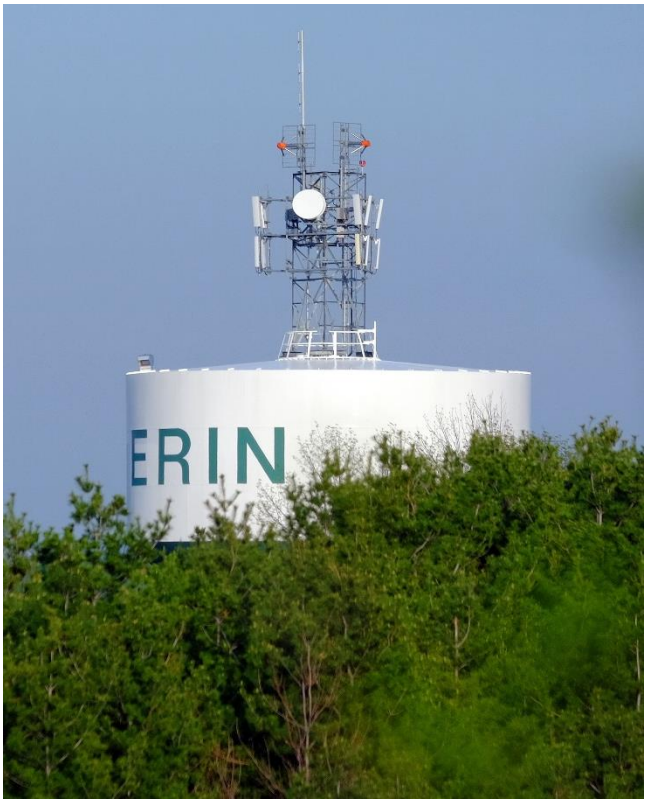
TOWN OF ERIN



Asset Management Plan 2024

Prepared by:
The Finance Team
June 30, 2025

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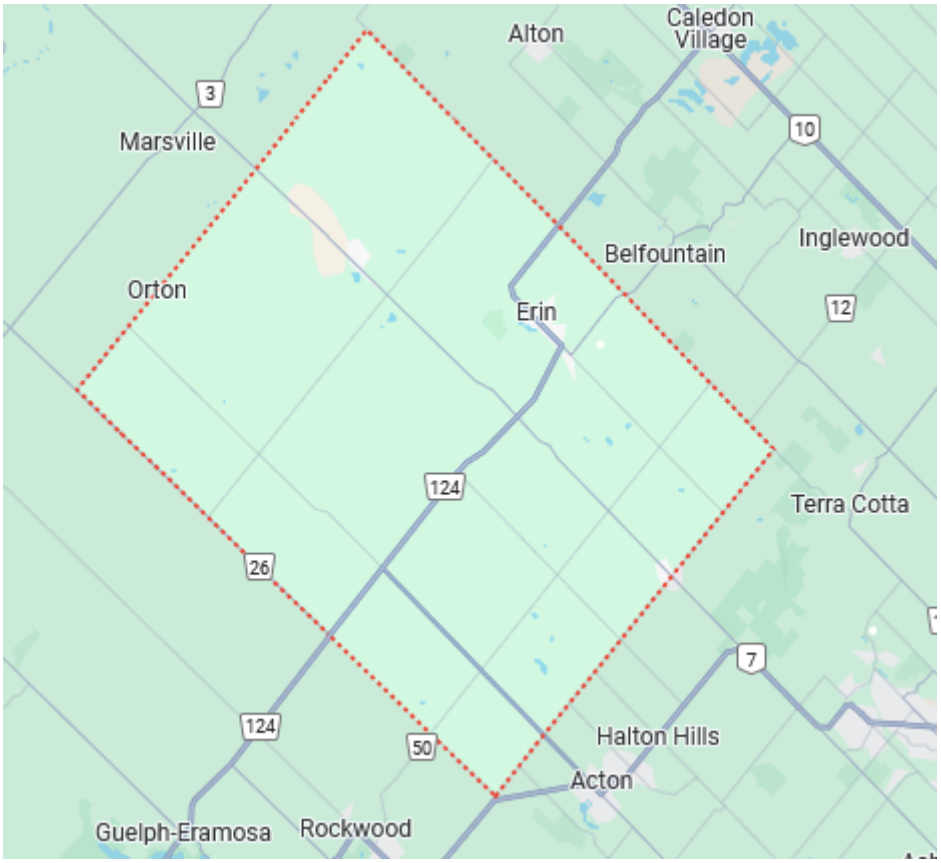
A.Introduction

1. Town of Erin at a Glance:

The Town of Erin is a lower-tier municipality within the County of Wellington that spans on a land area of 298.8 square kilometers. The estimated population of the Town is 12,790 with a population density of 40.61/km^2 and annual population change rate of 0.35%. (Based on Statistics Canada 2024)



The Town has developed significantly over the years by attracting developers to build new communities over the last few years. The new developments led to expanding the existing infrastructure and build new ones. The existing assets have been expanded to service the growth in Town's community.

The Town provides an array of essential services to its growing community that are supported by a wide array of assets and reliable infrastructure, including:

Roads Services:
Maintaining local asphalt and gravel roads, bridges and culverts, and streetlights within the Town-owned Road right of way for the provision of transportation services.
Maintaining sidewalks, parking and walkways within the road right of way, as well as trails and paths in parks and natural areas.

Water Distribution:
A watermain and water service pipes network, water towers and wells, associated with other assets, such as meters, that provide a safe and reliable distribution of water;

Parks and Outdoor Recreation:
Assets that provide various amenities such as sporting, recreation and leisure.

Recreation Facilities:
Facilities and equipment, including community centres and arenas that provide recreational programs for all interests and ages.

Protection Services:
Fleet, Fire stations, and equipment that provide emergency response and fire protection services to the community.

Administration Services:
Includes facilities, fleet and equipment that support resident services.

2. Town of Erin's Assets 2024:

The Town of Erin has an asset portfolio that includes different categories of Core and Non-Core assets
distributed among eight categories:

Core Assets:

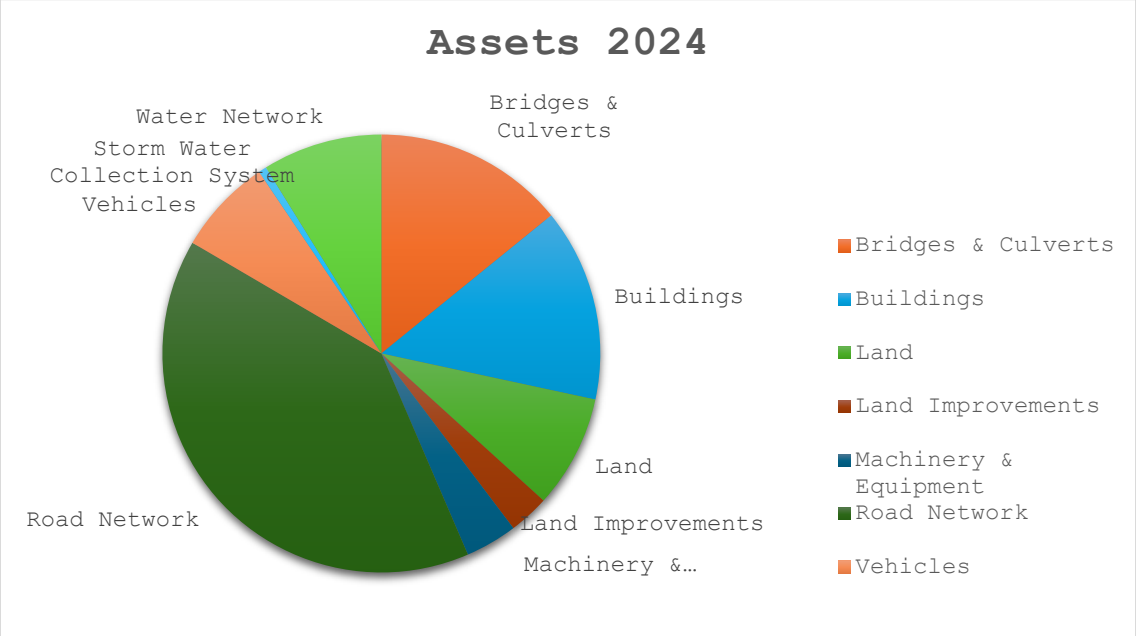
- Road Network
- Bridges & Culverts
- Water System
- Waste Water

Non-Core Assets:

- Buildings
- Land Improvements
- Machinery & Equipment
- Vehicles

The Town of Erin's Assets Portfolio includes core assets and non-core assets with an estimated $276 million total replacement cost as of 2024. This value is comprised of all assets from Roads, Bridges & Culverts, Water systems, Wastewater, Parks, Recreation, Facilities, and other non-core assets. These values don't include the work-in-progress assets. Work-In-Progress assets

includes the new Wastewater Treatment Plant with a value that exceeds $167 million, and Erin Community Centre Renovation project with an estimated total replacement value of $ 3.1 million.



Most of the assets currently owned by the Town are in good condition. The overall “Good” condition rating is attributed to the Town’s Road Network and Bridges due to continuous maintenance and upgrades.

3. Asset Management Plan 2024:

The Town of Erin presents 2024 Asset Management Plan to comply with the ongoing requirements of Ontario Regulation 588/17- Asset Management Planning for Municipal Infrastructure (0. Reg. 588/17). As required by regulations, municipalities are required to achieve the final and major milestone of the plan by July 1, 2025. After this milestone, the Town will continue to develop Assets Management Plans on a 5-year cycle, as required by regulations.

This 2024 Asset Management Plan includes a presentation of the Town’s assets, conditions, lifecycle, current level of services, proposed Levels of Service, and a financial strategy to fund the needs to maintain these assets. The data and analysis are based on updated data for Year 2024 from the Town’s asset management system, Citywide. In addition, proposed levels of service and financial forecasts have been developed to meet infrastructure needs.

As a result, much of the content of this Asset Management Plan is an update to the 2023 Asset Management Plan. The new additions to this year’s Asset Management Plan are summarized as follows:

- Asset data and analysis have been updated with the latest data from Citywide;
- Town’s proposed levels of service, which is a new requirement of 0. Reg. 588/17 for July 1, 2025, reporting;
- Financial strategy that provides additional information and analysis of the Town’s financial plan to finance the proposed levels of service.

4. Town's Asset Management Plan Roadmap:

The Town has adopted the requirements of Ontario Regulation 588/17- Asset Management Planning for Municipal Infrastructure since 2018. The first Asset Management Plan was issued July 1, 2019, and advanced to meet the milestones set in the regulation by July 1, 2025. The Town asset management planning advancements have included implementing the following key foundational components:

- **The Strategic Asset Management Policy**: Issued 2019 which outlines the Town's commitments to asset management planning guided by Town's strategic plans;
- **The Asset Management System, Citywide**: The Town implemented Citywide to manage and support assets decision making by generating analytical reports that support forecasting infrastructure investment.
- **The Asset database**: built into Citywide Software. It includes all Town's assets inventory, lifecycle, condition, risk management and levels of services;
- **Asset Management Plan 2020:** Provided an asset management plan for Town's core assets;
- **Asset management Plan 2021:** Provided an overview of existing levels of services for core assets.
- **Asset Management Plan 2023:** Provided an overview of existing levels of services for all assets.
- **Asset Management Plan 2024:** Provides an update on the 2023 Asset Management Plan adding the Town's proposed levels of service and financial strategy.

5. Impact of Population Growth on Asset Management Plan:

The population will grow significantly in the next 10 years when buildout may be complete. The Town's population growth will lead to increased demand for services, mainly the infrastructure services which will require the acquisition of new assets and the maintenance of current ones to meet demand. The Town's asset management plan must incorporate the results of its extensive growth planning into budget planning processes and evaluate the financial effect of growth demands.

The Town incorporates the collected development charges to help funding the future growth and demand for new infrastructure capital projects.

Currently the Town of Erin's Population is an estimated 12,790 people and 4,333 households. At the completion of the current buildout designated lands, the population is expected to be approximately over 25,000.

Town of Erin

Residential Growth Forecast Summary

	Year	Population (Including Census Undercount)	Population (Excluding Census Undercount)	Housing Units	Person/Unit
Historical	**Mid 2011**	11890	11418	3955	2.887
	Mid 2016	12910	11439	4110	2.783
	Mid 2021	12470	11981	4220	2.839
Forecast	**Mid 2024**	12790	12287	4333	2.836
	Buildout	26300	25500	9200	2.772

B. Asset Management Plan: Scope, Methodology & Inventories

1. Asset Management Scope & Methodology:

The Town of Erin utilizes PSD Citywide to manage its assets inventory. The system allows the Town to categorize these assets based on the nature of the asset and use, and it also allows the Town to track asset condition and risks to prevent premature and costly rehabilitation or replacement and to ensure that lifecycle activities occur at the right time to maximize asset value and useful life.

The scope of the asset management plan is to:

1- include all core and non-core assets
2- assess lifecycle activities, risks and conditions.
3- present the current and proposed level of services.
4- Plan the financial strategy to accommodate the proposed level of services.

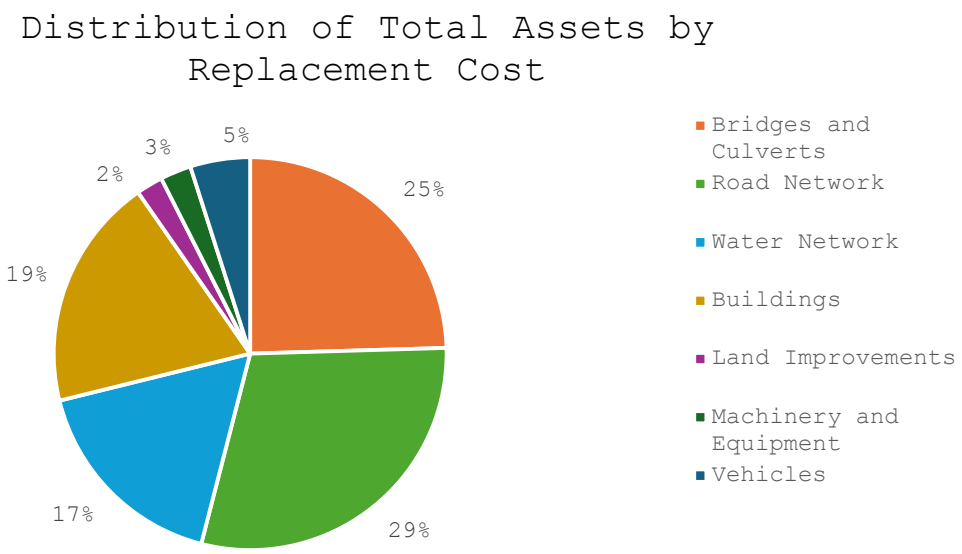
a) Assets Replacement Cost Methodology

Replacement cost valuation is an essential task that municipalities undertake to determine their future obligations to replace an asset with a similar asset with a similar condition. This task includes several methods to determine the replacement cost of an asset, and some are more accurate and reliable than others. The Town of Erin uses the following to determine the asset replacement cost:

- **User-Defined Cost & Cost/Unit:** This method uses reliable sources that are reasonably accurate and reliable to determine asset replacement costs. It is used mainly for assets, such as Land, Bridges & Culverts, their costs are provided by the following:
    - Town staff which could include average costs from recent contracts.
    - data from engineering reports and assessments.
    - staff estimates based on knowledge and experience.

- **Cost Inflation/CPI Tables:** Cost inflation is typically used in the absence of reliable replacement cost data. It is a reliable method for recently purchased and/or constructed assets where the total cost is reflective of the actual costs that the Town incurred and the inflation rate from the Consumer Price Index or Non-Residential Building Construction Price Index. The reliability of this method decreases as the assets age and new products and technologies become available.

The total replacement cost is divided into the following asset categories with the road network representing the largest category as 29% of the total replacement cost, followed by the Town's bridges and culverts at 25% and then the Town's buildings at 19%.

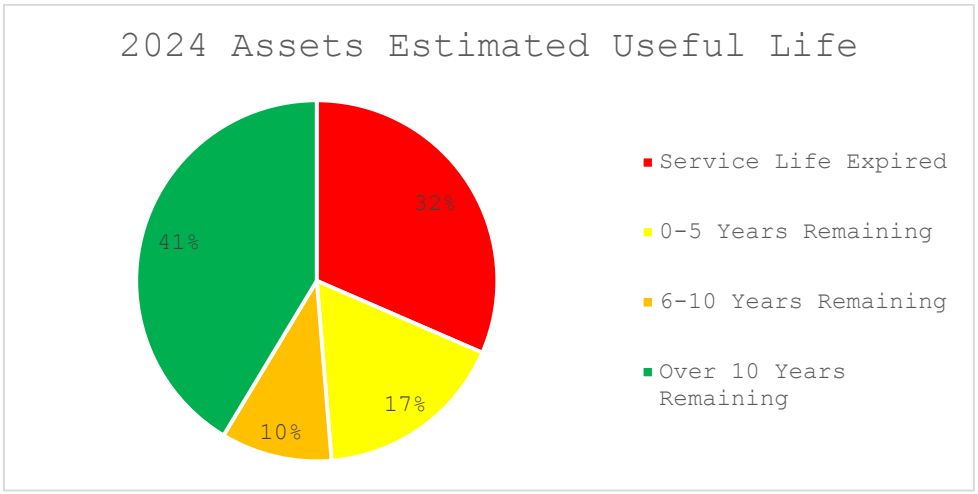


b) Assets Lifecycle

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

The service life of an asset is the average time, in years, that an asset is expected to be productive and in use. Some assets might either surpass or do not fulfill their expected service life. 32% of the Town's assets surpassed their usefulness by the end of 2024 and are still in use. Most of these assets are roads.

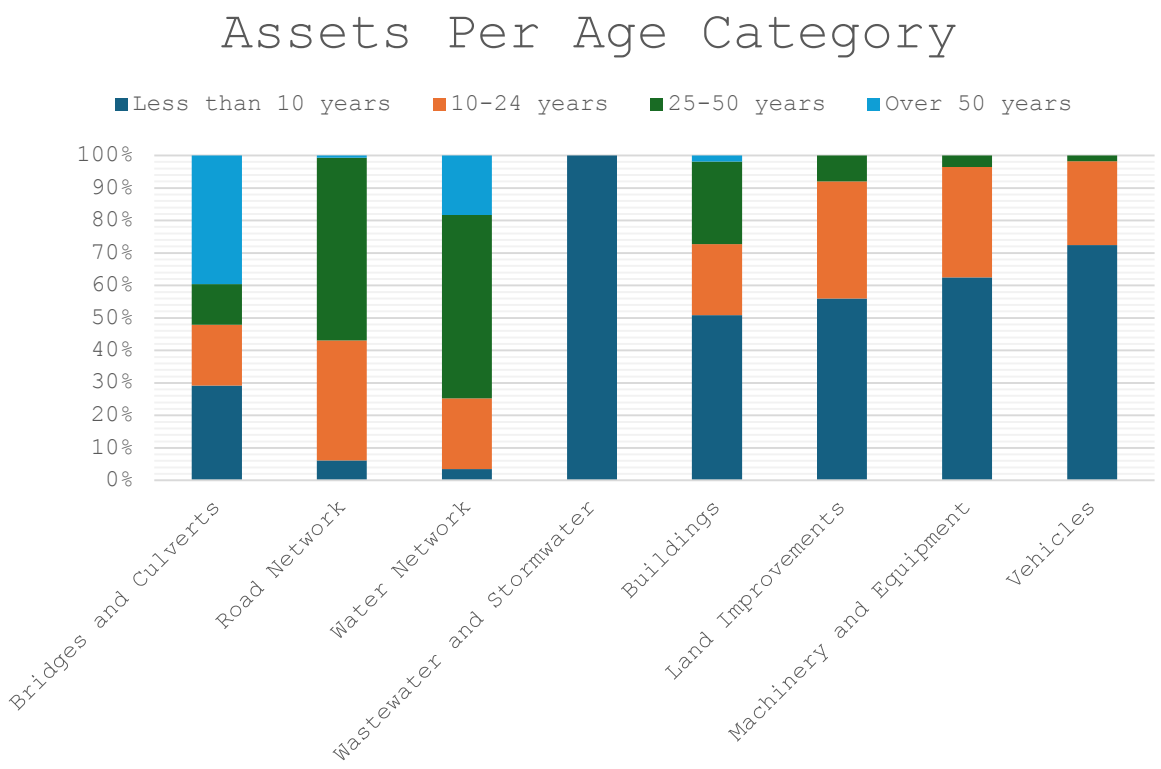
The Town determines the remaining useful life of an asset by subtracting the years of estimated useful life from the service life. The service life of an asset is an indicator of how well maintained and updated they are to serve the Town and community. By using asset service life and the asset condition data, the Town will be able to accurately forecast future years' capital needs.



c) Assets Age Profile

The asset age is a basis to determine an asset's estimated useful life and service life. All assets age must meet regulatory requirements and follow the industry index for the same assets.

The age analysis and condition data provide valuable insight into the Town's assets' lifecycle management and help set strategies for future needs. Below is a summary of the assets' ages for each category. 21% percent of the Town of Erin assets are newer than 10 years old, over half less than 25 years old and 93% less than 50 years old.



d) Assets Condition Assessment

The condition assessment of an asset depends on the type of asset. The Town uses the following condition assessment methodologies:

- Roads: Surface Condition Index *(Roads Need Study every 4 years)*
- Bridges: Bridge Condition Index *(OSIM Report every 2 years*)
- All other assets: Age-Based Condition Assessment

Surface Condition Index and Bridge Condition Index are two methodologies that utilize Inspection-Based Assessment. It involves element-by-element inspections and observation to assess an asset's current condition and identify maintenance requirements.

Age-Based Assessment is another methodology that relies on the assumption that asset conditions deteriorate with time and their remaining lifespan is estimated based on their age. This method is relevant for assets with well-documented deterioration patterns. It is used as an initial step to establish a baseline understanding of asset conditions. This approach allows the Town to forecast future maintenance and replacement needs.

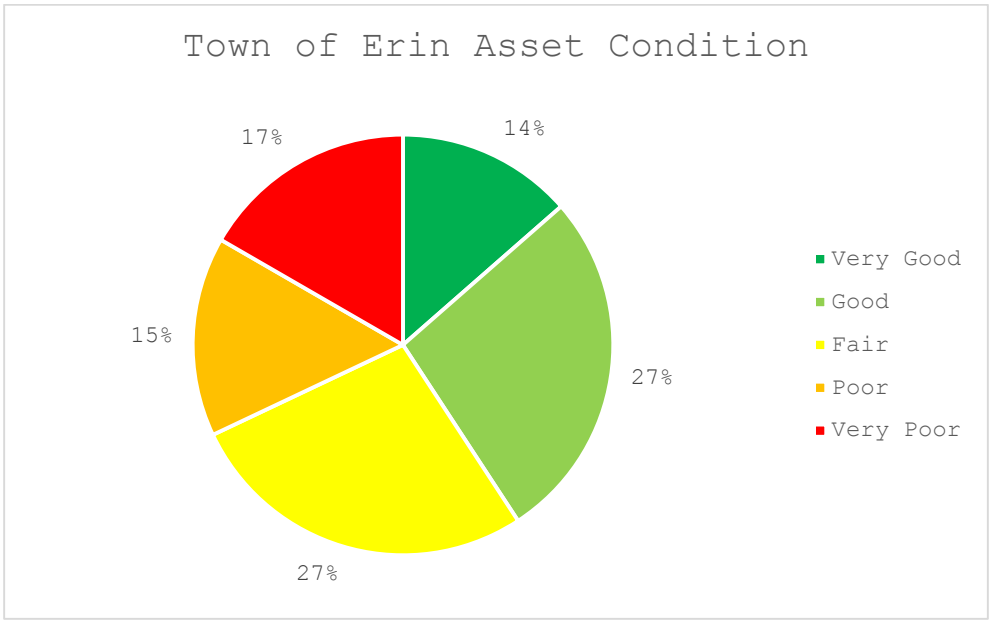
The Town uses a condition assessment rating system across the Town's asset portfolio. This rating system is aligned with the Canadian Core Public Infrastructure Survey which is used to develop the Canadian Infrastructure Report Card. When assessed condition data is not available, service life remaining and asset age is used to approximate asset condition.

Table 1 illustrates the condition rating system used by the Town to determine asset conditions:

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, exhibits significant deterioration	20-40
Very Poor	Unfit for sustained service	Near or beyond expected service life, signs of advanced deterioration, unusable	0-20

The chart below represents the distribution of the Town's assets by replacement cost with:

- 14% as very good,
- 27% as good,
- 27% as fair,
- 15% as poor, and
- 17% as very poor.



2. Asset Management Plan Inventories:

In 2018, the Town of Erin utilized the City-Wide asset management system to track its assets. The system allows the categorization of the assets under each department. This allows the Town to identify the Town's capital needs by each service area.

The following table illustrates the Town's assets by department and their Current Replacement Cost:

Dept.	Asset Category	Replacement Cost 2024
Corporate	Buildings	$ 1,632,653.00
	Furniture & Fixtures	$ 6,934.00
	Land Improvements	$ 46,462.00
	Computer Software	$ 51,727.00
	Computers & Equipment	$ 396,568.00
Building	Computer Software	$ 65,979.00
	Computers & Equipment	$ 1,402.00
	Building Vehicle Licensed	$ 169,160.00
Fire	Fire Buildings	$ 4,063,871.00
	Fire Equipment	$ 1,862,091.00
	Fire Trailer	$ 5,380.00
	Fire Vehicle Licensed	$ 4,215,580.00
	Fire Vehicle Unlicensed	$ 27,468.00
Parks and Recreation	Parks Buildings	$ 21,372,212.00
	Furniture & Fixtures	$ 18,594.00
	Land Improvements	$ 4,284,591.00
	Parks Computer Software	$ 30,907.00
	Parks Equipment	$ 907,782.00
	Parks Trailers	$ 14,126.00
	Parks Vehicle Licensed	$ 222,703.00
Roads	Road Structure - Bridge	$ 15,386,513.00
	Road Structure - Culvert	$ 33,059,870.00
	Roads Buildings	$ 1,778,827.00
	Machinery & Equipment	$ 253,024.00
	Streetlights	$ 416,136.00
	Storm Water Collection System	$ 974,856.00
	Road Network	$ 135,785,077.00
	Roads Trailer	$ 63,939.00
	Roads Vehicle Licensed	$ 2,191,247.00
	Roads Vehicle Unlicensed	$ 2,789,476.00
Water	Water Buildings	$ 8,972,145.00
	Water Equipment	$ 1,042,717.00
	Water Trailer	$ 16,423.00
	Water Service *(Residential & Commercial Pipe Network)*	$ 3,708,004.00
	Watermains *(Main Pipe Network)*	$ 30,127,514.00
	Total	**$ 275,961,958.00**

C.State of Core & Non-Core Assets 2024

1. Core Assets:

The Town's core assets consist of Road Network, Bridges & Culverts, Water Network and Storm Water Network.

a) Bridges & Culverts:

The Town of Erin has 48 bridges and culvert structures with a total replacement cost of $ 48.45 million. The average annual cost to replace bridges and culverts is $1.02 million.

The following table illustrates key asset attributes for the Town of Erin Bridge and Culvert portfolio. All values are from the OSIM Bridge Inspection Reports, completed every two years as per Ontario regulation 104/97.

Component	QTY	Average Age 2024	Valuation	2024 Replacement Cost	2023 Replacement Cost
Bridges	11	28.18	OSIM Report	$15,386,513.00	$15,386,513.00
Culverts	37	41.5	OSIM Report	$33,059,870.00	$33,660,056.00
Total	48			**$48,446,383.00**	**$49,046,569.00**

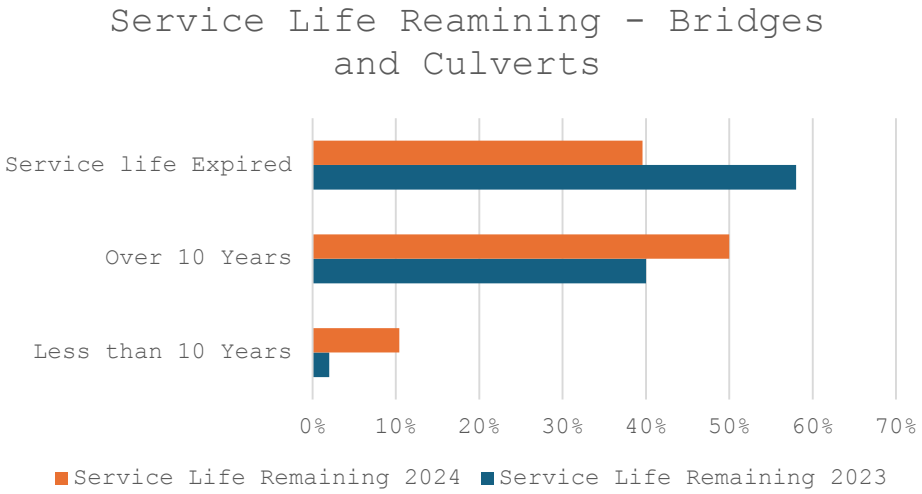
Total replacement cost was determined using the inflation adjusted OSIM report figures. The total replacement cost is lower because of lower costs than estimated for replacement.

Lifecycle:

The Town has been actively monitoring the bridges and culvert status and investing in replacing deteriorated structures. In 2024, Bridge 5, Culvert 2053 & Culvert 10 were replaced with an additional two bridges to be replaced in 2025.

The determined service life at completion for bridges and culverts with expired useful life sits at around 40% with a significant decrease from the prior year due to replacements. The

percentage of bridges and culverts with estimated remaining useful life is over 10 years, however increased 10% to approximately half of the total value in this asset category. The chart below shows the changes in the remaining service life from 2023 to 2024:



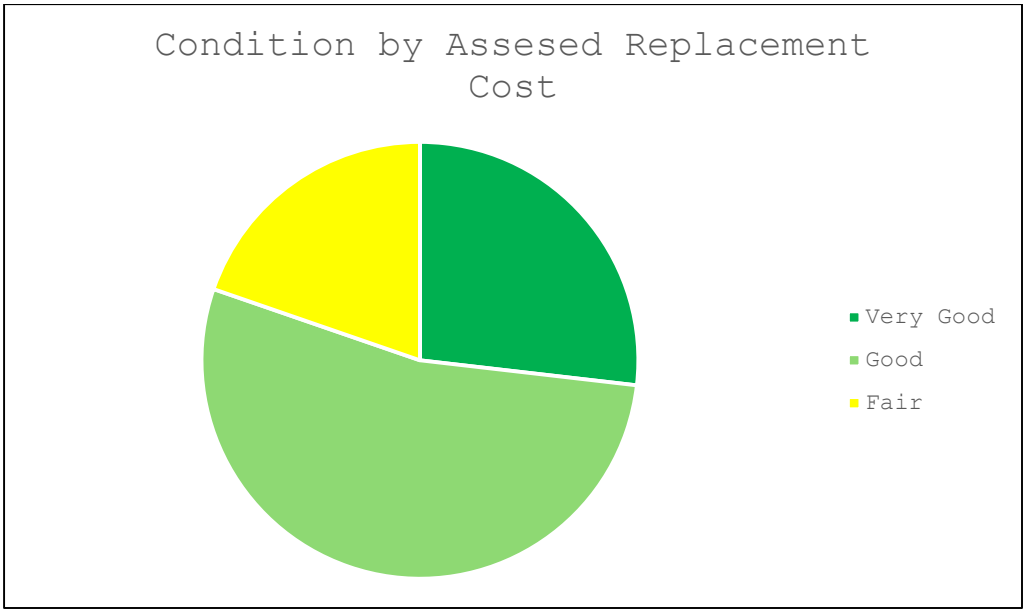
Condition:

The Bridge Condition Index (BCI) for each structure has been determined based on the Ministry of Transportation Ontario (MTO) methodology. A new structure would have a BCI value of 100 and the value would decline over time. Monitoring the rate of decline in the BCI and comparing this with an anticipated rate of decline will provide the Town with valuable, long-term planning and asset management information. Average BCI for bridges is 72.66. Average BCI for structural culverts is 68.43.

The BCI for 47 bridge and culvert structures ranges from 0 to 100:

- Very Good – BCI Range 80 to 100
- Good – BCI Range 60 to 80
- Fair: BCI range 40-60
- Poor: BCI range 20-40
- Very poor: less than 20

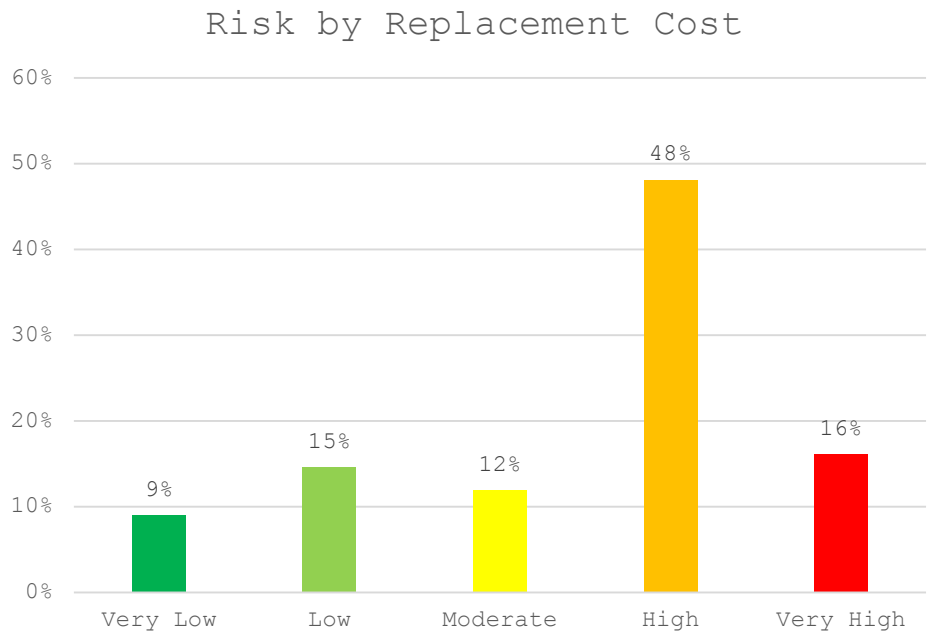
Currently, approximately 27% of the Town's structures are in very good condition, 53% are in good condition and with 20% of the structures classified as "fair" and none below illustrated in the chart below:



Risks:

The Canadian Highway Bridge Design Code has a target service life of approximately 75 years. Maintenance, repair, and rehabilitation will be required to reach or exceed this target. The total amount spent on maintaining and replacing structures was $3,921,912.76 for 2024.

The distribution of risk based on replacement cost is shown in the chart below:



b) Road Network:

The Town of Erin's Road Network spans over 300 KM with a total replacement cost of $ 91.6 million for 2024 compared to $87.6 million in 2023. The average annual investment requirement to repave roads is $2.9 million. In 2024 the town spent $0.86 million on road maintenance.

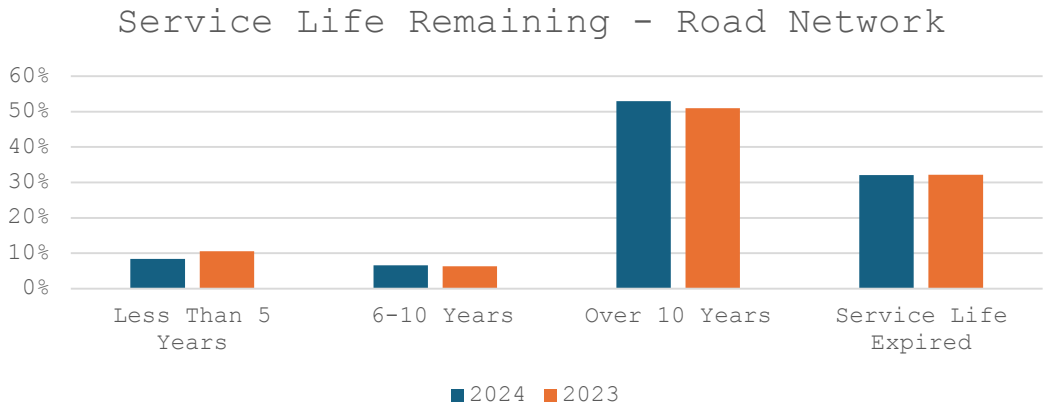
The following table illustrates the Town of Erin Road Network portfolio including road types, useful life, replacement cost valuation method, and the replacement cost for 2024 and 2023. To maintain the roads, a road needs study to be done every 4 years. The last study was done in 2021:

Road Types	Total Distance (lane km)	Lane km per Square km	Average Useful Life	Replacement Cost Valuation Method	Replacement Cost 2024	Replacement Cost 2023
Road Base - Asphalt – Rural	36	0.12	40	NRBCPI (Toronto)	23,343,719.00	22,310,081.00
Road Base - Asphalt - Semi-Urban	23	0.08	40.26	NRBCPI (Toronto)	13,612,274.00	13,024,349.00
Road Base - Asphalt – Urban	10	0.03	40	NRBCPI (Toronto)	16,212,926.00	15,492,813.00
Road Base - Earth – Rural	0.32	0	40	Not Planned	-	-
Road Base - Earth - Semi-Urban	0.25	0	40	Not Planned	-	-
Road Base - Gravel – Rural	190	0.64	39.94	Not Planned	43,771,157.00	-
Road Base - Gravel - Semi-Urban	2	0.01	40	Not Planned	350,216.00	-
Road Base - Surface Treatment - Rural	33	0.11	42.14	NRBCPI (Toronto)	12,969,463.00	12,407,974.00
Road Base - Surface Treatment - Semi-Urban	2	0.01	40	NRBCPI (Toronto)	912,839.00	874,623.00
Road Surface - Asphalt – Rural	30	0.1	20.7	NRBCPI (Toronto)	11,042,608.00	10,552,134.00
Road Surface - Asphalt - Semi-Urban	23	0.08	20.71	NRBCPI (Toronto)	8,386,295.00	8,013,808.00
Road Surface - Asphalt – Urban	11	0.04	20.73	NRBCPI (Toronto)	5,183,580.00	4,953,347.00
Grand Total	**360.57**	**1.21**	**33.6**		**135,785,077.00**	**87,629,129.00**

Lifecycle:

The roads are monitored and maintained regularly. In 2021, the Roads Needs Study was conducted to evaluate all the Town's roads based on their surface and pavement condition. Roads are a core asset with a lifespan of 40 years and over. Maintenance is done frequently to resurface deteriorated roads and potholes. As a result, the asset life increases due to regular maintenance. The average service life remaining is 6.5 years for the overall road network.

The distribution of age timeframes is shown in the chart below:



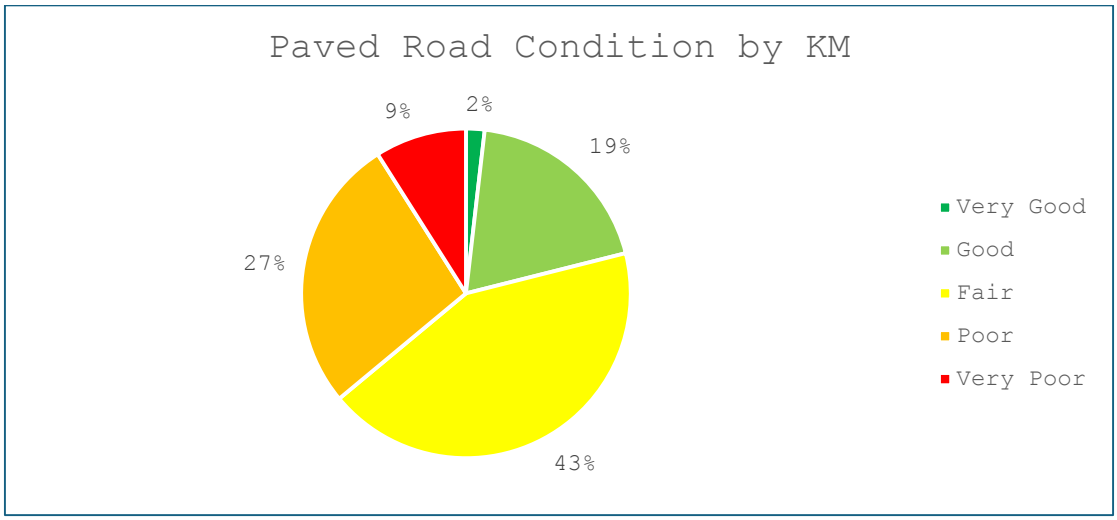
Condition:

The road network condition has been assessed in 2021 based on surface conditions. The Town assesses the road condition based on age and input from road inspectors.

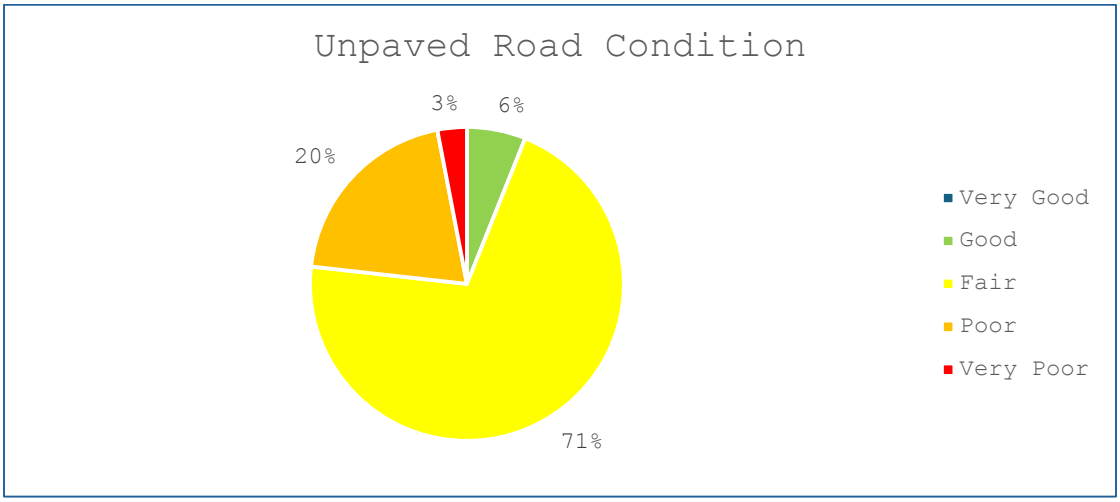
The average assessed condition ranges from 0 to 100:

- Very Good –Range 80 to 100
- Good – Range 60 to 80
- Fair: Range 40-60
- Poor: Range 20-40
- Very poor: less than 20

In 2024, only approximately 21% of the Town's paved roads are in good condition, with 43% classified as "fair" and 36% classified as "poor", as illustrated in the chart below:

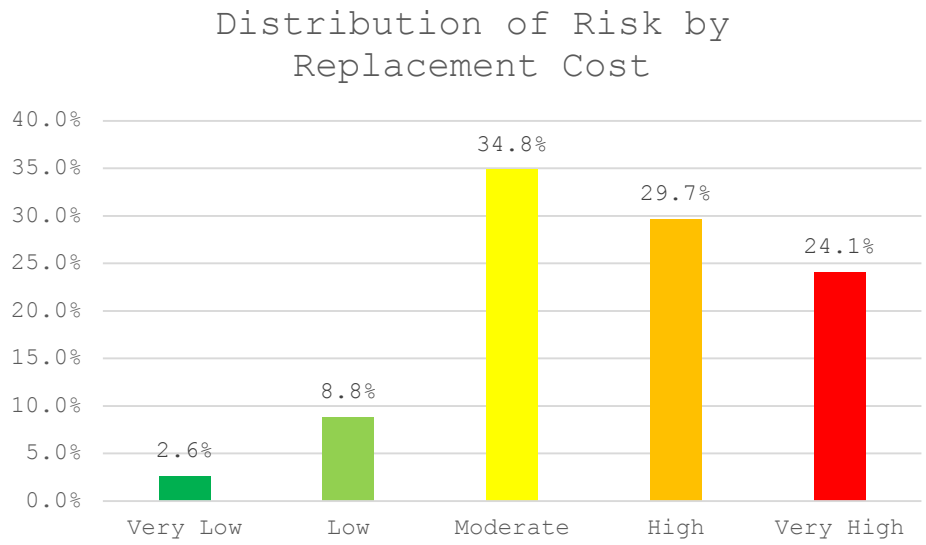


For unpaved roads 6% are good, 71% are fair and 23% are poor.



Risk:

As per Municipal Maintenance Standards (MMS), roads are to be maintained frequently based on the surface type and traffic volume. To mitigate the risks, the Town staff patrol the roads weekly and daily depending on weather conditions.
Each asset is evaluated for its condition and risk of failure based on inspection and age. In 2024 the cumulative risk is 13.3 High compared to 2023 of 10.68- High. The change in risk status is due to the road age.



c) Water Network:

The water system is an essential core asset that the Town recovers its maintenance cost and upgrades from water billing. In 2024, the Town served over 1750 meters with an estimated water supply of approximately 250,000 cubic meters. The annual requirement is an estimated $0.5 million to replace and upkeep current infrastructure. In 2024 the Town of Erin spent over $1.4 million on replacing and maintaining assets.

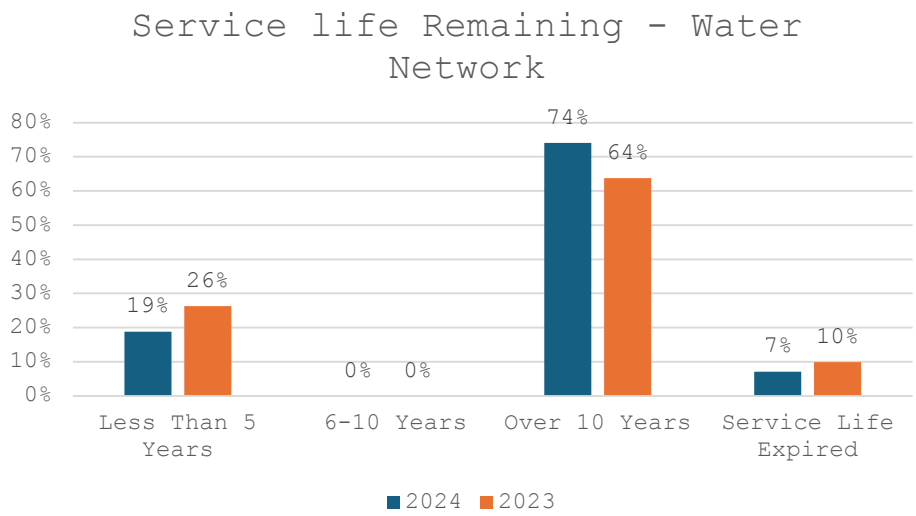
The Town's Water Assets include water mains and water service lines. The replacement cost valuation method is NRBCPI Quarterly (Toronto) but CPI Monthly (Canada) is used for assets with their service life expired.

Water Network	Count of Segment	Average Useful Life	Average Age	Valuation method	Replacement Cost 2024	Replacement Cost 2023
Water Service	117	63.25	38	CPI Monthly/NRBCPI	3,708,004.00	2,589,241.00
Watermains	113	62.83	39	CPI Monthly/NRBCPI	30,127,514.00	20,964,461.00
Totals	**230**				**33,835,518.00**	**23,553,702.00**

Lifecycle:

The water system is regulated under the Safe Drinking Water Act and the Ontario Water Resources Act. Regulation 170/03 under the Safe Drinking Water Act. The regulation requires the Town to ensure that the water supplied to the consumer is safe for consumption. Water mains and water services are monitored and maintained regularly to ensure continued service without interruption. The water mains and service lines are a core asset with a lifespan between 50 and 75 years and a replacement cost of over $33.8 million.

In 2024, 74% of the water mains and service lines have a remaining useful life of over 10 years with an average service life remaining of 32 years for assets that have not had their service life expired.

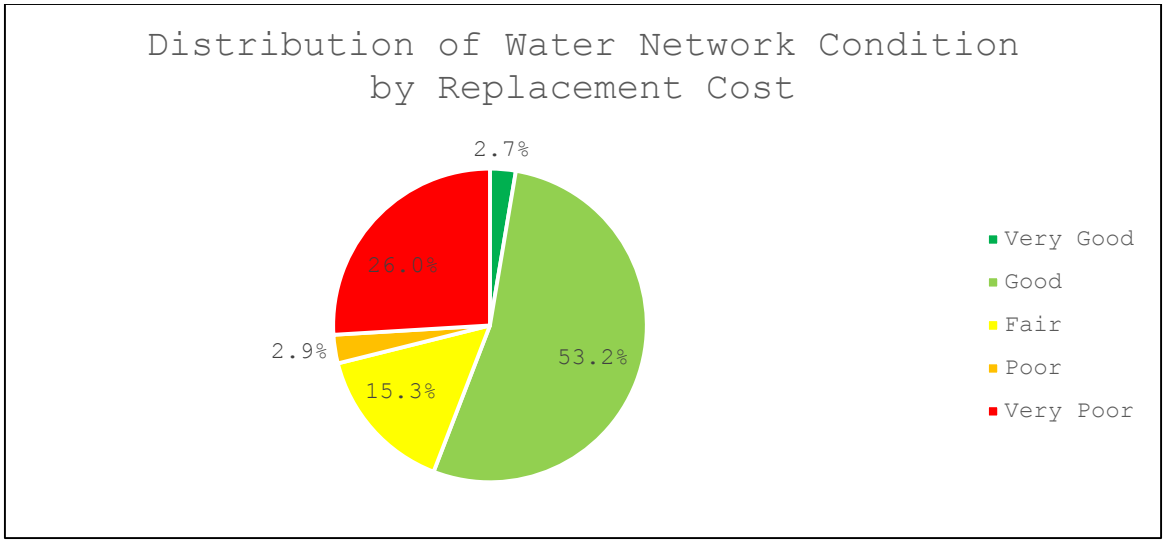


Condition:

The condition of the Town's Water Service Lines and Water Mains is classified from Very Poor to Very Good. There is no mechanism for tracking asset conditions. The condition assessment method is based on asset age data. To assess the condition of water mains and services, the following average assessed condition ranges are used:

- Very Good –Range 80 to 100
- Good – Range 60 to 80
- Fair: Range 40-60
- Poor: Range 20-40
- Very poor: less than 20

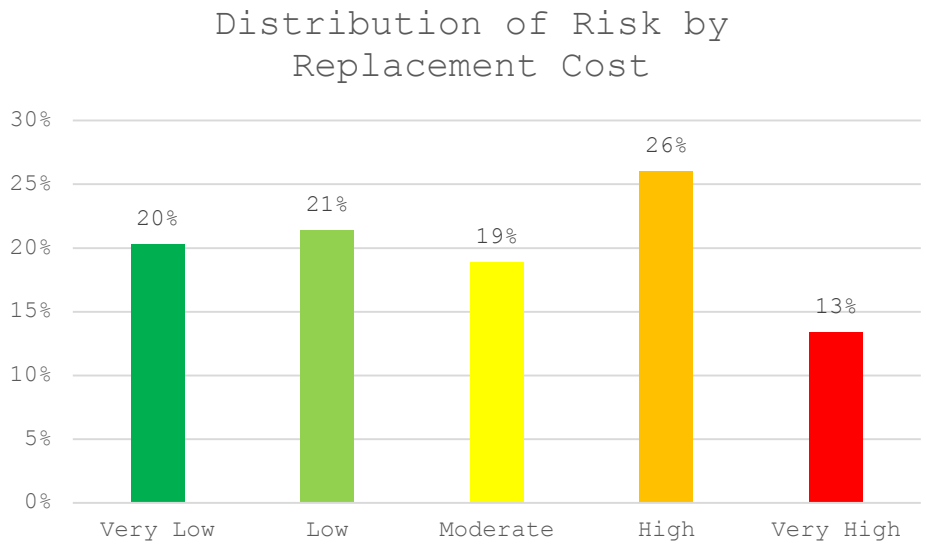
In 2024, only approximately 56% of the Town's water mains and service lines are in good condition, with 15% classified as "fair" and 29% classified as "poor", as illustrated in the chart below:



The water system has a total replacement value of over $33 million for 2024. The majority are for water mains and service lines. The Town works with OCWA to maintain the water buildings and equipment and provide the meter readings. To mitigate the risks of water interruption, the Town utilizes the SCADA system to monitor the wells.

Risk:

Each asset is evaluated for its condition and risk of failure based on inspection and age. In 2024 the cumulative risk was 8.86 Moderate compared to 2023 of 8.83- Moderate. The change in risk status is due to age.



d) Wastewater Network:

The Town of Erin wastewater system is currently a septic system. Working with the Credit Valley Conservation Authority (CVC) and the Ministry of the Environment, Conservation, and Parks (MECP), it was determined that a new system is the best path forward to keep the community thriving now, and for generations to come. In 2021, engineering, design and construction was tendered for a wastewater treatment plant and Linear Works to service the Town of Erin and Hillsburgh.

The new system will carry all wastewater flows to a single wastewater treatment plant. It will support the needs of the new developed community by removing the reliance on the existing septic systems.

As per schedule, the Wastewater Treatment Plant is slated to be completed June 2025 with the Linear Works and Sewage Pumping Station expected to be completed by late 2025. The Town's Wastewater Key Assets are the Wastewater treatment plant and sewage pumping station.

2. Non-Core Assets:

The Town's non-core assets consist of Buildings, Land Improvements, Machinery & Equipment, and Vehicles.

a) Buildings:

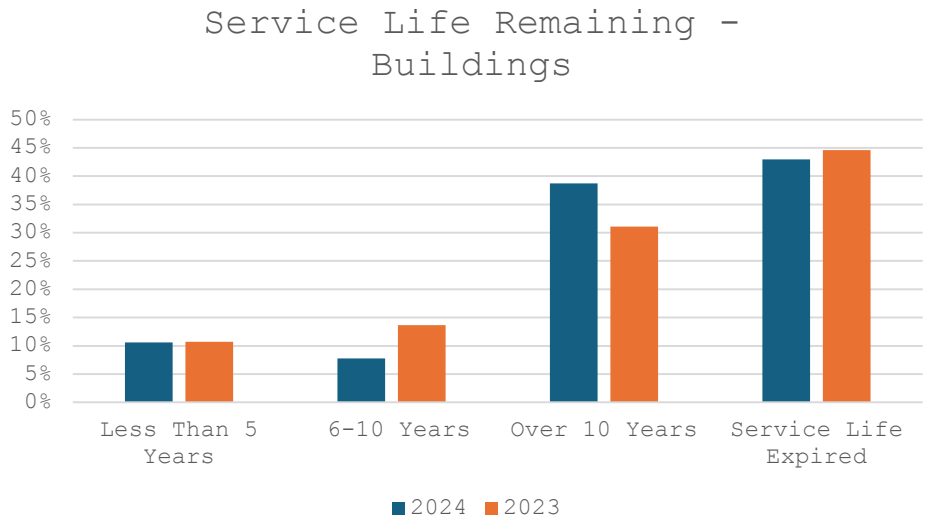
The Town of Erin has 23 buildings and structures in total. The buildings consist of one main building, two fire stations, three community centers, two booths, one pavilion, four road buildings and ten water buildings, with a total replacement cost of $ 37.8 million. The estimated annual maintenance and replacement cost to upkeep buildings is $1 million. In 2024 the Town spent $0.44 million on building maintenance. The total replacement cost for buildings increased by 2.9% in 2024 from 2023 due to inflation.

Buildings by Department	Quantity	Average Useful Life Remaining	Average Age	Valuation Method	Replacement Cost 2024	Replacement Cost 2023
Administration	1	29.8	8.4	CPI Monthly (ON)	1,632,653.00	1,589,768.00
Fire	2	25.62	6.88	CPI Monthly (ON)	4,063,871.00	3,957,128.00
Parks and Recreation	6	8.45	14.14	CPI Monthly (ON)	21,390,806.00	20,778,581.00
Roads	4	22.86	18.57	CPI Monthly (ON)	1,778,827.00	1,732,104.00
Water	10	18.5	32.4	CPI Monthly (ON)	8,972,145.00	8,734,460.00
Grand Total	**23**				**37,819,708.00**	**36,792,041.00**

Lifecycle:

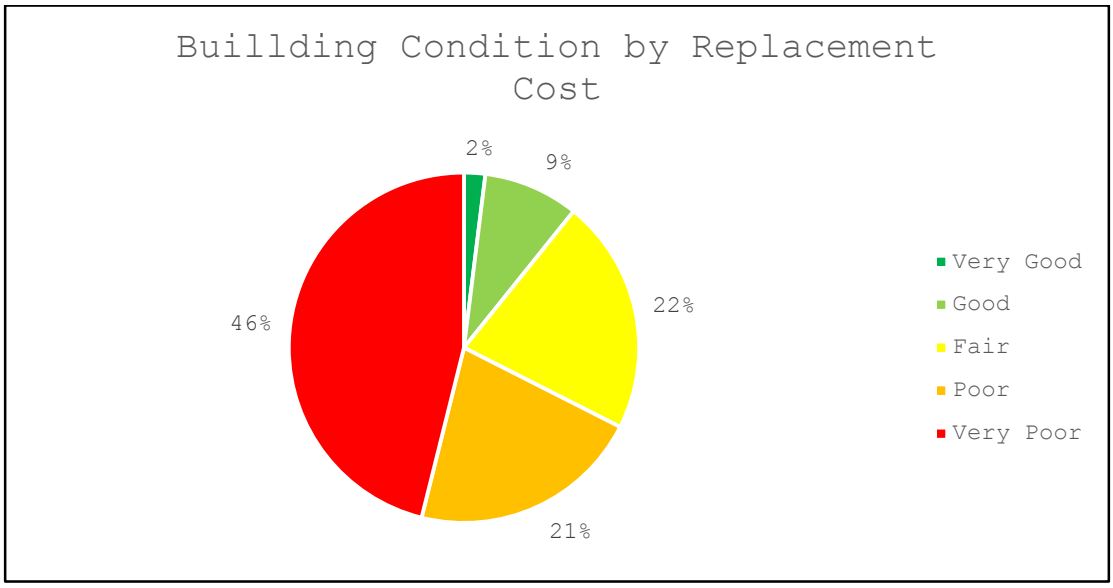
All the Town's buildings and structures are maintained regularly to extend their life cycle. In addition, new renovations are always required and requested yearly through capital budgets.

Currently the Town's structures and buildings have an average remaining service life of 14 years with the distribution by service life remaining category based on replacement cost is shown in the chart below:



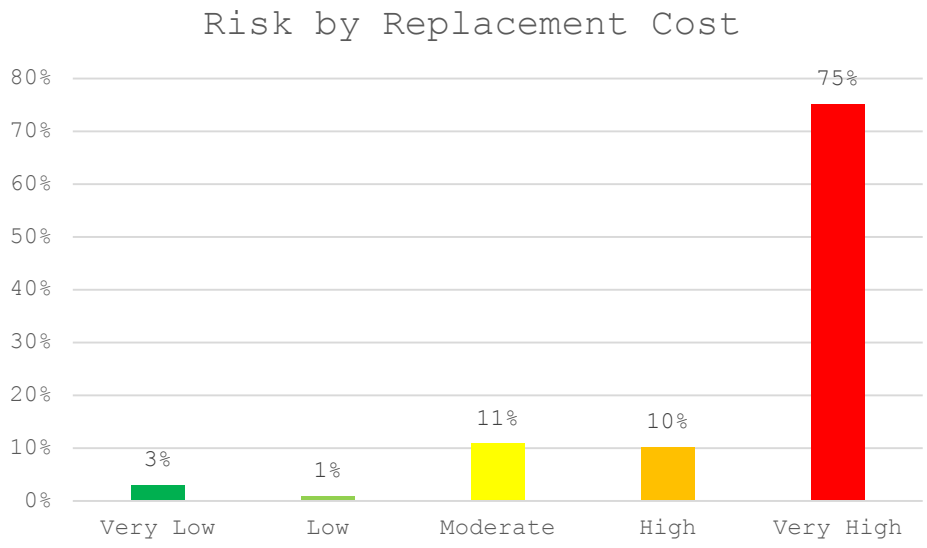
Condition:

The buildings and structures of the Town have their conditions assessed on age basis and staff inspections. The building's condition ranges from 100 to 0 as the value would decline over time. Currently, only 11% of the Town's building assets replacement value are in good condition, with 22% of the structures classified as "fair" and 67% classified as "poor". The distribution is allocated based on replacement cost shown in the chart below:



Risk:

Each asset is evaluated for its condition and risk of failure based on inspection and age. Three quarters of the replacement cost value of buildings is considered very high risk with another 10% considered high, 11% with moderate and less than 5% considered low risk assets. The replacement cost-based distribution of risk categories is depicted in the chart below:



In 2023 the cumulative total risk was 14.24 increasing to 17.88 in 2024 due to age and inclusion of high-risk water building assets.

b) Land Improvements:

The Town is responsible for a diverse array of land improvement assets. These assets have been segmented based on their original function. The Town has the following land improvement segments:

- Admin Land Improvement: includes Town hall landscaping, well, and a stormwater pond.
- Parks Landscaping: includes outdoor playgrounds and play equipment, outdoor playing courts and fields, outdoor lighting, gazebos, benches, picnic tables, and parking lots associated with buildings and parks.

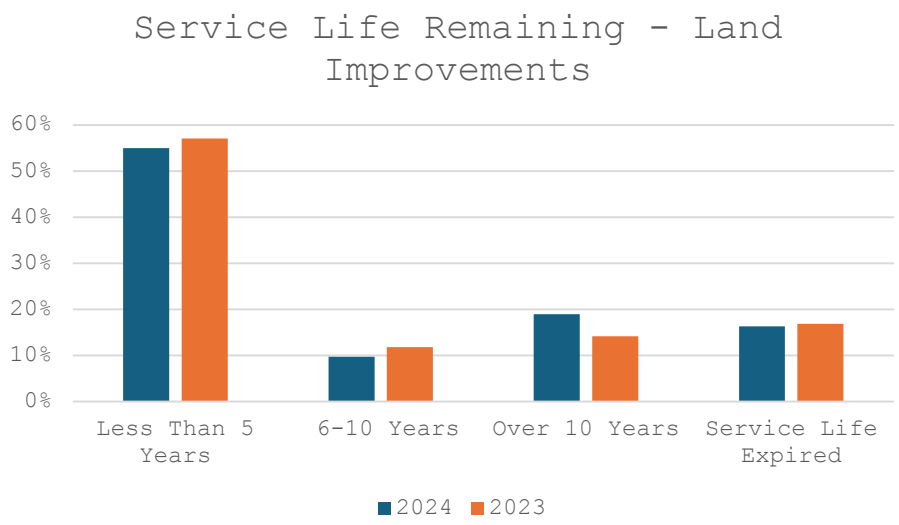
The following table provides summary information based on 2024 and 2023 data:

Land Improvements by Dept.	QTY	Average Useful Life	Average Age	Valuation Method	Replacement Cost 2024	Replacement Cost 2023
Administration	3	15	18	CPI Monthly (ON)	2,086,683.00	2,031,875.00
Parks and Recreation	22	16.59	11.32	CPI Monthly (ON)	2,244,370.00	2,031,246.00
Grand Total	**25**				**4,331,053.00**	**4,063,121.00**

The replacement cost increased by 6.6% because of inflation and improvements made in Carberry Park. The annual estimated requirement for maintenance and replacement is over $250k and the amount spent in 2024 was approximately $110k.

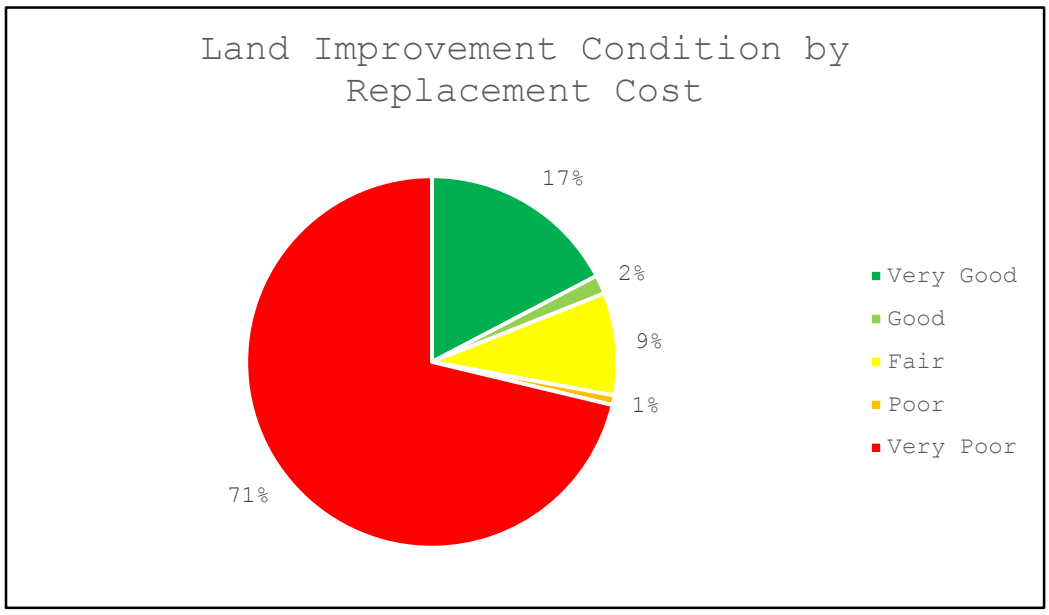
Lifecycle:

The town's efforts have reduced the number of improvements with a service life of less than five years or have their service life expired by 3% and increased the service life of land improvements with over 10 years by 5%. The distribution of service life categories is based off replacement cost and shown in the chart below:



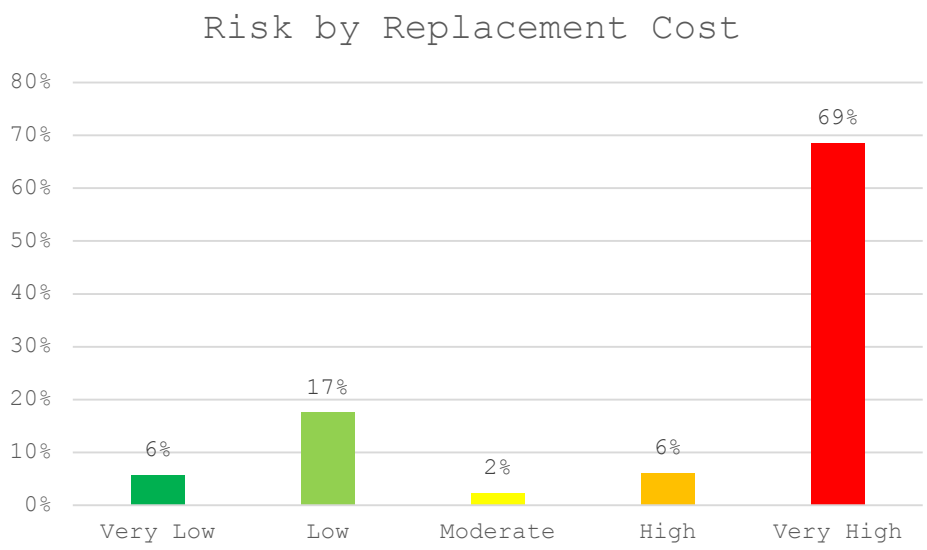
Condition:

The land improvement conditions are assessed based on age. The land improvement condition ranges from 100 to 0 as the value would decline over time. Currently, only 19% are in good condition, with 9% classified as “fair” and 72% classified as “poor”. The condition has improved from 2023 to 2024 but is still overall in “poor” condition. The distribution of land improvement conditions based on replacement cost is shown in the chart below:



Risk:

Each asset is evaluated for its condition and risk of failure based on inspection and age. A large 75% of the replacement cost value of land improvements is considered high, 2% with moderate and 23% considered low risk assets. The replacement cost-based distribution of risk categories is depicted in the chart below:



The total cumulative risk in 2023 was considered a very high 18.82 decreasing slightly to 18.35 in 2024 because of continuous improvements made by the town.

c) Machinery and Equipment:

Machinery and equipment assets serve various functions. The following segments are within the machinery and equipment category and can be defined as follows:

- Administration: Computer software and hardware
- Parks: various equipment to maintain parks (i.e., lawnmowers, EV Chargers, etc.)
- Recreation: security systems, ice resurfaces, scoreboards, and Audio system
- Roads: primarily larger machinery and equipment assets including fuel management system and snow blades
- Fire: includes various fire and bunker gear, emergency extraction equipment, hose cache, and communications equipment.

The following table provides summary information based on 2024 and 2023 data that illustrates the replacement cost increase by 6% in 2024 from 2023 due to inflation:

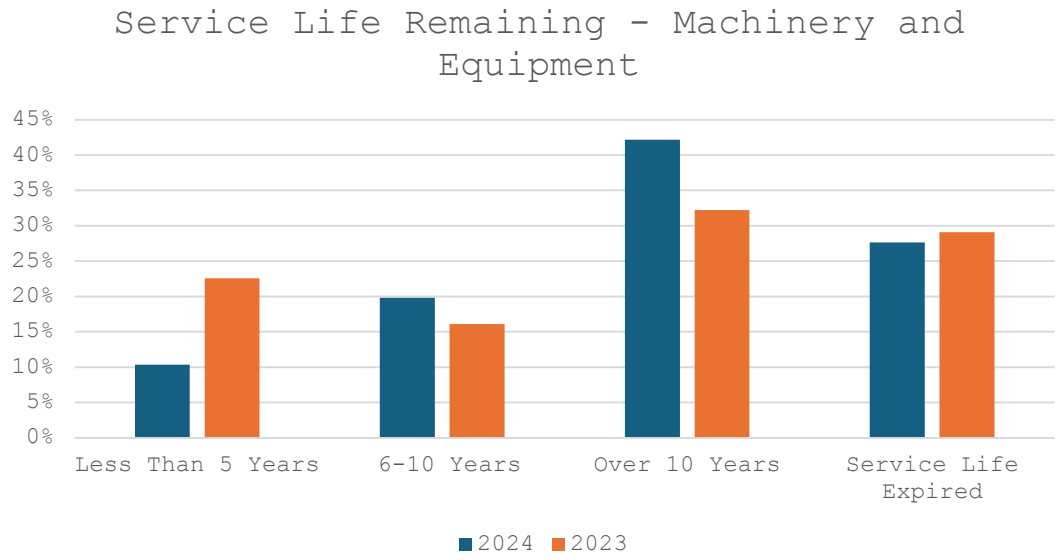
Machinery & Equipment by Category	Average Age	Average Useful Life	Replacement Cost 2024	Replacement Cost 2023
Admin Computer Software	8	5	51,727.00	50,368.00
Admin Computers & Equipment	7.7	5	396,568.00	365,415.00
Building Computer Software	7.5	5	65,979.00	64,246.00
Building Computers & Equipment	13	5	1,402.00	1,365.00
Fire Equipment	13.75	14.6	1,862,091.00	1,813,179.00
Parks Computer Software	4	5	30,907.00	30,095.00
Parks Equipment	6.39	14.78	907,782.00	880,054.00
Roads Equipment	5.75	9.5	253,024.00	246,379.00
Streetlights	5	20	416,136.00	405,206.00
Water Equipment	6.29	19.88	1,042,717.00	888,343.00
Grand Total			**5,028,333.00**	**4,744,650.00**

****** Replacement Cost Valuation Method: CPI Monthly (ON)***

Lifecycle:

All machinery and equipment have a useful estimate based on the type of equipment, the industry, and the judgment of head departments. The estimated useful life of this category ranges from 5 to 20 years. The average estimated useful life for all equipment and machinery as of 2024 is 13.42 years. The average service life remaining is less than 4 years. However, the Town estimates a yearly budget for different equipment, especially for the fire department and software to facilitate the Town's operations.

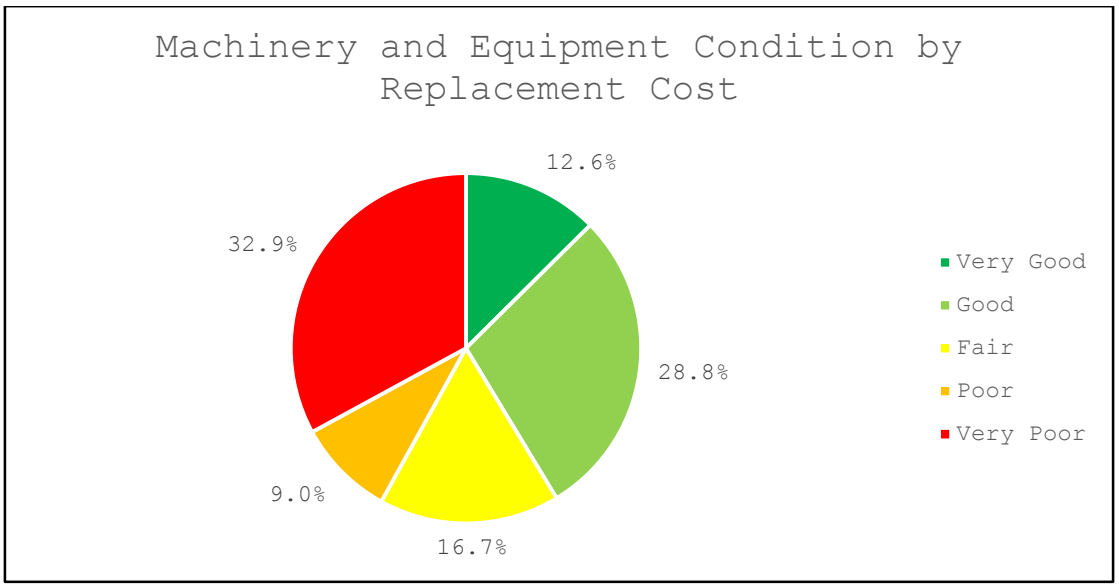
Currently, 42% of the equipment has a life span of over 10 years compared to just 32% in 2023 accompanied by a reduction in assets that have a service life of less than 5 years or have expired their estimated life by 14%, the trend has been a modernization of the town's machinery and equipment. The remaining service life based on the value of the replacement cost is illustrated below:



The Town's projected spending on machinery and equipment is based on the current demand and availability of funds. The estimated annual requirement to upkeep current equipment used is $0.49 million dollars. The amount spent in 2024 was $65k.

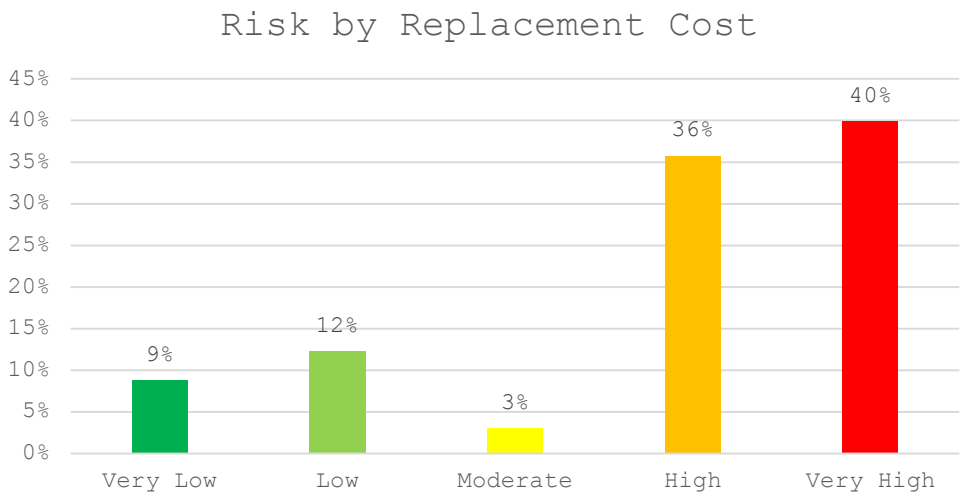
Condition:

The conditions of machinery and equipment are assessed based on age in CityWide system. Replacement of these assets depends mostly on inspection and staff recommendations. To assess the condition, a range from 100 to 0 is used as the value would decline over time. Currently, approximately 42% are in good condition, with 17% classified as "fair" and 42% classified as "poor". The condition trend analysis is illustrated in the chart below:



Risk:

The risk of failure is based mainly on age. In 2024 the cumulative risk is 12.37- High compared to 11.37- High in 2023. The change of status is due to age.
The distribution of risk based on replacement cost is shown in the chart below:



d) Vehicles:

The Town owns a fleet of licensed and unlicensed vehicles that are essential for daily operations for buildings, fire, roads, parks and recreation units:

- Building and By-law: Three pick-ups
- Fire: Nine fire trucks, one fire UTV and one trailer
- Parks & Recreation: Four pick-ups, two trailers.
- Roads: Five pick-ups, seven snowplows, one cube van, plus other heavy equipment that includes graders, mowers, chippers, tractors, etc.

The following table provides summary information based on 2024 and 2023 data:

Vehicles by Category	QTY	Average Useful Life	Average Age	Replacement Cost 2024	Replacement Cost 2023
Building Vehicle Licensed	3	7.67	2	169,160.00	110,291.00
Fire Trailer	1	15	9	5,380.00	5,239.00
Fire Vehicle Licensed	9	21.11	9.67	4,215,580.00	3,939,060.00
Fire Vehicle Unlicensed	1	10	9	27,468.00	26,746.00
Parks Trailers	2	15	0	14,126.00	-
Parks Vehicle Licensed	4	9.25	3.75	222,703.00	162,413.00
Roads Trailer	3	15	1	63,939.00	62,260.00
Roads Vehicle Licensed	14	8.64	4.93	2,191,247.00	1,922,761.00
Roads Vehicle Unlicensed	19	13.16	9.74	2,789,476.00	2,716,204.00
Water Trailer	2	15	24	16,423.00	15,992.00

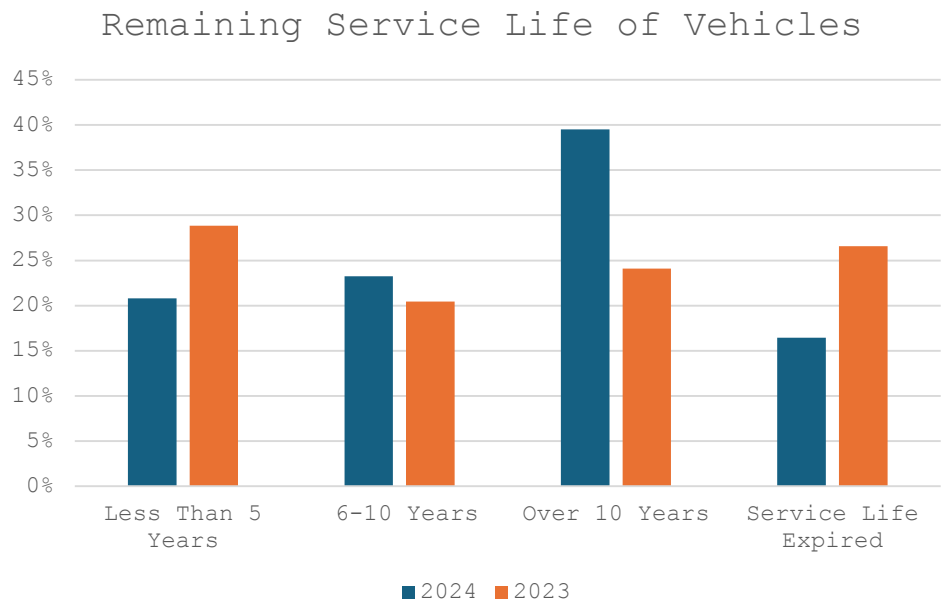
Grand Total	**58**	**9,715,502.00**	**8,960,966.00**

In 2024 the town purchased several new vehicles including a new tanker for the fire department, a new snow plowing truck and pick-up for the roads department. Parks and Recreation also acquired two new utility trailers and a new pick-up.

The estimated annual required for vehicle replacement is $0.7 million dollars while the amount spent on maintenance activities was $0.5 million in 2024.

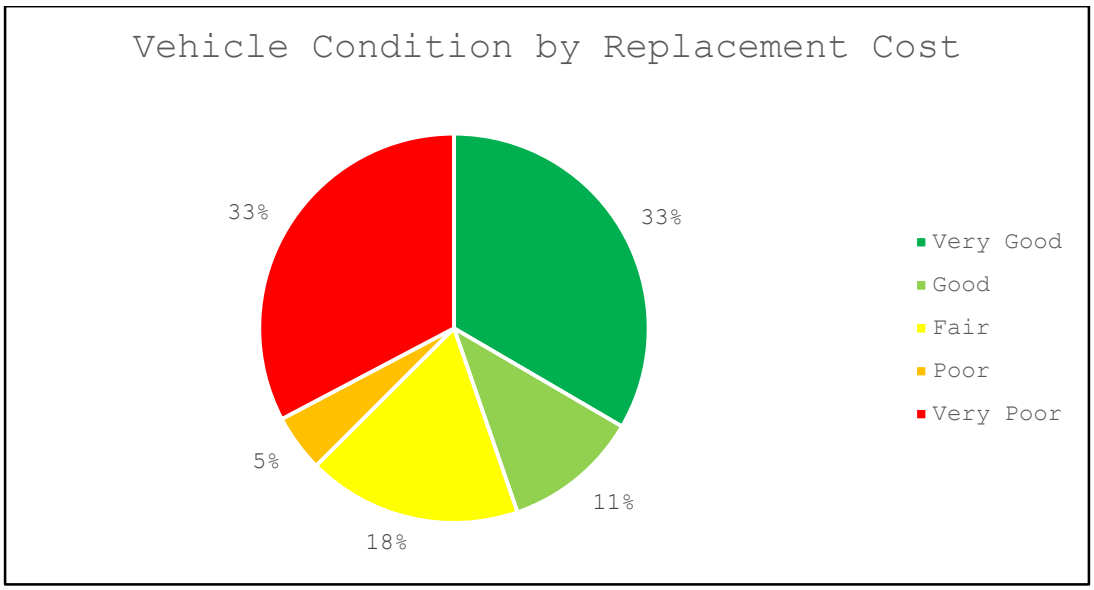
Lifecycle:

Vehicles are estimated to have a useful life based on the age of vehicles. In addition to the identified method, the useful life is estimated based on industry and the judgment of head departments. The estimated useful life of this category ranges from 10 to 20 years. The average estimated useful life for all vehicles as of 2023 is 13 years. The average estimated service life remaining is 5.5 years. The Town estimates a yearly budget for different vehicles and heavy equipment to maintain roads and provide fire services.



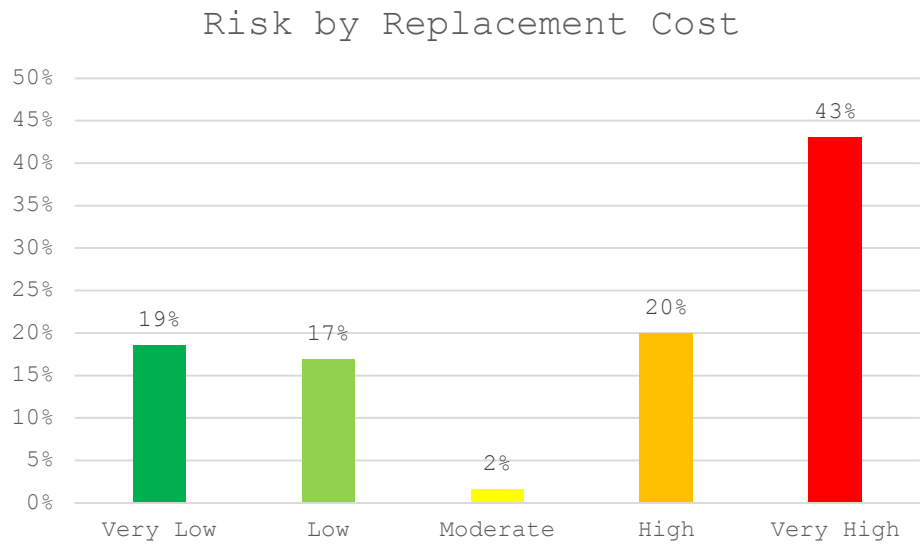
Condition:

Vehicle conditions are essential to ensure the smooth operations of different departments. Maintenance and repairs are done frequently to minimize the risk of service interruptions. The system uses age-based assessment for all vehicles. Replacement of these assets depends mostly on inspection and staff recommendations. To assess the condition, a range from 100 to 0 is used. The value would decline over time. Currently, only 44% are in good condition, with 18% classified as “fair” and 38% classified as “poor”. The condition distribution is illustrated in the chart below:



Risk:

The vehicle's failure risk is based mainly on age. In 2024 the cumulative risk is 12.79- high compared to 8.94 Moderate in 2023. The change of status is mainly due to age.



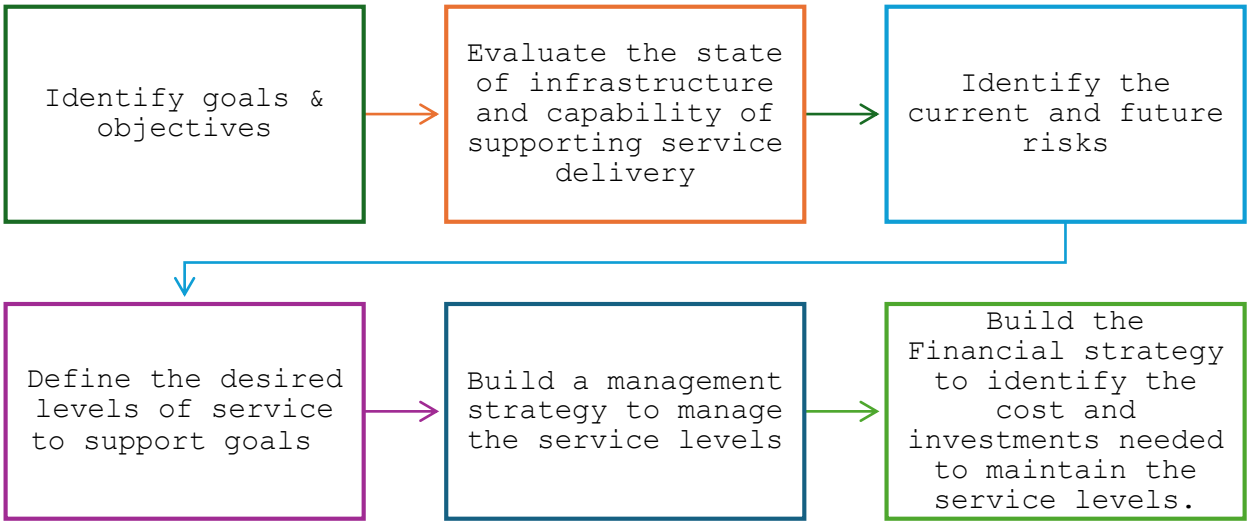
The risk of failure is mainly attributed to Road Vehicles with a very high risk rate of 15.09 followed by Fire Vehicles with a high risk of 10. Most vehicles are over their useful life. The Town spent over $ 0.46 million in 2024 on maintaining the roads vehicles to extend their useful life.

D.Levels of Service

1. Levels of Services Framework & Overview:

Service levels are established with an understanding of qualitative factors, service quantities, and service benchmarks. Asset Management Plans provide defined, multi-year approaches for handling infrastructure assets to achieve service goals. Service levels are defined to create a connection between business requirements, service results, infrastructure assets, and the capital and operational expenses necessary to manage risk and fulfill the Town's immediate and future needs.

Levels of Service Process Map:



As per Ontario Regulation 588/17- Asset Management Planning for Municipal Infrastructure (0. Reg. 588/17), the Town developed the Levels of Services framework in 2020 for its core assets and expanded it to included additional levels of service and performance measures for all assets in 2023.

The levels of service are categorized into two primary types. The first type—Community LOS—is designed to enhance both the Town's and the public's awareness of the services delivered by the Town's infrastructure. The second type—Technical LOS—describes the performance metrics that the Town tracks to assist in the management of that infrastructure.

Community (Strategic) LOS	Technical LOS
Quality & quantity	Specific
Efficiency & reliability	Measurable
Capacity	Achievable
Accessibility	Relevant
Legislative requirements	Timebound
Health & safety	Sustainable
Etc.	

- **Community & Strategic LOS:** Community LOS are qualitative service measures that describe the services being provided to the community in support of the overall Strategic LOS that are developed in the Town's Strategic Plan (2025).
- **Technical LOS:** quantitative measures applied at the asset level to assess the performance of assets in support of the Community LOS.
- **Service Attributes**: are developed for both community and technical LOS measures. The Service Attributes include attributes such as: Quality, Scope, Reliability and Environmental.
- **Performance Measures:** individual measures are used for assessing how the Town's individual assets may be performing in support of Technical and Community LOS.
- **Measurement Type:** There are two types of performance measures. The first are those that are required by 0. Reg. 588/17 for Core assets. The second type is defined measures to assist the Town's decision-making process.

The Town's Asset Management LOS framework aligns with the corporate strategic plan goals developed in 2025 for all services. It also allows decision making and lifecycle investment strategies that are required to achieve the Town's proposed LOS over the next 10 years, in compliance with the July 1, 2025, milestone of 0. Reg. 588/17.

2. Proposed Levels of Services:

The 2024 Asset Management Plan is the last milestone that required municipalities to include and assess the proposed levels of service for all assets. To present the proposed level of services, the Town assesses all service-level measures that were reported in the 2023 Asset Management Plan and established proposed service levels for these measures that represent its commitment to provide services that continue to meet the community's expectations.

Based on the assessment of current service levels, the Town's assets are performing as intended and are providing reliable services to the community. To ensure the Town's commitment to continue providing services to the level that the community's expectation, the Town's proposed levels of service are set for the next 10 years as required by regulation.

The Town's proposed service levels were established based on the following:

- ✓ **Stakeholder Expectations:** addressing the community needs and preferences, regulatory requirements, and leadership priorities.
- ✓ **Current Performance:** Assessing the existing service levels, performance measures and asset condition and capacity.
- ✓ **Risk Management:** Assessing the impact of service failure, service reliability and resilience, and environmental and safety risks.
- ✓ **Financial Considerations:** evaluating the cost-of-service delivery, budget constraints and funding sources and financial sustainability to provide the proposed levels of service at an affordable and manageable cost.
- ✓ **Technical and Operational Feasibility:** Availability of technology resources, staffing, expertise, operational capacity, and maintenance and lifecycle requirements
- ✓ **Environmental and Social Impact:** Considering the Town's sustainability goals and community well-being.
- ✓ **Legal and Regulatory Compliance:** Complying with Local, regional, and national regulations.
- ✓ **Future Demand and Growth:** Considering the population growth, urban development, and technological advancements.

3. Summary of Town's Levels of Services:

Attributes	Current Level of Services Community Level of Services	Technical Level of Services	Proposed Levels of Services
Bridges & Culverts:			
Scope & Quality	• 5 out of 47 structures have load restrictions with a maximum of 15 tons to allow crossing for farming and regular vehicles. • Meet the OSIM standards for structures condition rating (BCI). • OSIM inspection reports assessing structures condition and if replacement or rehabilitation is needed	• % of bridges with load restrictions: 10% • % of bridges with dimensional restrictions: 0% • Average assessed bridge condition index value: 70% • # of structures that need replacement: 26 with 3 structures to be replaced within 5 years • # of structures that need rehabilitation: 21 with 9 structures to be maintained within 5 years	• Redesign bridges & culverts to accommodate increased traffic and remove load restrictions. • Maintain & replace bridges & culverts based on OSIM report.
Road Network:			
Scope & Quality	• Percentage of assets in Fair or better condition is moderate for unpaved and paved roads • 2020 Roads Need Study conducted to assess the road and sidewalk pavement condition. The study is redone every 4 years to provide 10 years plan to resurface or reconstruct roads.	• Surface Condition Index for: **Paved roads:** Excessive maintenance: 20% High Maintenance: 80% **Unpaved roads:** Excessive Maintenance: 65% High Maintenance: 71% • Greater than 95 % of streetlights equipped with LED fixtures • Sidewalks are in good condition.	• Maintain the condition of most assets • Increase number of assets according to master plans • Resurface high priority roads within the next 3 years
Water Network:			
Scope & Quality	• Approximately 40% of properties are connected to the water network • Approximately 42% of properties with available fire flow. • 0 Boil Water Advisories in Erin and Hillsburgh drinking water system for 2024	• Number of meters connected to municipal water service: 1313 out of 3850 properties • Number of Buildings within Urban Boundary not serviced by municipal water: 56 buildings • # of connection days per year where water is not available due to water main breaks: 4 days in Erin & 0 days in Hillsburgh	• Increase number of drinking water wells • Improve water distribution network • Decrease service outage times • Decrease watermain breaks
Buildings & Structures *(Recreation, Fire Stations, Offices & Water Towers)*:			

Accessibility & Conditions	• All recreation, admin, and fire buildings meet the AODA requirements to have them fully accessible. • Newly renovated admin building to increase capacity • Fire buildings are under continuous renovations. • Recreation buildings are under renovation with ECC recently fully renovated.	• % of buildings with accessibility ramps and entrances: 50%. The remaining buildings are structures for inventory. • % of building/facilities in fair and better condition: 25 % • Greater than 75% of equipment within service life.	• Modernize and Increase capacity of facility amenities and spaces • Create new programs • Maintain equipment conditions • Build new water structures to accommodate population growth
Land Improvements *(Parks & Sports Fields)*:			
Quality & Sustainability	• land improvement assets range from very poor (0) to very good (100) • Land improvement assets include active and passive parkland, waterfront parks, and trails. • Improvements are designed to serve a wide range of users and to ensure their safety by eliminating risks. • Land improvement capital investment projects are formally and publicly identified one year in advance and internally identified ten (10) years in advance.	• Greater than 85% of parks sites are within service life • Fields are restored and maintained on a regular basis. • Keep Park lands clean and available to the public • Enhance playgrounds • Repair and maintain sports fields regularly	• Maintain condition of parks sites and amenities • Maintain parks & sports field capacity and availability
Machinery & Equipment			
Quality & Sustainability	• Machinery & Equipment assets condition range from very poor (0) to very good (100). • M&E asset investment is based on asset conditions and expected future useful life. • M&E capital investment projects are formally and publicly identified one year in advance.	• The average condition: 50% Fair • 42% of the equipment has a life span of over 10 years • Daily & weekly inspections are carried out on Fire & Roads equipment • Capital investments rate increased significantly to replace and improve most equipment	• Replace equipment to meet advanced technology and environmental standards. • Modernization of IT assets
Vehicles *(Roads, Parks & Fire Fleet):*			

Quality & Sustainability	• Vehicle condition ranges from 38% Poor to 44% Very Good. • Fire & Road vehicles are inspected regularly to avoid any service interruptions. • Vehicles fuel emissions are regularly inspected to follow transportation and environmental standards. • The new fleet is purchased with hybrid models.	• Regular inspections done for fire & road vehicles: Daily & weekly • Regular maintenance to increase fleet useful life • Yearly capital investments to add vehicles • Greater than 80% of vehicles are within service life	• Replace assets that have exceeded their useful life. • Increase the fleet to meet population growth

E. Financial Funding & Strategy

1. Reinvestment in Capital Assets:

Assets need more funding to keep them in good shape as they get older and deteriorate. To maintain a sufficient level of service, capital funds must be reinvested through asset renewal or replacement.

The Town can ascertain the magnitude of any current funding shortfall by comparing the target and actual capital assets reinvestment ratios by using the following formulas:

$$\text{Target Capital Asset Reinvestment Ratio (TCARR)} = \frac{\text{Annual Capital Requirement}}{\text{Total Replacement Cost}}$$

$$\text{Actual Capital Asset Reinvestment Ratio (ACARR)} = \frac{\text{Annual Capital Funding}}{\text{Total Replacement Cost}}$$

The table below represents the TCARR and ACARR for 2023 and 2024. The TCARR is based on the average annual capital requirements of $6.2 million for 2023 and $8.0 million for 2024. The deficit is due to the expanding infrastructure deficit:

Year	TCARR	ACARR	Deficit
2024	**2.6%**	**1.1%**	**1.5%**
2023	**2.9%**	**1.3%**	**1.6%**

2. Financial Funding Overview:

The yearly capital demand is $27.5 million in 2024, decreasing by 30% from the 2023 capital budget, with 61% allocated to the wastewater treatment plant and 32% to the water network. The remaining 7% is allocated across different assets, with the majority for fleet replacements.

The Town's assets portfolio total replacement cost is $276 million, with 6% of assets require immediate replacement and 18% projected in the next 10 years based on Service Life Analysis. The annual capital funding available is $2.9 million to meet the average annual capital requirement of $ 8.02 million across all assets for 2024.

1. Funding Objective

The funding objective of the Town is to own a fully funded asset base. This section gives an overview of the town's current funding situation.

2. Current Funding Position

The following is an updated financing scenario for determining the Town of Erin's infrastructure deficit using the same technique as the 2023 Asset Management Plan:

- The average annual asset requirement of each asset is derived by dividing the replacement cost by its expected useful life.
- The projected value for bridges and culverts is updated from the 2023 Ontario Structure Inspection Manual (OSIM) report.
- The outcome is the "Average annual investment required", calculated by CityWide, to cover the replacement costs at the end of the useful life. Compared to 2023 AMP, the Town's average annual investment requirement for 2023 is $8.02 million with a slight difference from the prior year of $6.5 million.
- The average annual investment required is compared to the available funding in the next year. The 2025 funding is allocated to 2024 requirements, resulting in an annual deficit of $4.2 million compared to $3.8 million in 2023 AMP.
- The average annual investment required is currently funded at 41% of their long-term requirement.
- Water building & equipment are excluded from annual investment requirements for this calculation. The cost of replacing these assets is derived from water rates and not taxation.

- The available funding includes revenues from taxes and grants such as Ontario Community Infrastructure Fund (OCIF).
- The Ontario Community Infrastructure Fund (OCIF) is a formula-based component. The estimated grant for 2025 is $0.33 million. This grant is no longer assured from year to year.
- The Canada Community-Building fund is determined by Infrastructure Canada

The below tables represent the infrastructure requirements and the available funding for 2024 and 2023 respectively:

Town of Erin
Infrastructure Requirements as of Dec.31, 2024
& Available Funding for 2025

Asset Category	Average Annual Investment Required	Annual Funding Available					Annual Deficit
		Taxes	CCBF	OCIF	Taxes to Reserves	Total Funding	
-							
Road Network	**4,006,999**	-	-	-	450,000	**450,000**	**3,556,999**
Bridges & Culverts	**1,024,044**	-	200,000	336,875	-	**536,875**	**487,169**
Facilities	**765,115**	187,500	-	-	155,000	**342,500**	**422,615**
Land Improvement	**267,373**	20,000	-	-	30,000	**50,000**	**217,373**
Machinery & Equipment	**407,741**	820,000	-	-	720,000	**1,540,000**	**-1,132,259**
Fleet	**714,407**	50,000	-	-	-	**50,000**	**664,407**
Total	**7,185,678**	**1,077,500**	**200,000**	**336,875**	**1,355,000**	**2,969,375**	**4,216,303**

Town of Erin
Infrastructure Requirements as of Dec.31, 2023
& Available Funding for 2024

Asset Category	Average Annual Investment Required	Annual Funding Available					Annual Deficit
		Taxes	CCBF	OCIF	Taxes to Reserves	Total Funding	
-							
Road Network	**3,152,968**	100,000	-	-	263,106	**363,106**	**2,789,862**
Bridges & Culverts	**1,023,387**	-	376,684	396,324	-	**773,008**	**250,379**
Facilities	**741,126**	222,000	-	-	165,000	**387,000**	**354,126**
Land Improvement	**250,072**	140,000	-	-	40,000	**180,000**	**70,072**
Machinery & Equipment	**393,208**	170,000	-	-	80,000	**250,000**	**143,208**

Fleet	**639,938**	370,000	-	-	370,000	**740,000**	**(100,062)**
Total	**6,200,700**	**1,002,000**	**376,684**	**396,324**	**918,106**	**2,693,114**	**3,507,586**

3. Long-Term Financial Planning:

The Town of Erin's funding resources include:

- Taxes: are the Town's main source to reinvest in its infrastructure assets and services. In 2024, 47% of funding was based on taxes compared to 59% in 2023.
- Grants: This resource is based on external sources such as Infrastructure Canada (OCIF) and the Ontario Government (CCBF). The Ontario Community Infrastructure Fund (OCIF) will be completed by the end of 2024.
- Loans: This option is exercised to meet infrastructure replacement costs. The total debt as of the end of 2024 is $2.3 million. The total debt payments will decline by $0.17M over the next 10 years, $0.33M by year 15, and $0.43M by year 20. Consequently, the cost of debt will decline over the maturity of the loans. *(See Appendix B)*

The following table illustrates the forecasted long-term financial plan for 20 years, taking into consideration the changes in debt costs. To maintain existing assets, an increase of 2.5% in tax revenues is needed for the next 20 years compared to 2.2% in 2023:

Long Term Financial Plan				
Activity	**Years**			
	5	**10**	**15**	**20**
Infrastructure Deficit	**4,216,303**	**4,216,303**	**4,216,303**	**4,216,303**
Change in OCIF Grant	**336,875**	**336,875**	**336,875**	**336,875**
Change in Debt Costs	**-**	**(166,255)**	**(329,086)**	**(428,972)**
Resultant infrastructure Deficit	**4,553,178**	**4,386,923**	**4,224,092**	**4,124,206**
Resulting tax increase required over years	**57.6%**	**55.4%**	**53.4%**	**52.1%**
Annually	**11.5%**	**5.5%**	**3.6%**	**2.5%**

As per the above table, full asset funding can be achieved in 20 years:

- By increasing capital funding by 2.5%
- Reallocating reductions in debt payments to infrastructure reserves
- Allocating The Canadian Community Building Fund (CCBF) to asset renewal requirements.

The 0.3% increase from the 2023 Asset Management Plan Update is mainly attributed to the increased deficit due to increased infrastructure requirements and decreased funding.