

Municipality of Central Huron Asset Management Plan

April 7, 2026



Precursor

In 2012, the Province of Ontario published “Building Together: Guide for Municipal Asset Management Plans” (AMP) to encourage and support municipalities in Ontario to develop AMP(s) in a consistent manner.

In 2015, Ontario passed the Infrastructure for Jobs and Prosperity Act, which affirmed the role that municipal infrastructure systems play in supporting the vitality of local economics. After a year-long industry review, the Province created Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure under the Infrastructure for Jobs and Prosperity Act. O. Reg. 588/17 further expands on the Building Together guide, mandating specific requirements for municipal Asset Management Policies and Asset Management Plans, phased in over a five-year period. O. Reg. 588/17 has a phased approach in the development of Strategic Asset Management Policy and Municipal Asset Management Plan.

Introduction

This Asset Management Plan (AMP) is the second iteration produced through the Municipality of Central Huron AMP Program. It builds upon the first AMP published in 2015, following the same overall approach while now also complying with new Provincial regulatory landscape.

This Asset Management Plan (AMP) has been built based on the strategic goals, objectives and direction contained within the Municipality of Central Huron's Asset Management Policy.

The Asset Management Planning process will be reviewed on an annual basis in conjunction with the municipal capital budget and long-term capital planning process; starting the year after the Municipality's AMP is fully complete in accordance with O. Reg. 588/17 July 1, 2025 deadline.

The AMP and Strategic Asset Management Policy can be viewed on the municipal website (www.centralhuron.com) or in person at the municipal office at 23 Albert Street, Clinton.

Key Deadlines

- July 1, 2019: The municipality was required to have a Council-approved Strategic Asset Management Policy in place. This policy acts as the guiding document for all our asset management activities and must be reviewed and updated at least every five years. – **Completed (Needs updating and review)**
- July 1, 2022: An asset management plan was required for all core infrastructure assets. These are defined as roads, bridges, culverts, and water, wastewater, and stormwater management systems. This plan focused on detailing our current levels of service and the costs associated with maintaining those levels. - **Completed**
- July 1, 2024: The asset management plan needed to be expanded to include all other municipal infrastructure assets (e.g., buildings, fleet, parks, and potentially natural assets). Similar to core assets, this plan detailed current levels of service and associated costs. – **Completed**
- July 1, 2025: For all assets, the plan must now be more comprehensive, outlining proposed levels of service for the next 10 years, the required lifecycle management activities to achieve those levels, and a financial strategy to fund these activities. – **In Progress (This Report. Detailed financial plan to follow.)**

Benefits of an Asset Management Plan

A properly prepared and effective Asset Management Plan provides numerous benefits for a municipality:

- It will allow for better decision making on asset replacement priorities;
- It will improve capital budget and long-term forecast preparation;
- It will ensure that critical assets are replaced at the appropriate time;
- It will ensure better management of risk to the municipality;
- It will reduce lifecycle costs of assets;
- It will improve financial planning;

- It will ensure continued eligibility for infrastructure grant opportunities; and
- It will assist in maintaining sustainable Levels of Service for the general public.

Components of an Asset Management Plan

In order for a plan to be considered a complete asset management program, it should include all of the following components:

1. State of Local Infrastructure
2. Current and Proposed Levels of Service
3. Current Performance Levels
4. Asset Lifecycle Management Strategy
5. Risk Management Strategies
6. Growth and Demand
7. Financing Strategies
8. Scope and Methodology
9. Overview
10. Analysis of Assets

Each of these components will be examined in more detail below.

1. State of Local Infrastructure

For each Asset Category, the State of the Local Infrastructure section includes the following information:

1. A summary of the assets in that category including quantities.
2. An estimated replacement value of the assets.
3. A summary of the average age and an age distribution as a proportion of estimated
 1. useful life of the asset.
4. Information available on the condition of the assets in the category.
5. A description of the data sources used to populate the State of Local Infrastructure
 2. information, including any relevant condition assessment policies/practices

2. Levels of Service

A level of service (LOS) is a measure of what the municipality is providing to the community and the nature and quality of that service. Within each asset class in this AMP, technical metrics and qualitative descriptions that measure both technical and community levels of service have been established and measured as data is available. These measures include a combination of those that have been outlined in O. Reg. 588/17 in addition to performance measures identified by the municipality as worth measuring and evaluating. The municipality measures the level of service provided at two levels:

Community Levels of Service, and Technical Levels of Service.

	Community Levels of Service	Technical Levels of Service
Description	Community levels of service provide a simple, plain language description or measure of how the community receives or experiences the services that the municipality provides.	Technical levels of service provide a quantitative measure of key technical attributes of the service being provided to the community. These include mostly quantitative measures.
Core Assets	For core asset categories (Roads, Bridges & Culvert and Stormwater) the Province, through O. Reg. 588/17, has provided qualitative descriptions that are required to be included in this AMP.	For core asset categories (Roads, Bridges & Culverts, and Stormwater) the Province, through O. Reg. 588/17, has provided technical metrics that are required to be included in this AMP.
Non-core Assets	For non-core asset categories, the Municipality has developed the qualitative descriptions. These were used to determine the community level of service.	For non-core asset categories, the Municipality has developed the technical metrics that were used to determine the technical level of service.

The current and proposed Levels of Service are outlined in the analysis of each asset class in section 10 to this report.

3. Current Levels of Performance

Currently, the Municipality of Central Huron measures the performance of their core assets based on meeting the standards established by legislative and regulatory requirements. These requirements prevent levels of service from declining below a certain standard. (i.e. Minimum Maintenance Standards for municipal highways).

Developing realistic LOS using meaningful key performance indicators (KPIs) can be instrumental in managing citizens expectations, identifying areas requiring higher investments, driving organizational performance and securing the highest value for money from public assets. The key objective is to develop and track only those KPIs that are relevant and insightful and reflect the priorities of the municipality. The development of well-defined KPIs for core and non-core assets will be defined in future updates of the AMP.

4. Asset Lifecycle Management Strategy

The asset lifecycle management strategy is the set of planned actions that will enable the assets to provide the desired level of service in a sustainable way, while managing risk, at the lowest lifecycle cost. This AMP considers lifecycle activities over the next 10 years to maintain the current levels of service.

These planned actions and/or activities are the range of actions funded through significant operating and capital budget on each of the asset categories. Asset lifecycle activities are generally grouped into the categories as show in Table 2.

Lifecycle Activity	Description	Examples
Non-Infrastructure	Actions or policies that can lower costs or extend asset life	Better integrated infrastructure planning and land use planning, demand management, process optimization, managed failures
Maintenance	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.	Fixing potholes
Rehabilitation	Significant treatments designed to extend the life of the asset.	Road resurfacing
Replacement	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	Vehicles replacement, road reconstruction
Disposal	Activities associated with disposing of an asset once it has reached the end of its useful life, or is otherwise no longer needed by the municipality	Sale of equipment
Growth/Service Improvement	Planned activities required to extend or expand municipal services to accommodate the demands of growth.	New recreation centre to service new subdivision

5. Risk Management Strategies

While the timing of asset replacement is generally closely related to an asset's condition assessment, a number of other factors such as financial costs, frequency of use, and criticality to the operations, should be considered when determining when an asset needs to be replaced.

It is also 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 3 below provides a summary of the identified risks, potential impacts and mitigating actions associated with the asset management program.

Corporate Risks 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 • Non-infrastructure solutions.
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 • 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	<ul style="list-style-type: none"> • Reduced asset life • Inefficient investments • Prioritization process failure • Failure to deliver service 	<ul style="list-style-type: none"> • Monitor and review • Create asset management network • Implement processes

Risk factors for each asset category will be determined and assigned to either “probability” or “consequence” and then weighted in relation to their importance. Using an algorithm that considers these elements, a risk rating can be calculated for each asset. This risk rating should be then be utilized as a guide to prioritize assets that require attention first and which capital works can be deferred.

Risk Rating = Probability of Failure x Consequence of Failure

The risk rating calculation can be visually modelled as a risk matrix as shown below to display where all assets fall in terms of their criticality. The risk matrix is broken into five major risk ratings:

- An overall risk rating of 1-5 for an asset indicates Very Low Risk (Green)
- An overall risk rating of 5-10 for an asset indicates Low Risk (Blue)
- An overall risk rating of 10-15 for an asset indicates Moderate Risk (Yellow)
- An overall risk rating of 15-20 for an asset indicates High Risk (Orange)
- An overall risk rating of 20-25 for an asset indicates Very High Risk (Red)



The risk rating criteria or metrics that the Municipality will be utilizing are identified and weighted in the tables on the following page and are subject to change and refinement if new data points are collected against the infrastructure assets.

Probability of Failure

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Probability of Failure
Roads	Surface Condition	40%	>=9	1
			8	2
			7	3
			6	4
			<6	5
	Drainage Rating	40%	Good	1
			Fair	3
			Poor	5
	Structure Condition	20%	>=8.5	1
			7.5 – 8	2
			6.5 – 7	3
			5.5. – 6	4
			<5.5	5
	Condition ¹	100%	0-20	5
			>20-40	4

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Probability of Failure
Bridges and Culverts			>40-60	3
			>60-80	2
			>80-100	1
Water and Sewer	Condition ¹	100%	0-20	5
			>20-40	4
			>40-60	3
			>60-80	2
			>80-100	1
Storm Drainage	Condition ¹	100%	0-20	5
			>20-40	4
			>40-60	3
			>60-80	2
			>80-100	1
Fleet and Equipment	Condition ¹	100%	0-20	5
			>20-40	4
			>40-60	3
			>60-80	2
			>80-100	1

¹ Where assessed condition is not available, age-based condition will be used.

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Probability of Failure
Facilities	Overall Condition Rating ¹ (Not FCI)	100%	Overall condition rating, subject to opinion. Age, etc. affect this score e.g. Aging shingle roof w signs of deterioration (5) vs. New shingle roof or aging steel roof, w little deterioration (1-2)	1-2
				2-3
				4-6
				7-8
				9-10

² Where assessed condition is not available, age-based condition will be used.

Consequence of Failure:

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Consequence of Failure
Roads – Paved and Gravel	Average Annual Daily Traffic	100%	0-49	1
			50-199	2
			200-499	3
			500-999	4
			>1000	5
Roads – Sidewalks	Replacement Cost	100%	\$0-\$10,000	1
			>\$10,000-\$20,000	2
			>\$20,000-\$30,000	3
			>\$30,000-\$40,000	4
			>\$40,000	5
Roads – Streetlights	Replacement Cost	100%	\$0-\$5,000	1
			>\$5,000-\$10,000	2
			>\$10,000-\$15,000	3
			>\$15,000-\$20,000	4
			>\$20,000	5
Bridges and Culverts	Average Annual Daily Traffic	100%	0-49	1
			50-199	2
			200-499	3
			500-999	4
			>1000	5
Storm Drains	Size of Storm Drainage	100%	0-300mm	1
			>301-600mm	2
			>601-800mm	3
			>801-1000	4
			>=1000mm	5
Utilities – Water - Watermain	Diameter of Pipe	100%	0-100mm	1
			>100 - 150mm	2
			>150 - 200mm	3
			>200 - 250mm	4
			>250mm	5
Utilities – Water – Water Treatment & Distribution	Replacement Cost	100%	\$0-\$100,000	1
			>\$100,000-\$250,000	2
			>\$250,000-\$500,000	3

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Consequence of Failure
			>\$500,000-\$750,000	4
			>\$750,000	5
Utilities – Sewer – Sewer main	Diameter of Pipe	100%	0-150mm	1
			>151-250mm	2
			>250-300mm	3
			>300-500mm	4
			>500mm	5
Utilities – Sewer – Collection and Treatment	Replacement Cost	100%	\$0-\$100,000	1
			>\$100,000-\$250,000	2
			>\$250,000-\$500,000	3
			>\$500,000-\$750,000	4
			>\$750,000	5
Parks and Sport Fields	Replacement Cost	100%	\$0-\$100,000	1
			>\$100,000-\$250,000	2
			>\$250,000-\$500,000	3
			>\$500,000-\$750,000	4
			>\$750,000	5
Fleet and Equipment	Replacement Cost	100%	\$0-\$100,000	1
			>\$100,000-\$250,000	2
			>\$250,000-\$500,000	3
			>\$500,000-\$750,000	4
			>\$750,000	5
Facilities	Rating of potential consequences of component failure to related items	100%	Generally Cosmetic – Very low impact on related items.	1
			Generally Cosmetic – Low impact on related items.	2

Asset Category	Risk Criteria	Criteria Weighting	Value Range	Consequence of Failure
			Cosmetic – Highly Visible, Disruption to related items.	3
			Impact has short-term remedial impact	4
			Failure causes damage to related items. Building cannot be used until remedied.	5

6. Growth and Demand

Growth is a critical infrastructure demand driver for most infrastructure services. As growth-related assets are constructed or acquired, they should be integrated into the Municipality's AMP. While the addition of residential units will add to the existing assessment base and offset some of the costs associated with growth, the Municipality will need to review the lifecycle costs of growth-related infrastructure. These costs should be considered in long-term funding strategies that are designed to, at a minimum, maintain the current level of service.

Population changes will require the Municipality to determine the impact to expected levels of service and if any changes to the existing asset inventory may be required.

Per the 2021 Statistics Canada. [Table 98-10-0002-01 Population and dwelling counts: Canada and census subdivisions \(municipalities\)](#), Central Huron's growth statistic from 2016 to 2021 was:

Population, 2021	Population, 2016	Population percentage change, 2016 to 2021	Total private dwellings, 2021	Total private dwellings, 2016	Total private dwellings percentage change, 2016 to 2021
7,799	7,576	2.9	3,917	3,823	2.5

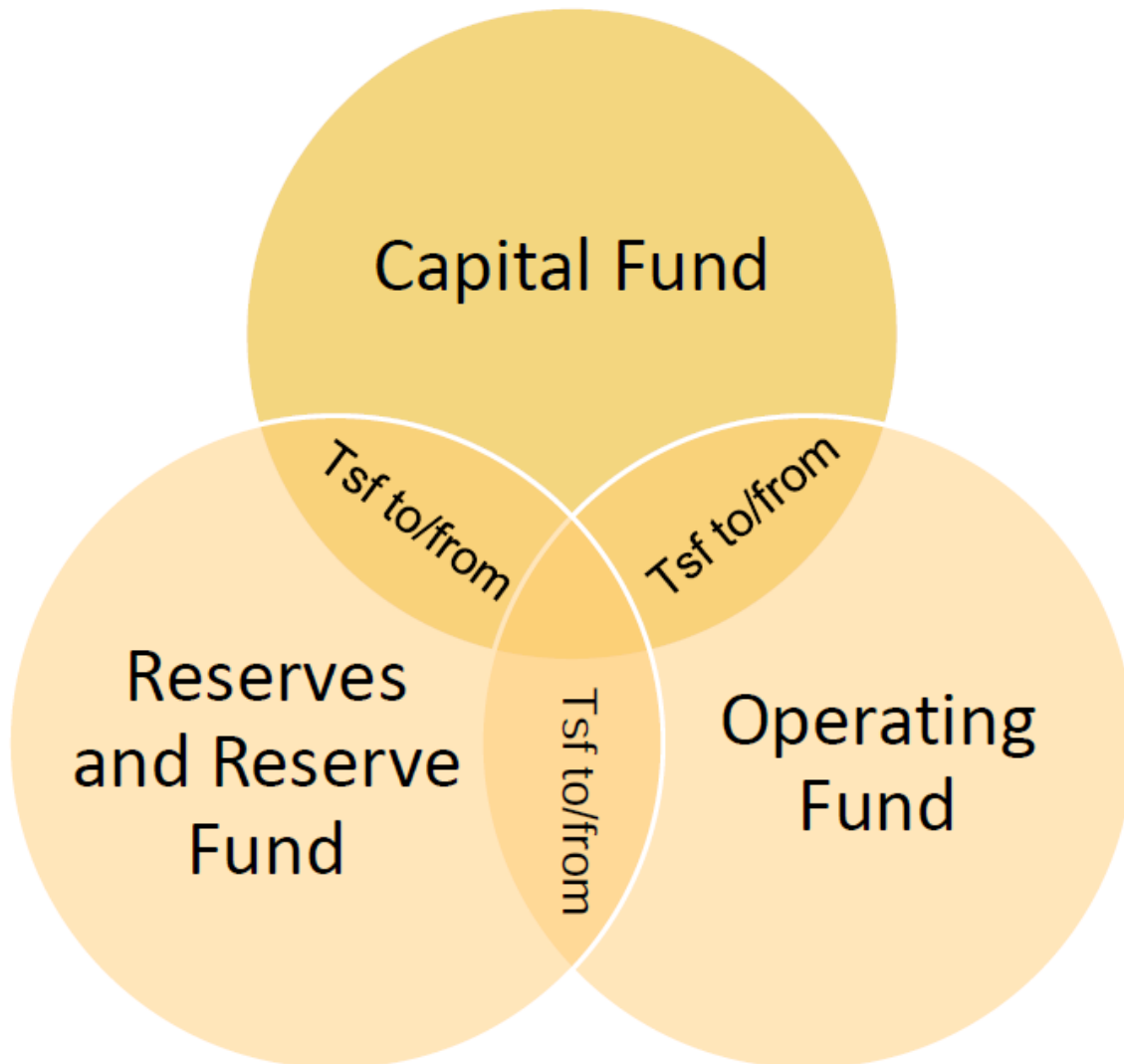
Per the County of Huron's Permanent Housing Forecast completed by Watson and Associates, Central Huron's permanent housing forecast is as follows:

Total Permanent Housing			Average Annual Housing Growth	
2001	2021	2051	2001 to 2021	2021 to 2051
2,930	3,270	4,400	17	38

Planning for forecasted population growth may require the expansion of existing infrastructure and services. As growth-related assets are constructed or acquired, they should be integrated into the Municipality's AMP. While the addition of residential units will add to the existing assessment base and offset some of the costs associated with growth, the Municipality will need to review the lifecycle costs of growth-related infrastructure. These costs should be considered in long-term funding strategies that are designed to, at a minimum, maintain the current level of service.

7. Financing Strategies

A financial plan is a critical component of the AMP and brings the plan into action. A sound financial plan demonstrates that the Municipality has integrated the asset management plan with the financial planning and long-term budgeting and that it has utilized all available funding tools. The diagram below illustrates how the different funds work together to help achieve the optimum funding strategy.



There are numerous sources of financing that can be utilized to fund the Municipality's Asset Management Plan. The major sources are tax revenues, reserves, debt financing, user fees, development charges, and capital grants from the Provincial and Federal Governments.

Each asset class will have its own characteristics, which often dictate the type of financing that best lends itself to funding its replacement program.

The majority of asset classes will see a combination of tax revenue and reserve strategies utilized as the preferred financing methodology.

Debt financing is best utilized for assets with a longer useful life such as buildings or bridges, so that payments can be spread over the life of the asset; but this type of financing can only be used sparingly, as it will start to have adverse effects on annual budget requirements if over-used.

In the event that the AMP identifies funding shortfalls in any of the asset categories, the Building Together Guide and specifically Ontario Regulation 588/17 requires the AMP indicates the impacts of the shortfall and how the impact will be managed are to be included in the plan. The action plan may include any of the following approaches:

1. Reduce levels of service which will effectively reduce the funding requirement; and
2. Employ asset management and financial strategies, such as:
 - a. Use of debt; and
 - b. Increase or introduce user fees.

When evaluating asset funding requirements and shortfalls, it is important to consider intergenerational equity which refers to the fairness between generations. From an asset perspective, this speaks to who should pay for the assets that have long term benefits. For assets such as fleet and equipment with short useful lives, 10 years or less, the current generation receives the full benefit of the asset and should be responsible for the asset's financing. For assets with longer lives, multiple generations will receive the benefit and establishing fairness for the asset financing is more difficult.

Annual Requirement

The annual requirements represent the amount the Municipality should allocate annually to each asset category to meet replacement needs. For core asset categories the annual requirement will be calculated based on total replacement costs at the end of their service life based on 2025 dollars.

Reserves

Reserves are currently maintained for each of the asset categories listed below with the exception of Stormwater Management Systems. Traditionally, capital expenditures in this area are funded from the Roads reserve.

As can be seen from section 9.1.2 Target vs Actual Capital Reinvestment Rate, Central Huron is currently funding 96.66% of its annual capital requirements and has an annual shortfall of only \$150,000. However, it is important to note that some areas are being over funded while some are being underfunded.

A more detailed financial strategy will be produced as a supplemental report to the asset management plan once proposed levels of service are determined in the next iteration of the plan.

Asset Management Plan by Asset Category

- Bridge and Culverts;
- Road Network;
- Stormwater Management Systems;
- Water Systems;

- Sewer System;
- Facilities;
- Playgrounds and Sports Fields;
- Fleet and Equipment;

8. Scope and Methodology

8.1 Deriving Replacement Costs

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

- **User-Defined Cost and Cost/Unit:** Based on costs provided by municipal staff which could include average costs from recent contracts; data from engineering reports and assessments; and staff estimates based on knowledge and experience.
- **Cost Inflation/CPI Tables:** Historical cost of the asset is inflated based on Non-Residential Building Construction Price Index.

8.2 Estimated Useful Life, Average Age, and Service Life Remaining

The estimated useful life (EUL) of an asset is the period over which the Municipality expects the asset to be available for use and remain in service before requiring replacement or disposal. The EUL for each asset in this AMP was assigned according to the knowledge and expertise of municipal staff and supplemented by existing industry standards when necessary. Each asset's Estimated Useful Life should be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

The average age of each asset is based on the number of years each asset has been in service. By using an asset's in-service date and its EUL, the Municipality can determine the service life remaining (SLR) for each asset. Using condition data and the asset's SLR, the Municipality can more accurately forecast when it will require replacement.

The SLR is calculated as follows:

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

The estimated useful life, average age, and average service life remaining can be found in the Estimated Useful Life & Average Age subsection within each asset category.

8.3 Reinvestment Ratio

As assets age and deteriorate, they require additional investment to maintain in a state of good repair. The reinvestment of capital funds, through asset renewal or replacement, is necessary to sustain an adequate level of service. The reinvestment ratio is a measurement of the Municipalities average actual capital spendings relative to the annual capital requirement. The average annual capital spending is an average of the previous 10 years adjusted by the Non-Residential Building Construction Price Index to 2024.

By reviewing the reinvestment ration, the Municipality can determine the extent of any existing funding gap. A reinvestment ratio of 100% would indicate the municipality is fully funding its capital needs. The reinvestment ratio is calculated as follows:

Reinvestment Ratio: Average Annual Capital Spending / Average Annual Capital Requirement

8.4 Deriving Asset Condition

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

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

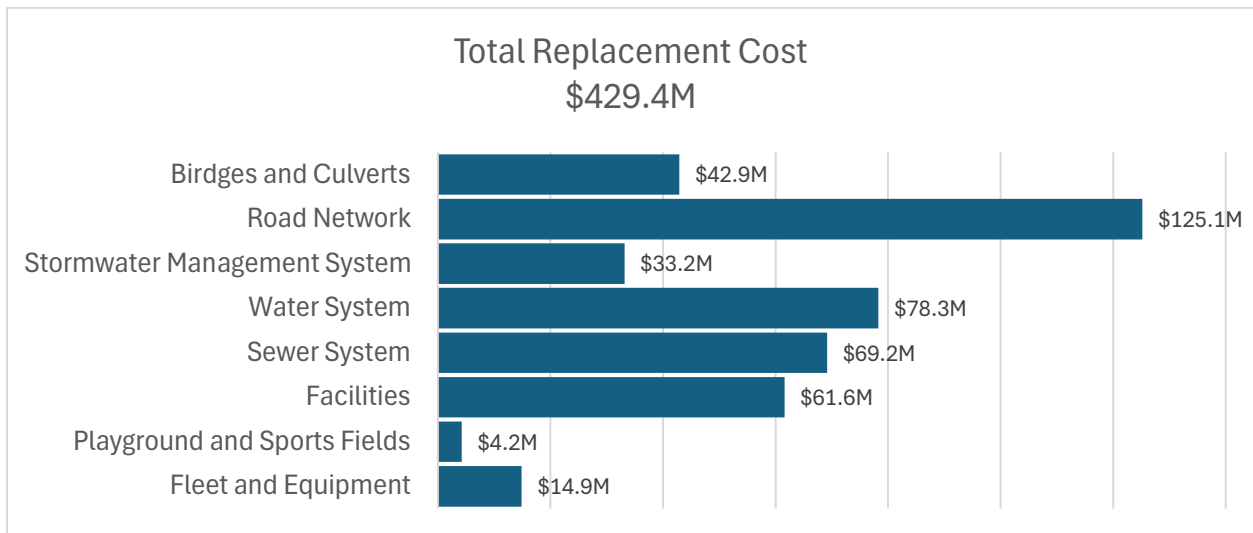
Condition	Description	Criteria	Service Life Remaining (%)
Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated	80-100
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life	60-80
Fair	Requires attention	Signs of deterioration,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

The analysis in this AMP is based on assessed condition data only as available. In the absence of assessed condition data, asset age is used as a proxy to determine asset condition.

9. Asset Overview

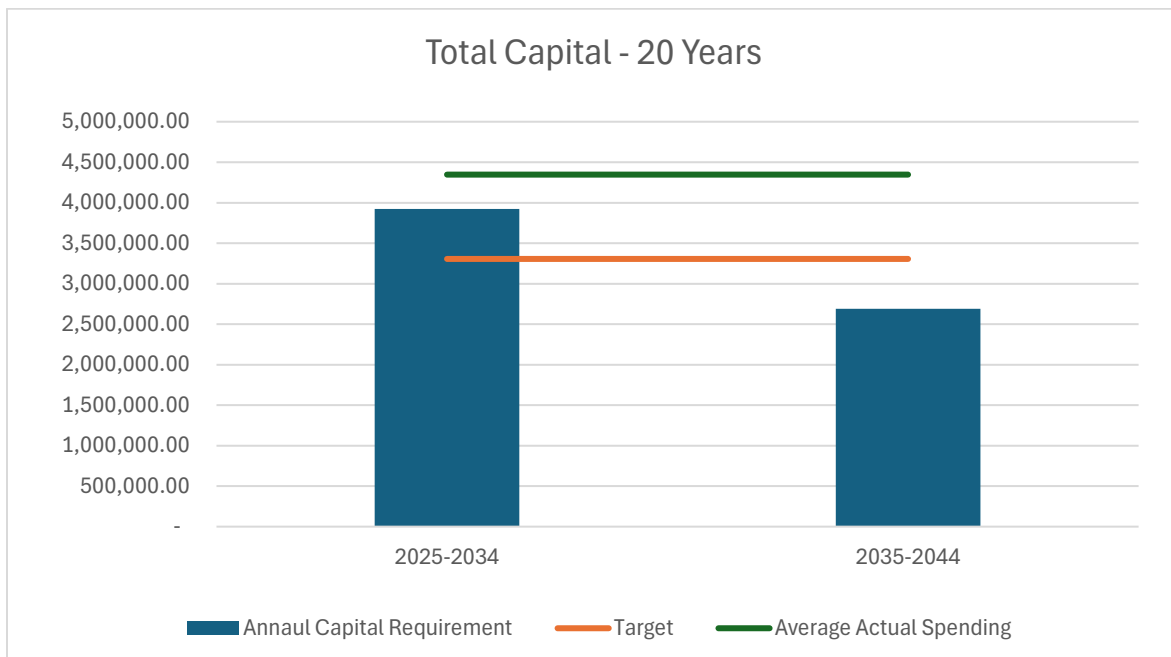
9.1.1. Total Replacement Cost of Assets

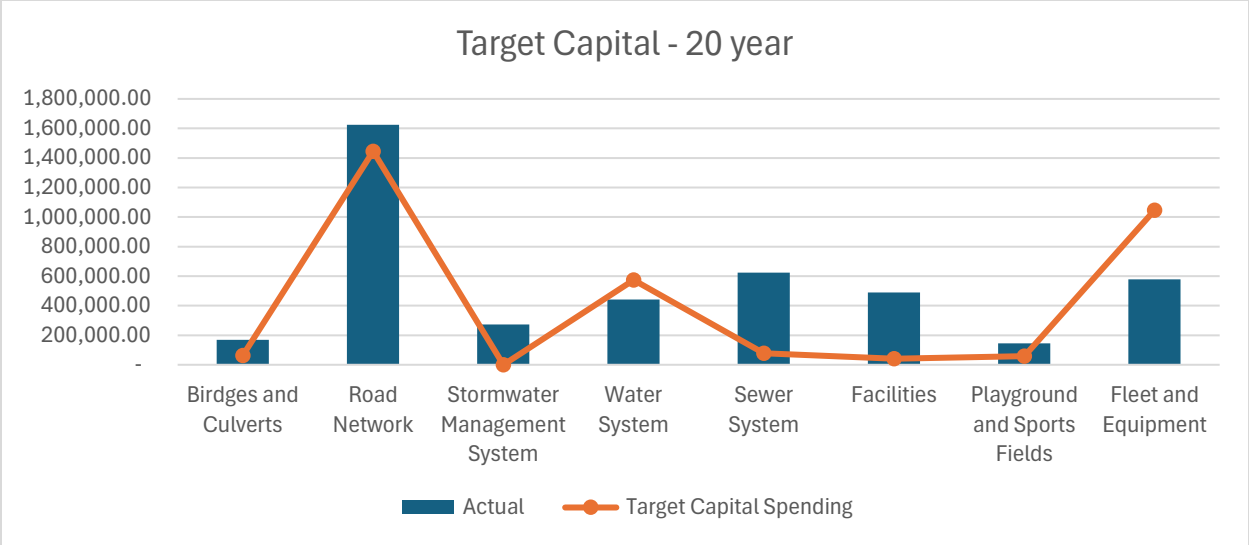
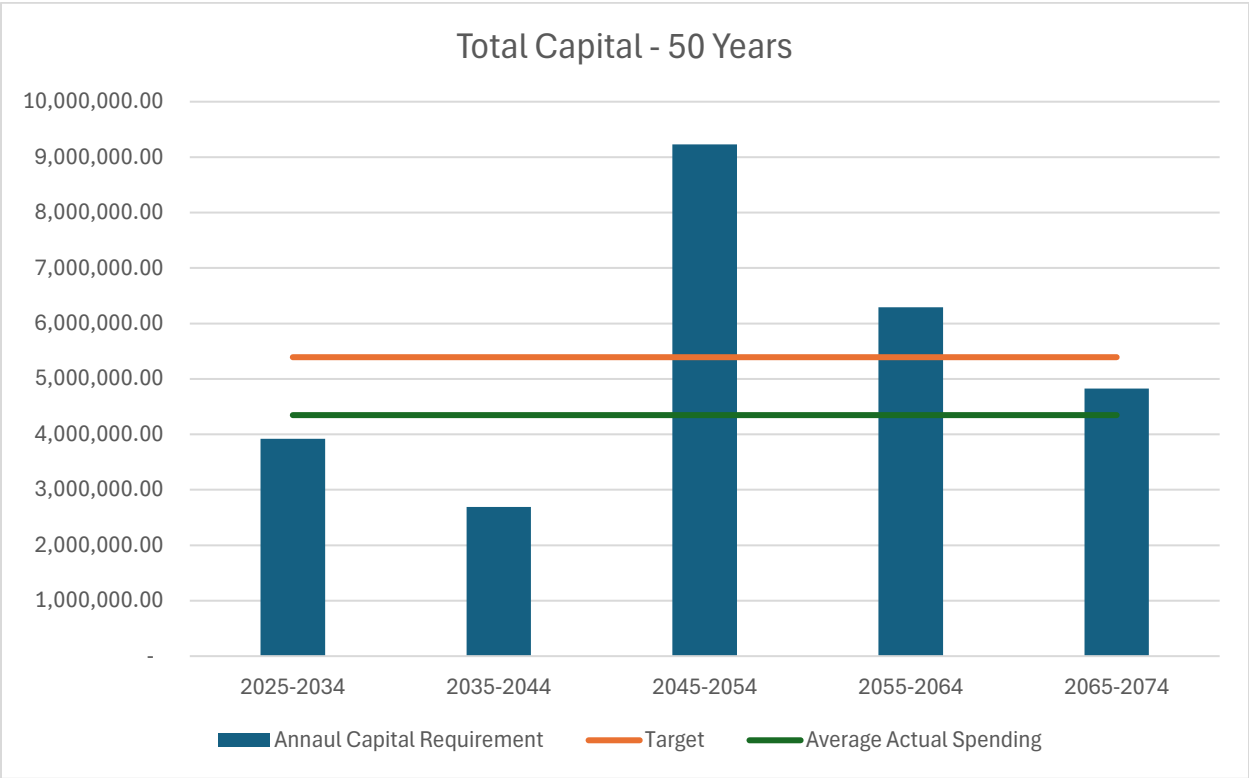
The asset categories analysed in this AMP have a total replacement cost of \$428.4 million based on inventory data from 2025. This total was determined based on a combination of user-defined costs and historical cost inflation. This estimate reflects replacement of existing historical assets with similar, not necessarily identical, assets available for procurement today.

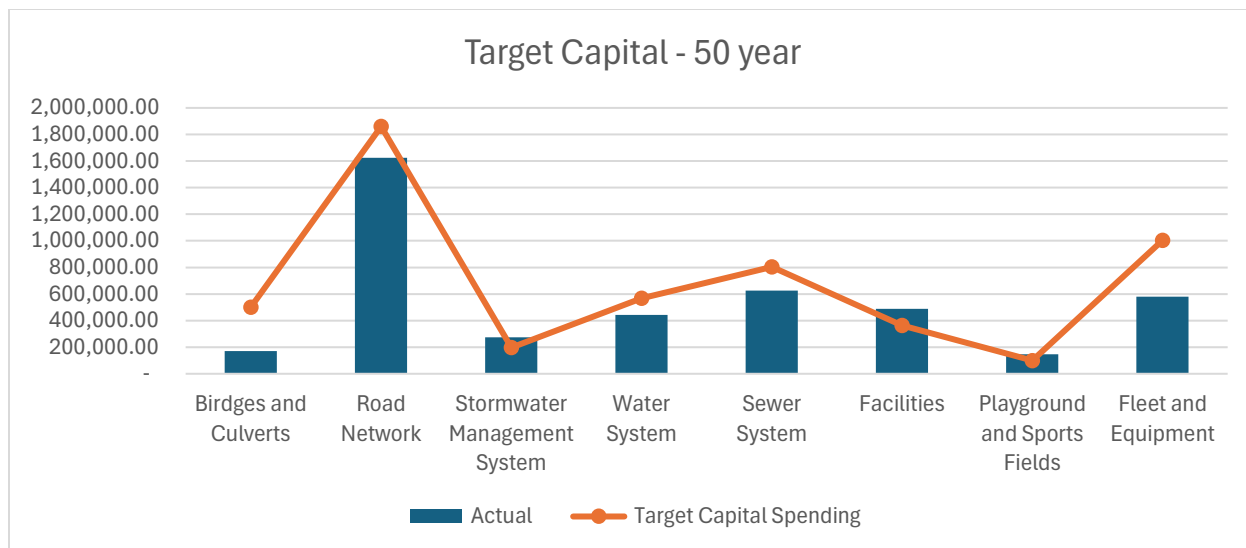


9.1.2. Target vs. Actual Capital Reinvestment Rate

The graphs below depict funding gaps or surpluses by comparing target vs actual capital reinvestment. Staff have analyzed the requirements over the next 20 years and the next 50 years in an attempt to find a balance between current capital needs and future capital planning. To meet the 20 year needs, the Municipality should be allocating \$3.306 million for capital and the 50 year needs would require spending of \$5.392 annually. Actual annual funding for capital infrastructure totals approximately \$4.347 million or 131.49% of the 20 year annual capital requirement and 80.62% of the 50 year average annual requirement. The actual capital expenditures have been adjusted to 2025 dollars by using the Non-Residential Building Consumer Price Index.





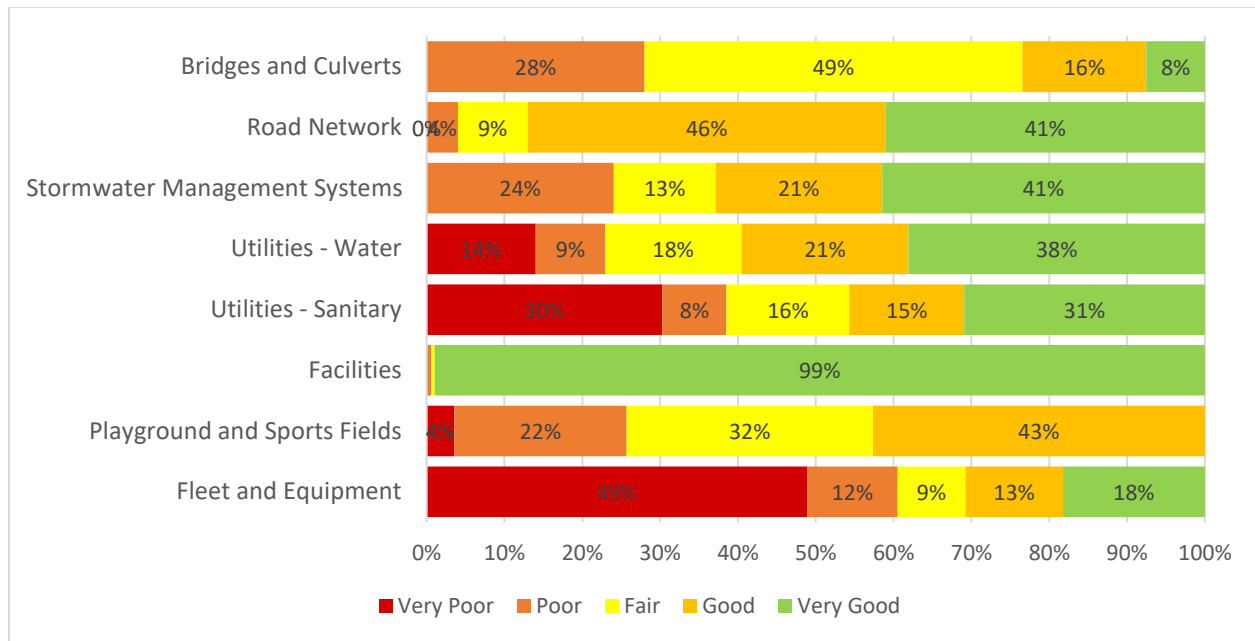


It is important to note, the actual target capital over the life of all assets is \$6.512 million. The difference is due to the fact that some assets have a life greater than 50 years. As the asset management plan is updated, the 20-year and 50-year window will shift with time and the current capital requirement will slowly increase to the \$6.512 required for replacement of all assets over their entire life. It is also important to note that the maximum life span assigned to an asset is 100 years. However, some assets may last longer than this with proper maintenance. The brick exterior of the town hall has a 100-life span, however, is over 100 years old.

9.1.3. Condition of Assets

The current condition of the assets is central to all asset management planning. Collectively, 77.71% of assets in Central Huron are in fair or better condition. This estimate relies on both age-based and field condition data.

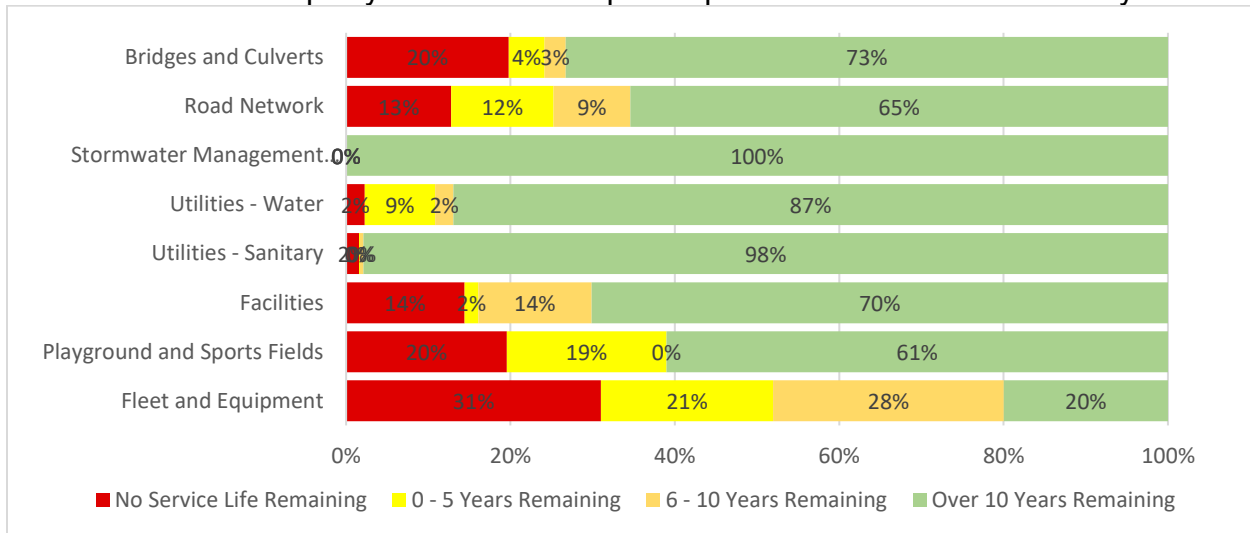
This AMP relies on assessed and age-based condition data for 88% of assets; for the remaining portfolio, age is used as an approximation of condition. Assessed condition data is invaluable in asset management planning as it reflects the true condition of the asset and its ability to perform its functions. The table below identifies the source of condition data used throughout this AMP.



Asset Category	Asset Segment	Source of Condition Data
Road Network	Gravel/Paved	2021 Road Needs Study and Staff Assessment
Road Network	Sidewalks	Staff Assessment / Age Based Condition
Road Network	Streetlights	Aged based Condition
Bridges and Culverts	All	2022 OSIM Reports
Storm Drains	All	Age Based Condition
Utilities - Water	All	Staff Assessment / Age Based Condition
Utilities - Sanitary	All	Staff Assessment / Age Based Condition
Facilities	All	2024 Facilities Assessment Report
Playgrounds and Sports Fields	All	Staff Assessment
Fleet & Equipment	All	Age Based Condition

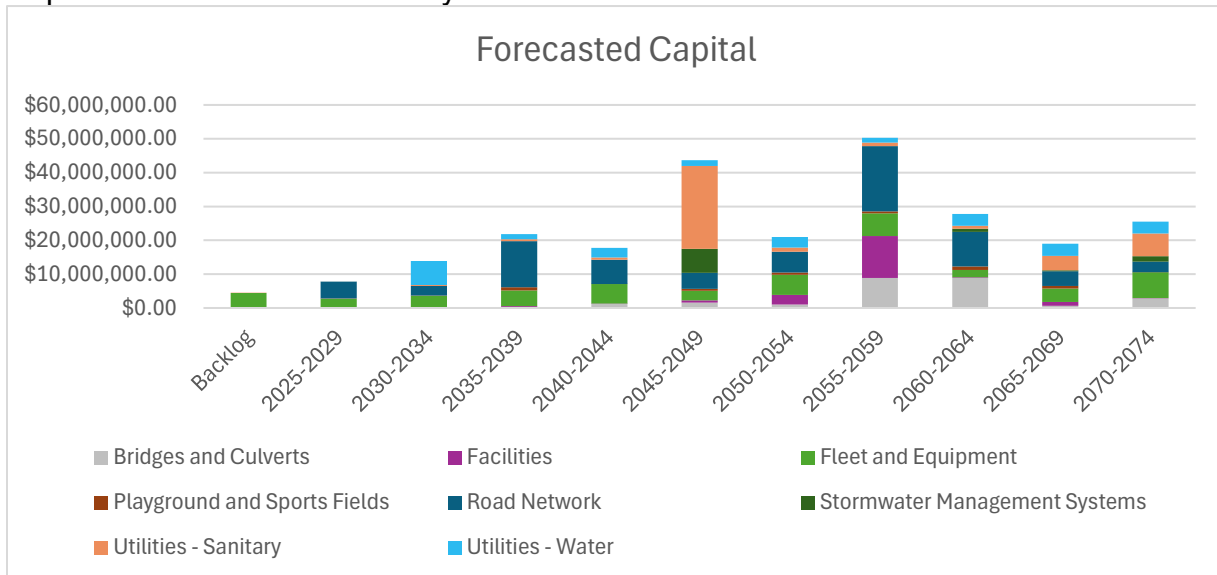
9.1.4. Service Life Remaining

Based on asset age, available assessed condition data and estimated useful life, 22.92% of the Municipality's assets will require replacement within the next 10 years.



9.1.5. Forecasted Capital Requirements

The development of a long-term capital forecast should include both asset rehabilitation and replacement requirements. With the development of asset-specific lifecycle strategies that include the timing and cost of future capital events, the Municipality can produce an accurate long-term capital forecast. The following graph identifies annual requirements over the next 50 years.



10. Analysis of Assets

10.1 Bridges and Culverts – Core Assets

10.1.1. Asset Inventory & Replacement Cost

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

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Bridge	20	Defined Cost	\$27,366,415
Culvert	34	Defined Cost	\$15,545,523
	54		\$42,911,938

10.1.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Bridge	55%	Fair	Assessed
Culvert	62%	Fair	Assessed
	58%	Fair	Assessed

10.1.3. Current Approach to Condition Assessment

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

- A comprehensive OSIM was completed in 2022 that included a detailed assessment of the condition of each bridge and culvert.
- The OSIM is reviewed every 2 years and additional bridges and culverts are assessed as needed.

10.1.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Bridge	80 Years	57.5	22.5
Culvert	50-80 Years	52	22.75

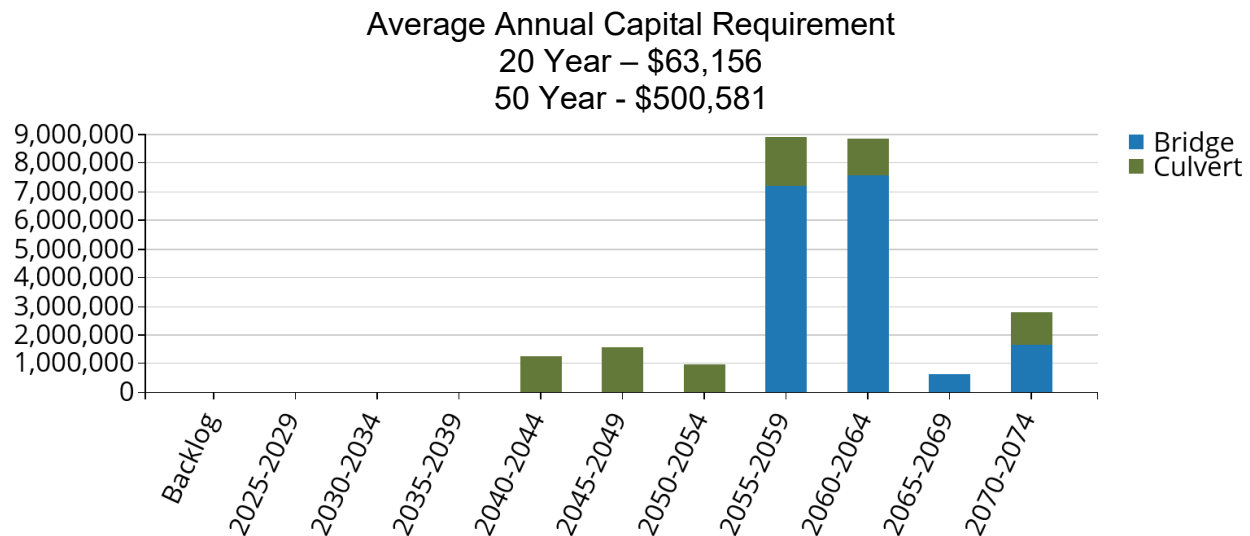
10.1.5. Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to follow the established lifecycle management strategy for each structure as defined in the Municipality's current OSIM Structural Inspection Reports to proactively manage asset deterioration.

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation and Replacement	All lifecycle activities are driven by the results of mandated structural inspections completed according to the Ontario Structural Inspection Manual (OSIM).
Bridge Replacement Strategy	Replacement of older, single lane bridges with either open or closed bottom culverts and expand road widths to double lanes, where warranted, to accommodate growth.
Inspection	The most recent inspection report was completed in 2022 by B.M Ross.

10.1.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.



10.1.7. Risk & Criticality

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

Consequence	5	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	4	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	3	1 Asset 1.00 unit(s) \$598,173.00	2 Assets 2.00 unit(s) \$669,279.35	1 Asset 1.00 unit(s) \$288,147.06	4 Assets 4.00 unit(s) \$4,028,871.09	0 Assets - \$0.00
	2	1 Asset 1.00 unit(s) \$756,512.91	8 Assets 8.00 unit(s) \$4,764,181.80	8 Assets 8.00 unit(s) \$6,233,900.99	4 Assets 4.00 unit(s) \$3,368,219.24	0 Assets - \$0.00
	1	4 Assets 4.00 unit(s) \$1,872,222.85	3 Assets 3.00 unit(s) \$1,403,067.54	7 Assets 7.00 unit(s) \$14,312,168.71	11 Assets 11.00 unit(s) \$4,617,193.00	0 Assets - \$0.00
		1	2	3	4	5
		Probability				

10.1.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Name	Risk Rating
Bridge	Kennedy Bridge_Bridge	12 - High
Bridge	Hogsback Bridge_Bridge	12 - High
Culvert	Orchard Line (1km North of Tele Rd)_Culvert	12 - High
Culvert	Hullett Mckillop Rd (E of London Rd)_Culvert	12 - High

10.1.8. Levels of Service

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

10.1.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Description of the traffic that is supported by municipal bridges and culverts (e.g. heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Bridges and culverts provide reliable access to the road network for vehicles and/or pedestrians.	Bridges and culverts provide reliable access to the road network for vehicles and/or pedestrians.
Quality	Description or images of the condition of bridges and culverts and how this would affect use of the bridges.	Images of bridges and culverts in various conditions are provided in Appendix A3. As per Ontario Regulation 104/97, every bridge and structural culvert (>3m) owned by the Municipality is subject to a biennial inspection, following best practices as laid out in the Ontario	Images of bridges and culverts in various conditions are provided in Appendix A3. As per Ontario Regulation 104/97, every bridge and structural culvert (>3m) owned by the Municipality is subject to a biennial inspection, following best practices as laid out in the Ontario

		Structure Inspection Manual (OSIM).	Structure Inspection Manual (OSIM).
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10.1.8.2. Technical Levels of Service

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

Service Attribute	Technical Metric	Current LOS	Proposed LOS
Scope	Percentage of bridges and culverts in the municipality with loading or dimensional restrictions.	1.89%	1.89%
Quality	Average bridge condition index value for bridges in the Municipality	55	50
	Average bridge condition index value for structural culverts in the Municipality	62	50
Performance	% of bridges and structural culverts in good or very good condition	35.18%	0-30%
	% of bridges and structural culverts in poor or very poor condition	35.19%	0-30%
	Average 10 Year capital cost / average 20 year annual capital requirement	268%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	34%	100%

10.1.9. Appendices

Appendix A1 – Bridge and Culvert - Asset List

Appendix A2 - Map of Bridges

Appendix A3 – Images of Bridges

10.1.10. Recommendations

Due to the requirement that an OSIM Bridge Study is completed every 2 years, this section of the asset management plan has no recommendations.

10.2 Road Network

10.2.1. Asset Inventory & Replacement Cost

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

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Gravel Road	126.44 KM	Unit Cost	\$32,716,573
Paved Road	216.03 KM	Unit Cost	\$84,532,844
Sidewalks	24.40 KM	Unit Cost	\$5,544,668
Streetlights	782 Lights	Unit Cost	\$2,383,000
			\$125,177,085

10.2.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Gravel Road	79%	Good	Assessed
Paved Road	71%	Good	Assessed
Sidewalks	69%	Good	Age Based / Assessed
Streetlights	63%	Good	Age Based
		73%	Good

10.2.3. Current Approach to Condition Assessment

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

- A comprehensive Roads Needs Study was completed in 2021 that included a detailed assessment of the condition of each Road.
- The Roads Needs Study is completed every 5 years.
- The condition of sidewalks is primarily age based. Any sidewalk section that has an age-based condition of poor or very poor received an assessment by Roads staff. In addition, sections that are known to be in poor or very poor state of repair are assessed by Roads staff.

- The condition of streetlights are age based.

10.2.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Gravel Road	NA	NA	NA
Paved Road	10-20 Years	17.83	.25
Sidewalks	40 Years	30.75	9.25
Streetlights	25 Years	9.70	15.31
		14.83	10.42

The useful life information is not included for Gravel Roads as the life of a gravel road, properly maintain, is assumed to be indefinite.

10.2.5. Lifecycle Management Strategy

The following current lifecycle strategies have been applied Road Network Assets based on the treatment strategy outlined by Municipal staff to manage the lifecycle of rural & semi urban paved roads, urban paved roads, gravel roads and sidewalks. Instead of allowing the roads to deteriorate until full replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

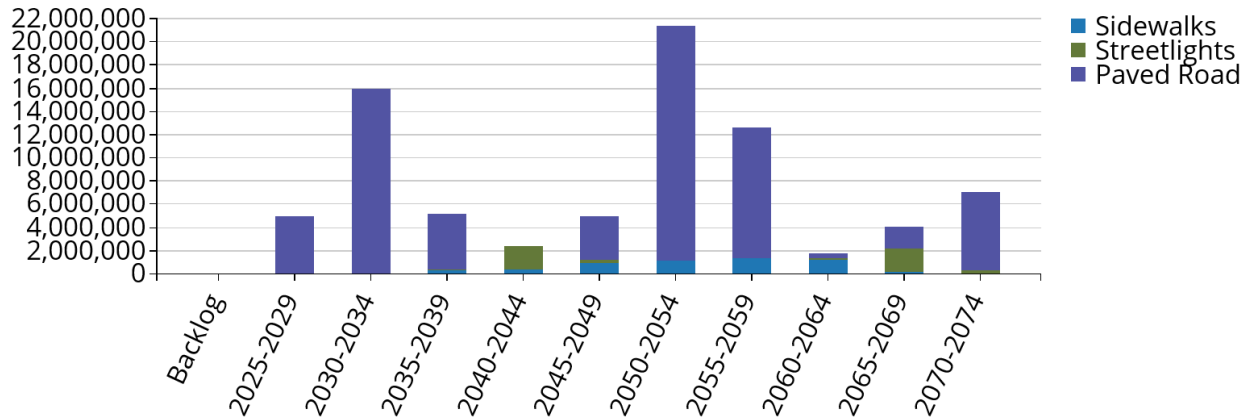
Gravel Roads Rural & Semi Urban		
Event Name	Event Class	Event Trigger
Grading	Maintenance	Annual Repetitive
Dust Suppressant	Maintenance	Annual Repetitive
Resurfacing	Rehabilitation	As Needed (Otherwise Perpetual Maintenance Strategy)
Paved Roads Rural & Semi Urban		
Event Name	Event Class	Event Trigger
Crack Sealing	Maintenance	5 Years after resurfacing (repeating)
Resurfacing (Top Coat)	Rehabilitation	15 Years (repeating)
Full Reconstruction	Replacement	As Needed (Otherwise Perpetual Treatment Strategy)

Paved Roads Urban		
Event Name	Event Class	Event Trigger
Resurfacing (1 st Top Coat)	Rehabilitation	1-3 Years after reconstruction and
Crack Sealing	Maintenance	5 Years after resurfacing
Resurfacing (Subsequent Top Coat)	Rehabilitation	15 Years
Full Reconstruction	Replacement	As Needed (Otherwise Perpetual Treatment Strategy)
Sidewalks		
Event Name	Event Class	Event Trigger
Crack Grinding	Rehabilitation	As Needed
Full Reconstruction	Replacement	50 Years or as needed.

10.2.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.

Average Annual Capital Requirement 20 Year - \$1,424,777 – excluding Gravel Roads 50 Year - \$1,609,198 excluding Gravel Roads



10.2.7. Risk & Criticality

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

Consequence	5	4	3	2	1
	26 Assets 5,825.41 m \$1,662,993.25	27 Assets 5,089.02 m \$1,525,796.34	16 Assets 3,403.80 m \$936,823.94	1 Asset 229.08 m \$52,063.01	0 Assets - \$0.00
	16 Assets 2,187.40 m \$709,932.99	11 Assets 1,593.28 m \$368,540.45	6 Assets 986.89 m \$224,290.49	0 Assets - \$0.00	0 Assets - \$0.00
	64 Assets 28,809.27 m \$10,976,369.70	35 Assets 21,258.50 m \$7,918,614.06	25 Assets 2,782.75 m \$860,109.52	14 Assets 1,635.43 m \$563,561.95	1 Asset 101.24 m \$44,850.71
	115 Assets 79,569.55 m, unit(s) \$29,884,306.03	179 Assets 87,987.83 m, unit(s) \$31,524,134.30	50 Assets 6,612.85 m, unit(s) \$2,594,590.71	20 Assets 3,308.05 m \$1,333,373.33	2 Assets 333.27 m \$117,722.38
1	36 Assets 15,781.35 m, unit(s) \$4,660,009.27	682 Assets 43,451.27 m, unit(s) \$13,313,541.99	74 Assets 46,826.50 unit(s), m \$13,183,259.45	9 Assets 2,230.73 m \$648,687.03	7 Assets 7,642.79 m \$1,977,572.45
Probability					
1					
2					
3					
4					
5					

10.2.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Description	Risk Rating
Sidewalks	Mary Street-539m to 778m_Sidewalks	20
Paved Road	King Street - Wellington St. to Mary St	15
Paved Road	Gibbings Street - Rattenbury St to Princess St	15
Paved Road	Ontario St. - Ransford St. to Smith St.	15
Paved Road	Huron St. - Albert St. to Orange St.	15
Paved Road	Huron St. - North St. to Erie St.	15
Sidewalks	Community Centre Line-0m to 219m_Sidewalks	15
Sidewalks	High Street-602m to 826m_Sidewalks	15
Sidewalks	Ontario St. -221m to 424m_Sidewalks	15
Sidewalks	Princess Street East-0m to 348m_Sidewalks	15
Sidewalks	Princess Street East-462m to 647m_Sidewalks	15
Sidewalks	Princess Street East-764m to 967m_Sidewalks	15
Sidewalks	Rattenbury Street East-0m to 303m_Sidewalks	15
Sidewalks	Rattenbury Street West-162m to 384m_Sidewalks	15
Sidewalks	Victoria St.-589m to 817m_Sidewalks	15
Sidewalks	Huron St. -0m to 217m (see note)_Sidewalks	15
Sidewalks	Huron St. -217m to 443m_Sidewalks	15
Sidewalks	Huron St. -516m to 753m_Sidewalks	15
Paved Road	King Street - Joseph St. to Dunlop St.	13.75
Paved Road	King Street - Joseph / Cutter to Wellington	13.75
Paved Road	Mary Street - Isaac St. to Orange	13.5
Paved Road	Gibbings Street - Ontario St to Rattenbury St	13.5
Paved Road	Ontario St. - Smith St. to East St.	12.5
Paved Road	Ontario St. - East St. to Raglan St.	12.5
Paved Road	Ontario St. - Raglan St. to Dinsley St.	12.5
Paved Road	Ontario St. - Dinsley St. to Gibbings St.	12.5
Paved Road	Ontario St. - Gibbings St. to William St	12.5
Paved Road	Ontario St. - William St to Albert St.	12.5
Paved Road	Huron St. - Orange St. to Shipley St.	12.5
Paved Road	Huron St. - Shipley St. to North St.	12.5
Paved Road	Huron St. - Erie St. to West Town Limit	12.5
Paved Road	Dunlop Street - King St. to Fulton St.	12
Paved Road	Erie Street South - Church Street to Alma Street	12
Paved Road	Erie Street South - Alma Street to Mary Street	12
Paved Road	William Street North - Rattenbury St. to Princess St	12
Sidewalks	Elizabeth St.-111m to 213m_Sidewalks	12

Segment	Description	Risk Rating
Sidewalks	Goderich Street-401m to 569m_Sidewalks	12
Sidewalks	High Street-418m to 602m_Sidewalks	12
Sidewalks	Huron St. -753m to 998m_Sidewalks	12
Sidewalks	Ontario St.- 0m to 97m Connecting Link Project_Sidewalks	12
Sidewalks	Rattenbury Street East-414m to 598m_Sidewalks	12
Sidewalks	Silver St.-218m to 325m_Sidewalks	12
Sidewalks	Walker Street-0m to 160m_Sidewalks	12
Sidewalks	Main Street-0m to 95m_Sidewalks	12
Sidewalks	Main Street-95m to 188m_Sidewalks	12
Sidewalks	Main Street-326m to 435m_Sidewalks	12
Sidewalks	Londesborough Rd-0m to 95m_Sidewalks	12
Sidewalks	Londesborough Rd-139m to 235_Sidewalks	12
Sidewalks	Londesborough Rd-235m to 324_Sidewalks	12
Paved Road	Dunlop Street - Fulton St to Isaac St	10.5
Paved Road	Dunlop Street - Frederick St. to North St. S	10.5
Paved Road	Dunlop Street - North Street South to Erie Street South	10.5
Paved Road	Wellington Street - Isaac St to King St	10.5
Paved Road	Princess Street West - Shipley St to Queen St.	10.5
Paved Road	Orange Street North - Rattenbury St. W to Huron Rd	10.5
Paved Road	Isaac Street - RR tracks to Devon St	10
Paved Road	Mary Street - Victoria St. to King St	10
Sidewalks	Beech St.extention BCF Prj-225m to 559m (incr by 334m)_Sidewalks	10
Sidewalks	Huron St. -0m to 217m (see note)_Sidewalks	10
Sidewalks	King Street-191m to 290m_Sidewalks	10
Sidewalks	Maple Street-0m to 204m_Sidewalks	10
Sidewalks	Maple Street-204m to 431m_Sidewalks	10
Sidewalks	Mary Street-306m to 539m_Sidewalks	10
Sidewalks	Mary Street-84m to 306m_Sidewalks	10
Sidewalks	Matilda Street-378m to 613m_Sidewalks	10
Sidewalks	Princess Street West-194m to 395m_Sidewalks	10
Sidewalks	Pugh's Terrace-0m to 239m_Sidewalks	10
Sidewalks	Spencer Street-0m to 204m_Sidewalks	10
Sidewalks	Wellington Street-183m to 402m_Sidewalks	10
Sidewalks	Smith St.N-Ontario to Princess St., E.	10
Sidewalks	John Street-236m to 440m_Sidewalks	10
Sidewalks	James Street-114m to 377m_Sidewalks	10
Sidewalks	James Street-377m to 646m_Sidewalks	10

Segment	Description	Risk Rating
Sidewalks	Victoria Terrace-95m to 296m_Sidewalks	10

10.2.8. Levels of Service

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

10.2.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Description, which may include maps, of the road network in the Municipality and its level of connectivity.	The Municipality owns and manages a road network comprised of both collector and local roads.	No Change
Quality	Description or images that illustrate the different levels of road class pavement condition.	The Municipality completes a roads needs study every 5 years. Every road receives a pavement condition index score between 1-100. Roads are broken down by condition, and appropriate replacement schedules are communicated in the report.	

10.2.8.2. Technical Levels of Service

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

Service Attribute	Technical Metric	Current LOS	Proposed LOS
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Scope	Lane-km of arterial roads (MMS classes 1 and 2) per land area (km/km ²)	0	0
	Lane-km of collector roads (MMS classes 3 and 4) per land area (km/km ²)	0	0
	Lane-km of local roads (MMS classes 5 and 6) per land area (km/km ²)	.76	.76
Quality	Average pavement condition index for paved roads in the Municipality	64	>=60
	Average surface condition for unpaved roads in the Municipality (e.g. excellent, good, fair, poor)	Good	Good
Performance	% of paved surfaces in good or very good condition	75%	60%
	% of paved surfaces in poor or very poor condition	5%	20%
	Average condition of sidewalks (e.g. very good, good, fair, poor, very poor)	62%	50-65%
	% of sidewalks in good or very good condition	69%	0-30%
	% of sidewalks in poor or very poor condition	6%	0-10%
	Average 10 Year capital cost / average 20 year annual capital requirement	112%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	87%	100%

10.2.9. Appendices

Appendix B1 – Road Network Asset List

Appendix B2 – Map of Roads

10.2.10. Recommendations

- The ages/last paving date of some paved roads are unknown. For roads with unknown ages, the date of January 1, 1999 has been used for the purposes of this report. Accordingly, the age of paved roads is likely overstated and the actual age of the paved roads is less than outlined in this report.

10.3 Stormwater Management Systems

10.3.1. Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Municipality's Stormwater Management System inventory.

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Drainage Pipes	22,078m	Unit Cost	\$33,172,173
			\$33,172,173

10.3.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Drainage Pipes	63%	Good	Age Based
		63%	Good

10.3.3. Current Approach to Condition Assessment

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

- The condition of drainage pipes are 100% age based.

10.3.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Drainage Pipes	100 Years	36.42	63.58
		36.42	63.58

10.3.5. Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is

Activity Type	Description of Current Strategy
	Maintenance activities are completed to a lesser degree compared to other core linear infrastructure
Maintenance	Primary activities include catch basin cleaning and storm main flushing, but only a small percentage of the entire network is flushed per year
Rehabilitation	Trenchless re-lining has the potential to reduce total lifecycle costs while potentially extending the current assets life by twice the original expected useful life of the asset.
Replacement	The Municipality's stormwater assets are assessed on a as needed basis. Replacement is scheduled to coincide with full street reconstruction, where applicable.

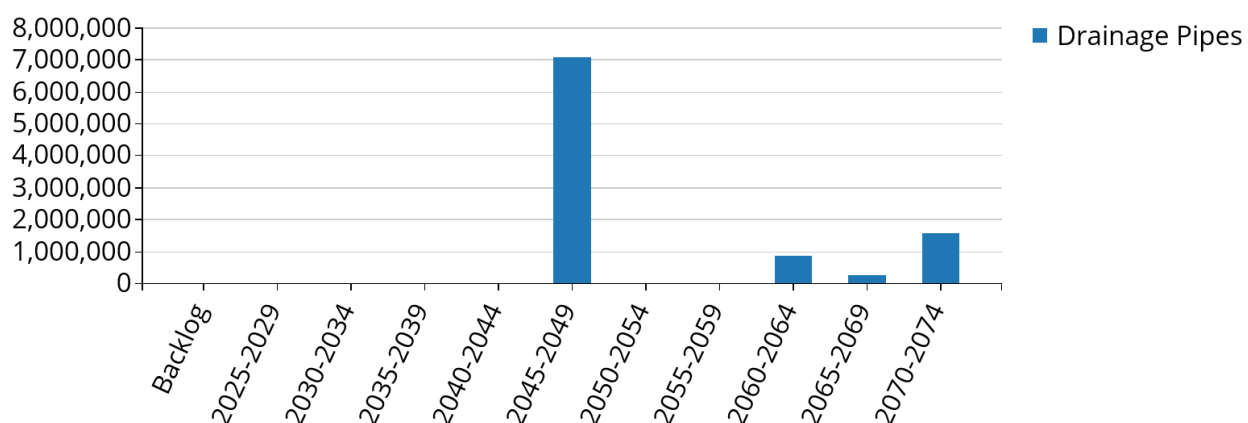
important to follow the established lifecycle management strategy to proactively manage asset deterioration.

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

10.3.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.

Average Annual Capital Requirement
20 Year - \$0
50 year - \$196,320



10.3.7. Risk & Criticality

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

Consequence	5	16 Assets 1,232.00 m \$4,096,864.87	3 Assets 421.00 m \$1,368,311.61	0 Assets - \$0.00	2 Assets 196.00 m \$685,214.04	0 Assets - \$0.00
	4	15 Assets 659.00 m \$2,032,202.40	3 Assets 126.00 m \$427,199.22	1 Asset 34.00 m \$115,275.98	3 Assets 314.00 m \$1,030,279.16	0 Assets - \$0.00
	3	13 Assets 671.00 m \$1,191,463.02	3 Assets 96.00 m \$169,106.90	3 Assets 175.00 m \$328,062.00	0 Assets - \$0.00	0 Assets - \$0.00
	2	62 Assets 2,707.00 m \$3,367,243.05	58 Assets 2,831.00 m \$3,556,009.46	25 Assets 1,497.00 m \$1,878,024.54	47 Assets 2,498.00 m \$3,207,528.73	0 Assets - \$0.00
	1	73 Assets 2,722.00 m \$3,068,837.24	30 Assets 1,403.00 m \$1,581,770.26	34 Assets 1,784.00 m \$2,011,317.28	52 Assets 2,712.00 m \$3,057,563.04	0 Assets - \$0.00
		1	2	3	4	5
		Probability				

10.3.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Name	Risk Rating
Drainage Pipes	Orange Street South - Huron Rd to Mary St.	20 - Very High
Drainage Pipes	Orange Street North - Rattenbury St. W to Huron Rd	20 - Very High
Drainage Pipes	Osborne Street - Church St to Alma St	16 - Very High
Drainage Pipes	Osborne Street - Church St to Alma St	16 - Very High
Drainage Pipes	Maple Street - Mill St. to Park Lane	16 - Very High
Drainage Pipes	Orange Street South - Mary St. to Wellington	12 - High
Drainage Pipes	Alma Street - Erie St to Mary St	10 - High
Drainage Pipes	King Street - Bond St. to Gordon St.	10 - High
Drainage Pipes	Huron St. - Erie St. to West Town Limit	10 - High

10.3.8. Levels of Service

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

10.3.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Description, which may include map, of the user groups or areas of the Municipality that are protected from flooding, including the extent of protection provided by the municipal Storm Sewer system	<p>Most of the Municipality's landscape is comprised of rural countryside and agricultural land where Storm Sewer runoff is conveyed through a series of rural ditches and culverts.</p> <p>Urban developments include commercial, industrial, and residential areas that are designed with an urban road right-of-way cross section and may be serviced by storm sewers and facilities.</p>	<p>Most of the Municipality's landscape is comprised of rural countryside and agricultural land where Storm Sewer runoff is conveyed through a series of rural ditches and culverts.</p> <p>Urban developments include commercial, industrial, and residential areas that are designed with an urban road right-of-way cross section and may be serviced by storm sewers and facilities.</p>

10.3.8.2. Technical Levels of Service

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

Service Attribute	Technical	Current LOS	Proposed LOS
Scope	% of properties in Municipality resilient to a 100-year storm ²	0-15%	0-15%

² Municipal storm infrastructure (including municipal drains) is not typically designed to be resilient to a 100-year storm event. A 100-year storm over a large enough geographic area is likely to cause damage to the majority of properties in Central Huron. It is assumed that a portion of the properties are resilient to a 100-year storm event due to natural geography. Accordingly, 0-15% of properties have assumed to be resilient for the purposes of this report.

	% of the municipal storm sewer management system resilient to a 5-year storm	100%	100%
Performance	Average condition of storm sewer system (e.g. very good, good, fair, poor, very poor)	Good	Fair
	% of storm sewer system in good or very good condition	37.90%	0-40%
	% of storm sewer system in poor or very poor condition	25.91%	0-40%
	Average 10 Year capital cost / average 20 year annual capital requirement	NA	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	139%	100%

10.3.9. Appendices

Appendix C1 – Stormwater Asset List

Appendix C2 – Stormwater Map

10.3.10. Recommendations

- Condition of stormwater network is age-based. Central Huron could consider implementing a program to camera drainage pipes to improve the accuracy of the condition of the stormwater network.
- Assets could be expanded to include catch basins, stormwater management ponds and other stormwater assets. Staff will consider this in future iterations of the report.
- Staff will investigate ways to estimate the percentage of properties in Central Huron resilient to a 100-year storm.
- Current plan doesn't consider the installation of new stormwater infrastructure. As noted, Central Huron is funding more than 250% of its annual requirement which is an indication that service levels are increasing in this area as stormwater infrastructure is being installed on streets that did not have it previously.

10.4 Water Systems

10.4.1. Asset Inventory & Replacement Cost

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

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Building and Structure	78	User Defined Cost	\$1,801,318
Building Equipment	19	User Defined Cost	\$1,697,325
Pipes and Valves	26	User Defined Cost	\$761,055
Water Instrumentation and Treatment	49	User Defined Cost	\$491,307
Water Mechanical and Electrical	28	User Defined Cost	\$1,131,514
Water Super Structure	10	User Defined Cost	\$1,155,000
Watermains	36,662 m	Unit Cost	\$71,259,464
			\$78,296,983

10.4.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Building and Structure	100%	Very Good	Assessed
Building Equipment	100%	Very Good	Assessed
Pipes and Valves	54%	Fair	Age Based / Assessed
Water Instrumentation and Treatment	59%	Fair	Age Based / Assessed
Water Mechanical and Electrical	70%	Good	Age Based / Assessed
Water Super Structure	54%	Fair	Age Based / Assessed
Watermains	60%	Good	Age Based
	61%	Good	

10.4.3. Current Approach to Condition Assessment

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

- A comprehensive Facilities Assessment was completed in 2024 that included a detailed assessment of the condition of each building which included the Building and Structure, and Building Equipment.
- The Facilities Assessment is recommended to be completed every 10 years.
- The condition of Pipes and Valves, Water Instrumentation and Treatment, Water Mechanical and Electrical, and Water Super Structure are primarily age based. Any asset that has an age-based condition of poor or very poor received an assessment by Utilities staff. In addition, any assets that are known to be in poor or very poor state of repair are assessed by Utilities staff.
- The condition of watermains are age based unless issues were noted by staff.

10.4.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining. As noted below, some estimated useful lives are dependent on the asset within the segment. For example, Building and Structure includes many elements of the building (e.g. roof, foundation, exterior, flooring, etc.). Depending on the type element and its own material these elements will have varying useful life.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Building and Structure	30 – 100 Years	49.33 Years	15.83 Years
Building Equipment	30 – 50 Years	32.58 Years	10.08 Years
Pipes and Valves	15 – 75 Years	16.17 Years	16.75 Years
Water Instrumentation and Treatment	15 – 25 Years	11.83 Years	11.17 Years
Water Mechanical and Electrical	15 – 40 Years	14.75 Years	9.00 Years
Water Super Structure	75 – 100 Years	57.67 Years	24.83 Years
Watermains	100 Years	40.67 Years	59.33 Years
		35.08 Years	34.00 Years

10.4.5. Lifecycle Management Strategy

The condition or performance of water assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is recommended that the below activities be performed over the life of the asset.

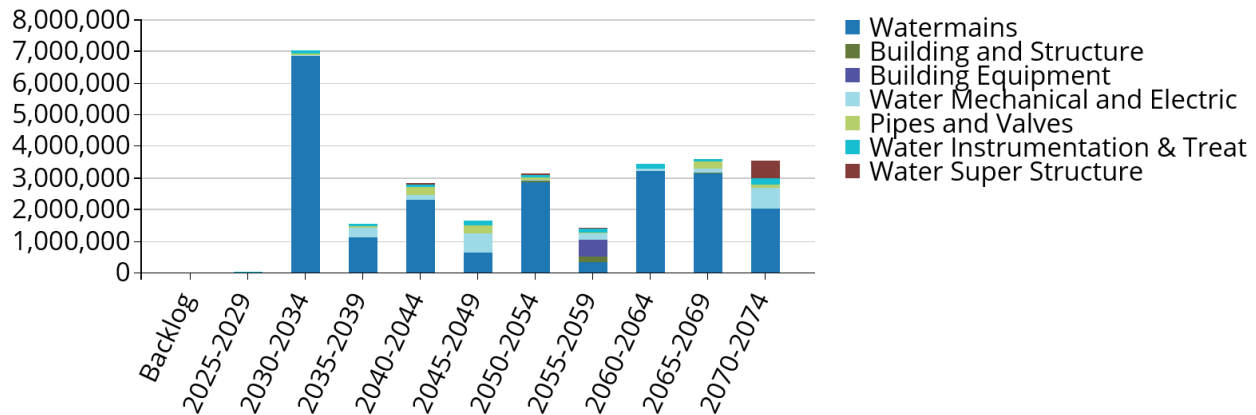
Asset Type	Activity Type	Description of Current Strategy
Watermain	Relining	Relining of watermain is recommended where the revised average annual requirement after relining is less than the average annual requirement after full replacement. In addition, relining is recommended on a case-by-case basis where the other related municipal assets (i.e. road base, asphalt, sewer main, storm main) are in good condition and replacement of the other assets isn't justified.
	Replacement	The life expectancy of a watermain is approximately 100 years. Where possible, replacement of watermain will be in conjunction with other related municipal infrastructure (i.e. road base, asphalt, sewer main, storm main).
Building and Structure, Building Equipment, Pipes and Valves, Water Instrumentation and Treatment, Water Mechanical and Electrical, and Water Super Structure	Maintenance and Replacement	These assets will have various life expectancies. Preventative maintenance will be completed where possible and assets will be replaced in order to maintain Ontario's Drinking Water Quality Standard.

10.4.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.

Average Annual Capital Requirement

20 Year - \$574,629
50 Year - \$567,195



10.4.7. Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2025 inventory data. See section 5 for the criteria used to determine the risk rating of each asset.

Consequence	5	3 Assets 1,041.00 m \$2,637,279.81	1 Asset 175.00 m \$443,346.75	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	4	14 Assets 13,271.00 m, sq ft, unit(s) \$7,805,444.05	10 Assets 1,798.00 m, sq ft \$3,530,145.32	4 Assets 1,174.00 m, sq ft, unit(s) \$1,115,413.82	0 Assets - \$0.00	0 Assets - \$0.00
	3	45 Assets 37,622.50 m, sq ft, unit(s), feet \$8,561,040.11	13 Assets 3,584.00 m, unit(s), sq ft \$2,881,541.33	10 Assets 3,227.00 m, feet, sq ft, unit(s) \$2,266,505.88	1 Asset 275.00 sq ft \$75,000.00	3 Assets 1,039.50 m \$2,141,609.09
	2	39 Assets 16,086.40 m, sq ft, unit(s) \$8,539,972.12	37 Assets 9,841.00 m, sq ft, unit(s) \$9,090,172.10	25 Assets 3,017.00 m, unit(s) \$6,149,608.52	11 Assets 1,383.00 m, sq ft, unit(s) \$2,683,128.32	6 Assets 2,443.00 m \$4,679,566.50
	1	28 Assets 6,406.00 m, sq ft, feet, unit(s) \$1,567,248.09	28 Assets 427.00 m, unit(s) \$1,146,627.00	48 Assets 3,517.00 m, feet, sq ft, unit(s) \$4,515,081.72	39 Assets 2,317.00 m, unit(s) \$4,317,706.12	12 Assets 2,412.00 m, unit(s) \$4,150,546.60
		1	2	3	4	5
		Probability				

10.4.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle

strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Name	Risk Rating
Watermains	Ontario St. - 38.5 m from main intersection to Raglan	15 - Very High
Watermains	Raglan St. - Princess St. E. to 187 Raglan	15 - Very High
Watermains	Raglan St. - Princess St. E. to Ontario	15 - Very High
Watermains	North St.S. - Mary to Church	12 - High
Building and Structure	FAC26: S.A.M Wellhouse - Roof structure - monolithic roof slope.	12 - High
Building and Structure	FAC37: Clinton Well House 1 - Chlorine Bldg - Roof Structure	12 - High
Building Equipment	FAC38: Clinton Well House 2 - Shed - Electrical - Well House 2	12 - High
Water Super Structure	Water Reservoir - Structure	12 - High
Watermains	Gordon ST: Victoria to 2m before James ST valve	10 - High
Watermains	King ST: Cutter to Maria	10 - High
Watermains	Mary St. - Isaac to Orange	10 - High
Watermains	Percival St. - Ontario to Princess St. E.	10 - High
Watermains	Rattenbury St. E. - Albert to Raglan	10 - High
Watermains	Rattenbury St. W. - Albert to Orange	10 - High
Watermains	Victoria ST: main intersection to East	10 - High

10.4.8. Levels of Service

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

10.4.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Description, which may include maps, of the user groups or areas of the Municipality that are	See Appendix D1	See Appendix D1

	connected to the municipal water system.		
Quality	Description, which may include maps, of the user groups or areas of the Municipality that have fire flow.	See Appendix D1. The Clinton map shows locations of fire hydrants.	See Appendix D1. The Clinton map shows locations of fire hydrants.

10.4.8.2. Technical Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	% of properties connected to the municipal water system	40.88% (1,731 / 4,234)	40.88% (1,731 / 4,234)
	% of properties where fire flow is available	38.14% (1,615 / 4,234)	38.14% (1,615 / 4,234)
Reliability	# of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system	0	0
	# of connection-days per year where water is not available due to water main breaks compared to the total number of properties connected to the municipal water system	0	0
Performance	average condition of water system (e.g. very good, good, fair, poor, very poor)	Good	Fair

	% of water system in good or very good condition	60%	0-25%
	% of water system in poor or very poor condition	23%	0-25%
	Average 10 Year capital cost / average 20 year annual capital requirement	77%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	78%	100%

10.4.9. Appendices

Appendix D1 – Water Asset List

Appendix D2 – Map of Water System

10.4.10. Recommendation

- Staff have estimated the current technical levels of service for reliability as this detail was not previously recorded. Staff have started capturing this detail for future iterations of this report.
- Currently the cost to install watermains includes water services. Inventory and costs could be expanded to estimate the cost of services as a separate asset segment.
- Fire Hydrants are currently not included in the asset management plan. This asset segment will be added in future iterations.

10.5 Sewer System

10.5.1. Asset Inventory & Replacement Cost

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

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Building and Structure	49	User Defined Cost	\$2,068,736
Building Equipment	13	User Defined Cost	\$919,947
Pipes and Valves	21	User Defined Cost	\$949,072
Sanitary Instrumentation and Treatment	20	User Defined Cost	\$603,948
Sanitary Mechanical and Electrical	43	User Defined Cost	\$1,264,796

Sanitary Super Structure	18	User Defined Cost	\$3,337,650
Sewer mains	29,215 m	Unit Cost	\$60,008,411
			\$69,152,561

10.5.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Building and Structure	100%	Very Good	Assessed
Building Equipment	100%	Very Good	Assessed
Pipes and Valves	39.05%	Poor	Age Based / Assessed
Sanitary Instrumentation and Treatment	49.59%	Poor	Age Based / Assessed
Sanitary Mechanical and Electrical	55.78%	Fair	Age Based / Assessed
Sanitary Super Structure	55.18%	Fair	Age Based / Assessed
Sewer mains	50.65%	Fair	Age Based
		53.9%	Fair

10.5.3. Current Approach to Condition Assessment

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

- A comprehensive Facilities Assessment was completed in 2024 that included a detailed assessment of the condition of each building which included the Building and Structure, and Building Equipment.
- The Facilities Assessment is recommended to be completed every 10 years.
- The condition of Pipes and Valves, Sanitary Instrumentation and Treatment, Sanitary Mechanical and Electrical, and Sanitary Super Structure are primarily age based. Any asset that has an age-based condition of poor or very poor received an assessment by Utilities staff. In addition, any assets that are known to be in poor or very poor state of repair are assessed by Utilities staff.
- The condition of sewer mains are age based unless issues noted by staff.

10.5.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease

the average service life remaining. As noted below, some estimated useful lives are dependent on the asset within the segment. For example, Building and Structure includes many elements of the building (e.g. roof, foundation, exterior, flooring, etc.). Depending on the type element and its own material these elements will have varying useful life.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Building and Structure	30 – 100 Years	36.58 Years	28.58 Years
Building Equipment	30 – 50 Years	30.66 Years	11.58 Years
Pipes and Valves	20 – 75 Years	28.33 Years	20.42 Years
Sanitary Instrumentation and Treatment	20 – 50 Years	18 Years	13 Years
Sanitary Mechanical and Electrical	15 – 50 Years	12.58 Years	11.58 Years
Sanitary Super Structure	50 – 80 Years	35.25 Years	38.66 Years
Sewer mains	100 Years	44.83 Years	55.16 Years
		35.17 Years	37.25 Years

10.5.5. Lifecycle Management Strategy

The condition or performance of sewer assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is recommended that the below activities be performed over the life of the asset.

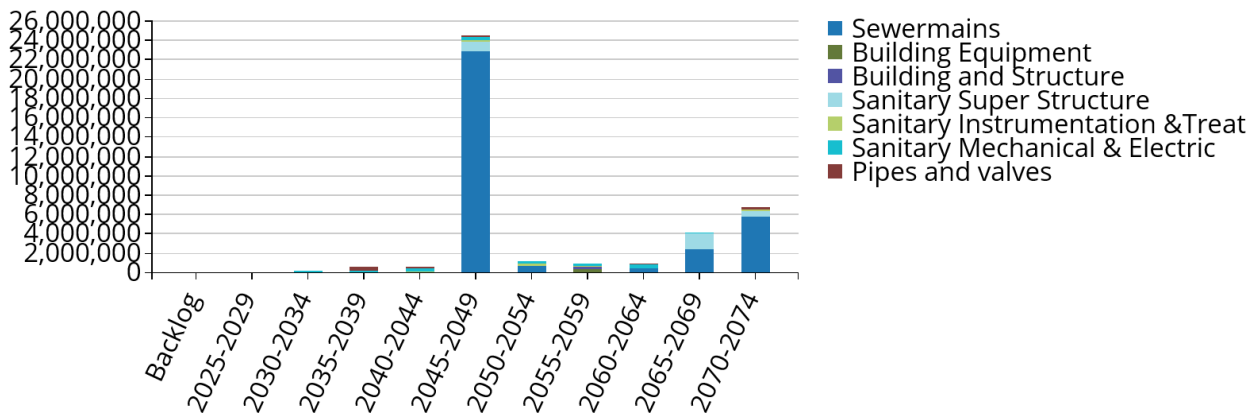
Asset Type	Activity Type	Description of Current Strategy
Sewer main	Relining	Relining of sewer mains is recommended where the revised average annual requirement after relining is less than the average annual requirement after full replacement. In addition, relining is recommended on a case-by-case basis where the other related municipal assets (i.e. road base, asphalt, watermain, storm main) are in good condition and replacement the other assets isn't justified.
	Replacement	The life expectancy of a sewer main is approximately 100 years. Where possible, replacement of water mains will be in conjunction with other related municipal infrastructure (i.e. road base, asphalt, watermain, storm main).

Building and Structure, Building Equipment, Pipes and Valves, Sanitary Instrumentation and Treatment, Sanitary Mechanical and Electrical, and Sanitary Super Structure	Maintenance and Replacement	Equipment will have various life expectancies. Preventative maintenance will be completed where possible and assets will be replaced in order to maintain the overall operation of the sanitary system.
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10.5.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.

Average Annual Capital Requirement
20 Year - \$78,234
50 Year - \$803,309



10.5.7. Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2025 inventory data. See section 5 for the criteria used to determine the risk rating of each asset.

Consequence	5	0 Assets - \$0.00	1 Asset 102.11 m \$388,349.86	1 Asset 137.20 m \$521,805.90	0 Assets - \$0.00	0 Assets - \$0.00
	4	12 Assets 18,435.90 m, sq ft, unit(s) \$2,464,696.31	7 Assets 784.20 m \$1,970,187.91	2 Assets 285.00 m \$783,035.22	0 Assets - \$0.00	0 Assets - \$0.00
	3	23 Assets 35,195.00 m, unit(s), feet, sq ft \$1,898,050.84	8 Assets 1,974.97 m, unit(s), feet, sq ft \$942,751.16	9 Assets 7,249.50 m, unit(s), sq ft, feet \$3,653,987.50	2 Assets 2.00 unit(s) \$550,000.00	6 Assets 1,269.95 m \$2,639,997.46
	2	46 Assets 16,506.27 m, sq ft, unit(s) \$13,802,416.24	22 Assets 6,253.62 m, sq ft, unit(s) \$6,365,472.98	21 Assets 2,217.88 m, unit(s) \$5,488,539.40	14 Assets 1,859.06 m, unit(s) \$4,210,360.20	35 Assets 8,968.37 m \$18,286,541.72
	1	24 Assets 6,472.00 m, sq ft, feet, unit(s) \$2,838,594.27	22 Assets 172.00 m, unit(s) \$820,087.00	30 Assets 1,030.13 m, sq ft, unit(s) \$1,309,308.49	27 Assets 27.00 unit(s) \$931,598.00	1 Asset 1.00 unit(s) \$32,000.00
		1	2	3	4	5
		Probability				

10.5.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Name	Risk Rating
Sewermains	King St. - Bond to Walker	15 - Very High
Sewermains	King St. - Mary to Maria	15 - Very High
Sewermains	Maria ST: James to King	15 - Very High
Sewermains	Orange St. - Huron to Wellington	15 - Very High
Sewermains	Victoria St. - William to Maria	15 - Very High
Sewermains	Wellington St. - North St. S. to Osborne	15 - Very High
Sewermains	Wellington St. - Orange to North St. S.	15 - Very High
Sewermains	King St. - 1st manhole north to Gordon	12 - High
Sewermains	King St. - Gordon to Bond	12 - High
Sanitary Super Structure	Sewage Treatment Plant - Circular Clarifier - Structure	12 - High
Sanitary Super Structure	Sewage Treatment Plant - Holding Tank - Structure	12 - High
Sewermains	Albert ST: Princess ST W to North Limit	10 - High

Sewermains	Bond St. - Matilda to King	10 - High
Sewermains	Church St. - middle of block, east to North St. S.	10 - High
Sewermains	Dunlop St. - Isaac to North St.S.	10 - High
Sewermains	Dunlop St. - King to Isaac	10 - High
Sewermains	Frederick St. - Joseph to South Limit	10 - High
Sewermains	Fulton St. - Joseph to South Limit	10 - High
Sewermains	Gibbings St. - Prin St. E. to Ratt. St. E.	10 - High
Sewermains	Gibbings St. - Ratt. St. E. to Ontario	10 - High
Sewermains	High St. - Victoria to East	10 - High
Sewermains	Huron St. - Main Intersection to Erie St. N.	10 - High
Sewermains	James St. - King to Railway	10 - High
Sewermains	Joseph St. - Fulton to North St. S.	10 - High
Sewermains	King St. - Gordon to Bond	10 - High
Sewermains	Lane -west of Albert, Ratt to Prin W -behind stores	10 - High
Sewermains	Lane: east of Albert, Ratt to Prin E - behind stores	10 - High
Sewermains	Maple St. - Whitehead to Mill	10 - High
Sewermains	Mary St. - North St. S. to Orange	10 - High
Sewermains	Mill St. - Albert to Beech	10 - High
Sewermains	North St. S. - Huron to Dunlop	10 - High
Sewermains	Ontario St. - William to East Limit	10 - High
Sewermains	Orange St. - Prin. St. W. to Ratt. St. W.	10 - High
Sewermains	Princess ST W: alley to Queen	10 - High
Sewermains	Princess St. W. - Queen to North St. N.	10 - High
Sewermains	Rattenbury ST E: Gibbings to Percival	10 - High
Sewermains	Rattenbury St. W. - Albert to Orange	10 - High
Sewermains	Rattenbury St. W. - Orange to North St. N.	10 - High
Sewermains	ShIPLEY St. - John to Princess St. W.	10 - High
Sewermains	ShIPLEY St. - Prin. St. W. to Huron	10 - High
Sewermains	Spencer St. - North St. N. to Erie St. N.	10 - High
Sewermains	Victoria St. - Gordon to Walker	10 - High
Sewermains	Victoria St. - Maria to Gordon	10 - High
Sewermains	Wellington St. - Isaac to Orange	10 - High
Sewermains	William St. - Prin. St. E. to 117 William	10 - High
Sewermains	William St. - Prin. St. E. to Ratt. St. E.	10 - High
Sewermains	William St. - Ratt. St. E. to Ontario	10 - High

10.5.8. Levels of Service

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

10.5.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the user groups or areas of the Municipality that are connected to the municipal sewer system.	See Appendix E1
Quality	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Municipality does not own any combined sewers.
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches	The Municipality does not own any combined sewers.
Reliability	Description of how storm water can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes	Storm water can enter into sanitary sewers due to cracks in sanitary mains or through indirect connections (e.g. footing tiles) and through illegal connections such as sump pump connections. In the case of heavy rainfall events where storm water can enter sanitary sewers through flat roof drainage, eavestrough downspouts and foundation drains, sanitary sewers may experience a volume of water and sewage that exceeds its designed capacity. In some cases, this can cause water and/or sewage to overflow backup into homes. the disconnection of weeping tiles from sanitary mains and the use of sump pumps and pits directing storm water to the storm drain system can help to reduce the chance of this occurring.
	Description of how sanitary sewers in the municipal wastewater system are designed to	The Municipality follows a series of design standards that integrate servicing requirements and land use considerations when constructing or replacing sanitary sewers. These standards have been determined with

	be resilient to Storm Sewer infiltration	consideration of the minimization of sewage overflows and backups.
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Effluent refers to treated sewage that is discharged from a wastewater treatment plant, and may include suspended solids, total phosphorous and biological oxygen demand. The Environmental Compliance Approval (ECA) identifies the effluent criteria for municipal wastewater treatment plants.

10.5.8.2. Technical Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	% of properties connected to the municipal sewer system	38.14% (1,615/ 4,234)	38.14% (1,615/ 4,234)
Reliability	# of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	NA	NA
	# of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0	0
	# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0	0
Performance	average condition of water system (e.g. very good, good, fair, poor, very poor)	Fair	Fair
	% of sewer system in good or very good condition	45%	0-25%
	% of sewer system in poor or very poor condition	38%	0-25%
	Average 10 Year capital cost / average 20 year annual capital requirement	799%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	78%	100%

10.5.9. Appendices

Appendix E1 – Sewer Asset List

Appendix E2 – Map of Sewer System

10.5.10. Recommendations

- Condition of sewer mains are age-based. Central Huron could consider implementing a program to camera drainage pipes to improve the accuracy of the condition of the sewer mains.
- Currently the cost to install sewer mains includes the cost of sewer services. Inventory and costs could be expanded to estimate the cost of services as a separate asset segment.

10.6 Facilities

10.6.1. Asset Inventory & Replacement Cost

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

Department	Quantity	Replacement Cost
Administration	1	\$5,012,058
Fire	1	\$6,027,703
Cemetery	1	\$356,958
Library	1	\$1,997,957
Roads	5	\$5,560,331
REACH	2	\$15,067,217
Recreation	18	\$27,585,208
	18	\$61,607,432

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Building and Structure	374 Components	Unit Cost	\$44,781,571
Building Equipment	69 Components	Unit Cost	\$15,160,133
Parking Lots	8 Components	Unit Cost	\$1,665,727
			\$61,607,432

10.6.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Administration	97%	Very Good	100% Assessed
Fire	100%	Very Good	100% Assessed
Cemetery	80%	Very Good	100% Assessed
Library	98%	Very Good	100% Assessed
Roads	97%	Very Good	100% Assessed
REACH	100%	Very Good	100% Assessed
Recreation	100%	Very Good	100% Assessed
	99%	Very Good	

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Building and Structure	99%	Very Good	100% Assessed
Building Equipment	100%	Very Good	100% Assessed
Parking Lots	92%	Very Good	100% Assessed
	99%	Very Good	

10.6.3. Current Approach to Condition Assessment

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

- A comprehensive Facilities Assessment was completed in 2024 that included a detailed assessment of the condition of each building which included the Building and Structure, Building Equipment, and Parking Lots. Condition is calculated based on the following formula:
Replacement Cost less Backlog of Needs / Replacement Cost

- This formula is used to determine the condition of each component and the weighted value of each component's condition based on replacement cost is used to calculate the condition for the overall facility.
- The Facilities Assessment is recommended to be completed every 10 years.

10.6.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining. As noted below, some estimated useful lives are dependent on the asset within the segment. For example, Building and Structure includes many elements of the building (e.g. roof, foundation, exterior, flooring, etc.). Depending on the type element and its own material these elements will have varying useful lives.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Building and Structure	10 – 100 Years	43.25 Years	11.75 Years
Building Equipment	25 – 50 Years	33.75 Years	10.5 Years
Parking Lots	30 Years	34 Years	(4 Years Overdue)
		41.58 Years	11.33 Years

10.6.5. Lifecycle Management Strategy

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

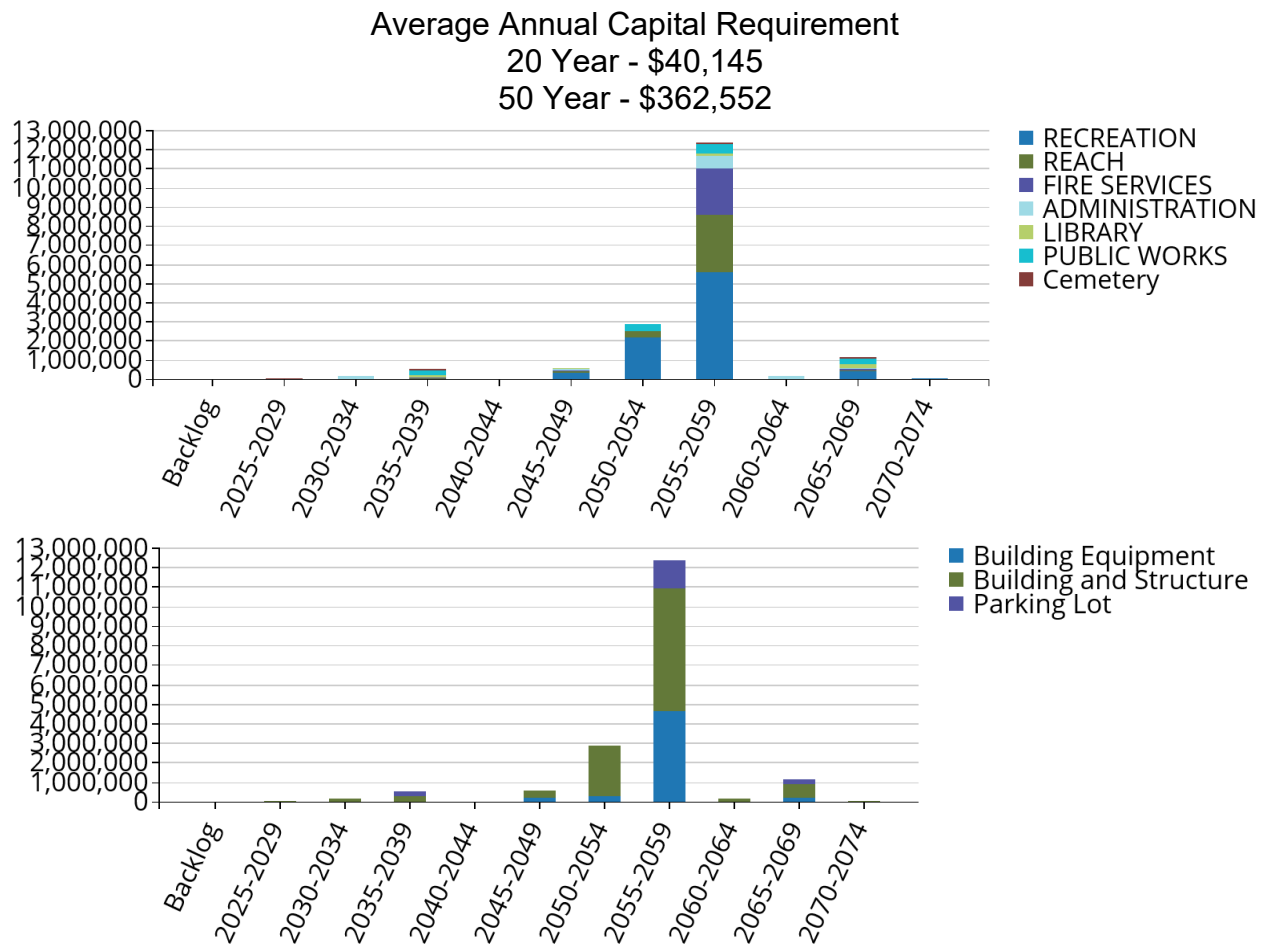
The following table outlines the Municipality's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance/ Rehabilitation	Municipal facilities are subject to regular inspections to identify health & safety requirements as well as deficiencies that require additional attention.
	Comprehensive facilities assessments are recommended to be completed every 10 years.
Replacement	Assessments are completed strategically as facilities approach their end-of-life.

10.6.6. Forecasted Capital Requirements

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

report a 50-year time span has been used to determine the average annual capital requirement.



10.6.7. Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2025 inventory data. See section 5 for the criteria used to determine the risk rating of each asset.

Consequence	5	2 Assets 2.00 unit(s) \$120,000.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	4	35 Assets 265,121.00 sq ft \$6,173,408.73	6 Assets 15,424.00 sq ft \$176,113.43	1 Asset 250.00 sq ft \$9,494.13	1 Asset 1,350.00 sq ft \$21,721.50	0 Assets - \$0.00
	3	111 Assets 639,582.00 sq ft, feet, unit(s) \$24,680,340.30	37 Assets 241,517.00 unit(s), feet, sq ft \$9,581,168.72	39 Assets 74,825.00 feet, sq ft, unit(s) \$4,524,473.47	1 Asset 2,460.00 sq ft \$76,798.13	0 Assets - \$0.00
	2	72 Assets 250,045.00 sq ft, unit(s) \$8,469,893.48	14 Assets 70,138.00 unit(s), sq ft \$1,593,366.02	20 Assets 85,751.00 sq ft, feet, unit(s) \$1,709,815.63	3 Assets 30,500.00 sq ft \$331,590.75	0 Assets - \$0.00
	1	61 Assets 100,254.00 sq ft, unit(s), feet \$2,343,680.45	24 Assets 51,629.00 unit(s), sq ft, feet \$1,232,554.55	19 Assets 25,157.00 sq ft, feet, unit(s) \$543,196.39	4 Assets 1,614.00 sq ft \$13,684.47	1 Asset 612.00 sq ft \$6,131.46
		1	2	3	4	5
		Probability				

10.6.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

Segment	Name	Risk Rating
Building and Structure	FAC27: Blacks Point Pavilion - Roof Structure	16 - Very High
Building and Structure	FAC36: Kinburn Hall - Roof Membrane	12 - High
Building and Structure	FAC40: Holmesville Ball Diamond Former Scalehouse - Interior Floor Structure	12 - High

10.6.8. Levels of Service

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

10.6.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the types of facilities that the Municipality operates and maintains.	Facility assets include structures such as arena, community halls, fire halls, and the town hall.
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts.	Facility asset rehabilitation and replacement decisions are predominantly based on opportunities for accessibility improvement, risk to occupant health and safety, legislative compliance, and cost and construction feasibility. Currently, decisions to replace components of facilities through capital investment projects are forecasted ten (10) years in advance.

10.6.8.2. Technical Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Facilities Per 1,000 residents	3.72	3.72
Quality	Average facility condition index value for facilities in the Municipality	99 (Very Good)	100 (Very Good)
Performance	% of facilities in good or very good condition	99%	100%
	% of facilities network in poor or very poor condition	1%	0%
	Average 10 Year capital cost / average 20 year annual capital requirement	1,219%	100%

	Average 10 Year capital cost / average 50 year annual capital requirement	135%	100%
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10.6.9. Appendices

Appendix F1 – Facilities Asset List

Appendix F2 – Map of Facilities

10.6.10. Recommendations

- It was noted in the BM Ross facilities assessment report that the stated useful life used in the report for some assets is not congruent with the actual life span of these assets. For example, brick exterior has a useful life of 100 years, however, brick that is properly maintained can last significantly longer than this. Accordingly, the Facilities Estimated Useful Life and Average Ages section is not useful in determining future replacement requirements or remaining lifespan of assets. Staff will consider alternative methodologies for this section in future reports.
- Asset conditions were set using the cost of work required over the next 10 years divided by the total replacement cost of the asset. It was noted that the BM Ross report did not identify some issues that are noted by staff. Accordingly, staff will consider either revising the methodology for condition assessments for facilities or update the list to include additional costs identified by staff.

10.7 Playgrounds and Sports Fields

10.7.1. Asset Inventory & Replacement Cost

The table below includes the quantity, replacement cost method and total replacement cost of each asset segment in the Municipality's Playgrounds and Sports Fields inventory.

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Fencing	6	User Defined Cost	\$555,000
Light Standards and Fixtures	8	User Defined Cost	\$2,160,000
Outdoor Pools, Splash Pads	1	User Defined Cost	\$400,000
Playground Equipment	5	User Defined Cost	\$705,000
Skate Parks	1	User Defined Cost	\$400,000
			\$4,220,000

10.7.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Fencing	81%	Very Good	Assessed
Light Standards and Fixtures	74%	Good	Assessed
Outdoor Pools, Splash Pads	70%	Good	Assessed
Playground Equipment	74%	Good	Assessed
Skate Parks	100%	Very Good	Assessed
		77%	Good

10.7.3. Current Approach to Condition Assessment

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

- An assessment of all Playgrounds and Sports Fields assets were completed by Facilities Staff.

10.7.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Fencing	40 Years	18.33 Years	21.67 Years
Light Standards and Fixtures	Light Fixtures – 25 Years, Light Standards – 50 years	34.75 Years	2.75 Years
Outdoor Pools, Splash Pads	Splash Pads - 20 Years	8.33 Years	11.67 Years
Playground Equipment	20 Years	21 Years	(1 Year)
Skate Parks	100 Years	7.25 Years	92.75 Years
		24.08 Years	11.42 Years

10.7.5. Lifecycle Management Strategy

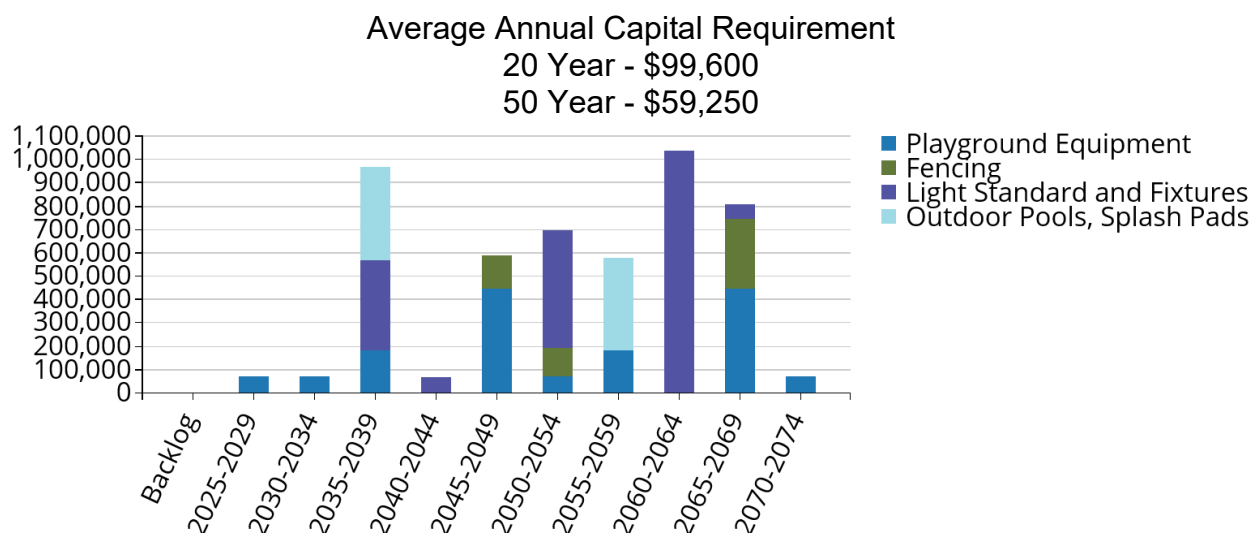
The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

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

Activity Type	Description of Current Strategy
Maintenance/ Rehabilitation	Municipal parks and sport fields are subject to regular inspections to identify health & safety requirements as well as deficiencies that require additional attention.
Replacement	Assessments are completed strategically as facilities approach their end-of-life.

10.7.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.



10.7.7. Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2025 inventory data. See section 5 for the criteria used to determine the risk rating of each asset.

Consequence	5	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	4	0 Assets - \$0.00	1 Asset 1.00 unit(s) \$550,000.00	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00
	3	0 Assets - \$0.00	2 Assets 2.00 unit(s) \$675,000.00	3 Assets 3.00 unit(s) \$1,050,000.00	2 Assets 2.00 unit(s) \$650,000.00	0 Assets - \$0.00
	2	0 Assets - \$0.00	2 Assets 2.00 unit(s) \$355,000.00	0 Assets - \$0.00	1 Asset 1.00 unit(s) \$140,000.00	0 Assets - \$0.00
	1	0 Assets - \$0.00	3 Assets 3.00 unit(s) \$220,000.00	4 Assets 4.00 unit(s) \$285,000.00	2 Assets 2.00 unit(s) \$145,000.00	2 Assets 2.00 unit(s) \$150,000.00
		1	2	3	4	5
		Probability				

10.7.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle

strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

Segment	Name	Risk Rating
Light Standard and Fixtures	Holmesville Ball Diamond - Light Standards	12 - High
Light Standard and Fixtures	Londesborough Ball Diamond - Lighting	12 - High

The following table identifies the most critical assets according to the risk criteria identified in section 5. The risk rating is calculated by multiplying the probability of failure and the consequence of failure for each asset.

10.7.8. Levels of Service

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

10.7.8.1. Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by Playgrounds and Sports Fields.

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the types Parks and Sports Fields that the municipality manages.	The municipality maintains baseball diamonds, playground equipment, dog parks, lawn bowling green and a skate park.
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts.	Playgrounds and Sport Field asset rehabilitation and replacement decisions are predominantly based cost and construction feasibility. Currently, decisions to replace playgrounds and sports fields are through capital investment projects are forecasted ten (10) years in advance.

10.7.8.2. Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by Playgrounds and Sports Fields.

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Scope	Playgrounds and sports fields per 1,000 residents	1.54	1.54

Quality	Average condition value for playgrounds and sports fields in the Municipality	77 (Good)	60-80 (Good)
Performance	% of playgrounds and sports fields in good or very good condition	42.65%	20-40%
	% of playgrounds and sports fields in poor or very poor condition	25.71%	0-25%
	Average 10 Year capital cost / average 20 year annual capital requirement	246%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	146%	100%

10.7.9. Appendices

Appendix G1 – Playground and Sports Fields Asset List

Appendix G2 – Map of Playgrounds and Sports Fields

10.7.10. Recommendation

- Improve asset inventory to include land improvement, such as, ball diamond clay, retaining walls and other landscaping.

10.8 Fleet and Equipment

10.8.1. Asset Inventory & Replacement Cost

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

Asset Segment	Quantity	Replacement Cost Method	Replacement Cost
Fire Equipment	7	User Defined Cost	\$433,500
Fire Trucks	5	User Defined Cost	\$3,325,000
Grounds Equipment	8	User Defined Cost	\$318,000
Heavy Equipment	16	User Defined Cost	\$4,997,000
Licensed Heavy Equipment	11	User Defined Cost	\$4,458,608
Tools and Equipment	6	User Defined Cost	\$11,786
Vehicles	19	User Defined Cost	\$1,232,500
	72		\$14,880,394

10.8.2. Asset Condition

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

Asset Segment	Average Condition (%)	Average Condition Rating	Condition Source
Fire Equipment	56%	Fair	Age Based
Fire Trucks	33%	Poor	Age Based
Grounds Equipment	53%	Fair	Age Based
Heavy Equipment	37%	Poor	Age Based
Licensed Heavy Equipment	29%	Poor	Age Based
Tools and Equipment	76%	Good	Age Based
Vehicles	29%	Poor	Age Based
	34%	Poor	

10.8.3. Current Approach to Condition Assessment

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

- The condition of Fleet and Equipment assets is 100% age based.

10.8.4. Estimated Useful Life & Average Age

The table below identifies the estimated useful life, average age, and average service life remaining for each asset segment. Assessed condition may increase or decrease the average service life remaining. As noted below, some estimated useful lives are dependent on the asset within the segment. For example, Building and Structure includes many elements of the building (e.g. roof, foundation, exterior, flooring, etc.). Depending on the type element and its own material these elements will have varying useful lives.

Asset Segment	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Fire Equipment	8 – 25 Years	6.25 Years	9.17 Years
Fire Trucks	10 - 25 Years	13.5 Years	6.5 Years
Grounds Equipment	15 Years	8.83 Years	6.17 Years
Heavy Equipment	10 – 20 Years	15 Years	0.33 Years
Licensed Heavy Equipment	10 – 25 Years	13.08 Years	2.33 Years
Tools and Equipment	15 – 20 years	4.58 Years	12.08 Years
Vehicles	10 – 15 Years	10.17 Years	1.17 Years
		10.92 Years	3.75 Years

10.8.5. Lifecycle Management Strategy

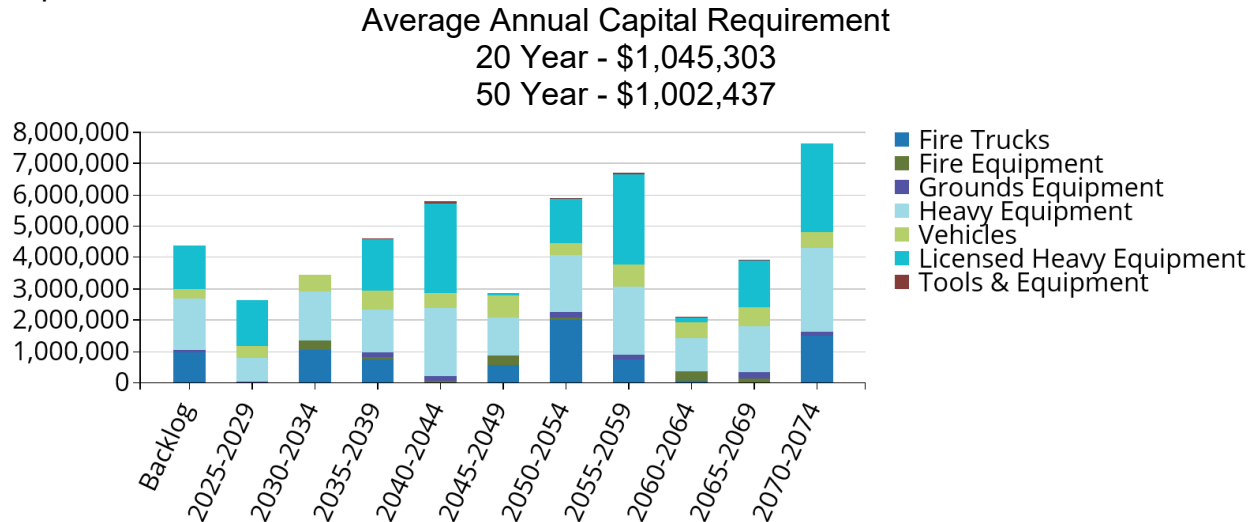
The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

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

Activity Type	Description of Current Strategy
Maintenance/ Rehabilitation	Maintenance programs vary by department.
	Fire Department Equipment is subject to a much more rigorous inspection and maintenance program compared to most other departments.
	Equipment is maintained according to manufacturer recommended actions and supplemented by the expertise of municipal staff.
Replacement	The replacement of equipment depends on deficiencies identified by operators that may impact their ability to complete required tasks.

10.8.6. Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Municipality should allocate towards funding rehabilitation and replacement needs. For the purposes of this report a 50-year time span has been used to determine the average annual capital requirement.



10.8.7. Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2025 inventory data. See section 5 for the criteria used to determine the risk rating of each asset.

Consequence	Probability				
	1	2	3	4	5
5	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets - \$0.00	1 Asset 1.00 unit(s) \$1,000,000.00	1 Asset 1.00 unit(s) \$1,000,000.00
4	0 Assets - \$0.00	0 Assets - \$0.00	1 Asset 1.00 unit(s) \$750,000.00	0 Assets - \$0.00	0 Assets - \$0.00
3	4 Assets 4.00 unit(s) \$1,821,576.00	3 Assets 3.00 unit(s) \$1,443,152.00	0 Assets - \$0.00	0 Assets - \$0.00	10 Assets 10.00 unit(s) \$4,678,880.00
2	2 Assets 2.00 unit(s) \$486,000.00	0 Assets - \$0.00	2 Assets 2.00 unit(s) \$430,000.00	3 Assets 3.00 unit(s) \$511,000.00	4 Assets 4.00 unit(s) \$750,000.00
1	12 Assets 12.00 unit(s) \$406,000.00	7 Assets 7.00 unit(s) \$418,500.00	2 Assets 2.00 unit(s) \$120,000.00	4 Assets 4.00 unit(s) \$213,500.00	16 Assets 16.00 unit(s) \$851,786.00

10.8.7.1. Critical Assets

The identification of critical assets allows the Municipality to determine appropriate risk mitigation strategies and treatment options. These may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data. Critical assets do not necessarily require immediate renewal or replacement.

Segment	Name	Risk Rating
Fire Trucks	PUMPER #8-2 97 HUB SPARTAN PUMPER	25 - Very High
Fire Trucks	PUMPER #8-1 2011 PIERCE RESCUE PUMPER	20 - Very High
Heavy Equipment	2010 ELGIN PELICAN STREET SWEEPER	15 - Very High
Licensed Heavy Equipment	International Dump Truck-1996	15 - Very High
Heavy Equipment	INT 4-WD TRACTOR/LOADER-1987	15 - Very High
Heavy Equipment	CHAMPION 740 GRADER-1992	15 - Very High
Licensed Heavy Equipment	2010 Freightliner Tandem Truck	15 - Very High
Licensed Heavy Equipment	2013 International Westernstar Truck	15 - Very High
Heavy Equipment	John Deere Grader	15 - Very High
Licensed Heavy Equipment	Sterling Tandem Truck-2007	15 - Very High
Licensed Heavy Equipment	05 Sterling Tandem Truck-2005	15 - Very High
Licensed Heavy Equipment	2014 Western Star Tandem	15 - Very High
Fire Trucks	2001 Spartan Rescue Vehicle	12 - High
Heavy Equipment	JOHN DEERE TRACTOR-1989	10 - High
Heavy Equipment	JOHN DEERE BACKHOE-2000	10 - High
Heavy Equipment	JD BACKHOE-2003	10 - High
Heavy Equipment	CASE BACKHOE-2008	10 - High

10.8.8. Levels of Service

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

10.8.8.1. Community Levels of Service

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

Service Attribute	Qualitative Description	Current LOS
Scope	Description or images of the types of vehicles (e.g. light, medium and heavy-duty) that the Municipality operates and the services that they help to provide to the community	Fleet and Equipment assets include diverse assets such as fire trucks, heavy machinery, light- and heavy-duty trucks, lawn mowers, tractors, and trailers.
Quality	Describe criteria for rehabilitation and replacement decisions and any related long-term forecasts	Fleet and Equipment investments are generally planned 10 years out and consider the asset's age, condition, utility, and cost-benefit analysis of replacement.

10.8.8.2. Technical Levels of Service

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

Service Attribute	Qualitative Description	Current LOS	Proposed LOS
Quality	% of assets that are in fair or better condition.	39.49%	60%
Performance	Average 10 Year capital cost / average 20 year annual capital requirement	55%	100%
	Average 10 Year capital cost / average 50 year annual capital requirement	58%	100%

10.8.9. Appendices

Appendix H1 – Fleet and Equipment Asset List

10.8.10. Recommendations

- Asset condition is currently 100% age based. Staff could consider moving to an assessment-based model, however, age-based conditions are likely sufficient for the purposes of this report.