks leading to closures and reduced levels of service
Extreme Temperatures – Heat Wave	Rare to almost certain	<ul style="list-style-type: none"> ▪ Land Improvements ▪ Buildings 	<ul style="list-style-type: none"> ▪ Potential closure/reduce used of outdoor amenities due to high temperatures (reduced levels of service). ▪ Lost habitats leading to reduced environmental diversity. ▪ Increased strain on indoor cooling systems leading to reduced service life and functionality of components and systems

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Windstorm	Rare to almost certain	<ul style="list-style-type: none"> ▪ Land Improvements ▪ Buildings 	<ul style="list-style-type: none"> ▪ Closure of outdoor assets due to potential hazards for residents ▪ Increased strain on facility assets leading to potential damages and reduced service life and functionality of components and systems

Source: <https://www.assetmanagementbc.ca/wp-content/uploads/Climate-Change-and-Asset-Management.pdf>

5. LIFECYCLE COSTS AND FINANCING STRATEGY

The Municipality has continually undertaken operating and capital expenditures necessary for both tax funded and rate funded services. In order to continue to maintain levels of service, the Municipality will need to monitor funding levels over the next few years. This section of the 2024 Plan is intended to help the Municipality build on the existing asset management practices already in place. The financing strategies presented provide the Municipality with feasible options to increase capital funding in a sustainable manner to maintain service levels. It is noted that all values are presented in constant 2024 dollars.

A. FINANCING STRATEGY FOR TAX FUNDED SERVICES

This section outlines the lifecycle costs and financing strategy for those services that are primarily funded through the tax rate. This includes all assets excluding water infrastructure.

Operating Budget Expenditures and Non-Infrastructure Solutions

Using the budget as the basis, the analysis used in the financing strategy assumes:

- About \$4.1 million per year (based on 2024 budget) is related to asset maintenance for existing tax supported assets;
- A further \$290,000 (based on 2024 budget) per year has been identified for gravel maintenance, which is capitalized by the Municipality; and
- A provision of \$50,000 per year has been assumed for tax funded non-infrastructure solutions;

These amounts represent operating budget costs that can be reasonably attributed to asset management activities and excludes costs related to service delivery not directly tied to the assets. It is anticipated that the Municipality's operating expenditures will be adjusted annually, at minimum, to account for the effects of inflation. Although, if additional asset management strategies are adopted by the Municipality, annual costs could exceed regular inflationary adjustments. Table 13 summarizes the annual and cumulative costs identified which amount to about \$176.5 million over the 40-year period.

Table 13 – Summary of Maintenance and Non-Infrastructure Solution Costs for Tax Funded Assets

Tax Funded Services	Annual	40-Year Cumulative
Asset Maintenance	\$4,072,817	\$162,912,692
Gravel Maintenance	\$290,063	\$11,602,520
Non-Infrastructure Solutions	\$50,000	\$1,950,000
Total Tax Funded Services	\$4,412,880	\$176,465,212

Note: All values expressed in constant 2024 dollars.

As the Municipality continues to mature its asset management program, it is expected that levels of service and associated costs can be monitored. The Municipality has identified that the proposed levels of service is to maintain the current level of service (see Section 3). Therefore, no additional incremental operating or maintenance costs have been identified to meet proposed levels of service.

Capital Replacement Schedule

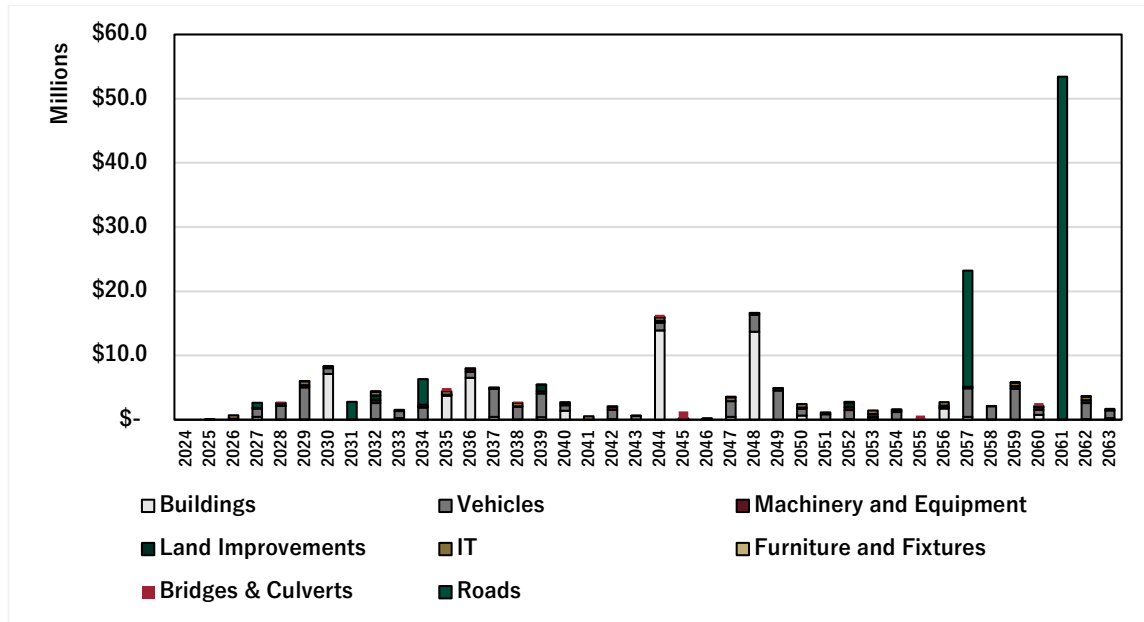
The 2024 Plan includes an estimate of the timing for replacement of all assets. Using the risk assessment discussed in Section 4, a schedule for the replacement of assets has been developed on an asset by asset basis. Furthermore, to assess the lifecycle costs based on the lifecycle activities required to undertake future works, varying methodologies have been used to develop the capital replacement schedule for each asset category. Table 14 below outlines the methodology used for each asset category.

Table 14 – Summary of Capital Related Lifecycle Cost Methodology for Tax Funded Services

Asset Category	Methodology
Roads	<ul style="list-style-type: none"> ▪ The Municipality’s 2023 Road Needs Study developed recommended works and costs over the next 10-year period and beyond the 10-year period. These costs have been included in the replacement schedule. ▪ In addition, future replacement of roads has also been included beyond the timing and recommendations of the Road Needs Study to align with the 40-year forecast in this AMP. ▪ Gravel road maintenance is an ongoing activity, however gravel roads do not typically have a distinct useful life as they are generally not replaced fully like other assets. However, the Municipality does replace the gravel on these roads regularly to maintain service levels and capitalizes the costs. Capital budget costs for gravel maintenance have been captured as an annual expenditure separate from general capital for this analysis. Costs and funding are assumed to continue going forward.
All other categories	<ul style="list-style-type: none"> ▪ Developed using the risk based replacement approach from Section 4.

Figure 2 sets out the schedule of repair and replacement of assets, to maintain current levels of service for the tax supported assets considered in the 2024 Plan. Over the 40-year period, to 2063, the tax supported repair and replacement program totals about \$215.9 million. The average yearly expenditure related to these assets amount to approximately \$5.4 million per year.

Figure 2 - Risk-Based Replacement Schedule for Tax Funded Assets



Expansion Activities

The Municipality has recently undertaken a Development Charges Background Study which has identified approximately \$45.0 million in gross costs for infrastructure needed to service the growing community over the next 10-years. Of this amount, approximately \$2.5 million (excluding post-period benefit) is eligible for development charges. To align with the 40-year forecast, a similar level of growth-related expenditure has been assumed, which amounts to approximately \$13.5 million in growth-related DC eligible costs over that period. This amount is assumed to be the growth-related portion of these projects and will be funded through development charge revenues.

However, future obligations for maintenance and replacement of these assets is the responsibility of the Municipality and will be funded through tax rates. Table 15 outlines a summary of these costs. About \$290,000 per year on average is associated to operations and maintenance and a further \$256,000 per year on average is associated to additional capital contributions.

Table 15 – Summary of Expansion Activity Costs

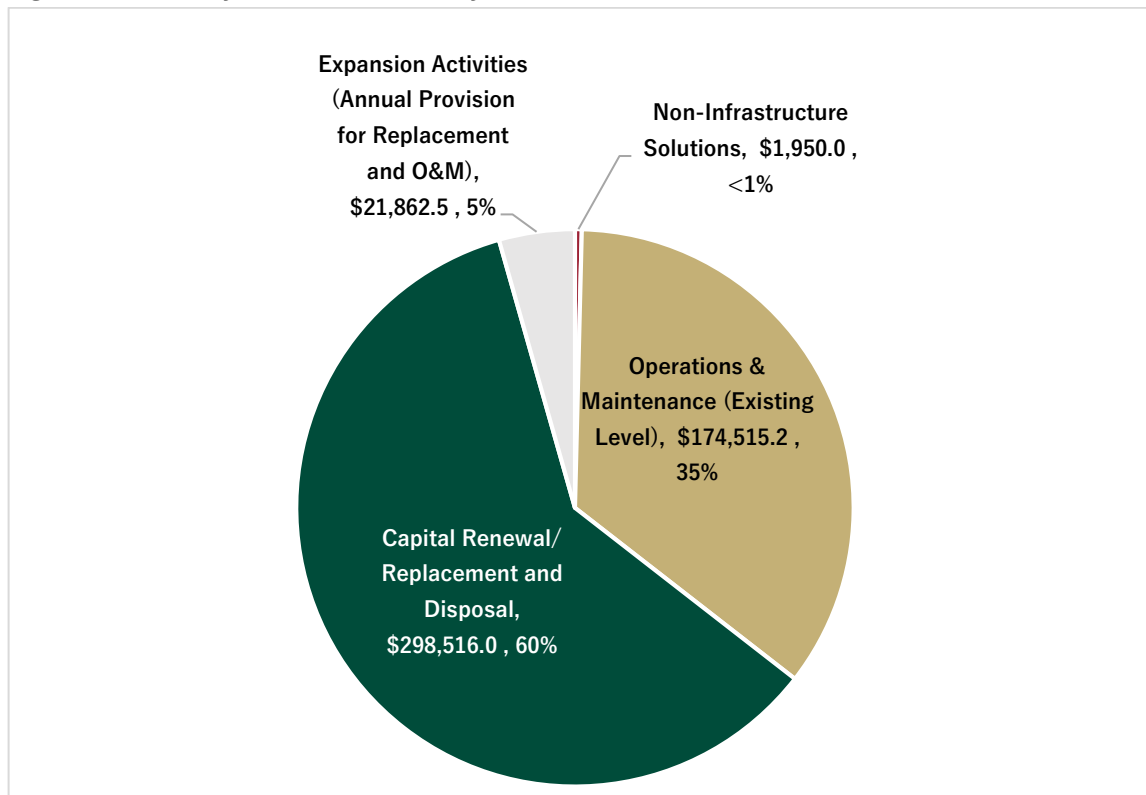
Tax Funded Services	40-Year Annual Average	40-Year Cumulative
Operations & Maintenance	\$290,107	\$11,604,282
Annual Capital Contribution	\$256,456	\$10,258,256
Total Tax Funded Services	\$546,563	\$21,862,538

Note: All values expressed in constant 2024 dollars.

Summary of the Cumulative Full Lifecycle Costs

Over the next 40 years, the analysis indicates a spending need of about \$496.8 million. Figure 3 below summarizes the cumulative 40-year investment needs across the tax supported service areas for the various lifecycle activities identified. Of the total life cycle cost, most costs can be attributed to saving for the repair, renewal and replacement of existing infrastructure, making up about 60%. This translates to an average annual capital contribution requirement of about \$7.5 million over the 40-year period. About 35% of the total is related to operating and maintenance costs of the existing asset base. No provisions for level of service adjustments to account for proposed levels of service has been included, as the Municipality has identified that the proposed level of service is to maintain the current level of service going forward.

Figure 3 - Summary of Cumulative Lifecycle Cost Model for Tax Funded Assets 2024-2063 (\$000)



Note: All values expressed in constant 2024 dollars.

Summary of Revenues

The municipal revenue sources available to address the identified full life cycle cost requirements outlined above are limited. Generally, the type of capital project aligns to its funding source. In this regard, growth related projects receive most of their funding through development charges in communities that impose DCs; replacement projects are

predominantly funded through tax-based contributions for tax supported assets and water rates for rate based services. In Trent Lakes, as DCs are imposed, any new assets would be emplaced directly from developers (as part of the subdivision agreement) or from development charges. When assets require rehabilitation or are due for replacement, the source of funds are essentially limited to reserves or contributions from the operating budget regardless of how the initial first round capital asset was funded. The table below provides a summary of the revenues assumed in this analysis for tax supported assets.

Table 16 - Financing Strategy Key Assumptions for Tax Supported Assets

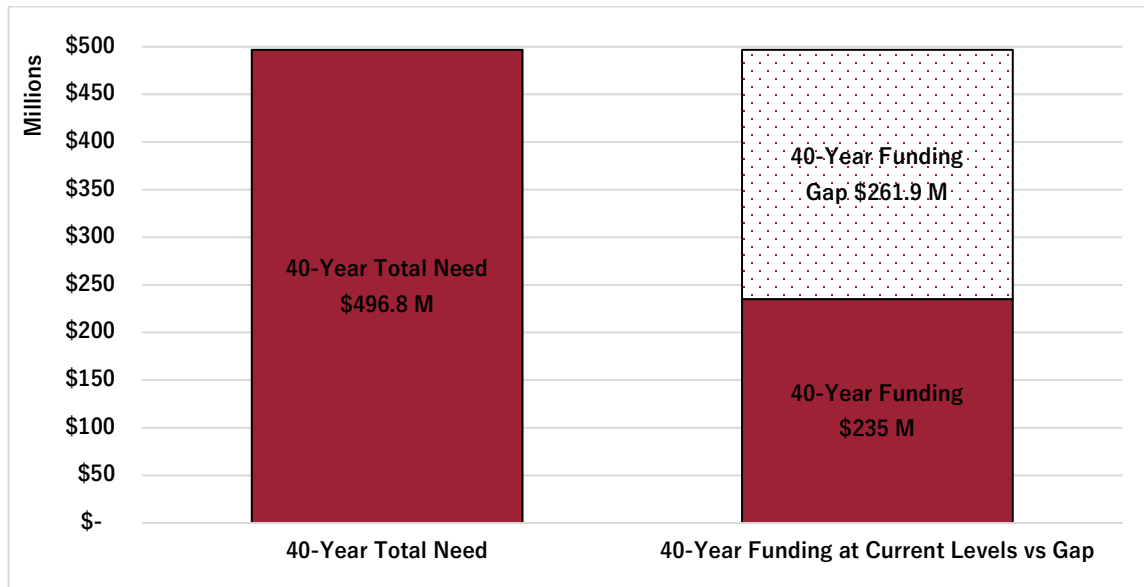
Financing Strategy Key Assumptions – Tax Supported Assets	
Category	Assumptions
Operations and Maintenance from Taxation (including gravel maintenance)	<ul style="list-style-type: none"> ▪ The Municipality prioritizes operating costs associated to providing services and it has been assumed that revenue from taxation will fully fund operating needs as they arise. ▪ Tax funding for gravel maintenance is also assumed over the planning period from the tax base.
Capital from Taxation (including reserve contributions)	<ul style="list-style-type: none"> ▪ Existing 2024 tax supported capital funding of about \$886,300 is assumed to be the starting point and base case for increasing annual capital contributions. This includes the capital from operating funding, net of gravel maintenance of about \$290,000, included in the budget for capital purposes.
Canada Community Building Fund (CCBF)	<ul style="list-style-type: none"> ▪ Gas tax funding for 2023 was approximately \$180,000. This amount has been assumed in 2024 and onwards throughout the 40-year period.
Other Grants	<ul style="list-style-type: none"> ▪ One-time government grants of approximately \$1.5 million are assumed for the next 3-years only. This includes OCIF and OMPF grants.
Inflation	<ul style="list-style-type: none"> ▪ Financing strategy is expressed in constant 2024 dollars.
Existing Reserves	<ul style="list-style-type: none"> ▪ Existing asset management related reserve funds of \$13.2 million have been accounted for and are applied against the lifecycle cost expenditures over a 5-year period for the purposes of the analysis. ▪ The reserves included for in the analysis only capture funds available for capital and generally exclude operating reserves

Infrastructure Funding Gap

To implement sustainable asset management practices the Municipality needs to have an understanding of the current “infrastructure funding gap” that would arise should the required full life-cycle costs related to capital be delayed.

The funding gap shown in Figure 4 represents the difference between the required lifecycle costs and the funding available for tax supported assets over the 40-year period. The graph indicates that existing funding levels are insufficient to cover projected costs over the 40-year planning period, as a result, a notional gap of \$261.9 million exists over the same period. It is unrealistic to expect the Municipality to address the total funding gap in the short-term. Therefore, a long-term funding strategy that identifies options for addressing current and future asset expenditures is required.

Figure 4 – 40-Year Need vs Funding (Funding Gap for Tax Supported Assets)



If the Municipality were to implement a funding strategy to eliminate the tax supported infrastructure deficit by 2063, the Municipality would be required to increase capital contributions on an annual basis by an average of about \$320,900 for 40 years (plus annual inflation). For 2025, the increase would be in addition to the funding sources already identified in Table 16. The yearly revenue requirement is equivalent to 2.9% of the Municipality’s 2024 tax levy revenues of about \$10.9 million. A detailed table of this strategy can be found in Appendix C – Table 1.

Eliminating the infrastructure deficit by 2063 is an aggressive objective and is an initiative the Municipality may not want to explore at this time; a few reasons include:

- The required capital contributions (to eliminate the deficit) will necessitate an increase to property taxes beyond a reasonable measure;
- The Municipality may need to decrease or limit funding of other key services or initiatives in lieu for capital repair and replacement activity;

- Assets can remain in use past their engineered design life and are capable of performing to meet the Municipality’s current level of service under these circumstances. Therefore, in such instances, the asset does not necessarily need to be replaced by virtue of exceeding their design life; and
- Prudent asset management strategies, which are currently employed by the Municipality can often extend the requirement of major repair or replacement of capital assets and may prolong the life of the asset.

Financing Strategies

Further to the above noted comments, two financing strategies were developed to illustrate a rational capital contribution level to meet the full lifecycle cost needs for tax supported assets as outlined in Figure 5. The financing strategies illustrate the “smoothed options” to the capital repair and replacement requirements identified in Figure 2. Key revenue assumptions for each of the tax supported funding strategies is shown in Table 16 and the resulting funding gap is summarized in Figure 5 below.

Table 17 - Financing Strategies for Tax Supported Assets

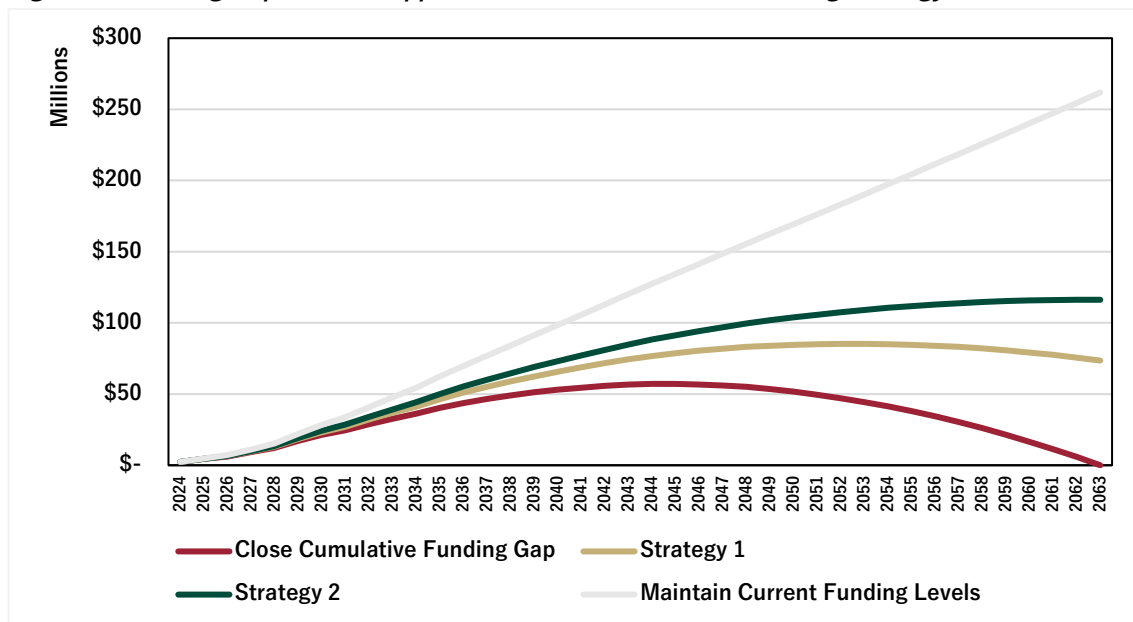
Financing Strategy	Strategy Parameters
Close Cumulative Funding Gap by 2063	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$320,900 per year. ▪ The increase in funding would begin in 2025. ▪ The yearly revenue requirement is equivalent to 2.9% of the Municipality’s 2024 tax levy.
Strategy 1 Close in-year Funding Gap by 2053 (30 years)	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$241,500 per year. ▪ The increase in funding would begin in 2025 ▪ The yearly revenue requirement is equivalent to 2.2% of the Municipality’s 2024 tax levy.
Strategy 2 Close in-year Funding Gap by 2063 (40 years)	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$186,700 per year. ▪ The increase in funding would begin in 2025 ▪ The yearly revenue requirement is equivalent to 1.7% of the Municipality’s 2024 tax levy.
Maintain Current Funding Levels	<ul style="list-style-type: none"> ▪ Maintain current annual capital contributions.

Note: Key assumptions noted in Table 16 are maintained for all three financing strategies.

Given the capital expenditure requirement to meet the asset lifecycle needs, the cumulative infrastructure deficit will increase in all scenarios before the Municipality begins to reduce this amount by increasing capital contributions by more than the annual provision requirement. The infrastructure deficit will increase by the annual funding gap and decrease once the annual contributions are greater than the annual provision.

It is important to note that even though the in-year funding gap has been addressed within the planning horizon in strategies 1 and 2, the infrastructure deficit poses risk to the Municipality as it is indicative of overdue assets that have fully depreciated and may be in Very Poor condition. These assets would need to be addressed in a longer time frame and are at risk for asset failure. The figure below provides a snapshot summary of the infrastructure deficit for all strategies outlined in Table 17.

Figure 5 – Funding Gap for Tax Supported Assets under Each Financing Strategy



B. FINANCING STRATEGY FOR RATE FUNDED SERVICES

Municipal water services are available in Alpine Village/Pirates Glen and Buckhorn Lake Estates. The Municipality of Trent Lakes owns the infrastructure for these systems. The Municipality has an agreement with the Ontario Clean Water Agency (OCWA) to maintain the operations of these systems. Private Wells service the majority of the rest of the Municipality. This section outlines the lifecycle costs and financing strategy for those services that are primarily funded through utility rates, specifically water services. Lifecycle cost needs have been identified for the existing water assets, however no growth-related expansion needs have been identified.

Operating Budget Expenditures and Non-Infrastructure Solutions

A similar approach to the tax funded services has been undertaken to identify asset management related operating costs for water services. Table 18 summarizes the annual and cumulative costs identified. It is anticipated that the Municipality's operating expenditures will be adjusted annually, at minimum, to account for the effects of inflation. This will ensure water rates are sufficient to achieve full-cost recovery. The analysis used in the financing strategy assumes:

- About \$432,098 (based on 2024 budget) for existing rate supported assets; and
- A provision of \$5,000 per year has been assumed for rate funded non-infrastructure solutions.

Table 18 – Summary of Maintenance and Non-Infrastructure Solution Costs for Rate Funded Assets

Rate Funded Services	Annual	40-Year Cumulative
Water Infrastructure	\$432,098	\$17,283,916
Non-Infrastructure Solutions	\$5,000	\$195,000
Total Rate Funded Services	\$437,098	\$17,478,916

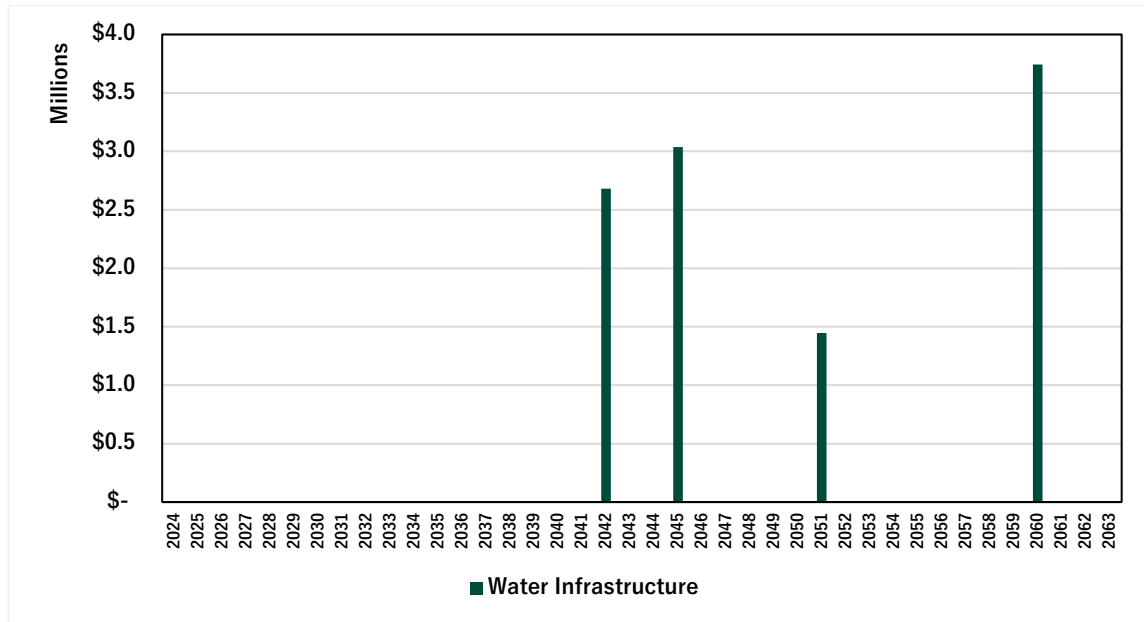
Note: All values expressed in constant 2024 dollars.

The Municipality has identified that the proposed levels of service is to maintain the current level of service (see Section 3). Therefore, no additional incremental operating or maintenance costs have been identified to meet proposed levels of service.

Capital Replacement Schedule

Using the risk assessment discussed in Section 4, a schedule for the replacement of water assets has been developed on an asset by asset basis. Figure 6 outlines the schedule of repair and replacement of assets, to maintain current levels of service for the water infrastructure assets. Over the 40-year period, to 2063, the rate supported repair and replacement program totals about \$10.9 million. The average yearly replacement costs of these assets amount to approximately \$273,000 per year.

Figure 6 - Risk-Based Replacement Schedule for Rate Supported Assets

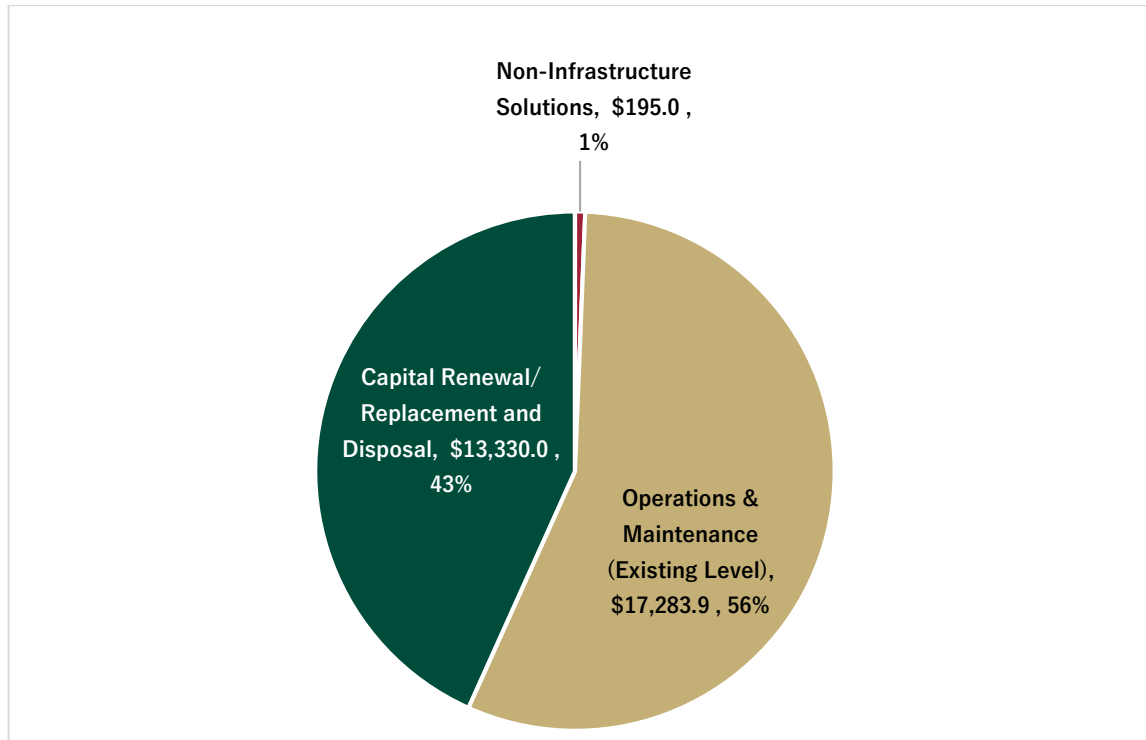


Summary of the Cumulative Full Lifecycle Costs

Over the next 40 years, the analysis indicates a spending need of about \$30.8 million. Figure 7 below summarizes the cumulative 40-year investment needs across the water assets. About 56% of the total is related to operating and maintenance costs of the existing asset base. Savings for the repair, renewal and replacement of existing infrastructure, makes up about 43%. This translates to an average annual capital contribution requirement of about \$333,300 over the 40-year period.

No provisions for level of service adjustments to account for proposed levels of service has been included, as the Municipality has identified that the proposed level of service is to maintain the current level of service going forward.

Figure 7 - Summary of Cumulative Lifecycle Cost Model for Rate Funded Assets 2024-2063 (\$000)



Note: All values expressed in constant 2024 dollars.

Summary of Revenues

The Municipality’s two water systems of Alpine Village/Pirates Glen and Buckhorn Lake Estates are primarily funded through flat rates. The management and operation of the system is undertaken through an OCWA contract. Through the water budget, regular contributions to water reserves are made for future repair and replacement of these assets. The table below provides a summary of the revenues assumed in this analysis for the water assets.

Table 19 - Financing Strategy Key Assumptions for Rate Supported Assets

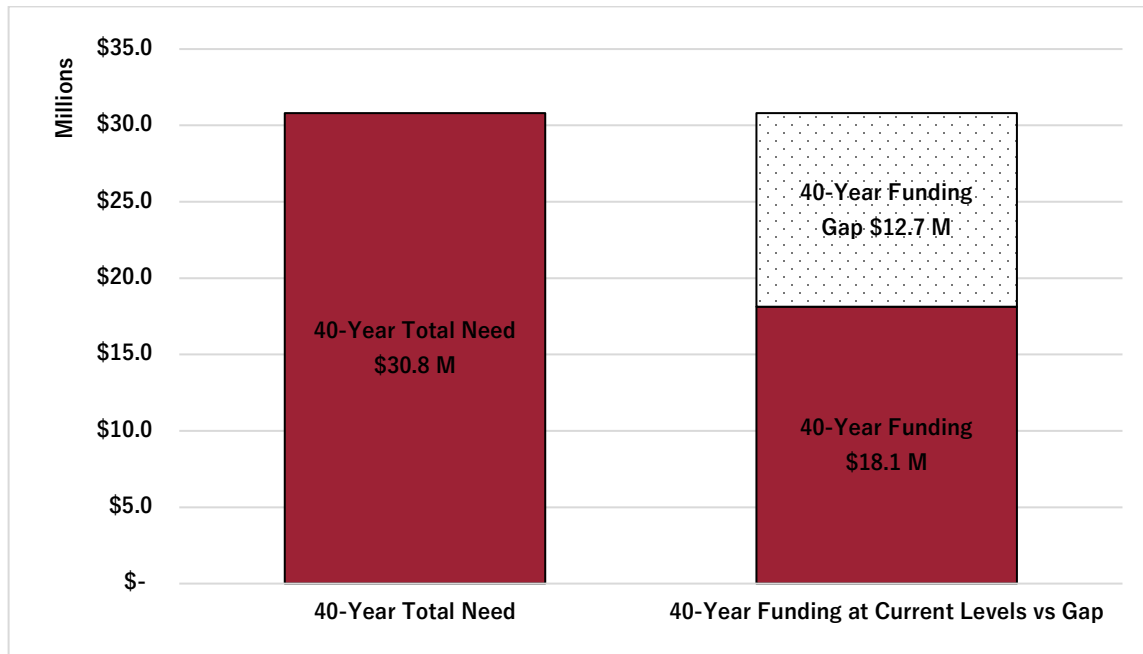
Category	Assumptions
Operations and Maintenance from Rates	<ul style="list-style-type: none"> It is assumed that the regular operations and maintenance of the systems are fully funded from rates throughout the 40-year period.
Capital from Rates (including reserve contributions)	<ul style="list-style-type: none"> Existing 2024 rate supported capital funding of about \$15,400 is assumed to be the starting point and base case for increasing annual capital contributions. This includes contributions to water reserves (from operating) included in the budget for capital purposes.
Inflation	<ul style="list-style-type: none"> Financing strategy is expressed in constant 2024 dollars for this analysis. It is noted that the Municipality will adjust values by inflation in the water service area budgets to ensure rates reflect full cost-recovery.

Category	Assumptions
Existing Reserves	<ul style="list-style-type: none"> Existing rate supported reserve funds of about \$219,000 have been accounted for and are applied against the lifecycle cost expenditures in 2024 for the purposes of forecast calculation.

Infrastructure Funding Gap

The funding gap shown in Figure 8 represents the difference between the required lifecycle costs and the funding available for rate supported assets over the 40-year period. The graph indicates that existing funding levels are insufficient to cover projected costs over the 40-year planning period, as a result, a notional gap of \$12.7 million exists over the same period. Unlike the tax funded assets, water services is managed on a full cost recovery model and therefore the notional gap shown is relatively lower compared to the tax funded gap.

Figure 8 - 40-Year Need vs Funding (Funding Gap for Rate Supported Assets)



If the Municipality were to implement a funding strategy to eliminate the rate supported infrastructure deficit by 2063, the Municipality would be required to increase capital contributions on an annual basis by an average of about \$16,300 for 40 years (plus annual inflation). The yearly revenue requirement is equivalent to about 3.6% of the Municipality’s 2024 rate revenues of about \$447,500 (combined for both systems). A detailed table of this strategy can be found in Appendix C – Table 5.

Financing Strategies

To provide consistency with the analysis on the tax supported assets, similar timeframes for additional funding strategies were developed. The financing strategies identified in Table 20 portray the “smoothed options” to the rate supported capital repair and replacement requirements identified in Figure 7. Assumptions for each of the three funding strategies is shown below; however, it is expected that the Municipality incorporate this information in future utility rate setting studies to balance the annual asset management requirements with affordable user rates.

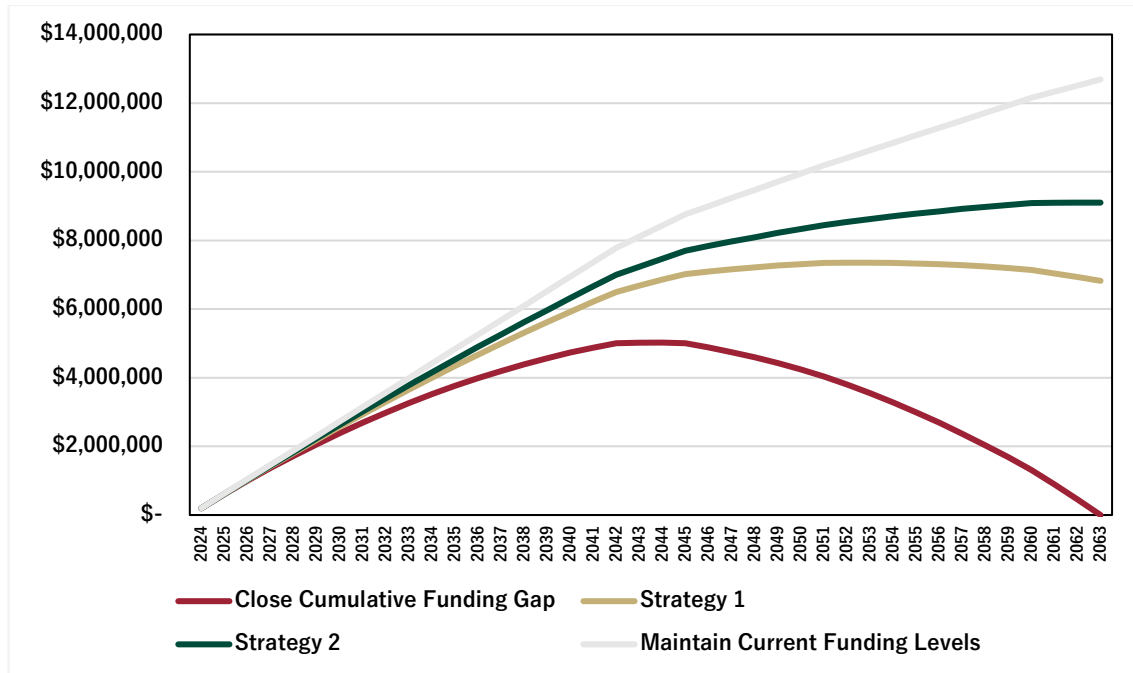
Table 20 - Financing Strategies for Rate Supported Assets

Financing Strategy	Strategy Parameters
Close Cumulative Funding Gap by 2063	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$16,300 per year. ▪ The increase in funding would begin in 2025. ▪ The yearly revenue requirement is equivalent to about 3.6% of the Municipality’s estimated 2024 rate revenue of about \$447,500.
Strategy 1 Close in-year Funding Gap by 2053 <i>(30 years)</i>	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$7,500 per year. ▪ The increase in funding would begin in 2025. ▪ The yearly revenue requirement is equivalent to about 1.7% of the Municipality’s estimated 2024 rate revenue of about \$447,500.
Strategy 2 Close in-year Funding Gap by 2063 <i>(40 years)</i>	<ul style="list-style-type: none"> ▪ Increase annual capital contributions by approximately \$4,600 per year. ▪ The increase in funding would begin in 2025. ▪ The yearly revenue requirement is equivalent to about 1.0% of the Municipality’s estimated 2024 rate revenue of about \$447,500.
Maintain Current Funding Levels	<ul style="list-style-type: none"> ▪ Maintain current annual capital contributions

Note: Key assumptions noted in Table 19 are maintained for all three financing strategies.

Since the water system operates on a full cost recovery model, it is expected that the assessment of the funding gap will be reviewed as part of regular rate study updates. However, as the water infrastructure is generally assessed to be in Fair condition, the Municipality will need to closely monitor the assets over the short-medium term as these assets may transition into the Poor and Very Poor categories in the future. Figure 9 provides a snapshot summary of the infrastructure deficit for all three strategies outlined in.

Figure 9 - Funding Gap for Rate Supported Assets under Each Financing Strategy



C. COSTS TO MAINTAIN CURRENT LEVELS OF SERVICE AND RELATIONSHIP WITH FINANCING STRATEGIES

In 2024, it is assumed a total of about \$9.6 million is asset management related funding is available for tax funded services. This amount is comprised of funding from the following sources:

- \$4.1 million in tax funded asset related maintenance plus about \$290,000 in gravel maintenance;
- About \$886,300 in capital from taxation (excluding gravel maintenance);
- About \$180,000 in CCBF funding plus about \$1.5 million from other grants; and
- About \$2.6 million in available reserves.

For rate funded services, a total of about \$666,500 is assumed available in 2024 for asset management related expenditures made up of about \$432,100 in rate funded maintenance. \$15,400 in transfers to reserves and about \$219,000 in available reserves.

Overall, this funding allocation is required to ensure the Municipality delivers the existing levels of service identified in Section 3 of the Asset Management Plan for both core and non-core infrastructure assets which represent the lifecycle activities outlined in Section 4. Overall, it is recommended that the Municipality continues to monitor levels of service on an

annual basis in the context of budget expenditures. In this manner, the Municipality can identify any significant changes in levels of service and identify if funding levels are appropriate to address any asset pressures.

Furthermore, the financing strategies represent sustainable options at maintaining the current levels of service from a long-term perspective. In summary, the following conclusions can be made:

- Closing the cumulative funding gap would ultimately result in a service level increase over the long-term as assets are replaced as required based on condition and useful life. Therefore, the deficit would largely be eliminated over the planning period. This strategy would represent a more optimal level of asset repair and replacement than existing trends.
- Strategy 1 and 2 would ensure, that over the long-term, the funding gap-stabilizes and the infrastructure deficit is controlled. Under this approach, the additional funding would allow for increased targeted investments in asset areas (such as buildings) currently in Fair condition to ensure these assets don't transition into the Poor category in the next 5 -10 years therefore maintaining the existing level of service.
- Maintaining current funding levels would allow for the infrastructure back-log to accumulate and would mean that existing funding would not be sufficient to manage the infrastructure in place over the long-term. Therefore, the assets in service would deteriorate with a series of assets moving into Poor and Very Poor condition which would effectively provide a reduction in the level of service over the short and long-term.

D. FUTURE DEMAND

The 2024 Plan reflects the assets that the Municipality currently owns and operates. According to Statistics Canada datasets, over 10 years (2011-2021) the Municipality's population has increased by about 1,339 people from about 5,100 to 6,439 people in 2021 (26% or 2.6% per annum). The Municipality's 2024 DC Study has identified an additional 375 residents expected by 2034.

In order to facilitate growth, the Municipality would be required to emplace new infrastructure to service development. The Municipality's 2024 DC Study has identified approximately \$45.0 million in new capital works needed to services growth, of which approximately \$2.5 million is eligible for development charge funding (excluding post-period benefit). Irrespective of how the first round capital is funded, when assets require

rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Despite the additional asset management requirements associated with new infrastructure, growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to help offset the capital asset provisions required to replace the infrastructure proposed to be funded under the Development Charges By-Law. The collection of these funds is intended to be allocated to the Municipality's reserves for the future replacement of these assets. The Municipality should continue to prioritize the repair and replacement of existing Very Poor and Poor conditioned infrastructure.

6. CONTINUOUS IMPROVEMENTS AND UPDATES

The major premise of a comprehensive asset management plan is that a municipality will seldom have perfect processes and data to manage the asset portfolio. Instead, the underlying culture of continuous improvement and reliability is its key to success. The improvements and next steps will form part of the Municipality's evolving Asset Management planning moving forward.

A. DATA QUALITY AND CONFIDENCE

The Municipality should regularly review the confidence of existing data as well as its effectiveness integrating asset management activities into regular business processes. The Confidence Level Rating approach identified in Table 21 is used to identify what specific asset categories/areas the Municipality can improve upon. The Confidence Level Rating is based on principles of the Ministry's Guide to Municipal Asset Management Plans, Federal Gas Tax Agreement Requirements, ISO 55000, and International Infrastructure Management Manual (IIMM). Current data used in the preparation of this asset management plan would be generally reliable and based on a Level 4 recognizing that all asset categories are well documented. The data quality score is included in Appendix B complementing the State of the Local Infrastructure Reports.

Table 21 - Data Quality Confidence Grading System

Confidence Grade		Description
5	Highly Reliable	<ul style="list-style-type: none"> ▪ Data based on sound records, procedure, investigations and analysis, documented properly and recognized as the best method of assessment. ▪ <i>Dataset is complete and estimated to be accurate +/- 2%.</i>
4	Reliable Data	<ul style="list-style-type: none"> ▪ Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. ▪ <i>Dataset is complete and estimated to be accurate +/- 10%.</i>
3	Uncertain	<ul style="list-style-type: none"> ▪ Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade 4 or 5 data is available. ▪ <i>Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated +/- 25%.</i>

Confidence Grade		Description
2	Very Uncertain	<ul style="list-style-type: none"> ▪ Data based on unconfirmed verbal reports and/or cursory inspection and analysis. ▪ <i>Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy +/- 40%.</i>
1	Unknown	<ul style="list-style-type: none"> ▪ None or very little data held

B. TIMEFRAMES FOR REVIEW AND UPDATES

The Municipality will need to carefully monitor and evaluate the asset management progress and effectiveness of the Plan on or before July 1 in each year starting in 2025. This ensures that the Plan is utilized to its full extent and any gaps are identified prior to the regulatory date. The Municipality could look to advance the review process and address the following criteria each year:

- a) The Municipality's progress in implementing its asset management plan.
- b) Any factors impeding the Municipality's ability to implement its asset management plan and a strategy to address these factors

This Asset Management Plan should be reviewed and updated on a regular basis. Recognizing that a full plan and related policies should only be updated at key intervals, it is important that other asset management components, such as capital budgeting, risk assessments and updates to the asset register should be integrated into staff's regular routine. Table 22 below outlines the key timelines.

Table 22 - Timeframes for Reviews and Updates

Asset Management Framework	Timeframe
Asset Management Policy	5 Years
Asset Management Plan	3-5 Years
Capital Budget	Annually
Asset Register and Data	Annually
Risk assessment (capital prioritization)	Annually
Level of Service Tracker	Annually
Reporting to Council	Annually

This asset management plan has been endorsed by the executive lead of the Municipality and will need to be approved, by resolution, by Council. The Municipality will need to be mindful of the reporting timelines noted above relative to any potential changes to the timelines referenced by O Reg. 588/17.

C. PUBLIC REVIEW AND COMMENT

Although the Asset Management Plan is intended to aid staff and Council make informed decisions regarding future capital investment needs, the 2024 AMP is intended to be available to the public. Therefore, it is recommended that the Municipality post this plan as well as the strategic asset management policy on the website and provide a copy to anyone upon request.

7. CONCLUSIONS AND RECOMMENDATIONS

The objective of this 2024 Plan is to provide the Municipality of Trent Lakes with the information it needs to make decisions on how best to manage capital assets in a sustainable way to 2063. In this section, recommendations based on the analysis undertaken are made.

A. SUMMARY OF KEY FINDINGS

- The Municipality's asset base is valued at \$248.9 million, in relation to the census population of about 6,439 persons (or approximately \$38,700 per capita).
- Overall, the highest proportion (about 69% or \$172.2 million) of the Municipality's assets are considered to be in Good to Very Good condition. Approximately 3% (\$7.7 million) of infrastructure is considered to be in Poor to Very Poor condition. The remaining share of \$69.0 million (28%) is in Fair condition.
- The Municipality of Trent Lakes has made some effort in recent years to address the infrastructure gap and improve the condition of assets:
 - Upper level government grant money received has typically been allocated to capital asset repair and replacement activities;
 - The Municipality has capital replacement reserves, and has been contributing to reserves on an annual basis, which is in addition to in year funding from the capital tax levy;
 - Through its annual capital budgeting process, the Municipality addresses critical issues and assets in need of repair or replacement.
- The responsibility to maintain existing infrastructure is challenging, however, in addition to current capital funding, the Municipality should increase annual capital contributions to address current and future infrastructure requirements;
 - A total of about \$496.8 million in cumulative lifecycle costs has been identified over the next 40-years for tax funded services. For water services this is about \$30.8 million.
 - Property taxes are the most secure form of revenue and the Municipality should consider increasing tax base revenues, above current practices, to fund capital works.

- Ensure user fees are being utilized to the full extent as allowed under Provincial legislation. This will help alleviate funding pressures from the tax base and allow for greater flexibility to fund capital asset repair and replacement activities.
- The Municipality should continue to seek funding from the Federal and Provincial government (when available) to undertake capital related works.

B. SUMMARY OF RECOMMENDATIONS

Based on the analysis undertaken for this 2024 Plan the following conclusions can be reached:

1. Continue to Improve Capital Development Planning Process

- The Municipality should develop a multi-year capital budget and forecasts for all services based on a 10-year forecast horizon. The capital budget can be based on the asset replacement schedule in the Municipality's Asset Management Model.
- Capital budgets and forecasts should identify and evaluate each capital project in terms of the following, including but not limited to:
 - Gross and net project costs;
 - Risk assessment;
 - Timing and phasing;
 - Funding sources;
 - Potential financing and debt servicing costs;
 - Long-term costs, including non-infrastructure solutions, maintenance activities, renewal/rehabilitation activities, replacement activities, disposal activities and expansion activities;
 - Capacity to deliver; and
 - Alternative service delivery and procurement options.
- Repair and replacement capital works should be prioritized based on a risk assessment. For example, assets identified as Very Poor and Poor and having a significant consequence of failure should be prioritized first.
- Infrastructure assets which have been provided a Fair condition rating should be targeted for maintenance to ensure they continue to perform at current levels of service.
- The Municipality should, where possible, coordinate the construction of new infrastructure with infrastructure repair and replacement to achieve cost efficiencies.

2. Ensure Asset Inventories are Updated Regularly

- Sound asset management decisions are only possible if information in the asset registry is accurate. The Municipality should regularly update the registry to account for asset purchases, upgrades, and replacements, as well as asset condition ratings and information on useful life.
- The Municipality should continue to refine the condition assessments for all assets considered under this 2024 Plan; and
- The Municipality should update this Asset Management Plan at a minimum every 5 years.

3. Optimize the Use of Existing Assets

- The Municipality should implement a range of engineering and non-engineering approaches to extend the useful life of current assets, and assessing the need to develop a corporate level of service policy.
- The Municipality should explore opportunities to dispose under utilized infrastructure/facilities which may not warrant repair/replacement. For example, underutilized facilities, or surplus land/parks, could be disposed and sold; and
- Coordinate assets into specific hubs to create operating and capital repair/maintenance efficiencies where possible.

APPENDIX A - DEFINITIONS

APPENDIX A – DEFINITIONS

This appendix contains definitions for commonly used terms throughout the Municipality's Asset Management Plan.

Annual Provision - Given the timing and cost to replace an asset in the future, the amount of savings required year-over-year to replace that asset on schedule. This is also referred to as the annual requirement.

Condition Assessment - A description of the state of an asset based on engineered or staff inspections on a 5-tier scale (very poor, poor, fair, good, and very good).

Cumulative Infrastructure Gap - The difference between available funding and the cost of works required based on the replacement schedule added over an extended time period. This difference includes the backlog of infrastructure work which remains unfunded. In years where funding continues to be less than the need, the deficit grows. Conversely, years where funding exceeds the need, the deficit decreases.

In-Year Funding Gap - For any given year, this is the difference between capital requirement costs and available funding.

Ontario Regulation 588/17 (O Reg. 588/17) - Ontario's Asset Management regulation that came into force on January 1st, 2018.

Provision Schedule - The required savings year-over-year needed to replace an asset based on the replacement schedule.

Replacement Cost - The cost of an asset to replace or reconstruct that asset at current prevailing market prices. The replacement cost will typically include all costs to procure, design, build and acquire the asset.

Replacement Schedule - The timing for replacement of an asset based on remaining useful life, condition or risk.

Useful Life - The expected service life of an asset expressed in years.

Weighted Condition - The average condition of an asset category weighted against the replacement costs of assets.

Weighted Remaining Useful Life - The average remaining useful life of an asset category weighted against the replacement cost of assets.

APPENDIX B - STATE OF LOCAL INFRASTRUCTURE

APPENDIX B – STATE OF LOCAL INFRASTRUCTURE

The appendix provides an overview of the Municipality’s assets with reference to quality and quantity. Engineering reports have been used to develop condition assessments for roads, bridges and culverts and buildings. The condition of the balance of assets considered are based on the useful life of the asset relative to its age or by high-level Hemson and staff assumptions. Useful life assumptions for the assets considered under the 2024 AMP were acquired from the Municipality’s tangible capital asset inventory. Hemson has prepared State of the Local Infrastructure report cards for each asset category which outline: summary of inventory, replacement value, remaining useful life, asset condition, and data reliability. It is intended that these report cards be updated annually by staff and used accordingly with the annual budget process.

Summary of Inventory

The summary of inventory provides an overview of the Municipality’s assets including asset components, the quantity of those components, the replacement cost in 2024 dollars, and the engineered useful life of the assets. The inventory summary is developed based on the Municipality’s capital asset information. Furthermore, an asset management financial model based in Excel was developed as part of the 2024 AMP, this model contains all detailed asset information.

Remaining Useful Life

The remaining useful life summary provides information on the age of assets based on the year assets were acquired or emplaced relative to their engineered useful life. Assets are categorized by remaining useful life based on their replacement cost in 2024 dollars. Assets categorized as overdue are considered to be beyond their engineered useful life, however, the asset may still be in good operating condition and therefore age does not represent the ideal method to determine condition. Typically, assets such as facilities are used well beyond their engineered useful lives with proper maintenance and repairs.

Asset Condition

As discussed in Section 2, conditions have been determined based on a 5-tier rating system from Very Poor to Very Good. Condition assessments are based on several sources including, engineering reports, Hemson and staff assumptions, and an age based approach.

Methodology Used for Condition Assessments

Asset Category	Methodology
Buildings	<ul style="list-style-type: none"> 2019 Facilities Master Plan Age Based Approach wherever data was unavailable
Vehicles	<ul style="list-style-type: none"> Age Based Approach Fire Vehicles – assumed to be in Fair condition
Machinery and Equipment	<ul style="list-style-type: none"> Age Based Approach Fire Machinery and Equipment – assumed to be in Fair condition
Land Improvements	<ul style="list-style-type: none"> Age Based Approach
IT	<ul style="list-style-type: none"> Age Based Approach
Furniture and Fixtures	<ul style="list-style-type: none"> Age Based Approach
Bridges and Culverts	<ul style="list-style-type: none"> 2021 OSIM Inspection for bridges and large culverts 2013 Culvert Study for small culverts Age Based Approach
Roads	<ul style="list-style-type: none"> 2023 Road Needs Study
Water Infrastructure	<ul style="list-style-type: none"> 2020 Water AMP - General approach classified all linear assets in Fair condition. Water facilities have been classified in Good condition. Note: OCWA is currently updating the Water AMP to reflect the challenges at Buckhorn Lake Estates.

Replacement Values

Replacement values are used to estimate the cost of replacing an asset when it reaches the end of its engineered design life. The total replacement cost of all assets is estimated at \$248.9 million, and the replacement values are used as the basis for this plan. Specific methods used to determine replacement costs for asset categories are outlined below.

Methodology Used for Replacement Values

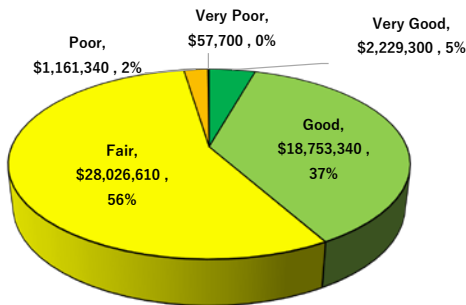
Asset Category	Methodology
Buildings	<ul style="list-style-type: none"> Based on review of benchmark costs for buildings and Municipality’s 2024 DC Study
Vehicles	<ul style="list-style-type: none"> Based on review of benchmark costs for vehicles and Municipality’s 2024 DC Study
Machinery and Equipment	<ul style="list-style-type: none"> Based on Municipality’s 2024 DC Study where possible Inflate acquisition value
Land Improvements	<ul style="list-style-type: none"> Inflate acquisition value
IT	<ul style="list-style-type: none"> Inflate acquisition value
Furniture and Fixtures	<ul style="list-style-type: none"> Inflate acquisition value
Bridges and Culverts	<ul style="list-style-type: none"> Based on Municipality’s 2024 DC Study
Roads	<ul style="list-style-type: none"> Based on Municipality’s 2024 DC Study
Water Infrastructure	<ul style="list-style-type: none"> Based on review of benchmark costs Adjust acquisition value to 2024 dollars based on NRBCPI

Table 1
Summary of Inventory - Buildings

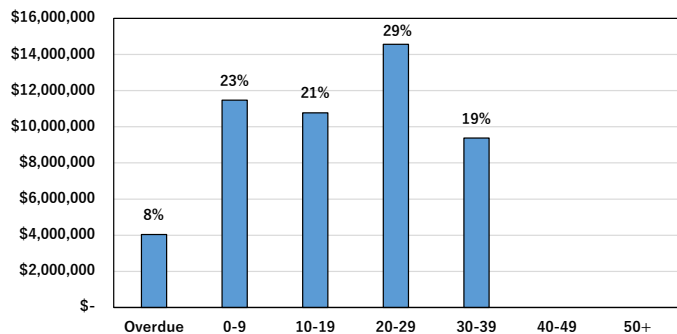
Service Area	Building Name	Components	Replacement Cost 2024	Useful Life (Years)
Admin	Municipal Office	5	\$3,401,300	10 to 40
Fire	Buckhorn Fire Hall #1	2	\$5,759,500	40
Fire	Cavendish Fire Hall #2	4	\$5,298,300	10 to 40
Fire	Galway Fire Hall #3	4	\$3,839,700	10 to 40
Fire	Nogies Creek Fire Hall #4	1	\$6,476,500	40
Health Service Buildings	Kinmount Med. Centre	7	\$4,128,000	10 to 40
Health Service Buildings	Buckhorn Regional Health Centre	5	\$2,077,400	10 to 40
Library	Cavendish Library	1	\$210,000	40
Library	Buckhorn Library	8	\$933,600	10 to 40
Parks and Recreation	Deer Bay Community Centre	3	\$606,700	10 to 40
Parks and Recreation	Galway Community Hall	11	\$2,026,200	10 to 40
Parks and Recreation	Cavendish Community Hall	5	\$839,700	8 to 40
Parks and Recreation	Harvey O.P.P.	1	\$189,640	40
Parks and Recreation	Lakehurst Community Hall	6	\$1,332,100	40
Parks and Recreation	Buckhorn Tourist Booth	1	\$700,850	10 to 40
Roads	Buckhorn Roads Depot / Sand/Salt Dome / Sand/Salt Shed	2	\$3,865,500	40
Roads	Galway Roads Depot / Sand Dome	3	\$729,300	10 to 40
Roads	Cavendish Sand Storage Shed / Storage Garage	1	\$19,010	40
Roads	County Road 49 Depot/Sand Domes (2)	3	\$7,656,500	40
Environmental Services	Buckhorn Lake Estates Pumphouse	1	\$34,600	40
Environmental Services	Alpine Pumphouse	1	\$25,110	40
Environmental Services	Cavendish Transfer Station Hut	1	\$21,590	40
Environmental Services	Crystal Lake Hut	1	\$14,010	25
Environmental Services	Bobcaygeon Transfer Station Hut	1	\$21,590	25
Environmental Services	Buckhorn Transfer Station Hut	1	\$21,590	25
Total		79	\$50,228,290	

The Township maintains 25 buildings with a total replacement value of \$50.2 million. The building assets have an assumed useful life ranging between 10 and 40 years depending on the building asset. The source of information for the building assets was the 2019 Facilities Master Plan and municipal inventory data. The replacement costs were calculated using the Municipality's 2024 DC Background Study and the 2024 Canadian Cost Guide.

Buildings Summary of Condition by Replacement Value



Buildings Remaining Useful Life by Replacement Value



Overall, \$4.0 million (8%) of building assets are overdue by virtue of their design life. Although not overdue at this time, it should be noted that \$22.2 million (44%) of buildings will require replacement over the next twenty years. Overall, the Township maintains \$21.0 million (42%) of building assets in Good to Very Good condition, \$28.0 million (56%) of building assets in Fair condition, and \$1.2 million (2%) of building assets in Poor to Very Poor condition.

Data Confidence and Reliability: Level 4 (Reliable)

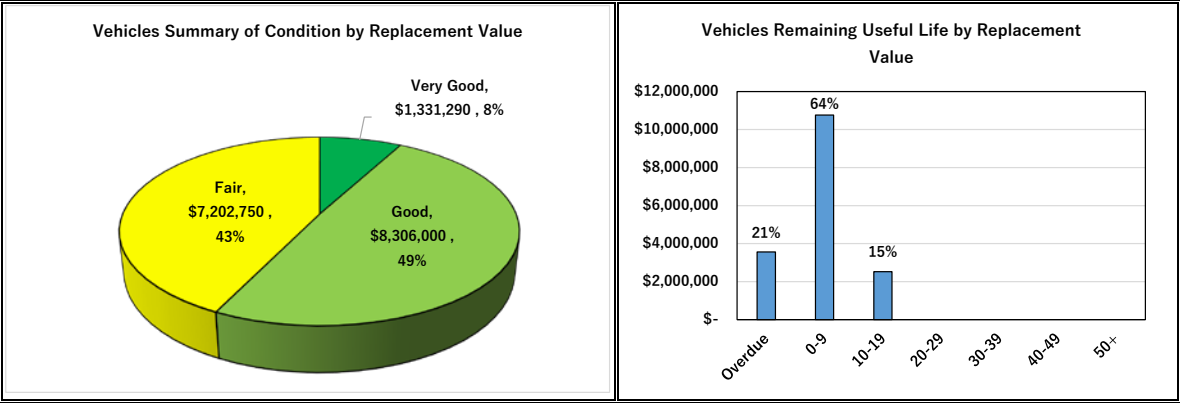
Dataset is complete and estimated to be accurate +/- 10%.



Vehicles	Good
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Table 2 Summary of Inventory - Vehicles			
Service Area	Quantity	Replacement Cost 2024	Useful Life (Years)
Administration Vehicles	2	\$138,300	5
Fire Vehicles	35	\$6,125,310	5 to 20
Parks & Recreation Vehicles	5	\$498,000	5 to 15
Roads Vehicles	36	\$10,078,430	5 to 15
Total	78	\$16,840,040	

The Municipality's vehicles assets contain a total of 78 vehicles with a total replacement value of \$16.8 million and an assumed engineered useful life of 5 to 20 years. The inventory replacement costs are based on the Municipality's 2024 DC Study and recent costing.



Overall, the Municipality's vehicles have been categorized by remaining useful life. About \$3.6 million (21%) are overdue and may require replacement in the short-term, while \$10.8 million (64%) of the Municipality's vehicles have less than 10 years of remaining useful life remaining. The remaining \$2.5 million (15%) of the Municipality's vehicles have a remaining useful life of 10-19 years.

The condition analysis identified that the Municipality maintains \$7.2 million (about 43%) of vehicles in Fair condition. Roughly \$8.3 million (about 49%) of vehicles are in Good condition, and another \$1.3 million (8%) are in Very Good condition. It is important to note that vehicles in Fair condition must be monitored closely as typically these vehicles will transition into the Poor/Very Poor categories over the short to medium term. Therefore, proper inspections and maintenance of these vehicles should continue over the short term. It has been assumed that fire vehicles in Poor or Very Poor condition are in Fair condition to reflect the requirements around the maintenance of emergency vehicles.

Data Confidence and Reliability: Level 4 (Reliable)
Dataset is complete and estimated to be accurate +/- 10%.



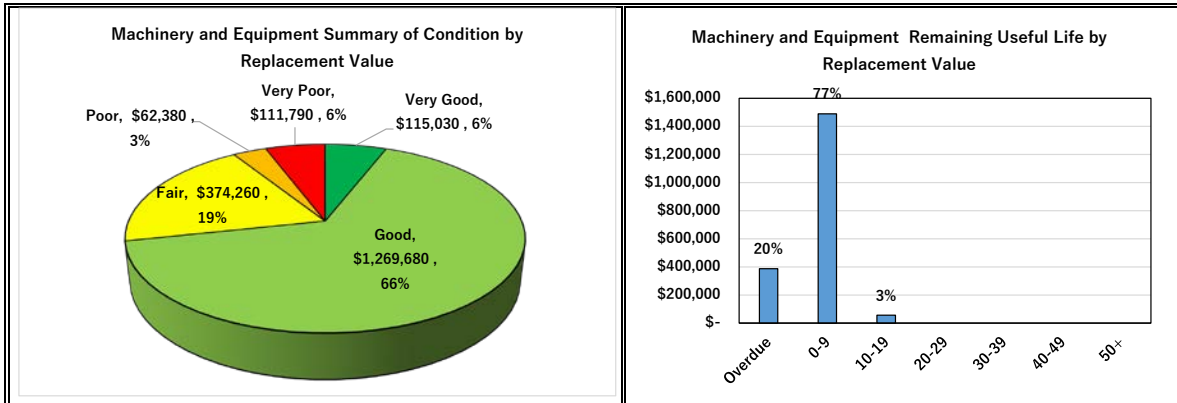
Machinery & Equipment

Good

Table 3
Summary of Inventory - Machinery and Equipment

Service Area	Units	Replacement Cost 2024	Useful Life (Years)
Admin/Building	20	\$72,030	5 to 10
Environmental Equipment	5	\$138,520	10 to 15
Environmental Services	2	\$83,710	10
Fire Equipment	99	\$1,226,070	5 to 20
Health Services Equipment	5	\$86,020	5 to 15
Parks & Recreation Equipment	12	\$127,600	10 to 15
Roads Equipment	9	\$199,190	10 to 15
Total	152	\$1,933,140	

The Municipality maintains pooled units of equipment for various services, which includes equipment for corporate management, environment, fire, health services, parks, recreation facilities, and roads with a total replacement value of approximately \$1.9 million. The equipment assets have an assumed useful life ranging between 5-20 years depending on the type of equipment. The asset replacement values have largely been derived by adjusting the original acquisition cost by inflation, but have also been derived using the Municipality's 2024 DC Study where possible.



Overall, approximately \$537,940 (20%) of equipment assets are considered to be overdue by virtue of their design life. Although not overdue at this time, it should be noted that 80% of the equipment (\$1.5 million) will require replacement in under 20 years. Overall, the Municipality maintains 72% (\$1.4 million) of equipment assets in Good to Very Good condition. Approximately 9% (\$174,170) of equipment assets are considered to be in Poor or Very Poor condition, which would indicate signs of deterioration and these assets should be considered for repair or replacement. The remainder of the assets \$374,260 (19%) are maintained in Fair condition. Similar to vehicles, fire assets in Poor or Very Poor condition have been assumed to be in Fair condition to reflect the maintenance of these assets.

Data Confidence and Reliability: Level 4 (Reliable)

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



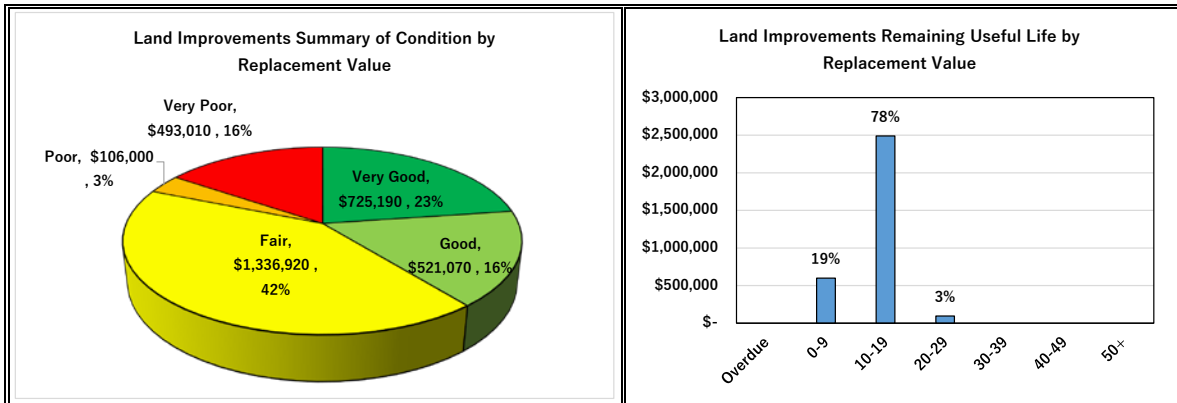
Land Improvements

Fair

Table 4
Summary of Inventory - Land Improvements

Asset Category	Units	Replacement Cost 2024	Useful Life (Years)
Environmental Services	11	\$829,930	20 to 25
Fire	6	\$264,370	20
Garbage Receptacles	1	\$2,820	20
No Segment	1	\$40,870	20
Parking Lot	1	\$5,080	20
Parks & Recreation	26	\$1,065,020	7 to 40
Picnic Tables	1	\$11,170	20
Retaining Wall	1	\$87,590	20
Rink	2	\$126,640	20 to 30
Roads	8	\$748,700	20
Total	58	\$3,182,190	

The Municipality maintains pooled units of land improvements of various types with a total replacement value of approximately \$3.2 million. The land improvement assets have an assumed useful life ranging between 7-40 years depending on the type of improvement. The asset replacement values have largely been derived by adjusting the original acquisition cost by inflation.



Overall, there are no land improvement assets that are considered to be overdue by virtue of their design life. Over 19% (\$599,010) of the assets will require replacement in under 10 years, and 78% (\$2.5 million) will require replacement in under 20 years. As the condition analysis for this category is based on the relative age of each asset, the conditions closely link to the remaining useful life graph. Overall, the Municipality maintains \$1.2 million (39%) of land improvement assets in Good to Very Good condition. Approximately 19% (\$599,010) of land improvement assets are considered to be in Poor or Very Poor condition, which would indicate signs of deterioration and these assets should be considered for repair or replacement. The remainder of the assets \$1.3 million (42%) are maintained in Fair condition.

Data Confidence and Reliability: Level 4 (Reliable)

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



IT

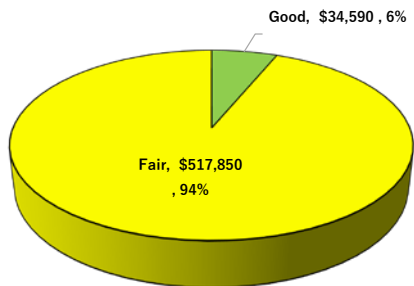
Fair

**Table 5
Summary of Inventory - IT**

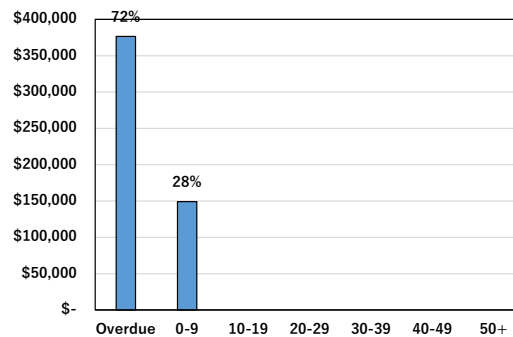
Service Area	Units	Replacement Cost 2024	Useful Life (Years)
Environmental Services	11	\$34,010	5
Fire	24	\$24,380	5
Health Services	6	\$11,740	5
Library	63	\$92,830	5
Medical Centre	57	\$51,520	5
Office Building	126	\$314,320	5
Parks and Recreation	7	\$8,780	5
Roads	9	\$14,860	0-5
Total	303	\$552,440	

The Municipality maintains pooled units of IT assets for various services including environmental, fire, health, library, medical, office, parks and recreation, and roads with a total replacement value of approximately \$550,000. The IT assets have an assumed useful life up to 5 years depending on the type of asset. The asset replacement values have largely been derived by adjusting the original acquisition cost by inflation.

IT Summary of Condition by Replacement Value



IT Remaining Useful Life by Replacement Value



Overall, approximately \$376,530 (72%) of IT assets are considered to be overdue by virtue of their design life. Although not overdue at this time, it should be noted that 28% of the assets (\$149,110) will require replacement in under 10 years. As the condition analysis for this category is based on the relative age of each asset, the conditions closely link to the remaining useful life graph. Overall, the Municipality maintains \$34,590 (6%) of equipment assets in Good condition. Approximately 94% (\$517,850) of IT assets are considered to be in Fair condition.

Data Confidence and Reliability: Level 4 (Reliable)

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



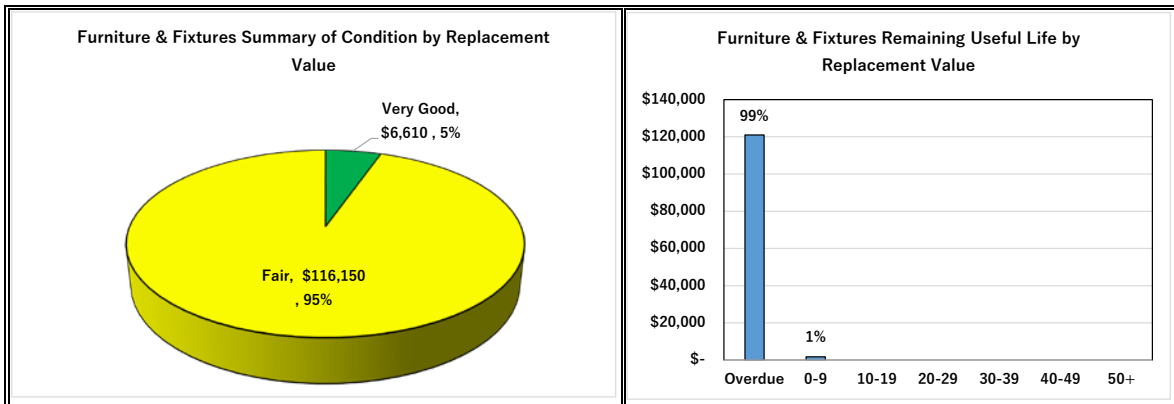
Furniture & Fixtures

Fair

Table 6
Summary of Inventory - Furniture and Fixtures

Service Area	Units	Replacement Cost 2024	Useful Life (Years)
Admin/Building Furniture	24	\$47,190	5
Environmental Services Furniture	4	\$4,710	5
Health Services Furniture	28	\$16,720	5
Library	1	\$1,800	5
Library Furniture	7	\$52,180	5
Parks & Recreation Furniture	2	\$160	5
Total	0	\$122,760	

The Municipality maintains pooled units of furniture and equipment for various services, which includes equipment for corporate management, environment, health, library, parks, and recreation with a total replacement value of approximately \$122,760. The furniture and fixtures have an assumed useful life of 5 years. The asset replacement values have largely been derived by adjusting the original acquisition cost by inflation.



Overall, approximately \$120,960 (99%) of equipment assets are considered to be overdue by virtue of their design life. 1% of the equipment (\$1,800) will require replacement in under 10 years. Some assets have used a recent condition assessment from municipal staff to determine their condition. Overall, the Municipality maintains \$6,610 (5%) of furniture and fixtures in Very Good condition. Approximately 95% (\$116,150) of furniture and fixtures are considered to be in Fair condition, which would indicate that these assets should be monitored in the future for signs of deterioration.

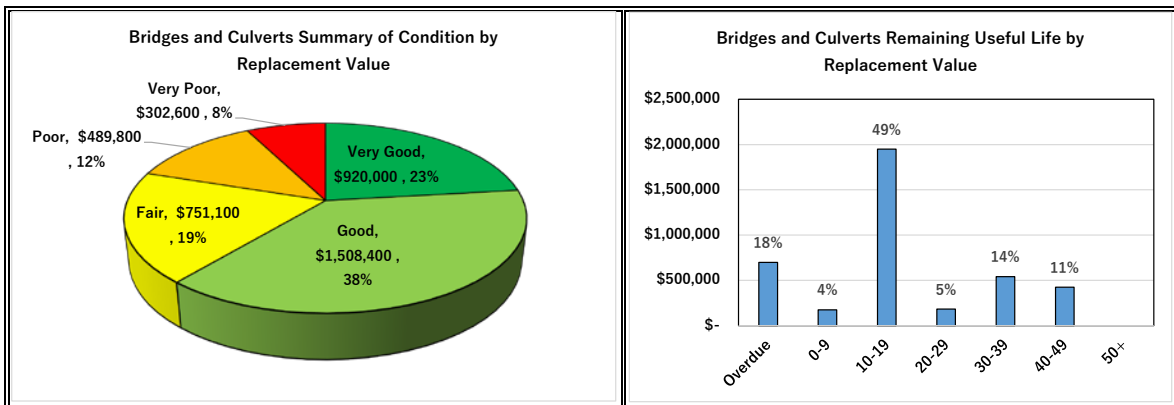
Data Confidence and Reliability: Level 4 (Reliable)

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

Table 7
Summary of Inventory - Bridges & Culverts

Asset	Length (m)	Replacement Cost 2024	Useful Life (Years)
Small Culverts	8,441	\$2,761,200	40
Kawartha Hideaway Culvert (#203)	14	\$131,000	40
Island Drive Culvert (#204)	12.2	\$131,000	40
Tate's Bay Road Culvert (#205)	3.5	\$131,000	40
Pirates Glen (#206)	5.5	\$131,000	40
Ties Mountain (#207)	4.4	\$131,000	40
Salmon Lake Road (#208)	14.5	\$131,000	40
Crowes Line Bridge (#209)	7.2	\$424,700	60
Total	8503	\$3,971,900	

The Township maintains seven bridges (including larger culverts) and 8,441m of pooled smaller culverts with a total replacement value of about \$4 million. Most bridge assets have an assumed useful life of 40 years. The source of the information for the large bridges and culverts is the 2021 OSIM Inventory and Inspection Report. The source of information for the smaller culverts is the TCA data. Replacement costs for both categories are based on municipal inventory data and the 2024 DC Study.

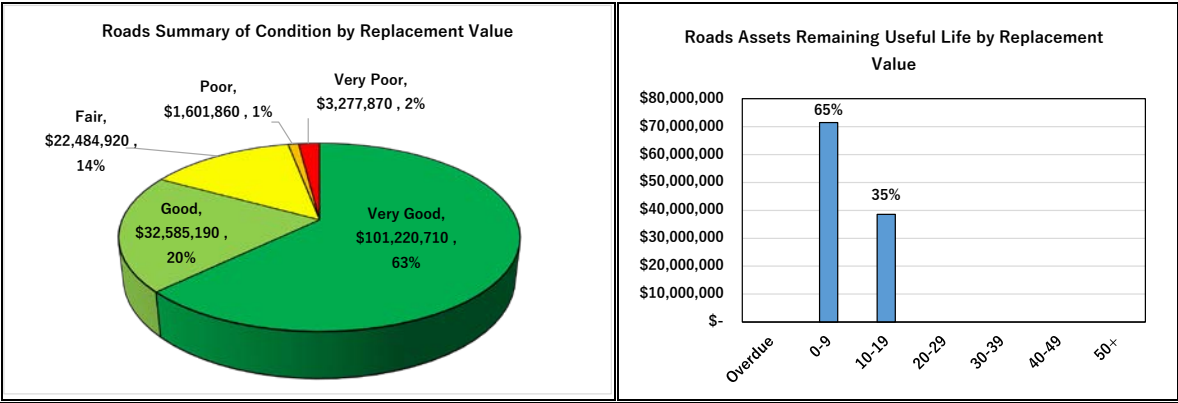


Overall, approximately \$697,900 (18%) of bridges and culverts are overdue by virtue of their design life. Although not overdue at this time, it should be noted that \$2.1 million (53%) of bridges will require replacement over the next twenty years. The remaining assets of \$1.2 million (30%) have a remaining useful life of 20 years or more. The condition analysis for this category is based on the 2021 OSIM report. Overall, the Township maintains \$2.4 million (61%) of bridges in Good to Very Good condition. \$792,400 (20%) of bridges are in Poor to Very Poor condition. The remainder of the assets \$751,100 (19%) are maintained in Fair condition.

Data Confidence and Reliability: Level 5 (Highly Reliable)
Dataset is complete and estimated to be accurate +/- 2%.

Table 8 Summary of Inventory - Roads			
Type	Quantity (km)	Replacement Cost 2024	Useful Life (Years)
Paved Roads	163	\$110,069,380	30
Gravel Roads	75	\$51,101,170	Not Applicable
Total	238	\$161,170,550	

The Township maintains 238km of roads with a total replacement value of \$161.2 million. The road assets have an assumed useful life of 30 years. The source of information for the roads assets is the 2023 Roads Needs Study, this includes the condition assessment for the roads. The replacement costs were calculated using the 2024 DC Study and with a benchmark average replacement cost per kilometer of: \$776,620 per km for HCB roads, \$595,340 per km for LCB roads and \$494,400 per km for gravel roads.



Overall, none of the road assets are overdue by virtue of their design life however it is noted that roads are not managed based on their age but rather their condition. Furthermore, gravel roads are not replaced therefore an age measure is not provided for this category. Overall, the Township maintains \$133.8 million (83%) of road assets in Good to Very Good condition. About 4.9 million (3%) of road assets are in Poor or Very Poor condition. The remainder of the roads, \$22.5 million (14%) are in fair condition.

Data Confidence and Reliability: Level 5 (Highly Reliable)
Dataset is complete and estimated to be accurate +/- 2%.



Water Infrastructure

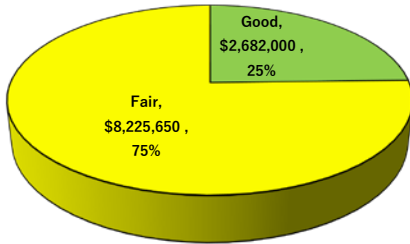
Fair

Table 9
Summary of Inventory - Water Infrastructure

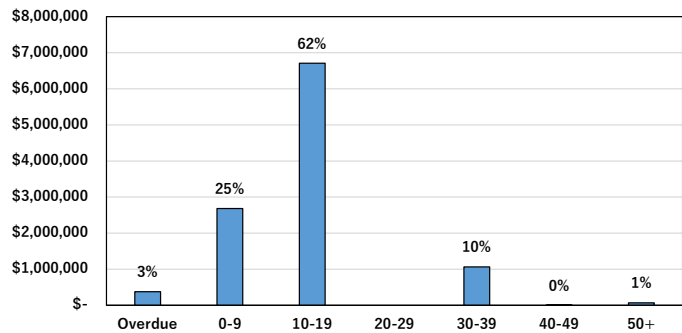
Asset Category	Quantity	Unit of Measure	Replacement Cost 2024	Useful Life (Years)
Water Facilities	2	Unit	\$2,682,000	60
CurbStop-Service	332	Unit	\$1,336,080	45
Flushing Gate	2	Unit	\$3,020	45
Flushing Gate-small	5	Unit	\$1,700	45
Flushing Hydrant	2	Unit	\$11,940	45
Flushing Hydrant-small	19	Unit	\$77,680	45
GateValve	14	Unit	\$16,100	45
WaterMain	6,311	meters	\$5,119,130	60
WaterMain-Laterals	1,705	meters	\$1,364,000	60
WaterMain-Raw Water	370	meters	\$296,000	60
Total	8762		\$10,907,650	

The Municipality maintains water infrastructure assets with a replacement cost of \$10.9 million. The source of the information for the water infrastructure assets is the 2020 Water AMP and municipal inventory. Replacement costs have been determined based on inflation from historical values as well as benchmark costs per metre of pipe for the linear components. The assumed useful life has been derived on a component by component basis ranging from 45-60 years.

Water Infrastructure Summary of Condition by Replacement Value



Water Infrastructure Remaining Useful Life by Replacement Value



Overall, approximately \$375,340 (3%) of bridges and culverts are overdue by virtue of their design life. Although not overdue at this time, it should be noted that \$9.4 million (86%) of bridges will require replacement over the next twenty years. The remainder of the system has a useful life of 30 or more years, which include linear assets and water facilities. Conditions of the water assets are based on the 2020 Water AMP. 75% (\$8.2 million) of Water assets are in Fair condition, and the remaining 25% (\$2.7 million) are deemed to be in Fair Condition.

Data Confidence and Reliability: Level 4 (Reliable)

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

APPENDIX C - FINANCING STRATEGY TABLES

Table 1
Municipality of Trent Lakes
2024 Asset Management Plan
Close Cumulative Infrastructure Deficit by 2063

Legend	1. Lifecycle Costs							2. Forecast of Revenues							3. Funding Gap Calculation		
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Operations & Maintenance (Expansion)	Gravel Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Gravel Maintenance from Budget	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund (CCBF)	Other Grants	Existing Reserves	Total Funding	Annual Funding Gap
2024			\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 11,958,138	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,355,360	\$ 2,355,360
2025	\$ 50,000	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 12,008,138	\$ 4,072,817	\$ 290,063	\$ 1,207,144	\$ 320,851	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,923,629	\$ 2,084,509	\$ 4,439,869
2026	\$ 50,000	\$ 4,072,817	\$ 15,660	\$ 290,063	\$ 7,590,454	\$ 13,844	\$ 12,032,838	\$ 4,088,478	\$ 290,063	\$ 1,527,995	\$ 320,851	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 10,260,141	\$ 1,772,697	\$ 6,212,566
2027	\$ 50,000	\$ 4,072,817	\$ 31,321	\$ 290,063	\$ 7,554,117	\$ 27,688	\$ 12,026,006	\$ 4,104,138	\$ 290,063	\$ 1,848,846	\$ 320,851	\$ 180,000		\$ 2,643,937	\$ 9,066,984	\$ 2,959,022	\$ 9,171,588
2028	\$ 50,000	\$ 4,072,817	\$ 46,981	\$ 290,063	\$ 7,822,116	\$ 41,531	\$ 12,323,509	\$ 4,119,798	\$ 290,063	\$ 2,169,698	\$ 320,851	\$ 180,000		\$ 2,643,937	\$ 9,403,496	\$ 2,920,013	\$ 12,091,601
2029	\$ 50,000	\$ 4,072,817	\$ 62,641	\$ 290,063	\$ 7,549,252	\$ 55,375	\$ 12,080,149	\$ 4,135,458	\$ 290,063	\$ 2,490,549	\$ 320,851	\$ 180,000			\$ 7,096,070	\$ 4,984,079	\$ 17,075,680
2030	\$ 50,000	\$ 4,072,817	\$ 78,302	\$ 290,063	\$ 7,162,884	\$ 69,219	\$ 11,723,285	\$ 4,151,119	\$ 290,063	\$ 2,811,400	\$ 320,851	\$ 180,000			\$ 7,432,582	\$ 4,290,703	\$ 21,366,383
2031	\$ 50,000	\$ 4,072,817	\$ 93,962	\$ 290,063	\$ 6,324,912	\$ 83,063	\$ 10,914,817	\$ 4,166,779	\$ 290,063	\$ 3,132,251	\$ 320,851	\$ 180,000			\$ 7,769,093	\$ 3,145,724	\$ 24,512,107
2032	\$ 50,000	\$ 4,072,817	\$ 109,622	\$ 290,063	\$ 7,767,243	\$ 96,907	\$ 12,386,652	\$ 4,182,439	\$ 290,063	\$ 3,453,102	\$ 320,851	\$ 180,000			\$ 8,105,605	\$ 4,281,047	\$ 28,793,154
2033	\$ 50,000	\$ 4,072,817	\$ 125,282	\$ 290,063	\$ 7,662,801	\$ 110,750	\$ 12,311,714	\$ 4,198,100	\$ 290,063	\$ 3,773,953	\$ 320,851	\$ 180,000			\$ 8,442,116	\$ 3,869,598	\$ 32,662,752
2034	\$ 50,000	\$ 4,072,817	\$ 140,943	\$ 290,063	\$ 7,624,280	\$ 124,594	\$ 12,302,697	\$ 4,213,760	\$ 290,063	\$ 4,094,804	\$ 320,851	\$ 180,000			\$ 8,778,627	\$ 3,524,070	\$ 36,186,822
2035	\$ 50,000	\$ 4,072,817	\$ 156,603	\$ 290,063	\$ 8,467,355	\$ 138,438	\$ 13,175,276	\$ 4,229,420	\$ 290,063	\$ 4,415,656	\$ 320,851	\$ 180,000			\$ 9,115,139	\$ 4,060,137	\$ 40,246,959
2036	\$ 50,000	\$ 4,072,817	\$ 172,263	\$ 290,063	\$ 8,220,827	\$ 152,282	\$ 12,958,252	\$ 4,245,081	\$ 290,063	\$ 4,736,507	\$ 320,851	\$ 180,000			\$ 9,451,650	\$ 3,506,602	\$ 43,753,561
2037	\$ 50,000	\$ 4,072,817	\$ 187,924	\$ 290,063	\$ 7,871,013	\$ 166,126	\$ 12,637,943	\$ 4,260,741	\$ 290,063	\$ 5,057,358	\$ 320,851	\$ 180,000			\$ 9,788,162	\$ 2,849,781	\$ 46,603,342
2038	\$ 50,000	\$ 4,072,817	\$ 203,584	\$ 290,063	\$ 7,805,963	\$ 179,969	\$ 12,602,397	\$ 4,276,401	\$ 290,063	\$ 5,378,209	\$ 320,851	\$ 180,000			\$ 10,124,673	\$ 2,477,724	\$ 49,081,066
2039	\$ 50,000	\$ 4,072,817	\$ 219,244	\$ 290,063	\$ 7,800,505	\$ 193,813	\$ 12,626,443	\$ 4,292,061	\$ 290,063	\$ 5,699,060	\$ 320,851	\$ 180,000			\$ 10,461,185	\$ 2,165,258	\$ 51,246,324
2040	\$ 50,000	\$ 4,072,817	\$ 234,905	\$ 290,063	\$ 7,761,401	\$ 207,657	\$ 12,616,843	\$ 4,307,722	\$ 290,063	\$ 6,019,911	\$ 320,851	\$ 180,000			\$ 10,797,696	\$ 1,819,147	\$ 53,065,471
2041	\$ 50,000	\$ 4,072,817	\$ 250,565	\$ 290,063	\$ 7,735,277	\$ 221,501	\$ 12,620,223	\$ 4,323,382	\$ 290,063	\$ 6,340,762	\$ 320,851	\$ 180,000			\$ 11,134,207	\$ 1,486,016	\$ 54,551,487
2042	\$ 50,000	\$ 4,072,817	\$ 266,225	\$ 290,063	\$ 7,735,277	\$ 235,345	\$ 12,649,727	\$ 4,339,042	\$ 290,063	\$ 6,661,614	\$ 320,851	\$ 180,000			\$ 11,470,719	\$ 1,179,008	\$ 55,730,495
2043	\$ 50,000	\$ 4,072,817	\$ 281,885	\$ 290,063	\$ 7,735,277	\$ 249,188	\$ 12,679,231	\$ 4,354,703	\$ 290,063	\$ 6,982,465	\$ 320,851	\$ 180,000			\$ 11,807,230	\$ 872,001	\$ 56,602,496
2044	\$ 50,000	\$ 4,072,817	\$ 297,546	\$ 290,063	\$ 7,735,277	\$ 263,032	\$ 12,708,735	\$ 4,370,363	\$ 290,063	\$ 7,303,316	\$ 320,851	\$ 180,000			\$ 12,143,742	\$ 564,993	\$ 57,167,489
2045	\$ 50,000	\$ 4,072,817	\$ 313,206	\$ 290,063	\$ 7,417,836	\$ 276,876	\$ 12,420,798	\$ 4,386,023	\$ 290,063	\$ 7,624,167	\$ 320,851	\$ 180,000			\$ 12,480,253	\$ (59,455)	\$ 57,108,034
2046	\$ 50,000	\$ 4,072,817	\$ 328,866	\$ 290,063	\$ 7,395,021	\$ 290,720	\$ 12,427,487	\$ 4,401,684	\$ 290,063	\$ 7,945,018	\$ 320,851	\$ 180,000			\$ 12,816,765	\$ (389,278)	\$ 56,718,756
2047	\$ 50,000	\$ 4,072,817	\$ 344,527	\$ 290,063	\$ 7,395,021	\$ 304,564	\$ 12,456,991	\$ 4,417,344	\$ 290,063	\$ 8,265,869	\$ 320,851	\$ 180,000			\$ 13,153,276	\$ (696,285)	\$ 56,022,471
2048	\$ 50,000	\$ 4,072,817	\$ 360,187	\$ 290,063	\$ 7,395,021	\$ 318,407	\$ 12,486,495	\$ 4,433,004	\$ 290,063	\$ 8,586,720	\$ 320,851	\$ 180,000			\$ 13,489,788	\$ (1,003,293)	\$ 55,019,178
2049	\$ 50,000	\$ 4,072,817	\$ 375,847	\$ 290,063	\$ 7,193,570	\$ 332,251	\$ 12,314,549	\$ 4,448,664	\$ 290,063	\$ 8,907,571	\$ 320,851	\$ 180,000			\$ 13,826,299	\$ (1,511,750)	\$ 53,507,428
2050	\$ 50,000	\$ 4,072,817	\$ 391,508	\$ 290,063	\$ 7,193,570	\$ 346,095	\$ 12,344,053	\$ 4,464,325	\$ 290,063	\$ 9,228,423	\$ 320,851	\$ 180,000			\$ 14,162,810	\$ (1,818,757)	\$ 51,688,671
2051	\$ 50,000	\$ 4,072,817	\$ 407,168	\$ 290,063	\$ 7,193,570	\$ 359,939	\$ 12,373,557	\$ 4,479,985	\$ 290,063	\$ 9,549,274	\$ 320,851	\$ 180,000			\$ 14,499,322	\$ (2,125,765)	\$ 49,562,906
2052	\$ 50,000	\$ 4,072,817	\$ 422,828	\$ 290,063	\$ 7,193,570	\$ 373,783	\$ 12,403,061	\$ 4,495,645	\$ 290,063	\$ 9,870,125	\$ 320,851	\$ 180,000			\$ 14,835,833	\$ (2,432,772)	\$ 47,130,134
2053	\$ 50,000	\$ 4,072,817	\$ 438,488	\$ 290,063	\$ 7,193,570	\$ 387,626	\$ 12,432,565	\$ 4,511,306	\$ 290,063	\$ 10,190,976	\$ 320,851	\$ 180,000			\$ 15,172,345	\$ (2,739,780)	\$ 44,390,354
2054	\$ 50,000	\$ 4,072,817	\$ 454,149	\$ 290,063	\$ 7,193,570	\$ 401,470	\$ 12,462,069	\$ 4,526,966	\$ 290,063	\$ 10,511,827	\$ 320,851	\$ 180,000			\$ 15,508,856	\$ (3,046,787)	\$ 41,343,567
2055	\$ 50,000	\$ 4,072,817	\$ 469,809	\$ 290,063	\$ 7,193,586	\$ 415,314	\$ 12,491,589	\$ 4,542,626	\$ 290,063	\$ 10,832,678	\$ 320,851	\$ 180,000			\$ 15,845,368	\$ (3,353,779)	\$ 37,989,788
2056	\$ 50,000	\$ 4,072,817	\$ 485,469	\$ 290,063	\$ 7,189,710	\$ 429,158	\$ 12,517,218	\$ 4,558,287	\$ 290,063	\$ 11,153,529	\$ 320,851	\$ 180,000			\$ 16,181,879	\$ (3,664,661)	\$ 34,325,127
2057	\$ 50,000	\$ 4,072,817	\$ 501,130	\$ 290,063	\$ 7,180,697	\$ 443,002	\$ 12,537,708	\$ 4,573,947	\$ 290,063	\$ 11,474,381	\$ 320,851	\$ 180,000			\$ 16,518,390	\$ (3,980,682)	\$ 30,344,445
2058	\$ 50,000	\$ 4,072,817	\$ 516,790	\$ 290,063	\$ 7,180,697	\$ 456,845	\$ 12,567,213	\$ 4,589,607	\$ 290,063	\$ 11,795,232	\$ 320,851	\$ 180,000			\$ 16,854,902	\$ (4,287,689)	\$ 26,056,756
2059	\$ 50,000	\$ 4,072,817	\$ 532,450	\$ 290,063	\$ 7,180,697	\$ 470,689	\$ 12,596,717	\$ 4,605,267	\$ 290,063	\$ 12,116,083	\$ 320,851	\$ 180,000			\$ 17,191,413	\$ (4,594,696)	\$ 21,462,060
2060	\$ 50,000	\$ 4,072,817	\$ 548,111	\$ 290,063	\$ 7,180,697	\$ 484,533	\$ 12,626,221	\$ 4,620,928	\$ 290,063	\$ 12,436,934	\$ 320,851	\$ 180,000			\$ 17,527,925	\$ (4,901,704)	\$ 16,560,356
2061	\$ 50,000	\$ 4,072,817	\$ 563,771	\$ 290,063	\$ 7,176,297	\$ 498,377	\$ 12,651,325	\$ 4,636,588	\$ 290,063	\$ 12,757,785	\$ 320,851	\$ 180,000			\$ 17,864,436	\$ (5,213,111)	\$ 11,347,245
2062	\$ 50,000	\$ 4,072,817	\$ 579,431	\$ 290,063	\$ 7,176,297	\$ 512,221	\$ 12,680,829	\$ 4,652,248	\$ 290,063	\$ 13,078,636	\$ 320,851	\$ 180,000			\$ 18,200,948	\$ (5,520,119)	\$ 5,827,126
2063	\$ 50,000	\$ 4,072,817	\$ 595,091	\$ 290,063	\$ 7,176,297	\$ 526,064	\$ 12,710,333	\$ 4,667,909	\$ 290,063	\$ 13,399,487	\$ 320,851	\$ 180,000			\$ 18,537,459	\$ (5,827,126)	\$ -
Total	\$ 1,950,000	\$ 162,912,692	\$ 11,604,282	\$ 11,602,520	\$ 298,516,038	\$ 10,258,256	\$ 496,843,791			\$ 285,715,609		\$ 7,200,000	\$ 4,589,004	\$ 13,219,685	\$ 496,843,791	\$ -	

Annual Increase	\$ 320,851
2024 Total Tax Levy	\$ 10,943,523
Inc. as % of Tax Levy	2.93%



Table 2
Municipality of Trent Lakes
2024 Asset Management Plan
Financing Strategy 1: Close In-Year Funding Gap by 2053

Legend	1. Lifecycle Costs							2. Forecast of Revenues							3. Funding Gap Calculation			
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Operations & Maintenance (Expansion)	Gravel Maintenance (Existing Level)	Capital Renewal/Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Gravel Maintenance from Budget	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund (CCBF)	Other Grants	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2024	\$	-	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 11,958,138	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,355,360	\$ 2,355,360	
2025	\$	50,000	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 12,008,138	\$ 4,072,817	\$ 290,063	\$ 1,127,789	\$ 241,496	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,844,275	\$ 2,163,863	\$ 4,519,223
2026	\$	50,000	\$ 4,072,817	\$ 15,660	\$ 290,063	\$ 7,590,454	\$ 13,844	\$ 12,032,838	\$ 4,072,817	\$ 290,063	\$ 1,369,286	\$ 241,496	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 10,085,771	\$ 1,947,067	\$ 6,466,290
2027	\$	50,000	\$ 4,072,817	\$ 31,321	\$ 290,063	\$ 7,554,117	\$ 27,688	\$ 12,026,006	\$ 4,072,817	\$ 290,063	\$ 1,610,782	\$ 241,496	\$ 180,000	\$ -	\$ 2,643,937	\$ 8,797,599	\$ 3,228,407	\$ 9,694,697
2028	\$	50,000	\$ 4,072,817	\$ 46,981	\$ 290,063	\$ 7,822,116	\$ 41,531	\$ 12,323,509	\$ 4,072,817	\$ 290,063	\$ 1,852,278	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 9,039,095	\$ 3,284,414	\$ 12,979,111
2029	\$	50,000	\$ 4,072,817	\$ 62,641	\$ 290,063	\$ 7,549,252	\$ 55,375	\$ 12,080,149	\$ 4,072,817	\$ 290,063	\$ 2,093,774	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 6,636,655	\$ 5,443,494	\$ 18,422,605
2030	\$	50,000	\$ 4,072,817	\$ 78,302	\$ 290,063	\$ 7,162,884	\$ 69,219	\$ 11,723,285	\$ 4,072,817	\$ 290,063	\$ 2,335,271	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 6,878,151	\$ 4,845,134	\$ 23,267,739
2031	\$	50,000	\$ 4,072,817	\$ 93,962	\$ 290,063	\$ 6,324,912	\$ 83,063	\$ 10,914,817	\$ 4,072,817	\$ 290,063	\$ 2,576,767	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 7,119,647	\$ 3,795,170	\$ 27,062,909
2032	\$	50,000	\$ 4,072,817	\$ 109,622	\$ 290,063	\$ 7,767,243	\$ 96,907	\$ 12,386,652	\$ 4,072,817	\$ 290,063	\$ 2,818,263	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 7,361,144	\$ 5,025,508	\$ 32,088,417
2033	\$	50,000	\$ 4,072,817	\$ 125,282	\$ 290,063	\$ 7,662,801	\$ 110,750	\$ 12,311,714	\$ 4,072,817	\$ 290,063	\$ 3,059,760	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 7,602,640	\$ 4,709,074	\$ 36,797,491
2034	\$	50,000	\$ 4,072,817	\$ 140,943	\$ 290,063	\$ 7,624,280	\$ 124,594	\$ 12,302,697	\$ 4,072,817	\$ 290,063	\$ 3,301,256	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 7,844,136	\$ 4,458,561	\$ 41,256,052
2035	\$	50,000	\$ 4,072,817	\$ 156,603	\$ 290,063	\$ 8,467,355	\$ 138,438	\$ 13,175,276	\$ 4,072,817	\$ 290,063	\$ 3,542,752	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 8,089,632	\$ 5,089,644	\$ 46,345,696
2036	\$	50,000	\$ 4,072,817	\$ 172,263	\$ 290,063	\$ 8,220,827	\$ 152,282	\$ 12,958,252	\$ 4,072,817	\$ 290,063	\$ 3,784,248	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 8,327,129	\$ 4,631,123	\$ 50,976,819
2037	\$	50,000	\$ 4,072,817	\$ 187,924	\$ 290,063	\$ 7,871,013	\$ 166,126	\$ 12,637,947	\$ 4,072,817	\$ 290,063	\$ 4,025,745	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 8,568,625	\$ 4,069,318	\$ 55,046,137
2038	\$	50,000	\$ 4,072,817	\$ 203,584	\$ 290,063	\$ 7,805,963	\$ 179,969	\$ 12,602,393	\$ 4,072,817	\$ 290,063	\$ 4,267,241	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 8,810,121	\$ 3,792,276	\$ 58,838,413
2039	\$	50,000	\$ 4,072,817	\$ 219,244	\$ 290,063	\$ 7,800,505	\$ 193,813	\$ 12,626,443	\$ 4,072,817	\$ 290,063	\$ 4,508,737	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 9,051,618	\$ 3,574,825	\$ 62,413,238
2040	\$	50,000	\$ 4,072,817	\$ 234,905	\$ 290,063	\$ 7,761,401	\$ 207,657	\$ 12,616,843	\$ 4,072,817	\$ 290,063	\$ 4,750,234	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 9,293,114	\$ 3,323,729	\$ 65,736,967
2041	\$	50,000	\$ 4,072,817	\$ 250,565	\$ 290,063	\$ 7,735,277	\$ 221,501	\$ 12,620,223	\$ 4,072,817	\$ 290,063	\$ 4,991,730	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 9,534,610	\$ 3,085,613	\$ 68,822,580
2042	\$	50,000	\$ 4,072,817	\$ 266,225	\$ 290,063	\$ 7,735,277	\$ 235,345	\$ 12,649,727	\$ 4,072,817	\$ 290,063	\$ 5,233,226	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 9,776,106	\$ 2,873,621	\$ 71,696,201
2043	\$	50,000	\$ 4,072,817	\$ 281,885	\$ 290,063	\$ 7,735,277	\$ 249,188	\$ 12,679,231	\$ 4,072,817	\$ 290,063	\$ 5,474,722	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 10,017,603	\$ 2,661,628	\$ 74,357,829
2044	\$	50,000	\$ 4,072,817	\$ 297,546	\$ 290,063	\$ 7,735,277	\$ 263,032	\$ 12,708,735	\$ 4,072,817	\$ 290,063	\$ 5,716,219	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 10,259,099	\$ 2,449,636	\$ 76,807,465
2045	\$	50,000	\$ 4,072,817	\$ 313,206	\$ 290,063	\$ 7,417,836	\$ 276,876	\$ 12,420,798	\$ 4,072,817	\$ 290,063	\$ 5,957,715	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 10,500,595	\$ 1,920,203	\$ 78,727,668
2046	\$	50,000	\$ 4,072,817	\$ 328,866	\$ 290,063	\$ 7,395,021	\$ 290,720	\$ 12,427,487	\$ 4,072,817	\$ 290,063	\$ 6,199,211	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 10,742,091	\$ 1,685,396	\$ 80,413,064
2047	\$	50,000	\$ 4,072,817	\$ 344,527	\$ 290,063	\$ 7,395,021	\$ 304,564	\$ 12,456,991	\$ 4,072,817	\$ 290,063	\$ 6,440,707	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 10,983,588	\$ 1,473,403	\$ 81,886,467
2048	\$	50,000	\$ 4,072,817	\$ 360,187	\$ 290,063	\$ 7,395,021	\$ 318,407	\$ 12,486,495	\$ 4,072,817	\$ 290,063	\$ 6,682,204	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 11,225,084	\$ 1,261,411	\$ 83,147,878
2049	\$	50,000	\$ 4,072,817	\$ 375,847	\$ 290,063	\$ 7,193,570	\$ 332,251	\$ 12,314,549	\$ 4,072,817	\$ 290,063	\$ 6,923,700	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 11,466,580	\$ 847,969	\$ 83,995,847
2050	\$	50,000	\$ 4,072,817	\$ 391,508	\$ 290,063	\$ 7,193,570	\$ 346,095	\$ 12,344,053	\$ 4,072,817	\$ 290,063	\$ 7,165,196	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 11,708,077	\$ 635,976	\$ 84,631,823
2051	\$	50,000	\$ 4,072,817	\$ 407,168	\$ 290,063	\$ 7,193,570	\$ 359,939	\$ 12,373,557	\$ 4,072,817	\$ 290,063	\$ 7,406,693	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 11,949,573	\$ 423,984	\$ 85,055,807
2052	\$	50,000	\$ 4,072,817	\$ 422,828	\$ 290,063	\$ 7,193,570	\$ 373,783	\$ 12,403,061	\$ 4,072,817	\$ 290,063	\$ 7,648,189	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 12,191,069	\$ 211,992	\$ 85,267,799
2053	\$	50,000	\$ 4,072,817	\$ 438,488	\$ 290,063	\$ 7,193,570	\$ 387,626	\$ 12,432,565	\$ 4,072,817	\$ 290,063	\$ 7,889,685	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 12,432,565	\$ -	\$ 85,267,799
2054	\$	50,000	\$ 4,072,817	\$ 454,149	\$ 290,063	\$ 7,193,570	\$ 401,470	\$ 12,462,069	\$ 4,072,817	\$ 290,063	\$ 8,131,181	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 12,674,062	\$ (211,993)	\$ 85,055,806
2055	\$	50,000	\$ 4,072,817	\$ 469,809	\$ 290,063	\$ 7,193,586	\$ 415,314	\$ 12,491,589	\$ 4,072,817	\$ 290,063	\$ 8,372,678	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 12,915,558	\$ (423,969)	\$ 84,631,837
2056	\$	50,000	\$ 4,072,817	\$ 485,469	\$ 290,063	\$ 7,189,710	\$ 429,158	\$ 12,517,218	\$ 4,072,817	\$ 290,063	\$ 8,614,174	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 13,157,054	\$ (639,836)	\$ 83,992,001
2057	\$	50,000	\$ 4,072,817	\$ 501,130	\$ 290,063	\$ 7,180,697	\$ 443,002	\$ 12,537,708	\$ 4,072,817	\$ 290,063	\$ 8,855,670	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 13,398,551	\$ (860,843)	\$ 83,131,158
2058	\$	50,000	\$ 4,072,817	\$ 516,790	\$ 290,063	\$ 7,180,697	\$ 456,845	\$ 12,567,213	\$ 4,072,817	\$ 290,063	\$ 9,097,167	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 13,640,047	\$ (1,072,834)	\$ 82,058,324
2059	\$	50,000	\$ 4,072,817	\$ 532,450	\$ 290,063	\$ 7,180,697	\$ 470,689	\$ 12,596,717	\$ 4,072,817	\$ 290,063	\$ 9,338,663	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 13,881,543	\$ (1,284,826)	\$ 80,773,498
2060	\$	50,000	\$ 4,072,817	\$ 548,111	\$ 290,063	\$ 7,180,697	\$ 484,533	\$ 12,626,221	\$ 4,072,817	\$ 290,063	\$ 9,580,159	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 14,123,039	\$ (1,496,818)	\$ 79,276,680
2061	\$	50,000	\$ 4,072,817	\$ 563,771	\$ 290,063	\$ 7,176,297	\$ 498,377	\$ 12,651,325	\$ 4,072,817	\$ 290,063	\$ 9,821,655	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 14,364,536	\$ (1,713,211)	\$ 77,563,469
2062	\$	50,000	\$ 4,072,817	\$ 579,431	\$ 290,063	\$ 7,176,297	\$ 512,221	\$ 12,680,829	\$ 4,072,817	\$ 290,063	\$ 10,063,152	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 14,606,032	\$ (1,925,203)	\$ 75,638,266
2063	\$	50,000	\$ 4,072,817	\$ 595,091	\$ 290,063	\$ 7,176,297	\$ 526,064	\$ 12,710,333	\$ 4,072,817	\$ 290,063	\$ 10,304,648	\$ 241,496	\$ 180,000	\$ -	\$ -	\$ 14,847,528	\$ (2,137,195)	\$ 73,501,071
Total	\$	1,950,000	\$ 162,912,692	\$ 11,604,282	\$ 11,602,520	\$ 298,516,038	\$ 10,258,256	\$ 496,843,791			\$ 223,818,820		\$ 7,200,000	\$ 4,589,004	\$ 13,219,685	\$ 423,342,720	\$ 73,501,071	

Annual Increase	\$ 241,496
2024 Total Tax Levy	\$ 10,943,523
Inc. as % of Tax Levy	2.21%



Table 3
Municipality of Trent Lakes
2024 Asset Management Plan
Financing Strategy 2: Close In-Year Funding Gap by 2063

Legend	1. Lifecycle Costs							2. Forecast of Revenues							3. Funding Gap Calculation			
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Operations & Maintenance (Expansion)	Gravel Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Gravel Maintenance from Budget	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund (CCBF)	Other Grants	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2024	\$	-	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 11,958,138	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,355,360	\$ 2,355,360	
2025	\$	50,000	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 12,008,138	\$ 4,072,817	\$ 290,063	\$ 1,072,989	\$ 186,696	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,789,475	\$ 2,218,663	\$ 4,574,023
2026	\$	50,000	\$ 4,072,817	\$ 15,660	\$ 290,063	\$ 7,590,454	\$ 13,844	\$ 12,032,838	\$ 4,072,817	\$ 290,063	\$ 1,259,686	\$ 186,696	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,976,171	\$ 2,056,667	\$ 6,630,690
2027	\$	50,000	\$ 4,072,817	\$ 31,321	\$ 290,063	\$ 7,554,117	\$ 27,688	\$ 12,026,006	\$ 4,072,817	\$ 290,063	\$ 1,446,382	\$ 186,696	\$ 180,000	\$ -	\$ 2,643,937	\$ 8,633,199	\$ 3,392,807	\$ 10,023,497
2028	\$	50,000	\$ 4,072,817	\$ 46,981	\$ 290,063	\$ 7,822,116	\$ 41,531	\$ 12,323,509	\$ 4,072,817	\$ 290,063	\$ 1,633,079	\$ 186,696	\$ 180,000	\$ -	\$ 2,643,937	\$ 8,819,896	\$ 3,503,613	\$ 13,527,110
2029	\$	50,000	\$ 4,072,817	\$ 62,641	\$ 290,063	\$ 7,549,252	\$ 55,375	\$ 12,080,149	\$ 4,072,817	\$ 290,063	\$ 1,819,775	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 6,362,655	\$ 5,717,494	\$ 19,244,604
2030	\$	50,000	\$ 4,072,817	\$ 78,302	\$ 290,063	\$ 7,162,884	\$ 69,219	\$ 11,723,285	\$ 4,072,817	\$ 290,063	\$ 2,006,471	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 6,549,352	\$ 5,173,933	\$ 24,418,537
2031	\$	50,000	\$ 4,072,817	\$ 93,962	\$ 290,063	\$ 6,324,912	\$ 83,063	\$ 10,914,817	\$ 4,072,817	\$ 290,063	\$ 2,193,168	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 6,736,048	\$ 4,178,769	\$ 28,597,306
2032	\$	50,000	\$ 4,072,817	\$ 109,622	\$ 290,063	\$ 7,767,243	\$ 96,907	\$ 12,386,652	\$ 4,072,817	\$ 290,063	\$ 2,379,864	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 6,922,745	\$ 5,463,907	\$ 34,061,213
2033	\$	50,000	\$ 4,072,817	\$ 125,282	\$ 290,063	\$ 7,662,801	\$ 110,750	\$ 12,311,714	\$ 4,072,817	\$ 290,063	\$ 2,566,561	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 7,109,441	\$ 5,202,273	\$ 39,263,486
2034	\$	50,000	\$ 4,072,817	\$ 140,943	\$ 290,063	\$ 7,624,280	\$ 124,594	\$ 12,302,697	\$ 4,072,817	\$ 290,063	\$ 2,753,257	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 7,296,137	\$ 5,006,560	\$ 44,270,046
2035	\$	50,000	\$ 4,072,817	\$ 156,603	\$ 290,063	\$ 8,467,355	\$ 138,438	\$ 13,175,276	\$ 4,072,817	\$ 290,063	\$ 2,939,953	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 7,482,434	\$ 5,692,442	\$ 49,962,488
2036	\$	50,000	\$ 4,072,817	\$ 172,263	\$ 290,063	\$ 8,220,827	\$ 152,282	\$ 12,958,252	\$ 4,072,817	\$ 290,063	\$ 3,126,650	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 7,669,530	\$ 5,288,722	\$ 55,251,210
2037	\$	50,000	\$ 4,072,817	\$ 187,924	\$ 290,063	\$ 7,871,013	\$ 166,126	\$ 12,637,947	\$ 4,072,817	\$ 290,063	\$ 3,313,346	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 7,856,227	\$ 4,781,716	\$ 60,032,926
2038	\$	50,000	\$ 4,072,817	\$ 203,584	\$ 290,063	\$ 7,805,963	\$ 179,969	\$ 12,602,393	\$ 4,072,817	\$ 290,063	\$ 3,500,043	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,042,923	\$ 4,559,474	\$ 64,592,400
2039	\$	50,000	\$ 4,072,817	\$ 219,244	\$ 290,063	\$ 7,800,505	\$ 193,813	\$ 12,626,443	\$ 4,072,817	\$ 290,063	\$ 3,686,739	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,229,619	\$ 4,396,824	\$ 68,989,224
2040	\$	50,000	\$ 4,072,817	\$ 234,905	\$ 290,063	\$ 7,761,401	\$ 207,657	\$ 12,616,843	\$ 4,072,817	\$ 290,063	\$ 3,873,436	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,416,316	\$ 4,200,527	\$ 73,189,751
2041	\$	50,000	\$ 4,072,817	\$ 250,565	\$ 290,063	\$ 7,735,277	\$ 221,501	\$ 12,620,223	\$ 4,072,817	\$ 290,063	\$ 4,060,132	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,603,012	\$ 4,017,211	\$ 77,206,962
2042	\$	50,000	\$ 4,072,817	\$ 266,225	\$ 290,063	\$ 7,735,277	\$ 235,345	\$ 12,649,727	\$ 4,072,817	\$ 290,063	\$ 4,246,828	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,789,709	\$ 3,860,018	\$ 81,066,980
2043	\$	50,000	\$ 4,072,817	\$ 281,885	\$ 290,063	\$ 7,735,277	\$ 249,188	\$ 12,679,231	\$ 4,072,817	\$ 290,063	\$ 4,433,525	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 8,976,405	\$ 3,702,826	\$ 84,769,806
2044	\$	50,000	\$ 4,072,817	\$ 297,546	\$ 290,063	\$ 7,735,277	\$ 263,032	\$ 12,708,735	\$ 4,072,817	\$ 290,063	\$ 4,620,221	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 9,163,101	\$ 3,545,634	\$ 88,315,440
2045	\$	50,000	\$ 4,072,817	\$ 313,206	\$ 290,063	\$ 7,417,836	\$ 276,876	\$ 12,420,798	\$ 4,072,817	\$ 290,063	\$ 4,806,918	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 9,349,798	\$ 3,071,000	\$ 91,386,440
2046	\$	50,000	\$ 4,072,817	\$ 328,866	\$ 290,063	\$ 7,395,021	\$ 290,720	\$ 12,427,487	\$ 4,072,817	\$ 290,063	\$ 4,993,614	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 9,536,494	\$ 2,890,993	\$ 94,277,433
2047	\$	50,000	\$ 4,072,817	\$ 344,527	\$ 290,063	\$ 7,395,021	\$ 304,564	\$ 12,456,991	\$ 4,072,817	\$ 290,063	\$ 5,180,310	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 9,723,191	\$ 2,733,800	\$ 97,011,233
2048	\$	50,000	\$ 4,072,817	\$ 360,187	\$ 290,063	\$ 7,395,021	\$ 318,407	\$ 12,486,495	\$ 4,072,817	\$ 290,063	\$ 5,367,007	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 9,909,887	\$ 2,576,608	\$ 99,587,841
2049	\$	50,000	\$ 4,072,817	\$ 375,847	\$ 290,063	\$ 7,193,570	\$ 332,251	\$ 12,314,549	\$ 4,072,817	\$ 290,063	\$ 5,553,703	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 10,096,583	\$ 2,217,966	\$ 101,805,807
2050	\$	50,000	\$ 4,072,817	\$ 391,508	\$ 290,063	\$ 7,193,570	\$ 346,095	\$ 12,344,053	\$ 4,072,817	\$ 290,063	\$ 5,740,400	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 10,283,280	\$ 2,060,773	\$ 103,866,580
2051	\$	50,000	\$ 4,072,817	\$ 407,168	\$ 290,063	\$ 7,193,570	\$ 359,939	\$ 12,373,557	\$ 4,072,817	\$ 290,063	\$ 5,927,096	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 10,469,976	\$ 1,903,581	\$ 105,770,161
2052	\$	50,000	\$ 4,072,817	\$ 422,828	\$ 290,063	\$ 7,193,570	\$ 373,783	\$ 12,403,061	\$ 4,072,817	\$ 290,063	\$ 6,113,792	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 10,656,673	\$ 1,746,388	\$ 107,516,549
2053	\$	50,000	\$ 4,072,817	\$ 438,488	\$ 290,063	\$ 7,193,570	\$ 387,626	\$ 12,432,565	\$ 4,072,817	\$ 290,063	\$ 6,300,489	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 10,843,369	\$ 1,589,196	\$ 109,105,745
2054	\$	50,000	\$ 4,072,817	\$ 454,149	\$ 290,063	\$ 7,193,570	\$ 401,470	\$ 12,462,069	\$ 4,072,817	\$ 290,063	\$ 6,487,185	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,030,065	\$ 1,432,004	\$ 110,537,749
2055	\$	50,000	\$ 4,072,817	\$ 469,809	\$ 290,063	\$ 7,193,586	\$ 415,314	\$ 12,491,589	\$ 4,072,817	\$ 290,063	\$ 6,673,882	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,216,762	\$ 1,274,827	\$ 111,812,576
2056	\$	50,000	\$ 4,072,817	\$ 485,469	\$ 290,063	\$ 7,189,710	\$ 429,158	\$ 12,517,218	\$ 4,072,817	\$ 290,063	\$ 6,860,578	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,403,458	\$ 1,113,760	\$ 112,926,336
2057	\$	50,000	\$ 4,072,817	\$ 501,130	\$ 290,063	\$ 7,180,697	\$ 443,002	\$ 12,537,708	\$ 4,072,817	\$ 290,063	\$ 7,047,274	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,590,155	\$ 947,553	\$ 113,873,889
2058	\$	50,000	\$ 4,072,817	\$ 516,790	\$ 290,063	\$ 7,180,697	\$ 456,845	\$ 12,567,213	\$ 4,072,817	\$ 290,063	\$ 7,233,971	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,776,851	\$ 790,362	\$ 114,664,251
2059	\$	50,000	\$ 4,072,817	\$ 532,450	\$ 290,063	\$ 7,180,697	\$ 470,689	\$ 12,596,717	\$ 4,072,817	\$ 290,063	\$ 7,420,667	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 11,963,548	\$ 633,169	\$ 115,297,420
2060	\$	50,000	\$ 4,072,817	\$ 548,111	\$ 290,063	\$ 7,180,697	\$ 484,533	\$ 12,626,221	\$ 4,072,817	\$ 290,063	\$ 7,607,364	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 12,150,244	\$ 475,977	\$ 115,773,397
2061	\$	50,000	\$ 4,072,817	\$ 563,771	\$ 290,063	\$ 7,176,297	\$ 498,377	\$ 12,651,325	\$ 4,072,817	\$ 290,063	\$ 7,794,060	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 12,336,940	\$ 314,385	\$ 116,087,782
2062	\$	50,000	\$ 4,072,817	\$ 579,431	\$ 290,063	\$ 7,176,297	\$ 512,221	\$ 12,680,829	\$ 4,072,817	\$ 290,063	\$ 7,980,756	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 12,523,637	\$ 157,192	\$ 116,244,974
2063	\$	50,000	\$ 4,072,817	\$ 595,091	\$ 290,063	\$ 7,176,297	\$ 526,064	\$ 12,710,333	\$ 4,072,817	\$ 290,063	\$ 8,167,453	\$ 186,696	\$ 180,000	\$ -	\$ -	\$ 12,710,333	\$ -	\$ 116,244,974
Total	\$	1,950,000	\$ 162,912,692	\$ 11,604,282	\$ 11,602,520	\$ 298,516,038	\$ 10,258,256	\$ 496,843,791	\$	\$	\$ 181,074,917	\$	\$ 7,200,000	\$ 4,589,004	\$ 13,219,685	\$ 380,598,817	\$ 116,244,974	

Annual Increase	\$	186,696
2024 Total Tax Levy	\$	10,943,523
Inc. as % of Tax Levy		1.71%



Table 4
Municipality of Trent Lakes
2024 Asset Management Plan
Maintain Current Funding Levels

Legend	1. Lifecycle Costs							2. Forecast of Revenues							3. Funding Gap Calculation			
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Operations & Maintenance (Expansion)	Gravel Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Expansion Activities (Annual Provision for Replacement)	Total Lifecycle Costs	O&M from Taxation	Gravel Maintenance from Budget	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding (\$)	Canada Community Building Fund (CCBF)	Other Grants	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2024	\$	-	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 11,958,138	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,355,360	\$ 2,355,360
2025	\$	50,000	\$ 4,072,817	\$ -	\$ 290,063	\$ 7,595,257	\$ -	\$ 12,008,138	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,405,360	\$ 4,760,720
2026	\$	50,000	\$ 4,072,817	\$ 15,660	\$ 290,063	\$ 7,590,454	\$ 13,844	\$ 12,032,838	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ 1,529,668	\$ 2,643,937	\$ 9,602,778	\$ 2,430,060	\$ 7,190,780
2027	\$	50,000	\$ 4,072,817	\$ 31,321	\$ 290,063	\$ 7,554,117	\$ 27,688	\$ 12,026,006	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ 2,643,937	\$ 8,073,110	\$ 3,952,896	\$ 11,143,676
2028	\$	50,000	\$ 4,072,817	\$ 46,981	\$ 290,063	\$ 7,822,116	\$ 41,531	\$ 12,323,509	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ 2,643,937	\$ 8,073,110	\$ 4,250,399	\$ 15,394,075
2029	\$	50,000	\$ 4,072,817	\$ 62,641	\$ 290,063	\$ 7,549,252	\$ 55,375	\$ 12,080,149	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,650,976	\$ 22,045,051
2030	\$	50,000	\$ 4,072,817	\$ 78,302	\$ 290,063	\$ 7,162,884	\$ 69,219	\$ 11,723,285	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,294,112	\$ 28,339,163
2031	\$	50,000	\$ 4,072,817	\$ 93,962	\$ 290,063	\$ 6,324,912	\$ 83,063	\$ 10,914,817	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 5,485,644	\$ 33,824,807
2032	\$	50,000	\$ 4,072,817	\$ 109,622	\$ 290,063	\$ 7,767,243	\$ 96,907	\$ 12,386,652	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,957,479	\$ 40,782,286
2033	\$	50,000	\$ 4,072,817	\$ 125,282	\$ 290,063	\$ 7,662,801	\$ 110,750	\$ 12,311,714	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,882,541	\$ 47,664,827
2034	\$	50,000	\$ 4,072,817	\$ 140,943	\$ 290,063	\$ 7,624,280	\$ 124,594	\$ 12,302,697	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,873,524	\$ 54,538,351
2035	\$	50,000	\$ 4,072,817	\$ 156,603	\$ 290,063	\$ 8,467,355	\$ 138,438	\$ 13,175,276	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,746,103	\$ 62,294,454
2036	\$	50,000	\$ 4,072,817	\$ 172,263	\$ 290,063	\$ 8,220,827	\$ 152,282	\$ 12,958,252	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,529,079	\$ 69,813,533
2037	\$	50,000	\$ 4,072,817	\$ 187,924	\$ 290,063	\$ 7,871,013	\$ 166,126	\$ 12,637,947	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,208,770	\$ 77,022,303
2038	\$	50,000	\$ 4,072,817	\$ 203,584	\$ 290,063	\$ 7,805,963	\$ 179,969	\$ 12,602,393	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,173,224	\$ 84,195,527
2039	\$	50,000	\$ 4,072,817	\$ 219,244	\$ 290,063	\$ 7,800,505	\$ 193,813	\$ 12,626,443	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,197,270	\$ 91,392,797
2040	\$	50,000	\$ 4,072,817	\$ 234,905	\$ 290,063	\$ 7,761,401	\$ 207,657	\$ 12,616,843	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,187,670	\$ 98,580,467
2041	\$	50,000	\$ 4,072,817	\$ 250,565	\$ 290,063	\$ 7,735,277	\$ 221,501	\$ 12,620,223	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,191,050	\$ 105,771,517
2042	\$	50,000	\$ 4,072,817	\$ 266,225	\$ 290,063	\$ 7,735,277	\$ 235,345	\$ 12,649,727	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,220,554	\$ 112,992,071
2043	\$	50,000	\$ 4,072,817	\$ 281,885	\$ 290,063	\$ 7,735,277	\$ 249,188	\$ 12,679,231	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,250,558	\$ 120,242,129
2044	\$	50,000	\$ 4,072,817	\$ 297,546	\$ 290,063	\$ 7,735,277	\$ 263,032	\$ 12,708,735	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,279,562	\$ 127,512,691
2045	\$	50,000	\$ 4,072,817	\$ 313,206	\$ 290,063	\$ 7,417,836	\$ 276,876	\$ 12,420,798	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,991,625	\$ 134,513,316
2046	\$	50,000	\$ 4,072,817	\$ 328,866	\$ 290,063	\$ 7,395,021	\$ 290,720	\$ 12,427,487	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,998,314	\$ 141,511,630
2047	\$	50,000	\$ 4,072,817	\$ 344,527	\$ 290,063	\$ 7,395,021	\$ 304,564	\$ 12,456,991	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,027,818	\$ 148,539,448
2048	\$	50,000	\$ 4,072,817	\$ 360,187	\$ 290,063	\$ 7,395,021	\$ 318,407	\$ 12,486,495	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,057,322	\$ 155,596,770
2049	\$	50,000	\$ 4,072,817	\$ 375,847	\$ 290,063	\$ 7,193,570	\$ 332,251	\$ 12,314,549	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,885,376	\$ 162,482,146
2050	\$	50,000	\$ 4,072,817	\$ 391,508	\$ 290,063	\$ 7,193,570	\$ 346,095	\$ 12,344,053	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,914,880	\$ 169,397,026
2051	\$	50,000	\$ 4,072,817	\$ 407,168	\$ 290,063	\$ 7,193,570	\$ 359,939	\$ 12,373,557	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,944,384	\$ 176,341,410
2052	\$	50,000	\$ 4,072,817	\$ 422,828	\$ 290,063	\$ 7,193,570	\$ 373,783	\$ 12,403,061	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 6,973,888	\$ 183,315,298
2053	\$	50,000	\$ 4,072,817	\$ 438,488	\$ 290,063	\$ 7,193,570	\$ 387,626	\$ 12,432,565	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,003,392	\$ 190,318,690
2054	\$	50,000	\$ 4,072,817	\$ 454,149	\$ 290,063	\$ 7,193,570	\$ 401,470	\$ 12,462,069	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,032,896	\$ 197,351,586
2055	\$	50,000	\$ 4,072,817	\$ 469,809	\$ 290,063	\$ 7,193,586	\$ 415,314	\$ 12,491,589	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,062,416	\$ 204,414,002
2056	\$	50,000	\$ 4,072,817	\$ 485,469	\$ 290,063	\$ 7,189,710	\$ 429,158	\$ 12,517,218	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,088,045	\$ 211,502,047
2057	\$	50,000	\$ 4,072,817	\$ 501,130	\$ 290,063	\$ 7,180,697	\$ 443,002	\$ 12,537,708	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,108,535	\$ 218,610,582
2058	\$	50,000	\$ 4,072,817	\$ 516,790	\$ 290,063	\$ 7,180,697	\$ 456,845	\$ 12,567,213	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,138,040	\$ 225,748,622
2059	\$	50,000	\$ 4,072,817	\$ 532,450	\$ 290,063	\$ 7,180,697	\$ 470,689	\$ 12,596,717	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,167,544	\$ 232,916,166
2060	\$	50,000	\$ 4,072,817	\$ 548,111	\$ 290,063	\$ 7,180,697	\$ 484,533	\$ 12,626,221	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,197,048	\$ 240,113,214
2061	\$	50,000	\$ 4,072,817	\$ 563,771	\$ 290,063	\$ 7,176,297	\$ 498,377	\$ 12,651,325	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,222,152	\$ 247,335,366
2062	\$	50,000	\$ 4,072,817	\$ 579,431	\$ 290,063	\$ 7,176,297	\$ 512,221	\$ 12,680,829	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,251,656	\$ 254,587,022
2063	\$	50,000	\$ 4,072,817	\$ 595,091	\$ 290,063	\$ 7,176,297	\$ 526,064	\$ 12,710,333	\$ 4,072,817	\$ 290,063	\$ 886,293	\$ -	\$ 180,000	\$ -	\$ -	\$ 5,429,173	\$ 7,281,160	\$ 261,868,182
Total	\$	1,950,000	\$ 162,912,692	\$ 11,604,282	\$ 11,602,520	\$ 298,516,038	\$ 10,258,256	\$ 496,843,791			\$ 35,451,720		\$ 7,200,000	\$ 4,589,004	\$ 13,219,685	\$ 234,975,609	\$ 261,868,182	

Annual Increase	\$	-
2024 Total Tax Levy	\$	10,943,523
Inc. as % of Tax Levy		0.00%



Table 5
Municipality of Trent Lakes
2024 Asset Management Plan
Close Cumulative Infrastructure Deficit by 2063

Legend	1. Lifecycle Costs				2. Forecast of Revenues					3. Funding Gap Calculation	
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Total Lifecycle Costs	O&M from Rates	Capital from Rates (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Existing Reserves	Total Funding	Annual Funding Gap
2024		\$ 432,098	\$ 431,985	\$ 864,083	\$ 432,098	\$ 15,412		\$ 219,031	\$ 666,541	\$ 197,542	\$ 197,542
2025	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 31,680	\$ 16,269		\$ 463,778	\$ 405,305	\$ 602,847
2026	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 47,949	\$ 16,269		\$ 480,047	\$ 389,036	\$ 991,883
2027	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 64,218	\$ 16,269		\$ 496,316	\$ 372,767	\$ 1,364,650
2028	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 80,486	\$ 16,269		\$ 512,584	\$ 356,499	\$ 1,721,149
2029	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 96,755	\$ 16,269		\$ 528,853	\$ 340,230	\$ 2,061,379
2030	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 113,024	\$ 16,269		\$ 545,122	\$ 323,961	\$ 2,385,340
2031	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 129,292	\$ 16,269		\$ 561,390	\$ 307,693	\$ 2,693,033
2032	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 145,561	\$ 16,269		\$ 577,659	\$ 291,424	\$ 2,984,457
2033	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 161,830	\$ 16,269		\$ 593,927	\$ 275,156	\$ 3,259,613
2034	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 178,098	\$ 16,269		\$ 610,196	\$ 258,887	\$ 3,518,500
2035	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 194,367	\$ 16,269		\$ 626,465	\$ 242,618	\$ 3,761,118
2036	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 210,635	\$ 16,269		\$ 642,733	\$ 226,350	\$ 3,987,468
2037	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 226,904	\$ 16,269		\$ 659,002	\$ 210,081	\$ 4,197,549
2038	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 243,173	\$ 16,269		\$ 675,271	\$ 193,812	\$ 4,391,361
2039	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 259,441	\$ 16,269		\$ 691,539	\$ 177,544	\$ 4,568,905
2040	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 275,710	\$ 16,269		\$ 707,808	\$ 161,275	\$ 4,730,180
2041	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 291,979	\$ 16,269		\$ 724,077	\$ 145,006	\$ 4,875,186
2042	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 308,247	\$ 16,269		\$ 740,345	\$ 128,738	\$ 5,003,924
2043	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 324,516	\$ 16,269		\$ 756,614	\$ 16,011	\$ 5,019,935
2044	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 340,785	\$ 16,269		\$ 772,882	\$ (257)	\$ 5,019,678
2045	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 357,053	\$ 16,269		\$ 789,151	\$ (16,526)	\$ 5,003,152
2046	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 373,322	\$ 16,269		\$ 805,420	\$ (120,195)	\$ 4,882,957
2047	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 389,590	\$ 16,269		\$ 821,688	\$ (136,463)	\$ 4,746,494
2048	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 405,859	\$ 16,269		\$ 837,957	\$ (152,732)	\$ 4,593,762
2049	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 422,128	\$ 16,269		\$ 854,226	\$ (169,001)	\$ 4,424,761
2050	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 438,396	\$ 16,269		\$ 870,494	\$ (185,269)	\$ 4,239,492
2051	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 454,665	\$ 16,269		\$ 886,763	\$ (201,538)	\$ 4,037,954
2052	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 470,934	\$ 16,269		\$ 903,032	\$ (237,324)	\$ 3,800,630
2053	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 487,202	\$ 16,269		\$ 919,300	\$ (253,592)	\$ 3,547,038
2054	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 503,471	\$ 16,269		\$ 935,569	\$ (269,861)	\$ 3,277,177
2055	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 519,740	\$ 16,269		\$ 951,838	\$ (286,130)	\$ 2,991,047
2056	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 536,008	\$ 16,269		\$ 968,106	\$ (302,398)	\$ 2,688,649
2057	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 552,277	\$ 16,269		\$ 984,375	\$ (318,667)	\$ 2,369,982
2058	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 568,546	\$ 16,269		\$ 1,000,643	\$ (334,935)	\$ 2,035,047
2059	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 584,814	\$ 16,269		\$ 1,016,912	\$ (351,204)	\$ 1,683,843
2060	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 601,083	\$ 16,269		\$ 1,033,181	\$ (367,473)	\$ 1,316,370
2061	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 617,351	\$ 16,269		\$ 1,049,449	\$ (422,521)	\$ 893,849
2062	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 633,620	\$ 16,269		\$ 1,065,718	\$ (438,790)	\$ 455,059
2063	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 649,889	\$ 16,269		\$ 1,081,987	\$ (455,059)	\$ -
Total	\$ 195,000	\$ 17,283,916	\$ 13,330,045	\$ 30,808,958		\$ 13,306,010		\$ 219,031	\$ 30,808,958	\$ -	

Annual Increase	\$ 16,269
2024 Est Rate Req	\$ 447,510
Inc. as % of Rate Req	3.64%



Table 6
Municipality of Trent Lakes
2024 Asset Management Plan
Financing Strategy 1: Close In-Year Funding Gap by 2053

Legend	1. Lifecycle Costs				2. Forecast of Revenues					3. Funding Gap Calculation	
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Total Lifecycle Costs	O&M from Rates	Capital from Rates (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Existing Reserves	Total Funding	Annual Funding Gap
2024	\$ -	\$ 432,098	\$ 431,985	\$ 864,083	\$ 432,098	\$ 15,412		\$ 219,031	\$ 666,541	\$ 197,542	\$ 197,542
2025	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 22,936	\$ 7,524	\$ -	\$ 455,034	\$ 414,049	\$ 611,591
2026	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 30,460	\$ 7,524	\$ -	\$ 462,558	\$ 406,525	\$ 1,018,116
2027	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 37,984	\$ 7,524	\$ -	\$ 470,082	\$ 399,001	\$ 1,417,117
2028	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 45,508	\$ 7,524	\$ -	\$ 477,606	\$ 391,477	\$ 1,808,594
2029	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 53,032	\$ 7,524	\$ -	\$ 485,130	\$ 383,953	\$ 2,192,547
2030	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 60,556	\$ 7,524	\$ -	\$ 492,654	\$ 376,429	\$ 2,568,976
2031	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 68,080	\$ 7,524	\$ -	\$ 500,178	\$ 368,905	\$ 2,937,881
2032	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 75,604	\$ 7,524	\$ -	\$ 507,702	\$ 361,381	\$ 3,299,262
2033	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 83,128	\$ 7,524	\$ -	\$ 515,226	\$ 353,857	\$ 3,653,119
2034	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 90,652	\$ 7,524	\$ -	\$ 522,750	\$ 346,333	\$ 3,999,452
2035	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 98,176	\$ 7,524	\$ -	\$ 530,274	\$ 338,808	\$ 4,338,260
2036	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 105,700	\$ 7,524	\$ -	\$ 537,798	\$ 331,284	\$ 4,669,544
2037	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 113,224	\$ 7,524	\$ -	\$ 545,322	\$ 323,760	\$ 4,993,304
2038	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 120,748	\$ 7,524	\$ -	\$ 552,846	\$ 316,236	\$ 5,309,540
2039	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 128,272	\$ 7,524	\$ -	\$ 560,370	\$ 308,712	\$ 5,618,252
2040	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 135,796	\$ 7,524	\$ -	\$ 567,894	\$ 301,188	\$ 5,919,440
2041	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 143,320	\$ 7,524	\$ -	\$ 575,418	\$ 293,664	\$ 6,213,104
2042	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 150,844	\$ 7,524	\$ -	\$ 582,942	\$ 286,140	\$ 6,499,244
2043	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 158,368	\$ 7,524	\$ -	\$ 590,466	\$ 182,158	\$ 6,681,402
2044	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 165,892	\$ 7,524	\$ -	\$ 597,990	\$ 174,634	\$ 6,856,036
2045	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 173,416	\$ 7,524	\$ -	\$ 605,514	\$ 167,110	\$ 7,023,146
2046	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 180,940	\$ 7,524	\$ -	\$ 613,038	\$ 72,186	\$ 7,095,332
2047	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 188,464	\$ 7,524	\$ -	\$ 620,562	\$ 64,662	\$ 7,159,994
2048	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 195,988	\$ 7,524	\$ -	\$ 628,086	\$ 57,137	\$ 7,217,131
2049	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 203,512	\$ 7,524	\$ -	\$ 635,610	\$ 49,613	\$ 7,266,744
2050	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 211,036	\$ 7,524	\$ -	\$ 643,134	\$ 42,089	\$ 7,308,833
2051	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 218,560	\$ 7,524	\$ -	\$ 650,658	\$ 34,565	\$ 7,343,398
2052	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 226,084	\$ 7,524	\$ -	\$ 658,182	\$ 7,524	\$ 7,350,922
2053	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 233,608	\$ 7,524	\$ -	\$ 665,706	\$ -	\$ 7,350,922
2054	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 241,132	\$ 7,524	\$ -	\$ 673,230	\$ (7,524)	\$ 7,343,398
2055	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 248,656	\$ 7,524	\$ -	\$ 680,754	\$ (15,048)	\$ 7,328,350
2056	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 256,180	\$ 7,524	\$ -	\$ 688,278	\$ (22,572)	\$ 7,305,778
2057	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 263,704	\$ 7,524	\$ -	\$ 695,802	\$ (30,096)	\$ 7,275,682
2058	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 271,228	\$ 7,524	\$ -	\$ 703,326	\$ (37,620)	\$ 7,238,062
2059	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 278,752	\$ 7,524	\$ -	\$ 710,850	\$ (45,144)	\$ 7,192,918
2060	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 286,276	\$ 7,524	\$ -	\$ 718,374	\$ (52,668)	\$ 7,140,250
2061	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 293,800	\$ 7,524	\$ -	\$ 725,898	\$ (98,973)	\$ 7,041,277
2062	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 301,324	\$ 7,524	\$ -	\$ 733,422	\$ (106,497)	\$ 6,934,780
2063	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 308,848	\$ 7,524	\$ -	\$ 740,946	\$ (114,021)	\$ 6,820,759
Total	\$ 195,000	\$ 17,283,916	\$ 13,330,045	\$ 30,808,958	\$ -	\$ 6,485,252	\$ -	\$ 219,031	\$ 23,988,199	\$ 6,820,759	\$ -

Annual Increase	\$ 7,524
2024 Est Rate Req	\$ 447,510
Inc. as % of Rate Req	1.68%



Table 7
Municipality of Trent Lakes
2024 Asset Management Plan
Financing Strategy 2: Close In-Year Funding Gap by 2063

Legend	1. Lifecycle Costs				2. Forecast of Revenues					3. Funding Gap Calculation	
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Total Lifecycle Costs	O&M from Rates	Capital from Rates (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Existing Reserves	Total Funding	Annual Funding Gap
2024	\$ -	\$ 432,098	\$ 431,985	\$ 864,083	\$ 432,098	\$ 15,412		\$ 219,031	\$ 666,541	\$ 197,542	\$ 197,542
2025	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 20,012	\$ 4,600	\$ -	\$ 452,110	\$ 416,973	\$ 614,515
2026	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 24,613	\$ 4,600	\$ -	\$ 456,711	\$ 412,372	\$ 1,026,887
2027	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 29,213	\$ 4,600	\$ -	\$ 461,311	\$ 407,772	\$ 1,434,659
2028	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 33,814	\$ 4,600	\$ -	\$ 465,912	\$ 403,171	\$ 1,837,830
2029	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 38,414	\$ 4,600	\$ -	\$ 470,512	\$ 398,571	\$ 2,236,401
2030	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 43,015	\$ 4,600	\$ -	\$ 475,113	\$ 393,970	\$ 2,630,371
2031	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 47,615	\$ 4,600	\$ -	\$ 479,713	\$ 389,370	\$ 3,019,741
2032	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 52,216	\$ 4,600	\$ -	\$ 484,314	\$ 384,769	\$ 3,404,510
2033	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 56,816	\$ 4,600	\$ -	\$ 488,914	\$ 380,169	\$ 3,784,679
2034	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 61,417	\$ 4,600	\$ -	\$ 493,514	\$ 375,569	\$ 4,160,248
2035	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 66,017	\$ 4,600	\$ -	\$ 498,115	\$ 370,968	\$ 4,531,216
2036	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 70,618	\$ 4,600	\$ -	\$ 502,715	\$ 366,368	\$ 4,897,584
2037	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 75,218	\$ 4,600	\$ -	\$ 507,316	\$ 361,767	\$ 5,259,351
2038	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 79,818	\$ 4,600	\$ -	\$ 511,916	\$ 357,167	\$ 5,616,518
2039	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 84,419	\$ 4,600	\$ -	\$ 516,517	\$ 352,566	\$ 5,969,084
2040	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 89,019	\$ 4,600	\$ -	\$ 521,117	\$ 347,966	\$ 6,317,050
2041	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 93,620	\$ 4,600	\$ -	\$ 525,718	\$ 343,365	\$ 6,660,415
2042	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 98,220	\$ 4,600	\$ -	\$ 530,318	\$ 338,765	\$ 6,999,180
2043	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 102,821	\$ 4,600	\$ -	\$ 534,919	\$ 237,706	\$ 7,236,886
2044	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 107,421	\$ 4,600	\$ -	\$ 539,519	\$ 233,106	\$ 7,469,992
2045	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 112,022	\$ 4,600	\$ -	\$ 544,120	\$ 228,505	\$ 7,698,497
2046	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 116,622	\$ 4,600	\$ -	\$ 548,720	\$ 136,505	\$ 7,835,002
2047	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 121,223	\$ 4,600	\$ -	\$ 553,321	\$ 131,904	\$ 7,966,906
2048	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 125,823	\$ 4,600	\$ -	\$ 557,921	\$ 127,304	\$ 8,094,210
2049	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 130,424	\$ 4,600	\$ -	\$ 562,522	\$ 122,703	\$ 8,216,913
2050	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 135,024	\$ 4,600	\$ -	\$ 567,122	\$ 118,103	\$ 8,335,016
2051	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 139,625	\$ 4,600	\$ -	\$ 571,723	\$ 113,502	\$ 8,448,518
2052	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 144,225	\$ 4,600	\$ -	\$ 576,323	\$ 89,385	\$ 8,537,903
2053	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 148,826	\$ 4,600	\$ -	\$ 580,923	\$ 84,785	\$ 8,622,688
2054	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 153,426	\$ 4,600	\$ -	\$ 585,524	\$ 80,184	\$ 8,702,872
2055	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 158,027	\$ 4,600	\$ -	\$ 590,124	\$ 75,584	\$ 8,778,456
2056	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 162,627	\$ 4,600	\$ -	\$ 594,725	\$ 70,983	\$ 8,849,439
2057	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 167,227	\$ 4,600	\$ -	\$ 599,325	\$ 66,383	\$ 8,915,822
2058	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 171,828	\$ 4,600	\$ -	\$ 603,926	\$ 61,782	\$ 8,977,604
2059	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 176,428	\$ 4,600	\$ -	\$ 608,526	\$ 57,182	\$ 9,034,786
2060	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 181,029	\$ 4,600	\$ -	\$ 613,127	\$ 52,581	\$ 9,087,367
2061	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 185,629	\$ 4,600	\$ -	\$ 617,727	\$ 9,201	\$ 9,096,568
2062	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 190,230	\$ 4,600	\$ -	\$ 622,328	\$ 4,600	\$ 9,101,168
2063	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 194,830	\$ 4,600	\$ -	\$ 626,928	\$ -	\$ 9,101,168
Total	\$ 195,000	\$ 17,283,916	\$ 13,330,045	\$ 30,808,958		\$ 4,204,843		\$ 219,031	\$ 21,707,790	\$ 9,101,168	

Annual Increase	\$ 4,600
2024 Est Rate Req	\$ 447,510
Inc. as % of Rate Req	1.03%



Table 8
Municipality of Trent Lakes
2024 Asset Management Plan
Maintain Current Funding Levels

Legend	1. Lifecycle Costs				2. Forecast of Revenues					3. Funding Gap Calculation	
	Year	Non-Infrastructure Solutions	Operations & Maintenance (Existing Level)	Capital Renewal/ Replacement and Disposal	Total Lifecycle Costs	O&M from Rates	Capital from Rates (Including Transfers to Reserves)	Yearly Increase in Rate Funding (\$)	Existing Reserves	Total Funding	Annual Funding Gap
2024	\$ -	\$ 432,098	\$ 431,985	\$ 864,083	\$ 432,098	\$ 15,412		\$ 219,031	\$ 666,541	\$ 197,542	\$ 197,542
2025	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412		\$ -	\$ 447,510	\$ 421,573	\$ 619,115
2026	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 1,040,688
2027	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 1,462,261
2028	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 1,883,834
2029	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 2,305,407
2030	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 2,726,980
2031	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 3,148,553
2032	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 3,570,126
2033	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 3,991,699
2034	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 4,413,272
2035	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 4,834,845
2036	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 5,256,418
2037	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 5,677,991
2038	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 6,099,564
2039	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 6,521,137
2040	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 6,942,710
2041	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 7,364,283
2042	\$ 5,000	\$ 432,098	\$ 431,985	\$ 869,083	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 421,573	\$ 7,785,856
2043	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 325,115	\$ 8,110,971
2044	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 325,115	\$ 8,436,086
2045	\$ 5,000	\$ 432,098	\$ 335,527	\$ 772,625	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 325,115	\$ 8,761,201
2046	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 8,998,916
2047	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 9,236,631
2048	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 9,474,346
2049	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 9,712,061
2050	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 9,949,776
2051	\$ 5,000	\$ 432,098	\$ 248,127	\$ 685,225	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 237,715	\$ 10,187,491
2052	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 10,405,689
2053	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 10,623,887
2054	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 10,842,085
2055	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 11,060,283
2056	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 11,278,481
2057	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 11,496,679
2058	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 11,714,877
2059	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 11,933,075
2060	\$ 5,000	\$ 432,098	\$ 228,611	\$ 665,708	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 218,198	\$ 12,151,273
2061	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 179,418	\$ 12,330,691
2062	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 179,418	\$ 12,510,109
2063	\$ 5,000	\$ 432,098	\$ 189,830	\$ 626,928	\$ 432,098	\$ 15,412	\$ -	\$ -	\$ 447,510	\$ 179,418	\$ 12,689,527
Total	\$ 195,000	\$ 17,283,916	\$ 13,330,045	\$ 30,808,958		\$ 616,472		\$ 219,031	\$ 18,119,431	\$ 12,689,527	

Annual Increase	\$ -
2024 Est Rate Req	\$ 447,510
Inc. as % of Rate Req	0.00%

