Asset Management Plan 2025

Town of Bradford West Gwillimbury

April 2026

This Asset Management Plan was prepared by:



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

Key Statistics

$1.72 B	2024 Replacement Cost of Asset Portfolio
$40 k	Replacement Cost of Infrastructure Per Household
69%	Percentage of Assets in Fair or Better Condition
42%	Percentage of Assets with Assessed Condition Data
$13.7 M	Proposed LOS: Annual Capital Infrastructure Deficit
20 Y	Council Selected Years to Close Proposed LOS Deficit



Table of Contents

1. Executive Summary 5
2. Introduction & Context 9
3. Portfolio Overview 22
4. Growth 31
5. Proposed LOS Overview 35
6. Financial Strategy 62
7. Recommendations & Key Considerations 75

Appendices 78

Core Assets 79

Appendix A: Road Network 80
Appendix B: Bridges & Culverts 89
Appendix C: Water Network 94
Appendix D: Wastewater Network 100
Appendix E: Stormwater Network 106

Non-Core Assets 111

Appendix F: Facilities 112
Appendix G: Land Improvements 117
Appendix H: Vehicles 122
Appendix I: Machinery & Equipment 127
Appendix J: Pooled Assets 132

Analysis Reference Files 137

Appendix K: Resident Survey 138
Appendix L: Infrastructure Report Card 149
Appendix M: 10-Year Capital Requirements 151

Appendix N: Proposed LOS Scenario Comparisons.....155

Appendix O: Level of Service Maps & Photos 175

Appendix P: Risk Rating Criteria.....192

1. Executive Summary

Municipal infrastructure delivers critical services that are foundational to the economic, social, and environmental health and growth communities. The goal of asset management is to enable infrastructure to deliver an adequate Level of Service (LOS) in the most cost-effective manner. This involves the ongoing review and update of infrastructure information and data alongside asset management strategies and long-term financial planning.

1.1 Scope

This Asset Management Plan (AMP) evaluates three proposed LOS options and identifies the option endorsed by Council's considering risks, costs, and achievability. It outlines the projected LOS over a ten-year period and the associated costs for delivery. The AMP also estimates the Town's sustainable funding, the average annual funding required to achieve the proposed LOS, and the funding shortfall. Strategies to address the identified funding shortfalls are provided.

As detailed in Appendices A to J, the Town has compiled its asset inventory, including replacement costs, condition assessments, and lifecycle management strategies, based on year-end 2024 data. The analysis completed in this plan is predicated on this asset inventory information.

This AMP has been developed in accordance with the 2025 requirements for Asset Management Planning in Ontario. The AMP advances the Town's asset management program by assessing proposed LOS options and selecting one that balances risk, affordability, and achievability. This work supports the Town of Bradford West Gwillimbury in planning for public infrastructure and delivering municipal services sustainably. This AMP includes the following asset categories:

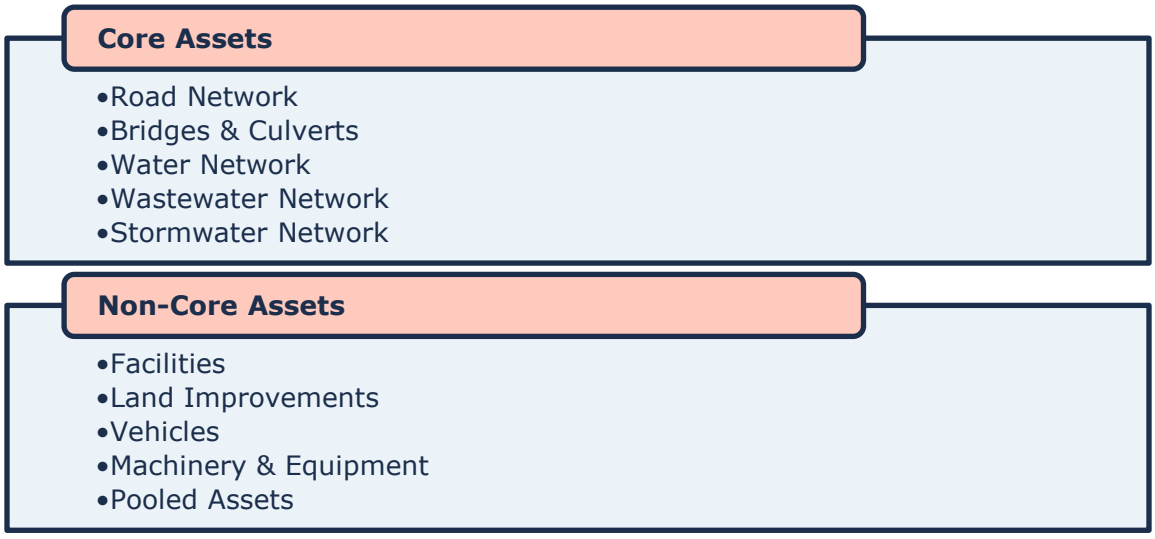


Figure 1 Core and Non-Core Asset Categories

1.2 Compliance

With the development of this AMP the Town of Bradford West Gwillimbury has achieved compliance with July 1, 2025, requirements under O. Reg. 588/17. This includes requirements for proposed LOS and inventory reporting for all asset categories.

1.3 Findings

To inform the development of suitable proposed LOS options, a resident survey was conducted to assess residents' experiences with municipal infrastructure, their priorities, desired service changes, and willingness to pay for different service levels (further detailed in Section 5.2.1). Key survey insights, include:

- Respondents placed highest importance on roads and bridges, water services, and emergency services.
- Based on availability, reliability, condition, and safety, roads have the highest levels of dissatisfaction, while bridges and public facilities have the highest levels of satisfaction.
- Across most asset categories, respondents prefer to maintain current service levels. However, for roads, bridges and structural culverts, most respondents prefer increased service levels. Notably, the number of respondents desiring increased service levels is higher than the number of respondents who are willing to pay for increased service levels.

This was considered alongside key details about the Town's infrastructure assets, namely:

- The overall replacement cost of the asset categories included in this AMP totals $1,724,438,000. The optimal annual capital investment, based on replacing all assets at the end of their Estimated Useful Life (EUL) and completing recommended rehabilitations, is $47,353,000. Currently, capital investment from sustainable sources is $24,133,000.
- As of December 2024, approximately two thirds (69%) of the Town's infrastructure portfolio was in fair or better condition, with the remaining 31% in poor or worse condition (refer to Section 3: Portfolio Overview).

Staff directly responsible and/or involved in the daily operations, capital planning, and/or capital projects were also surveyed. Overall, responses indicated that staff are generally confident in asset data and that staffing levels are largely sufficient, however, funding constraints— particularly related to capital investment— persist. Across all departments, survey results showed a consensus that the proposed LOS should be at least maintained or otherwise increased.

In consideration of the above, three proposed LOS options were selected, modelled, and evaluated.

Table 1: Proposed LOS Options

Scenario #	Description
1: Maintain Current Investment	Model the long-term impact of continuing with the current investment levels
2: Maintain Current Condition	Model investments required to maintain current condition levels (based on average conditions as provided in tables & graphs)
3: Optimal Investment	Model optimal investment to meet the AAR, phased in over 10 years

The three above noted scenarios were analyzed and the results were reviewed with senior leadership. Based on the information presented, staff recommended council endorse **Scenario 3 (Optimal Investment)** over 10 years as the Town of Bradford West Gwillimbury's proposed LOS.

In February 2026, Council held deliberations and voted to endorse **Scenario 2 (maintain condition)** phased in over a 20-year timeline. This selection represents the Town of Bradford West Gwillimbury's proposed LOS at this time.

A financial strategy to fund the investments required under Scenario 2 (maintain condition) was developed. Given the risks associated with extending the phase-in period— such as accelerated asset deterioration, service disruptions and reliability issues—a shorter 5 to 10-year phase-in period, rather than the 20-year period selected by the 2026 Council, is recommended for future consideration.

1.4 Recommendations

A financial strategy was developed to address the annual capital funding gap based on Council's selected proposed LOS and phase in period. The following graphic shows annual tax/rate change required to eliminate the Town's infrastructure deficit for the selected proposed LOS. These recommendations are based on a 20-year phase-in period, as adopted by council on February 3rd, 2026.

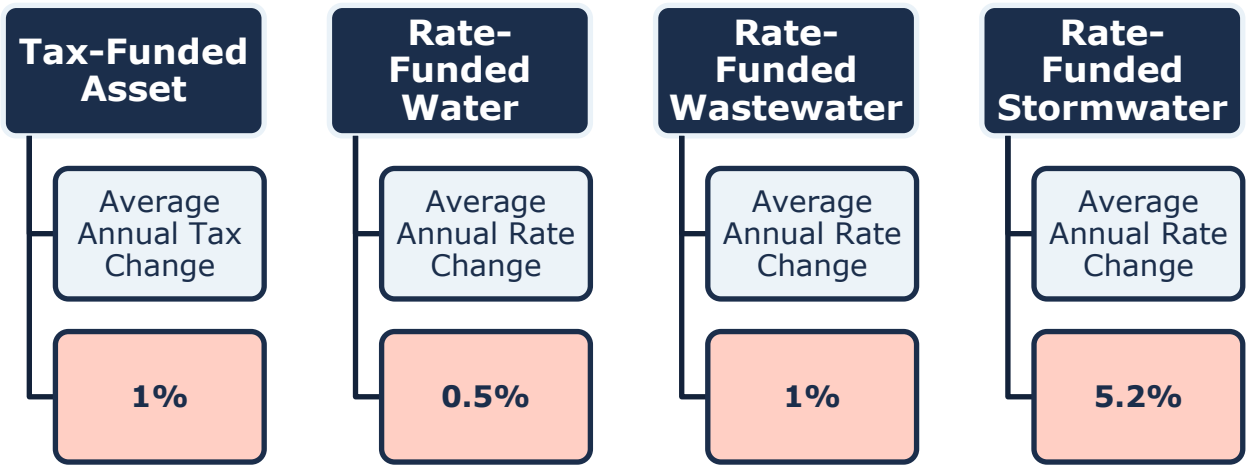


Figure 2 Proposed Tax/Rate Changes

Additional recommendations to guide continuous refinement of the Town's asset management program are provided in sections 7.2-7.4. Especially pertinent recommendations include:

- Continuously review, refine, and calibrate asset data to improve its accuracy, utility, and relevance. Notable opportunities for enhancement include upload of condition data for the underground water, wastewater, and stormwater assets, procurement of Building Condition Assessments (BCA) for facility assets, standardized internal condition assessment protocols, and as possible the collection of additional data alongside already planned assessment programs (i.e. Roads Needs Study, Bi-Annual Bridge inspection etc.)

- Each year, report on the current LOS and compare it to the projected LOS. Where there is material difference, work to understand their cause.

- Develop and regularly review short- and long-term plans to meet capital requirements, consider cash flow projections and project resources to support.

- Review the Town's asset management policy to ensure it remains accurate, relevant, and effective.

2. Introduction & Context

2.1 Community Profile

Bradford West Gwillimbury is a thriving town situated in Simcoe County within Ontario's Greater Golden Horseshoe region. Strategically positioned along Highway 400, the Town serves as a vital link between the Greater Toronto Area and northern destinations such as Muskoka.

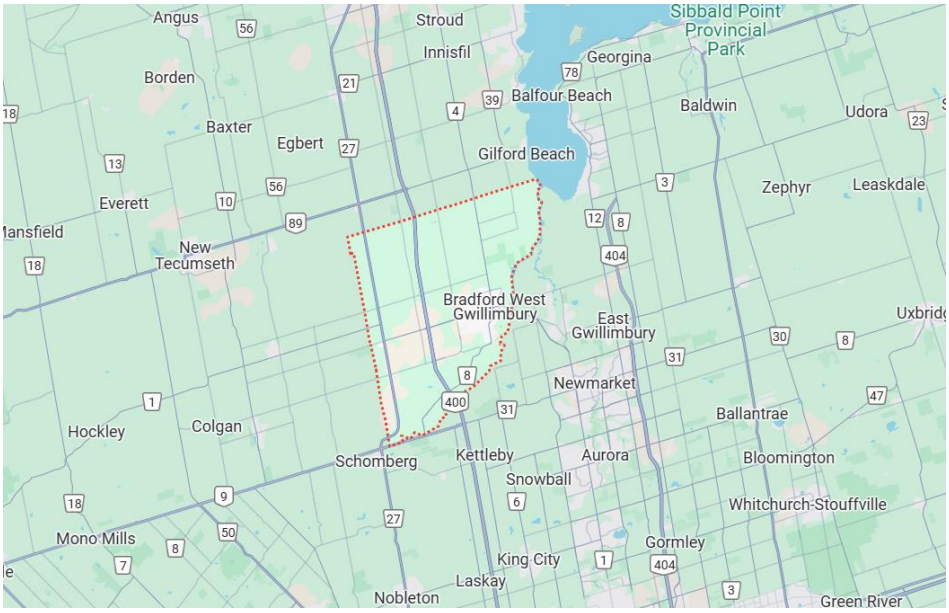


Figure 3: Location of the Bradford West Gwillimbury

The area was first settled as an agricultural and lumbering community. Known for its fertile soils of the Holland Marsh, agriculture has been fundamental to the community's economic development ever since the 1930s.

In 1991, the Town of Bradford and the Town of West Gwillimbury were amalgamated to form the Town of Bradford West Gwillimbury. In more recent years Bradford West Gwillimbury has experienced remarkable growth. According to the 2021 Census, between 2016 and 2021 the population increased by 21.4%, reaching 42,880 people. Over this period, Bradford West Gwillimbury's population was the 18th fastest growing across Canada. These population figures are outlined in Table 2 below.

Table 2 Town of Bradford West Gwillimbury Community Profile

Census Characteristic	Town of Bradford West Gwillimbury	Ontario
Population 2021	42,880	14,223,942
Population Change 2016-2021	21.4 %	5.8 %
Total Private Dwellings	13,907	5,929,250
Population Density	213.7	15.9

The Town's growth is supported and spurred by its thriving economic hub, driven by its strategic location near Toronto and a robust mix of manufacturing and agriculture. The fertile Holland Marsh supports a strong agri-food sector, contributing to the local economy through farming and food processing. The Town's proximity to major highways makes it an attractive location for logistics and warehousing, further enhancing its role as a regional transport node. A strong sense of community, supported by events like the annual Carrot Fest (50,000+ visitors), contributes to a high quality of life for the Town's residents.

2.2 Climate Change

Climate change poses significant risks to both human and natural systems globally. Its effects in Canada include rising temperatures, increased precipitation, more frequent droughts, and extreme weather events. The 2019 Canada's Changing Climate Report (CCCR 2019) revealed that from 1948 to 2016, Canada's average temperature rose by 1.7°C, with Northern Canada experiencing a 2.3°C increase—twice the global average. Without significant emissions reductions, Canada could warm by 6.3°C by 2100. Precipitation has increased by 20% since 1948, with projections showing a further rise, especially in the southern regions. Extreme weather events like droughts, floods, and wildfires have become more frequent.

These changes threaten Canada's economy, society, environment, and infrastructure. Extreme weather events put physical infrastructure at risk, requiring municipalities to protect local economies, communities, and assets from growing climate-related challenges.

Bradford West Gwillimbury's Climate Profile

The Town is expected to experience notable effects of climate change which include higher average annual temperatures, and an increase in total annual precipitation. According to Climatedata.ca, a collaboration supported by Environment and Climate Change Canada (ECCC), the Municipality may experience the following trends:

1. Higher Average Annual Temperature:
    - Between the years 1971 and 2000 the annual average temperature was 6.6ºC.
    - Under a Representative Concentration Pathway (RCP)[1] 8.5 model, the annual average temperatures are projected to be 9.4ºC by the year 2050, 11.6ºC for the 2051-2080 period, and 13.3ºC by the end of this century. The historical average is 9 ºC.

2. Increase in Total Annual Precipitation:
    - Under a high emissions scenario, Bradford West Gwillimbury is projected to experience a 12% increase in precipitation by the year 2080 and a 16% increase by the end of the century.

[1] A Representative Concentration Pathway (RCP) represents a greenhouse gas concentration trajectory (not emissions) adopted by the Intergovernmental Panel on Climate Change (IPCC). These pathways describe various climate change scenarios, each contingent on the amount of greenhouse gases emitted in the coming years. RCPs are a reference for climate modeling and research and help to understand potential outcomes based on different emission levels. These scenarios guide policy decisions and underscore the need for sustainable practices to safeguard our planet's future. RCP 8.5, one of four potential future pathways, represents a "business as usual" or "high emissions" scenario, leading to significantly higher temperature increases, greater impacts, and increased adaptation costs. This RCP scenario is what the Town has used in their Climate Mitigation and Adaptation Strategy.

The Town of Bradford West Gwillimbury has taken a proactive approach to managing climate change risks through its Climate Mitigation and Adaptation Strategy. Specific climate mitigation strategies that relate to the Town's infrastructure include:

- An aim to reduce emissions from corporate buildings by replacing gas-powered components, such as HVAC systems, with energy-efficient alternatives such as heat pumps and other renewable energy sources.
- Electrification of fleet assets to reduce the amount of GHG emissions.
- Consideration and prioritization of climate change risks in infrastructure decisions, such as design standards of stormwater infrastructure. This is reflected in the *Resilience Building Strategy* component of the plan, and *Goal 2: Resilient, Low-Carbon Infrastructure, Objective 2.1*.

2.3 Asset Management Overview

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

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

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

2.3.1 Foundational Asset Management Documentation

The industry-standard approach and sequence to developing a practical asset management program begins with a Strategic Plan, followed by an Asset Management Policy and an Asset Management Strategy, concluding with an Asset Management Plan.

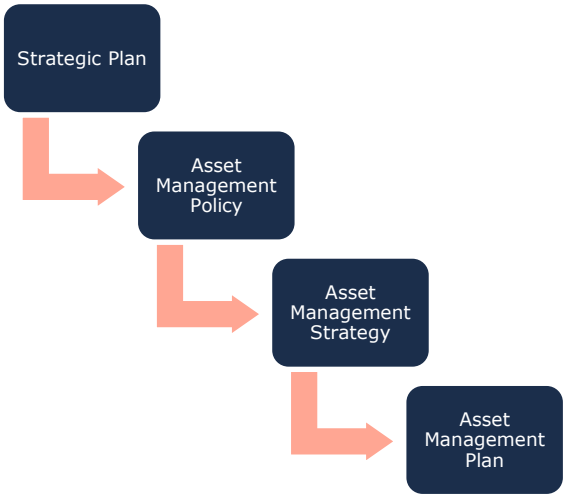


Figure 4 Foundational Asset Management Documents

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

Asset Management Policy

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

The Town of Bradford West Gwillimbury adopted its asset management policy on May 30th, 2019, in accordance with Ontario Regulation 588/17. The policy outlines the scope of asset management, strategies to implement asset management, and resourcing considerations to support. Notable details include:

- The Town's commitment to maintaining asset inventory information to support the delivery of services that are reliable, sustainable and appropriate for the Town (Section 1).
- The Town's intent to make decisions based on optimal lifecycle costing of assets rather than acquisition cost considerations only (Section 1).
- An asset management strategy that is customer focused, risk-based, forward looking, and integrates the Town's financial information into it (Section 7).
- The regular consideration of asset management planning throughout the annual budget development and review processes (Section 10).
- The goal is to maintain the current LOS of assets and where possible improve service levels considering the financial resources available to support (Section 11).

- The governance of asset management within the Town including roles and responsibilities (Section 15).

Asset Management Strategy

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

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

Asset Management Plan

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

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

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

2.3.2 Key Concepts in Asset Management

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

Lifecycle Management Strategies

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

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

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

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

Lifecycle Activity	Cost	Typical Associated Risks
Maintenance Activities that prevent defects or deteriorations from occurring	**$**	♦ Balancing limited resources between planned maintenance and reactive, emergency repairs and interventions; ♦ Diminishing returns associated with excessive maintenance activities, despite added costs; ♦ Intervention selected may not be optimal and may not extend the useful life as expected, leading to lower payoff and potential premature asset failure;
Rehabilitation/ Renewal Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	**$$$**	♦ Useful life may not be extended as expected; ♦ May be costlier in the long run when assessed against full reconstruction or replacement; ♦ Loss or disruption of service, particularly for underground assets;
Replacement/ Reconstruction Asset end-of-life activities that often involve the complete replacement of assets	**$$$$$**	♦ Incorrect or unsafe disposal of existing asset; ♦ Costs associated with asset retirement obligations; ♦ Substantial exposure to high inflation and cost overruns; ♦ Replacements may not meet capacity needs for a larger population; ♦ Loss or disruption of service, particularly for underground assets;

Table 3 Lifecycle Management: Typical Lifecycle Interventions

The Town's approach to lifecycle management is described for each asset category in Appendices A to I. Staff will continue to evolve and innovate current practices for developing and implementing proactive lifecycle strategies to determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest total cost of ownership.

Risk & Criticality

Asset risk and criticality are essential building blocks of asset management, integral in prioritizing projects and distributing funds where they are needed most based on a variety of factors. Assets in disrepair may fail to perform their intended function, pose substantial risk to

the community, lead to unplanned expenditures, and create liability for the municipality. In addition, some assets are simply more important to the community than others, based on their financial significance, their role in delivering essential services, the impact of their failure on public health and safety, and the extent to which they support a high quality of life for community stakeholders.

Risk is a product of two variables: the probability that an asset will fail, and the resulting consequences of that failure event. It can be a qualitative measurement, (i.e. low, medium, high) or quantitative measurement (i.e. 1-5), that can be used to rank assets and projects, identify appropriate lifecycle strategies, optimize short- and long-term budgets, minimize service disruptions, and maintain public health and safety.

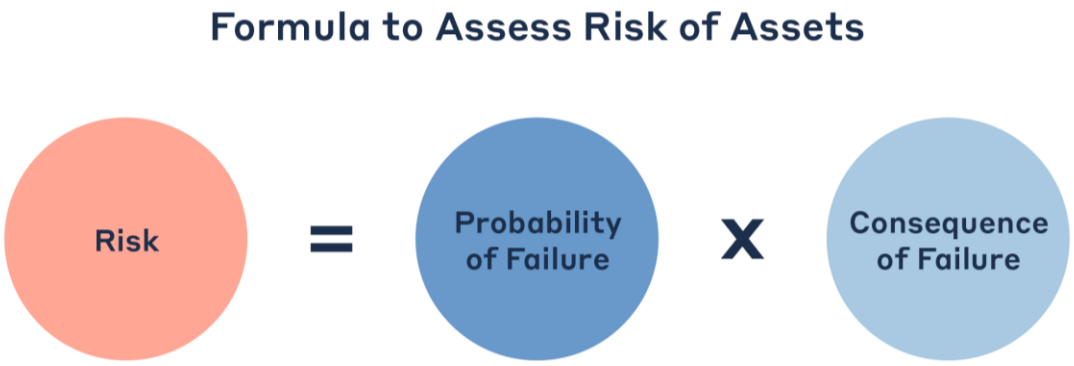


Figure 5 Risk Equations

The approach used in this AMP relies on a quantitative measurement of risk associated with each asset. The probability and consequence of failure are each scored from 1 to 5, producing a minimum risk index of 1 for the lowest risk assets, and a maximum risk index of 25 for the highest risk assets.

Probability of Failure

Several factors can help decision-makers estimate the probability or likelihood of an asset's failure, including its condition, age, previous performance history, and exposure to extreme weather events, such as flooding and ice jams—both a growing concern for municipalities in Canada.

Consequence of Failure

Estimating criticality also requires identifying the types of consequences that the organization and community may face from an asset's failure, and the magnitude of those consequences. Consequences of asset failure will vary across the infrastructure portfolio; the failure of some assets may result primarily in high direct financial cost but may pose limited risk to the community. Other assets may have a relatively minor financial value, but any downtime may pose significant health and safety hazards to residents.

Table 4 illustrates the various types of consequences that can be integrated in developing risk and criticality models for each asset category and segments within. We note that these consequences are common, but not exhaustive.

Table 4 Risk Analysis: Types of Consequences of Failure

Type of Consequence	Description
Direct Financial	Direct financial consequences are typically measured as the replacement costs of the asset(s) affected by the failure event, including interdependent infrastructure.
Economic	Economic impacts of asset failure may include disruption to local economic activity and commerce, business closures, service disruptions, etc. Whereas direct financial impacts can be seen immediately or estimated within hours or days, economic impacts can take weeks, months and years to emerge, and may persist for even longer.
Socio-political	Socio-political impacts are more difficult to quantify and may include inconvenience to the public and key community stakeholders, adverse media coverage, and reputational damage to the community and the Municipality.
Environmental	Environmental consequences can include pollution, erosion, sedimentation, habitat damage, etc.
Public Health and Safety	Adverse health and safety impacts may include injury or death, or impeded access to critical services.
Strategic	These include the effects of an asset's failure on the community's long-term strategic objectives, including economic development, business attraction, etc.

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

Risk models have been built for each asset in inventory. An overview of the current risk models is provided in Appendix P: Risk Rating Criteria.

Levels of Service

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

The Town measures the LOS provided at two levels: Community LOS, and Technical LOS.

Community Levels of Service

Community LOS are simple, plain language description or measure of the service that the

community receives. For core asset categories (Road Network, Bridges & Culverts, Water, Wastewater, Stormwater) the province, through O. Reg. 588/17, has provided qualitative descriptions that are required to be included in this AMP. Across all asset categories, the Town has selected additional metrics deemed to be useful and beneficial.

Technical Levels of Service

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

For core asset categories as applicable the province, through O. Reg. 588/17, has also provided technical metrics that are required to be included in this AMP. Across all asset categories, the Town has selected additional metrics deemed to be useful and beneficial.

Current and Proposed Levels of Service

A current LOS reflects the technical LOS for (most often) a group of assets as of a defined *past* measurement date. In contrast, a proposed LOS reflects the Municipality's goal for asset performance by a defined *future* date.

It is important to note that O. Reg 588/17 does not dictate the proposed LOS values required. Meaning, a proposed LOS may be maintaining or even reducing current performance.

Regardless of what the selected proposed LOS is, O. Reg 588/17 requires Municipalities to demonstrate the feasibility of the proposed LOS. This must consider the associated costs, risks, and impact of population and economic activity over the period (O. Reg. 588/17 6,2). The following sections outline O. Reg 588/17 reporting requirements and how the Town of Bradford West Gwillimbury meets them, while noting any additional considerations made.

2.4 Scope & Methodology

2.4.1 Data Effective Date

It is important to note that this plan is based on assets in ownership as of 2024-year end and baseline data, such as replacement cost and condition, is reported as of **December 2024**. This data represents a snapshot in time using the best available processes, data, and information at the Town.

Future projections of asset condition and risk are based on the asset information as of the data effective date (December 2024) forecasted into the future. Forecasts are predicated on key asset information such as an asset's Estimated Useful Life (EUL), condition, its expected rate of decline (i.e. deterioration curve) over time, and available investment amounts. Strategic asset management planning is an ongoing and dynamic process that requires continuous data updates and dedicated data management resources. Such data updates may change projected data outputs (e.g. projected condition).

2.4.2 Determining Replacement Costs

There are a range of methods to determine the replacement cost of an asset, and some are

more accurate and reliable than others. This AMP relies on two methodologies:

User-Defined Cost and Cost Per Unit

Based on costs provided by municipal staff which could include average costs from recent contracts; data from engineering reports and assessments; staff estimates based on knowledge and experience.

Cost Inflation / CPI Tables

Historical costs of the assets are inflated based on Consumer Price Index or Non-Residential Building Construction Price Index.

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

2.4.3 Estimated Service Life & Service Life Remaining

The 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 for each asset in this AMP was assigned according to the knowledge and expertise of municipal staff and supplemented by existing industry standards when necessary.

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



Figure 6 Service Life Remaining Calculation

2.4.4 Reinvestment Rate

As assets age and deteriorate, they often require additional investment to maintain a state of good repair. The reinvestment of capital funds, through asset renewal or replacement, may be necessary to sustain an adequate LOS. The reinvestment rate is a measurement of available or required funding relative to the total replacement cost. There are two types of reinvestment rates: the target reinvestment rate, based on optimal funding, and the actual reinvestment rate, based on currently available funding.

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

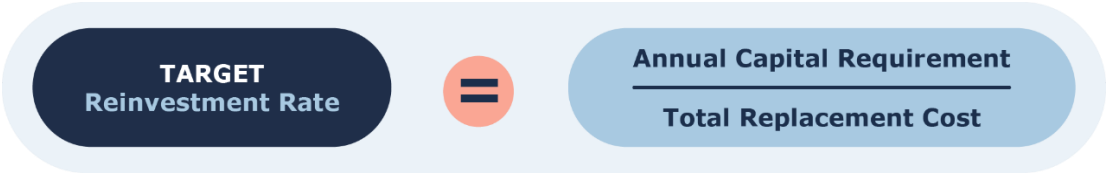


Figure 7 Target Reinvestment Rate Calculation

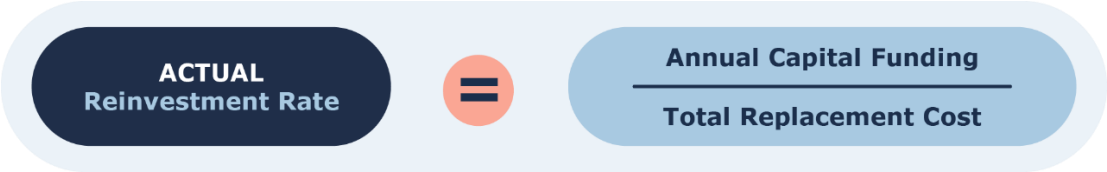


Figure 8 Actual Reinvestment Rate Calculation

2.4.5 Deriving Asset Condition

An incomplete or limited understanding of asset conditions can mislead long-term planning and decision-making. Accurate and reliable condition data helps to prevent premature and costly rehabilitation or replacement and increases the likelihood of lifecycle activities occurring 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 Town'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.

Table 5 Standard Condition Rating Scale

Condition	Description	Criteria	SLR (%)
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. Further details as assessed condition sources and extent are detailed in Table 7 in section 3.2.3.

2.5 Ontario Regulation 588/17

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

Figure 9 below outlines key reporting requirements under O. Reg 588/17 and the associated timelines. This AMP meets the regulatory requirements of Phase III, 2025.

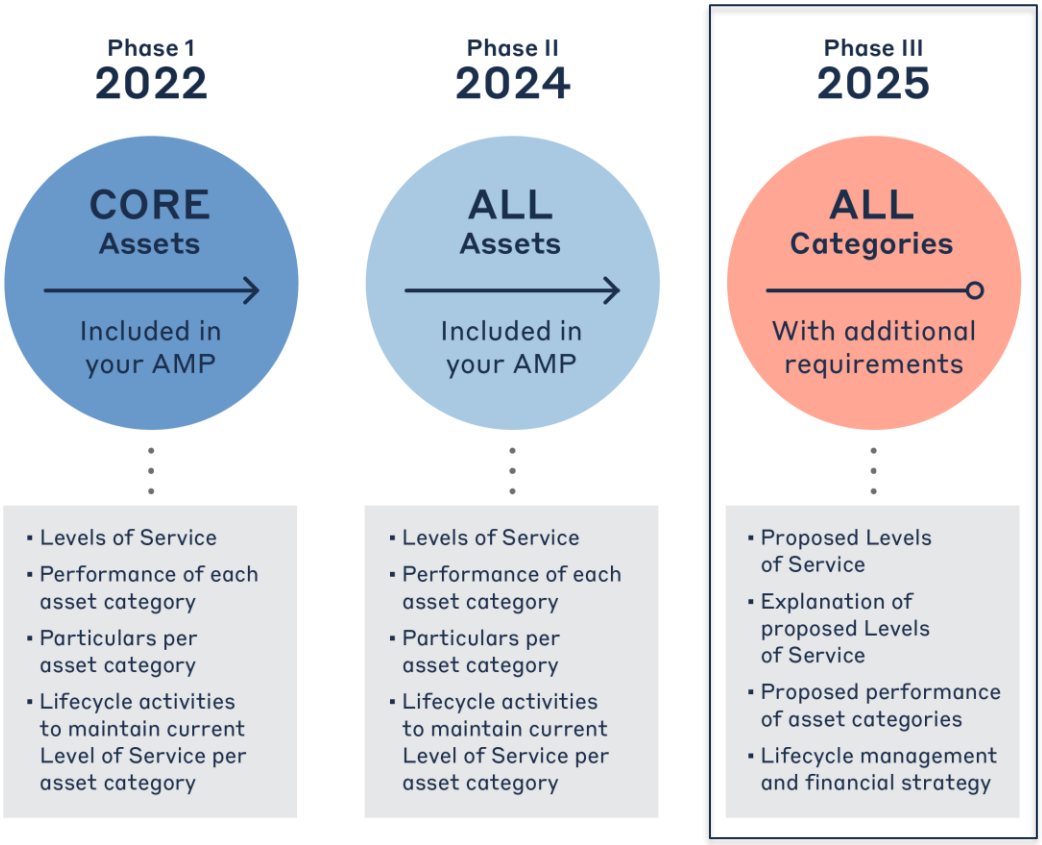


Figure 9 O. Reg. 588/17 Requirements and Reporting Deadlines

2.5.1 O. Reg. 588/17 Compliance Review

The following table identifies the requirements outlined in Ontario Regulation 588/17 for municipalities to meet by July 1, 2025. Next to each requirement a section reference is included.

Table 6: O.Reg. 588 2025 Compliance Requirements

Requirement	O. Reg. 588/17 Section	AMP Section Reference	Status
Growth assumptions Considerations for Proposed LOS	S.5(2), 3(i)	4	Complete
Proposed LOS over 10 years for each asset category	S.5(2), 3(ii)	5.4.2	Complete
Why the proposed LOS is appropriate	S.5(2), 3(iii)	5.3	Complete
Proposed LOS lifecycle management	S.5(2), 3(iv)	5.4.1	Complete
Proposed LOS risk management	S.5(2), 3(v)	5.4.2	Complete
Proposed LOS financial strategy	S.5(2), 1(i-ii)	6	Complete

3. Portfolio Overview

This section summarizes the inventory, condition, age profiles, and other key performance indicators for the Town's infrastructure portfolio. These details are presented for all asset categories.

3.1 Asset Hierarchy & Data Classification

Asset hierarchy explains the relationship between individual assets, their functions, and the services they provide. How assets are grouped in a hierarchy structure can impact how data is interpreted. In this report assets are grouped by category and nested within each category a segment, as detailed in Figure 10 below.



Figure 10 Asset Hierarchy and Data Classification

3.2 Portfolio Overview

3.2.1 Total Replacement Cost of Asset Portfolio

The ten asset categories analyzed in this AMP have a total current replacement cost of $1.7 billion. This estimate was calculated using user-defined costing, as well as inflation of historical costs to the data effective date. This estimate reflects replacement of historical assets with similar, not necessarily identical, assets available for procurement today. Figure 11 illustrates the replacement cost of each asset category; at 30% of the total portfolio, roads form the largest share of the Town's asset portfolio, followed by wastewater network at 17%.

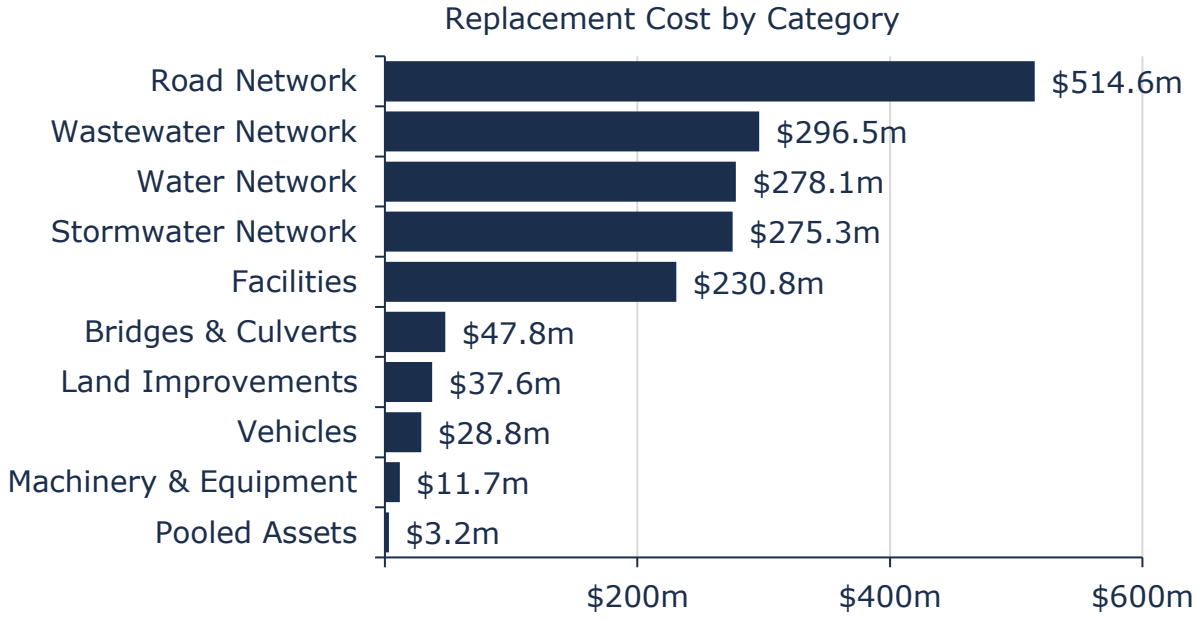


Figure 11 Current Replacement Cost by Asset Category

3.2.2 Target vs. Actual Reinvestment Rate

The graph below depicts funding gaps by comparing the target[2] to the current reinvestment rate. To meet the existing long-term capital requirements, the Town requires an annual capital investment of $47.3 million, for a target portfolio reinvestment rate of 2.75%. Currently, annual investment from sustainable revenue sources[3] is $24,134,000, for a current portfolio reinvestment rate of 1.34%. Target and current re-investment rates by asset category are detailed in Figure 12 below.

[2] Target reinvestment is based on replacing every single asset when it reaches its EUL and completing all recommended rehabilitation activities. This is the optimal level of capital investment as reflected in proposed LOS option 3: Optimal Investment, further detailed in section 5.2.4 of this report.
[3] Sustainable revenue sources are taxes, rates (for water, wastewater, and stormwater asset categories), OCIF, and CCBF. One-time grants are not considered sustainable primarily because they are not controllable or repeatable.

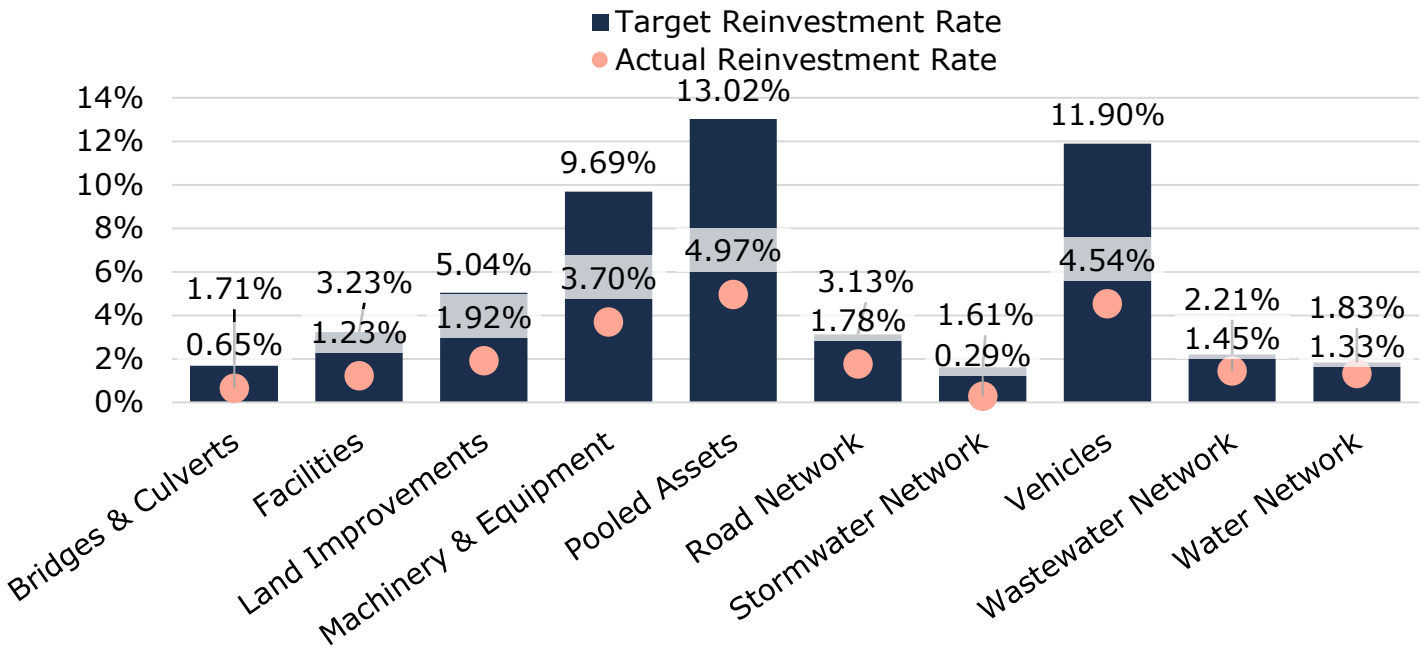


Figure 12 Current Vs. Target Reinvestment Rate (Scenario 3: Optimal Investment)

3.2.3 Condition of Asset Portfolio

Figure 13 and Figure 14 summarize asset condition as of December 2024 at the portfolio and category levels, respectively. Based on both assessed condition and age-based analysis, 69% of the Town's infrastructure portfolio was in fair or better condition and 31% in poor or worse condition as of December 2024. Typically, assets in poor or worse conditions may require replacement or major rehabilitation in the immediate or short-term. Targeted condition assessments may help further refine the list of assets for potential replacement or rehabilitation.

Similarly, assets in fair condition should be monitored for disrepair over the medium term. Keeping assets in fair or better conditions is typically more cost-effective than addressing asset needs when they enter the latter stages of their lifecycle or decline to a lower condition rating, e.g., poor or worse.

Condition data was available for most of the road network, all bridges & culverts, and facilities. For all remaining assets, including major infrastructure such as water and stormwater network, age was used as an approximation of condition for these assets. Age-based condition estimations can skew data and lead to potential under- or overstatement of asset needs. As noted in 7.2, it is recommended that the Town formalize and expand their condition assessment program.

Further, when assessed condition data was available, it was projected to current year-end (2024). This 'projected condition' can generate lower condition ratings than those established at the time of the condition assessment. The rate of this deterioration will also depend on lifecycle curves used to project conditions over time.

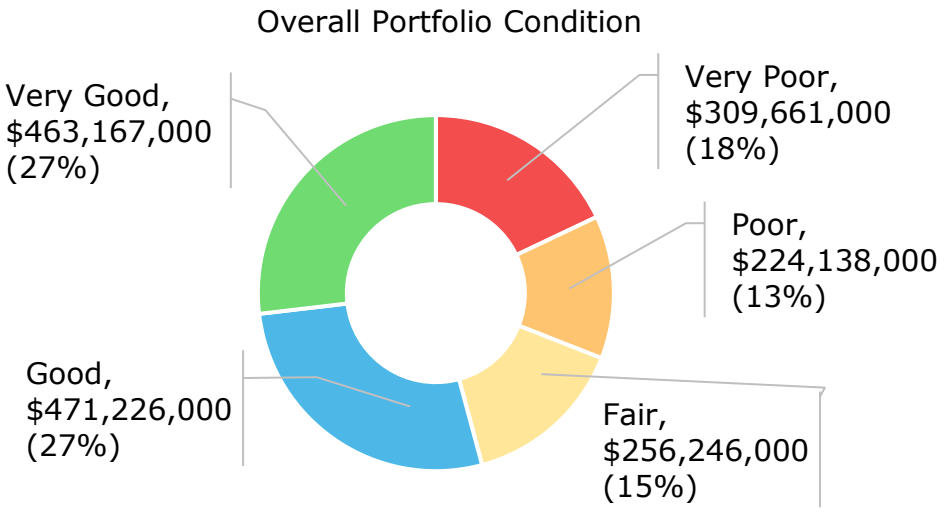


Figure 13 Asset Condition: Portfolio Overview

As further illustrated in Figure 14 at the category level, most bridges & culverts, water, wastewater, stormwater network, and facilities assets are in fair or better condition. On the contrary, more than 50% of the road network or vehicle assets are in poor or worse condition. See Table 7 for details on how condition data was derived for each asset segment.

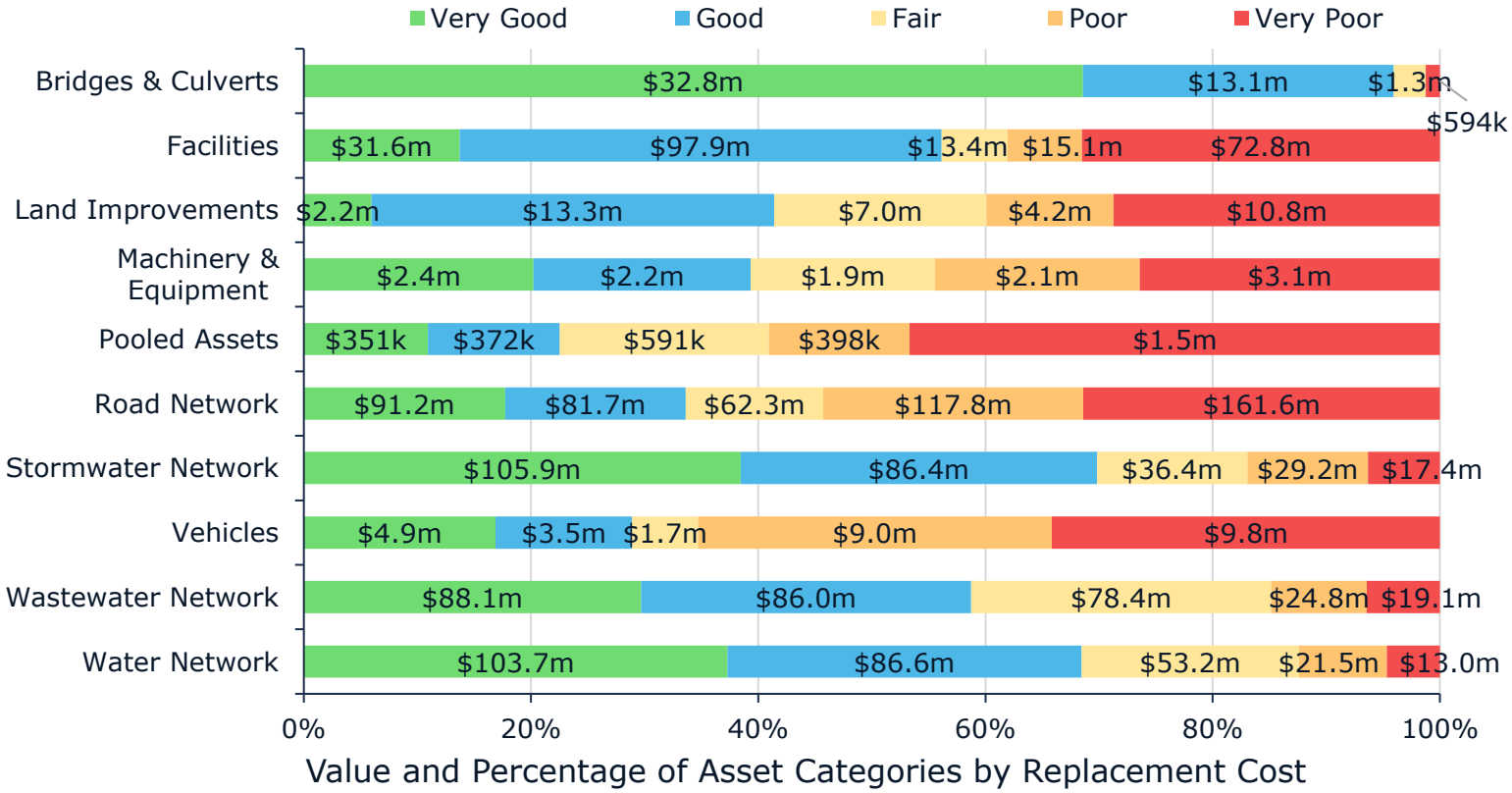


Figure 14 Asset Condition by Asset Category

Source of Condition Data

This AMP relies on assessed condition for 42% of assets, based on and weighted by replacement cost. For the remaining assets, age is used as an approximation of condition. Assessed condition data is invaluable in asset management planning as more accurately reflects an asset's condition. Table 7 below identifies the source of condition data used throughout this AMP.

Table 7 Source of Condition Data

Asset Category	Asset Segment(s)	% of Assets with Assessed Conditions	Source of Condition Data
Road Network	Paved Roads (HCB)	96%	2025 Assessments by R.J Burnside & Associates
	Paved Roads (LCB)	100%	2025 Assessments by R.J Burnside & Associates
	Street Signs	100%	2024 Staff Assessments
	Streetlights Sidewalks Traffic Signals	0%	Age-Based
Bridges & Culverts	Bridges Structural Culverts Pedestrian Bridges	100%	2023 OSIM Report
Water Network	Booster Pumping Stations	6%	2020 Assessments by GM Blue Plan Engineering
	Wells, Towers & Chambers	73%	2020 Assessments by GM Blue Plan Engineering
	Fire Hydrants Water Mains Water Valves Water Laterals	0%	Age-Based
Wastewater Network	Wastewater Treatment Plant	100%	2020 Assessments by Ainley Consulting Engineers
	Chambers Force Mains Gravity Mains Manholes Pumping Stations	0%	Age-Based
Stormwater Network	Non-Structural Culverts	89%	2023 Assessments by ART Engineering

Asset Category	Asset Segment(s)	% of Assets with Assessed Conditions	Source of Condition Data
	Catch Basins Maintenance Holes Storm Laterals Storm Outlets Stormwater Mains & Chambers	0%	Age-Based
Facilities	Community Centre	65%	2025 Staff Assessments
	Emergency Services	26%	
	Municipal Building	99%	
	Operations	47%	
	Other	31%	
	Sports	31%	
Land Improvements	All	0%	Age-Based
Vehicles	All	0%	Age-Based
Machinery & Equipment	All	0%	Age-Based
Pooled Assets	All	0%	Age-Based

3.2.4 Service Life Remaining

Based on asset age, available assessed condition data and estimated useful life, based on replacement costs 23% of the Town's assets will require replacement within the next 10 years. This is summarized in Figure 15 below.

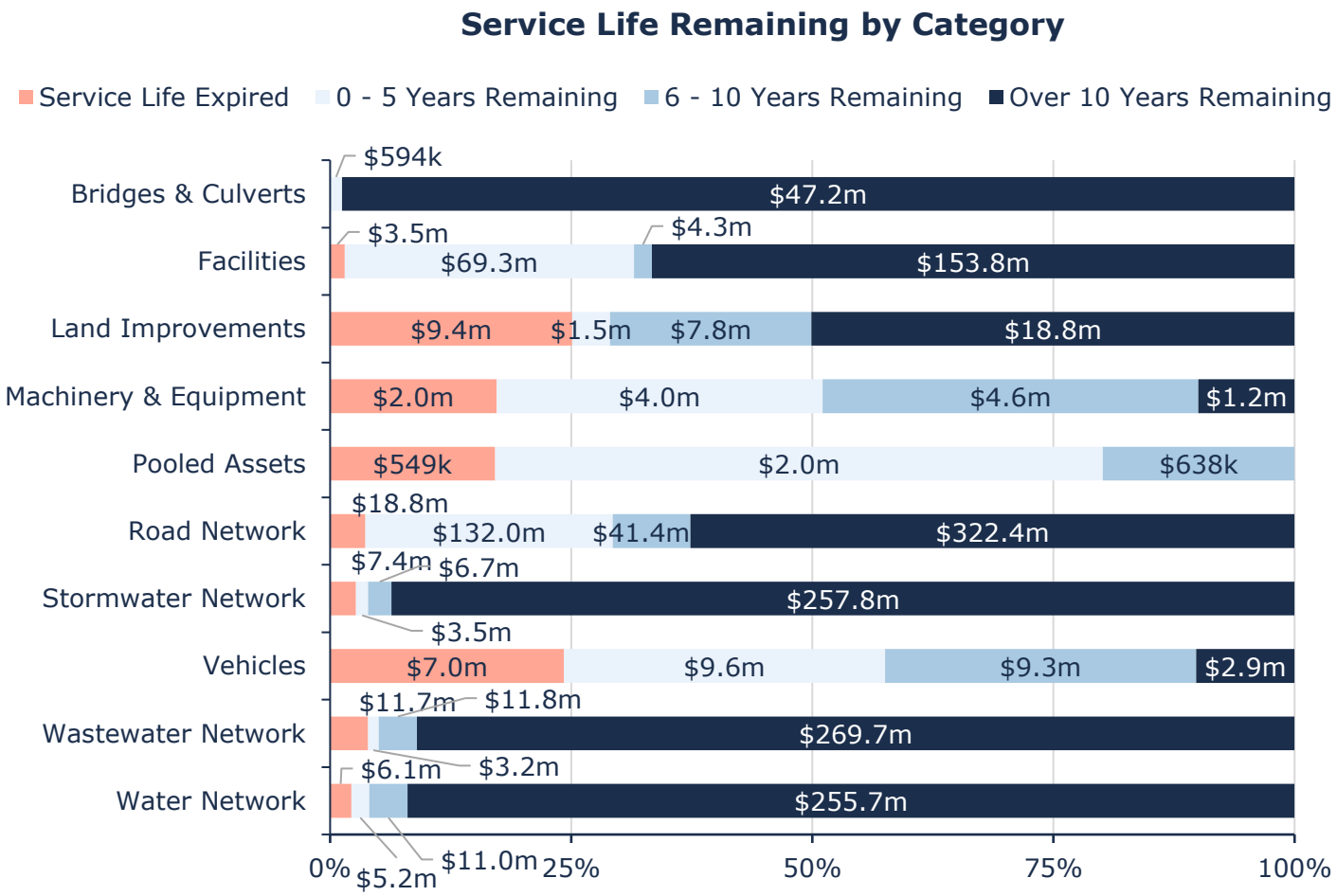


Figure 15 Service Life Remaining by Asset Category

3.2.5 Risk Matrix

Using the risk equation and preliminary risk models, Figure 16 shows how assets across the different asset categories are stratified within a risk matrix.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$691,161,000 (40%)	$305,467,000 (17%)	$86,152,000 (5%)	$329,444,000 (19%)	$337,055,000 (19%)

Figure 16 Risk Matrix: All Assets

The analysis shows that as of December 2024, approximately 19% of the Town's assets, carry a risk rating of 15 or higher (red) out of 25. Assets in this group may have a high probability of failure based on available condition data and age-based estimates and carry moderate to severe

consequences of failure. These risk scores are determined by the risk models summarized in Appendix P.

As new asset attribute information and condition assessment data are integrated with the asset register, asset risk ratings will evolve, resulting in a redistribution of assets within the risk matrix. Staff should also continue to calibrate risk models.

We caution that since risk ratings may rely on many factors beyond an asset's physical condition or age, assets in a state of disrepair can sometimes be classified as low-risk, despite their poor condition rating. In such cases, although the probability of failure for these assets may be high, their consequences of failure ratings were determined to be low based on the attributes used and the data available.

Similarly, assets with very high condition ratings can receive a moderate to high-risk rating despite a low probability of failure. These assets may be deemed as highly critical to the Town based on their costs, economic importance, social significance, and other factors. Continued calibration of an asset's criticality and regular data updates are needed to ensure these models more accurately reflect an asset's actual risk profile.

3.2.6 Forecasted Capital Requirements (Optimal Investment)

Figure 17 below illustrates the long-term infrastructure capital investment requirements for all asset categories analyzed in this AMP. On average, $47.4 million (red dotted line) in capital investment is required each year to replace every single asset when it reaches its EUL and complete recommended rehabilitations. Although investment requirements may fluctuate from year to year, this figure is a useful benchmark to ensure projects are not deferred due to financial shortfalls. The annual requirement represents the optimal level of investment and does *not* represent the funding required to meet the selected proposed LOS (as discussed in Section 5).

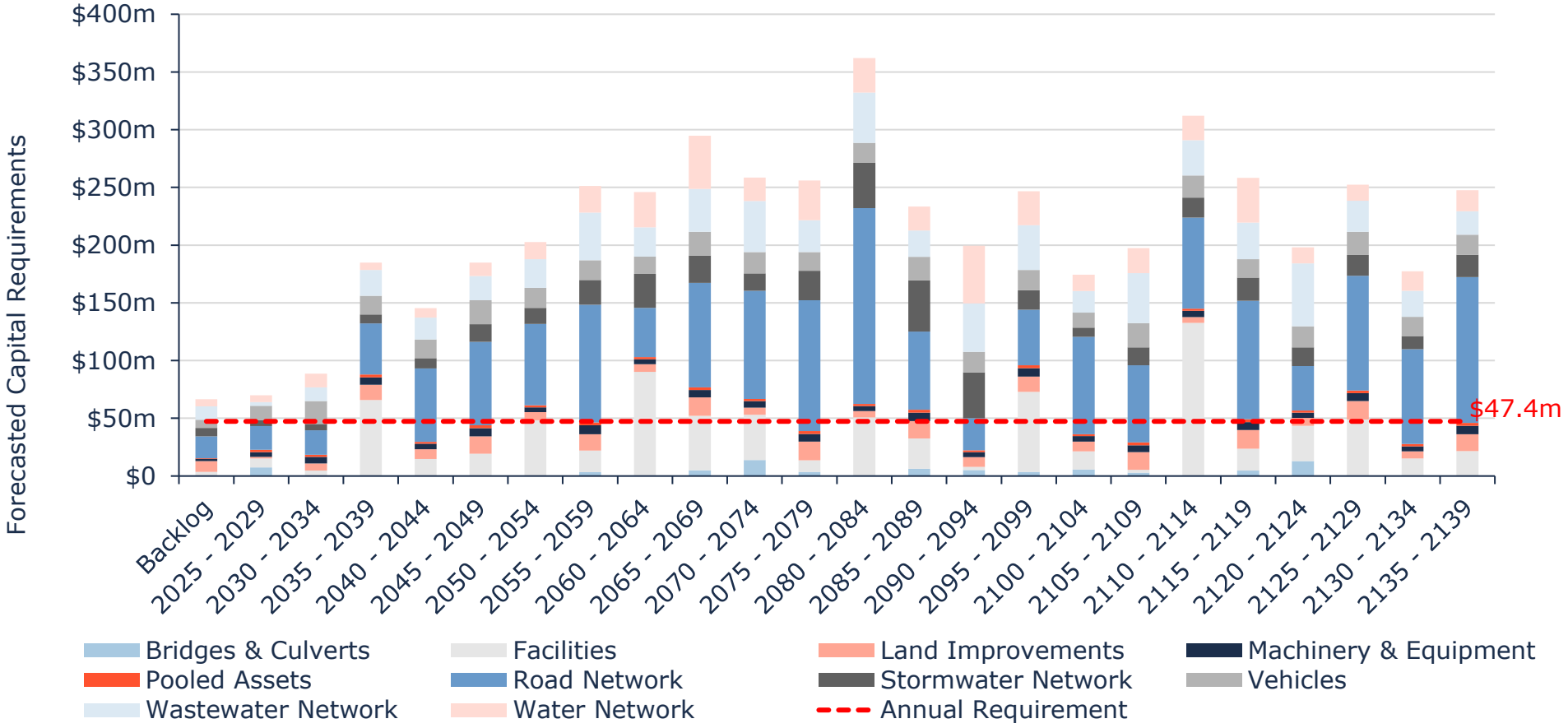


Figure 17 Capital Investment Needs (Optimal Investment): Portfolio Overview 2025-2139

4. Growth

The demand for infrastructure and services will change over time based on a combination of internal and external factors. Understanding the key drivers of population growth and demand improves the effectiveness of infrastructure planning.

4.1 Growth Assumptions

Several plans and studies were reviewed to identify the long-term population growth projections for the Town of Bradford West Gwillimbury. The studies reviewed are as follows:

- Simcoe Official Plan
- Bradford West Gwillimbury Official Plan
- Growth Management Strategy: Town of Bradford West Gwillimbury, Draft Report
- Development Charges Background Study: Town of Bradford West Gwillimbury

Key details and findings from the above-mentioned studies are as follows:

- Between 2016-2021 population growth in both Simcoe County and the Town of Bradford West Gwillimbury has been significant and greater than the provincial growth average (21.4% Bradford West Gwillimbury; 11.2% Simcoe County; 5.8% Ontario).
- Bradford West Gwillimbury is forecasted to accommodate about one-fifth (17%) of the growth within the County of Simcoe to 2051.
- By 2051, the Town of Bradford West Gwillimbury is expected to accommodate a population of 83,500 which is an increase of 38,800 or 1,290 residents annually between 2021 and 2051.
- This population growth will necessitate the construction of around 5,200 new dwelling units. Of this, 40% of new housing is targeted within the existing built-up area, particularly in the downtown Bradford West Gwillimbury and Major Transit Station Area.
- Development charges are a key tool to fund the cost of infrastructure and services required to accommodate growth. The Development Charges Background Study forecasts growth costs and identifies capital costs benefitting existing development. These costs, called Benefit to Existing (BTE), are not recoverable through development charges. For this reason, they are identified as a growth cost.

Additional background on the above studies is provided below.

1. Simcoe Official Plan

The County of Simcoe Official Plan establishes a policy framework to manage long-term growth, aiming to balance economic development, community building, and environmental protection. Growth is primarily directed to settlement areas, with an emphasis on primary settlement areas. The Official Plan supports the protection of agricultural lands, natural heritage systems, and cultural heritage resources, while promoting compact, complete, and sustainable communities.

The Official Plan is in conformity with the Growth Plan for the Greater Golden Horseshoe, incorporating provincially mandated population and employment forecasts. Growth management principles include efficient use of land and infrastructure, support for a range of housing options

and employment opportunities and coordinated planning with local municipalities and surrounding jurisdictions. According to the Growth Plan allocations, the County of Simcoe is projected to grow from a 2006 population of 272,200 to 416,000 by the year 2031, representing a 53% increase.

For the Town of Bradford West Gwillimbury, the population is forecasted to reach 50,500 by 2031, with a corresponding employment projection of 18,000. This aligns with the Greater Golden Horseshoe Growth Plan projections outlined in Schedule 7. As a designated Primary Settlement Area, Bradford West Gwillimbury is intended to accommodate a significant share of this growth. These areas are expected to develop as complete communities with a mix of land uses, full municipal water and sewage services, and a built form that supports transit and active transportation. The Town is required to focus growth within its settlement boundaries (density target- 35 residents and jobs/hectare), identify areas for intensification (40% intensification target), and plan for coordinated development (i.e., transit service areas and plans).

2. Bradford West Gwillimbury Official Plan:

The Official plan was adopted by the Council in March 2021 and approved by the County of Simcoe in March 2023. The Town of Bradford West Gwillimbury is poised for significant growth and transformation by 2031, guided by its Official Plan and aligned with provincial frameworks such as the Provincial Policy Statement, the Growth Plan for the Greater Golden Horseshoe, and the Greenbelt Plan. These policies collectively provide a comprehensive framework to manage population and employment growth, protect natural and agricultural lands, and foster the development of complete, sustainable communities.

Bradford West Gwillimbury's population is projected to increase from 42,880 residents in 2021 to approximately 50,500 residents and 18,000 total jobs by 2031. This population growth will necessitate the construction of around 5,200 new dwelling units, averaging 350 units annually. A key focus is on intensification, with 40% of new housing targeted within the existing built-up area, particularly in the Downtown Bradford West Gwillimbury and Major Transit Station Area, to promote transit-oriented development and efficient land use. The Plan also sets a minimum density target of 35 persons and jobs per hectare in the Bradford West Gwillimbury Urban Area to support compact, mixed-use neighborhoods. Employment growth is equally prioritized, with a target of at least 18,000 jobs by 2031, primarily located within the Bradford West Gwillimbury Urban Area and the Highway 400 Employment Lands, supporting a diverse and resilient local economy.

Public infrastructure will be designed to accommodate the scale of development, with existing and planned infrastructure sufficient to meet 2031 growth targets. Updates to the Town's servicing strategies (e.g., Master Servicing Plan, and Transportation Master Plan) will address growth to 2041. Planning for new or expanded infrastructure will follow an integrated approach, incorporating long-range scenario-based land use planning, financial planning, and supporting studies such as infrastructure master plans, asset management plans, community energy plans, watershed planning, and environmental assessments.

The Official Plan emphasizes balancing growth with environmental stewardship and heritage preservation. It protects prime agricultural lands and natural features, including wetlands and greenfield areas, in accordance with the Greenbelt Plan. Infrastructure investments and policies encourage complete communities that offer housing, recreation, retail, and employment

opportunities, while fostering walkability and transit accessibility. This strategic approach ensures that Bradford West Gwillimbury can accommodate growth thoughtfully, maintaining its unique character and enhancing quality of life for current and future residents.

3. Growth Management Strategy, Draft Report

This draft report provides a framework to manage growth until 2051 and aligns local planning frameworks with Provincial Planning Statement, 2024 and Simcoe County's Official Plan Amendment 7.

The report indicates that the long-term population growth is significant at approximately 1,290 new residents annually, representing a 2.1% annual increase. These forecasts are outlined in Figure 18 below.

Figure 12
Town of Bradford West Gwillimbury
Long-Term Population Growth Forecast, 2021 to 2051

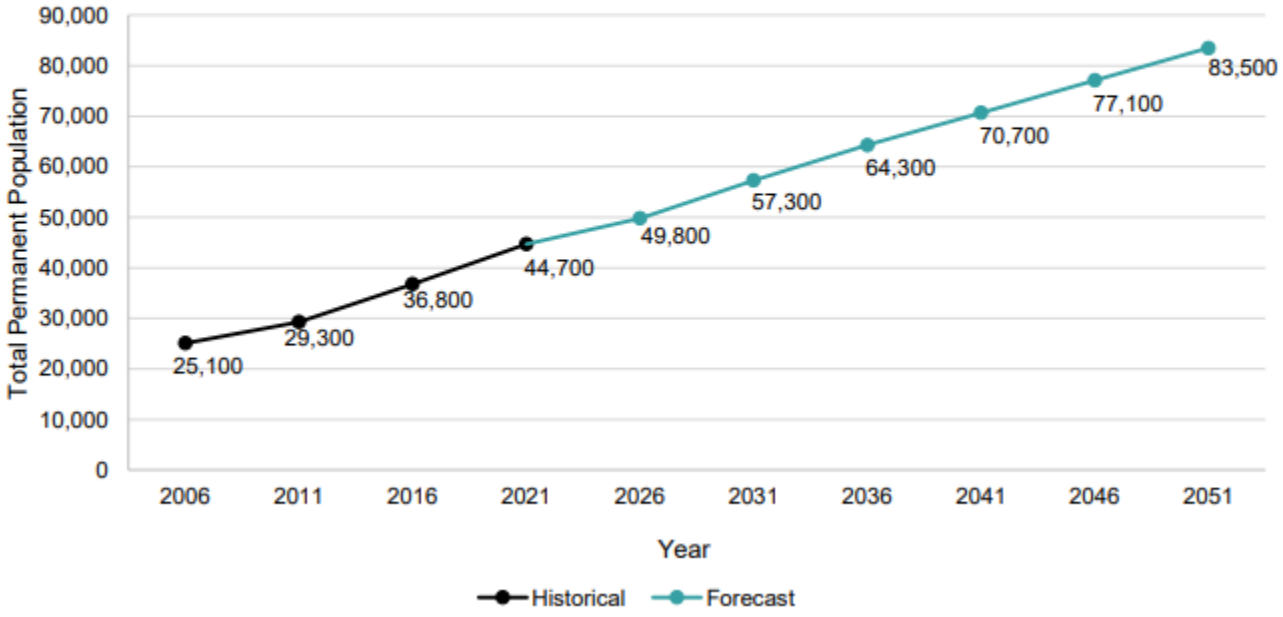


Figure 18: Historic and Projected Population Levels

The strategy aims to support some of the anticipated growth through intensification and accordingly has a 44% intensification target. This target represents the proportion of growth accommodated within existing urban areas rather than undeveloped land. The remaining 66% of growth is planned to occur on undeveloped lands. This growth strategy maximizes the use of existing assets by increasing use through densification. While it carries benefits, it has the potential to force early upgrades and replacements where the capacity (i.e. pipe size) of existing infrastructure is insufficient to accommodate growth. For this reason, intensification opportunities consider servicing capacity alongside other important criteria, like market demand by housing type.

4.2 Impact of Growth on Lifecycle Activities

O. Reg. 588/17 requires that municipality with a population of 25,000 or more as reported by Statistics Canada in the most recent census report on the following:

i. Estimated capital expenditures to achieve the proposed LOS to accommodate projected increases in demand caused by population and employment growth relating to new construction or upgrading of existing municipal infrastructure assets
ii. The funding projected to be available
iii. An overview of the risks associated with the implementation of the AMP

Estimated capital expenditures due to growth are determined based on the Development Charges Background study as discussed below.

Development Charges Background Study

In accordance with the Development Charges Act (D.C.A), 1997 the Town of Bradford West Gwillimbury has identified the forecasted growth-related capital expenditures from new development based on a period of 10 years for transit services and longer for other asset categories. Section 5(1) 6 of the D.C.A. provides that, "the increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development." Common examples of Benefits to Existing (BTE) include:

- Repair or unexpanded replacement of existing assets in need of repair
- Increase in average service level of quantity or quality
- Providing services where none previously existed
- The elimination of a chronic problem not created by growth

Based on these criteria, the Development Charges Background Study has identified projects with BTE and determined their estimated associated cost share. As these costs cannot be recovered from Development Charges they are considered a cost of growth.

The Town has established that BTE costs are to be funded entirely by reserves and that reserve funds drawn are not required to be replenished. Where reserves funds are insufficient BTE projects will be deferred until reserve funds become available. Considering this strategy, growth costs associated with BTE are not included in the analysis herein.

The acquisition cost of growth-related infrastructure is largely funded by development charges. Development charges are based on By-Law 2018-18 and account for the identified infrastructure expansion requirements and associated costs which inform the established rates determined most recently as of January 2019 through the Development Charges Background Study. With small exception[4], these rates provide for services covered by all asset categories reported in this AMP. Rates are indexed as of January 1st of each year. Development charges are estimated over a 10-year planning horizon and consider the housing form and type and for non-residential development (i.e. industrial, commercial, and institutional), the per square foot unit cost.

Lifecycle cost following asset acquisition are funded by the increased tax and user-fees collected from newly developed properties.

[4] As per section 5 (3) of the Development charges act, computer equipment and rolling stock with an estimated useful life of less than seven years are ineligible.

5. Proposed LOS Overview

5.1.1 O. Reg. 588/17 Proposed Levels of Service Requirements

Current LOS reflects the current technical LOS for (most often) a group of assets as of a defined *past* measurement date. In contrast, a proposed LOS reflects the Municipality's *goa*l for asset performance by a defined *future* date. It is important to note that O. Reg 588/17 does not dictate the proposed LOS values required. Meaning, a proposed LOS may be maintaining or even reducing current performance.

O. Reg. 588/17 requires Municipalities to report on proposed LOS, including an overview of the following:

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

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

1. Identification of lifecycle activities needed to provide the proposed LOS.
2. Annual costs over the next 10 years to achieve the proposed LOS.
3. Identification of proposed funding projected to be available.

5.2 Proposed LOS Selection Process

To determine the most suitable proposed LOS options considering cost, risk, and achievability, the following four-step process was deployed:

1. Understand what the Town's residents' value.
2. Understand the current state and anticipated future needs of the Town's infrastructure assets.
3. Collect Insights from staff managing the Town's assets.
4. Considering the above, select three meaningful proposed LOS options to model.

The following sections outline the relevant information and considerations held for each of the above steps.

5.2.1 Understand Residents Values

To better understand resident priorities, the Town of Bradford West Gwillimbury conducted a resident survey in spring 2025. The survey was open from May 27 to September 17, 2025, and was distributed through the Town's website, social media channels, Bradford Today, a local newspaper, and via QR codes on posters placed in the Town's most public facing facilities.

A total of 83 responses were received, representing a relatively low response rate. The survey included 15 questions focused on satisfaction with various municipal infrastructure assets, along

with opportunities for respondents to provide additional feedback. A copy of the survey is included in Appendix K: Resident Survey.

Despite the modest response rate, the results offer valuable insights into residents' experiences with municipal infrastructure, their priorities, desired service improvements, and willingness to pay for different service levels. These findings helped to inform proposed LOS options.

Demographic information from survey respondents was collected to evaluate the representation of the survey. As outlined in Table 8 below, compared to 2021 census distributions people under 29 years of age are underrepresented and people between 30 and 64 are overrepresented.

Table 8: Demographic Details of Resident Survey vs. Census Demographic Details

Age Range	2021 Census Share (%)	Resident Survey Share (%)
15-29	16.8	6
30-44	23	30
45-64	25	32
65+	13	12

When asked to identify the importance of each infrastructure service the largest share of high importance was assigned to roads and bridges (82%), followed by water services (78%), and emergency services (76%). This is summarized in Figure 19 below.

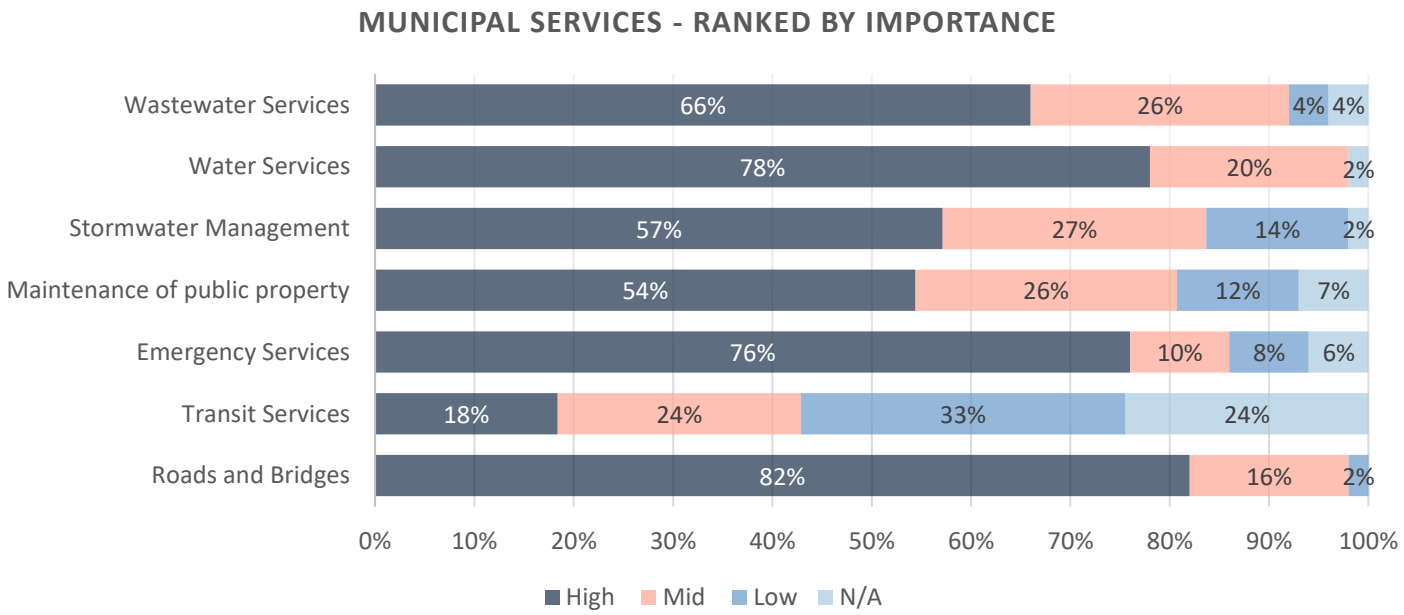


Figure 19: Service Area Importance

Respondents rated infrastructure performance based on availability, reliability and condition, and safety. As indicated in Table 9 the highest rate of dissatisfaction across all measures is within the road network (21%). Dissatisfaction rates for other asset categories are comparatively low.

Table 9: Asset Performance Evaluation (Dissatisfaction rates)

Category	Availability	Reliability & Condition	Safety	Combined Average
Roads	20%	24%	20%	21%
Bridges	4%	4%	4%	4%
Public Facilities	8%	8%	6%	7%
Outdoor Open Spaces	14%	13%	6%	11%
Stormwater Management	6%	8%	6%	7%
Water Services	14%	14%	12%	13%
Wastewater Services	12%	8%	8%	9%
Emergency Services, Vehicles and Equipment	4%	4%	4%	4%

Respondents were also asked to report on their satisfaction rates based on the same criteria (availability, reliability and condition, and safety). As shown in Table 10, the combined average exceeds 50% across all asset categories with bridges and public facilities achieving the highest rate at 85%, followed closely by outdoor spaces, and emergency services at 82%, and stormwater management at 81%. This indicates that generally residents are satisfied with the LOS currently provided.

Table 10: Asset Performance Evaluation (Satisfaction rates)

Infrastructure	Availability	Reliability & Condition	Safety	Combined Average
Roads	78%	76%	80%	78%
Bridges	86%	88%	82%	85%
Public Facilities	84%	85%	86%	85%
Outdoor Open Spaces	78%	83%	84%	82%
Stormwater Management	82%	82%	80%	81%
Water Services	76%	76%	76%	76%
Wastewater Services	72%	76%	78%	75%
Emergency Services, Vehicles and Equipment	82%	82%	82%	82%

Respondents were asked if they desire increased, maintained, or decreased service levels by service area. The results indicate that residents desire service level improvements most frequently for roads and bridges (59% desired increase service levels), otherwise most respondents seek to maintain service levels. This is summarized in Figure 20 below.

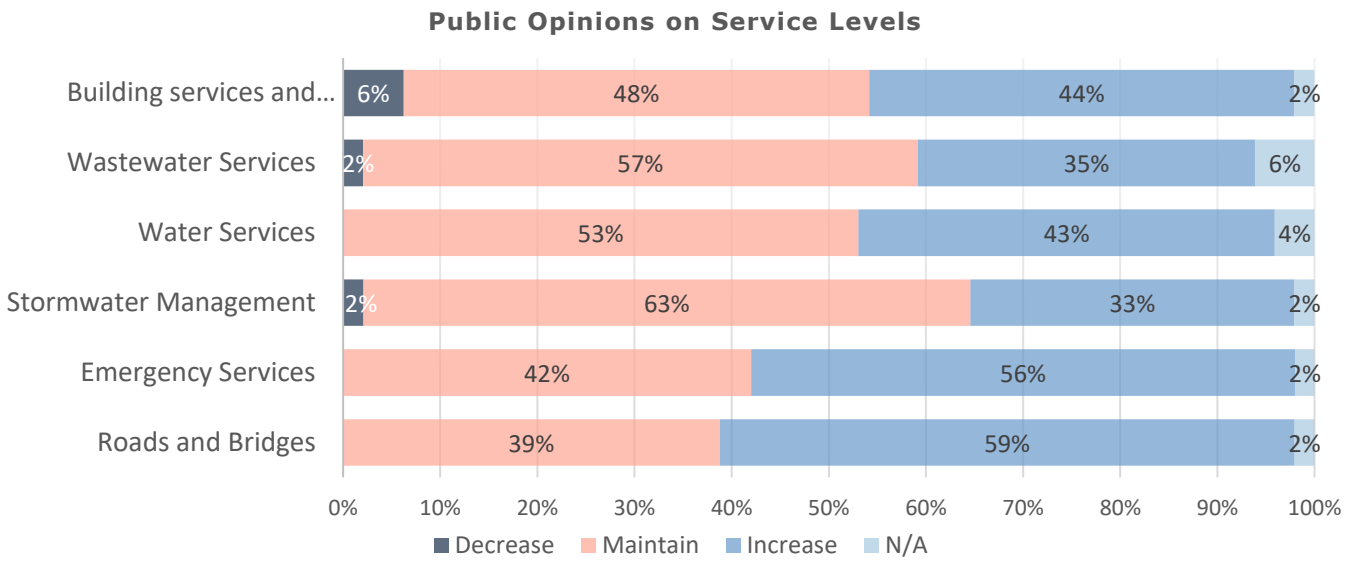


Figure 20: Service Level Preferences

It is crucial to recognize that service level changes hold associated costs. Currently, the optimal annual capital investment (detailed in section 3.2.6) is significantly greater than annual capital allocations. Therefore, maintaining existing service levels (e.g. average condition) will require increased investment levels. Increasing service levels beyond current performance will require even more substantial investment increases. With this dynamic in mind, respondents were asked to describe their willingness to pay for service improvements. Figure 21 indicates that the largest proportion of respondents are willing or somewhat willing to pay for improvements in emergency services (78%) followed by roads and bridges (72%).

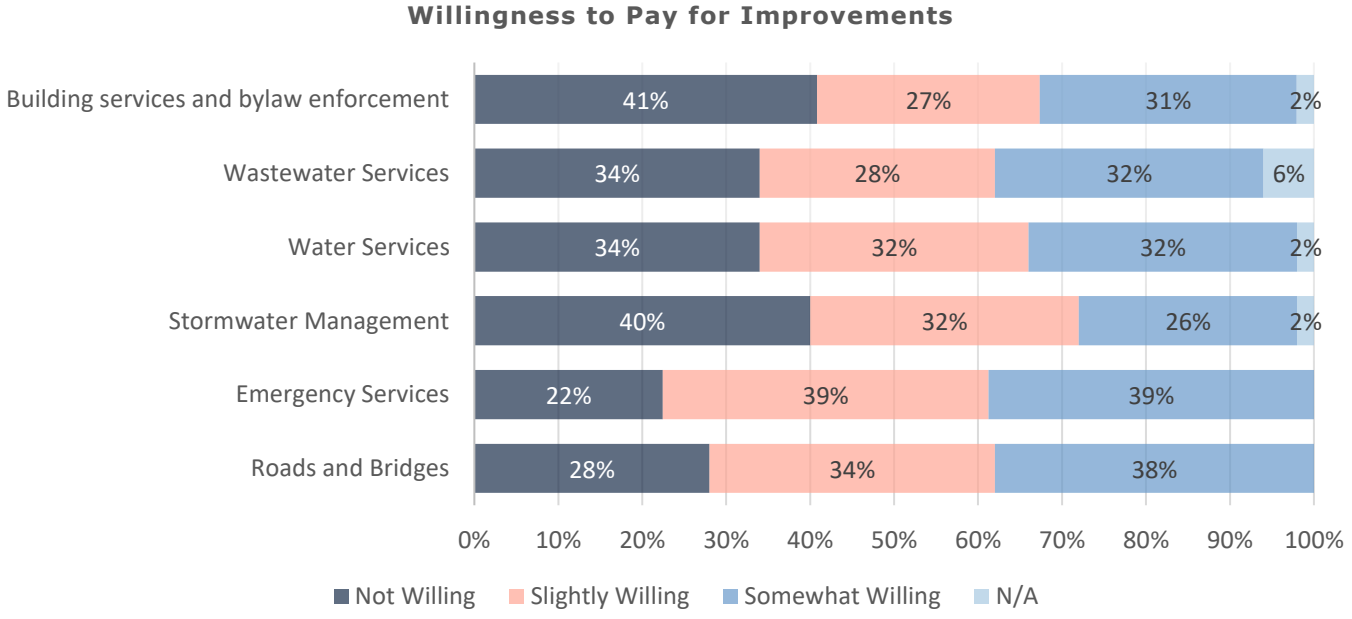


Figure 21: Preference for Spending

Overall, respondents were asked to identify the importance of growth features. Limiting cost increase to residents emerged as the feature most often selected as high importance. This suggests that more moderate, phased-in taxation and rate increases may be more palatable considering other competing priorities. This is summarized in Figure 22 below.

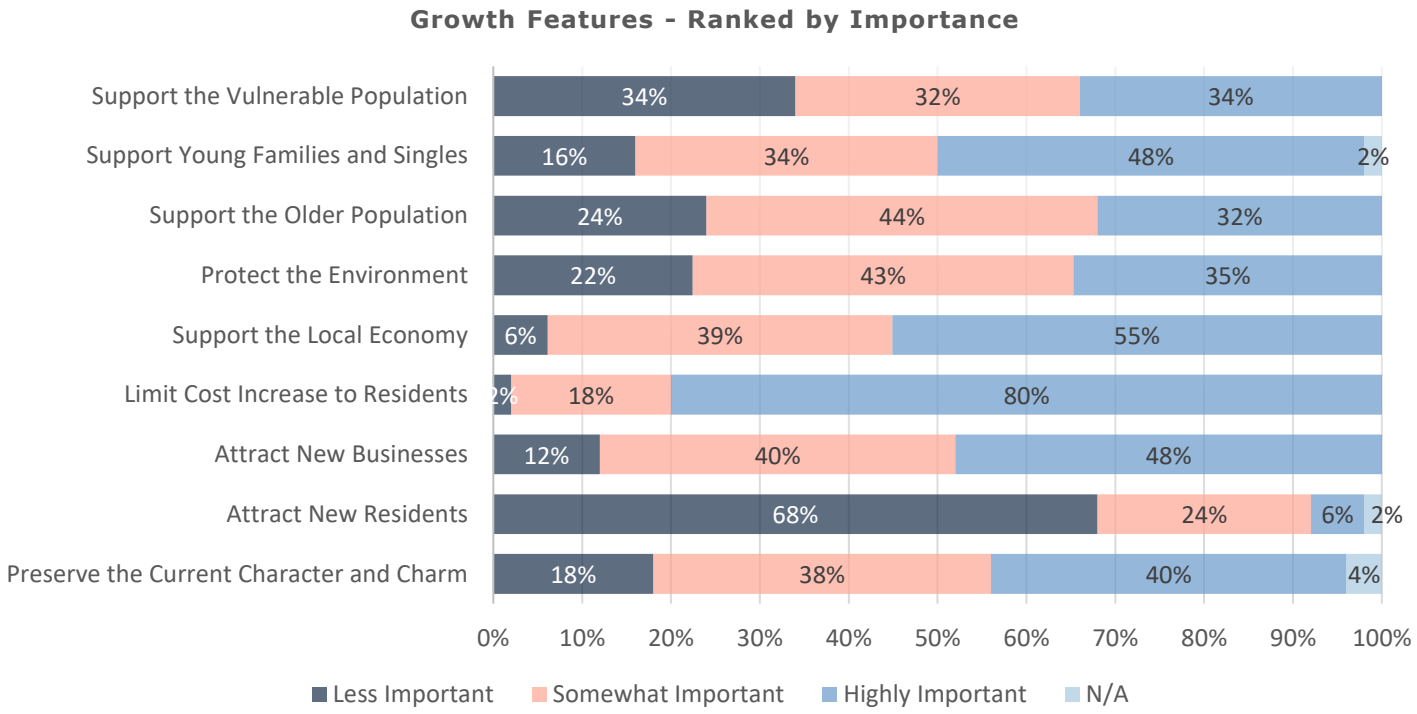


Figure 22: Growth Features of Importance

5.2.2 Understand Asset Inventory

The current state of the Town's assets and their projected investment requirements over time is an important consideration when determining suitable proposed LOS options. Portfolio information is detailed in Section 3 of this report. Especially pertinent details that were considered in selecting proposed LOS options are:

- The optimal annual capital funding (or the average annual requirement, AAR), based on replacing every single asset when it reaches its estimated useful life (EUL) and completing recommended rehabilitations, is $47.4 million. Currently, the Town allocates $23.8 M from sustainable funding sources.

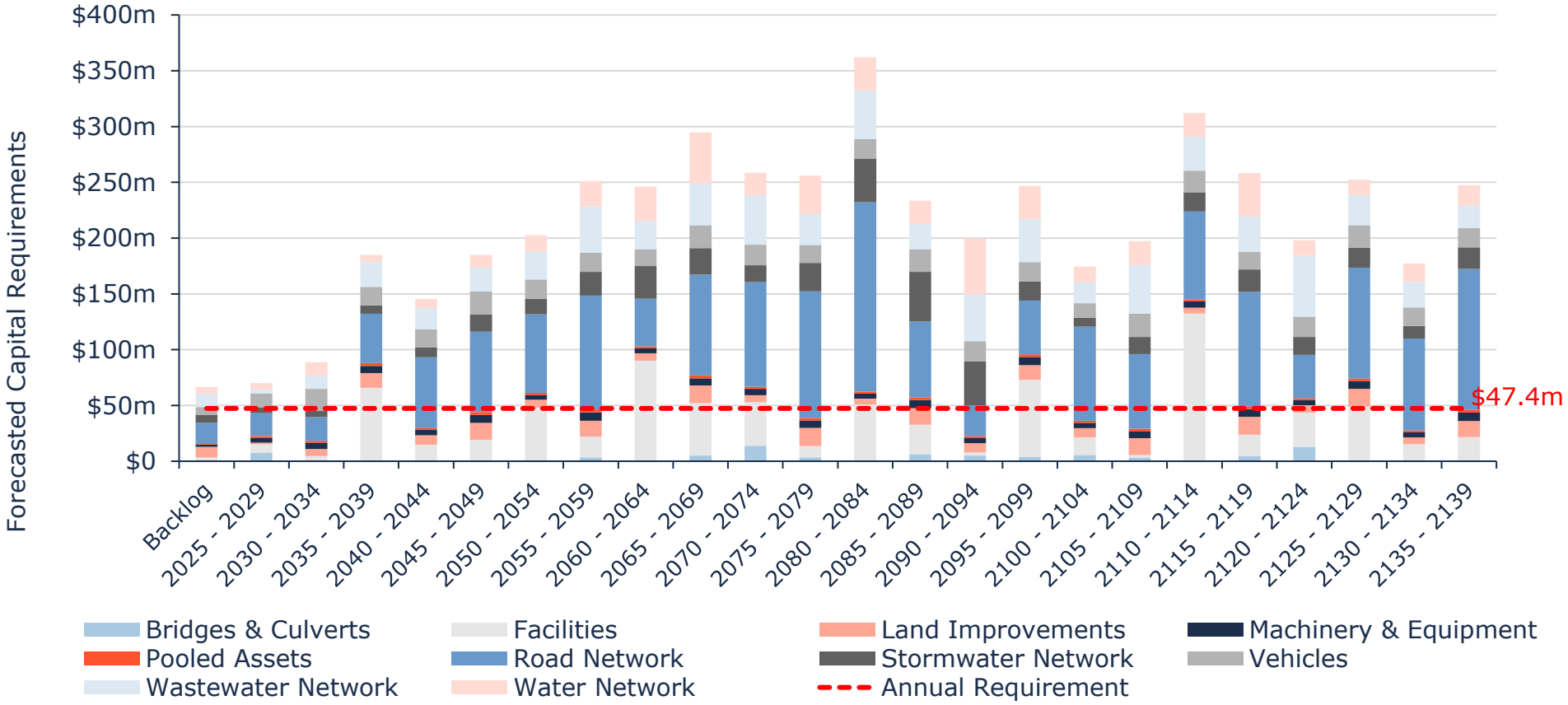


Figure 23: Capital Investment Requirement Forecast- Optimal Funding

- While about two-thirds of the Town's assets were in fair or better condition as of December 2024, the infrastructure gap noted above is expected to lead to declining asset conditions over time, as budget constraints delay replacement and more assets remain in service beyond their estimated useful life (EUL).

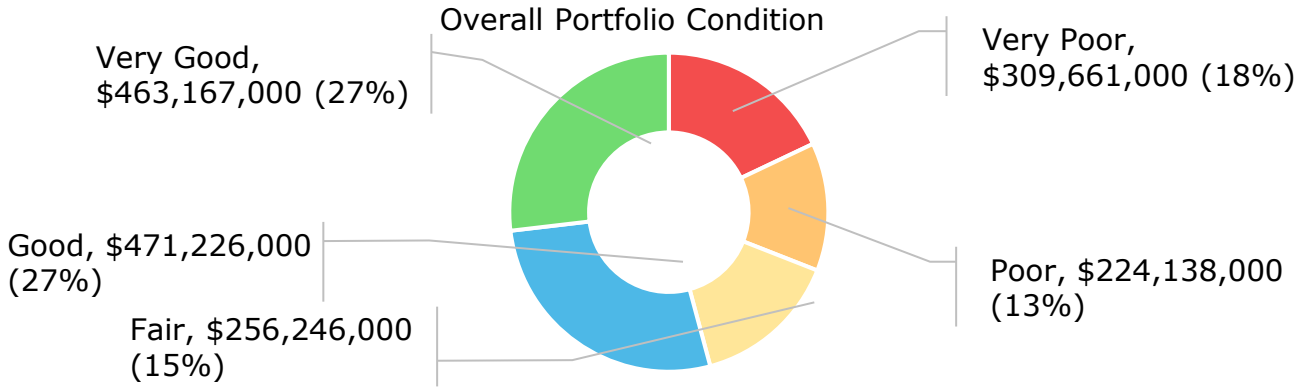


Figure 24: Portfolio Condition as of December 2024

- The current reinvestment rate compared to the target reinvestment rate (based on optimal investment) varies by asset category; water and wastewater assets are relatively well-funded compared to most other tax funded asset categories.

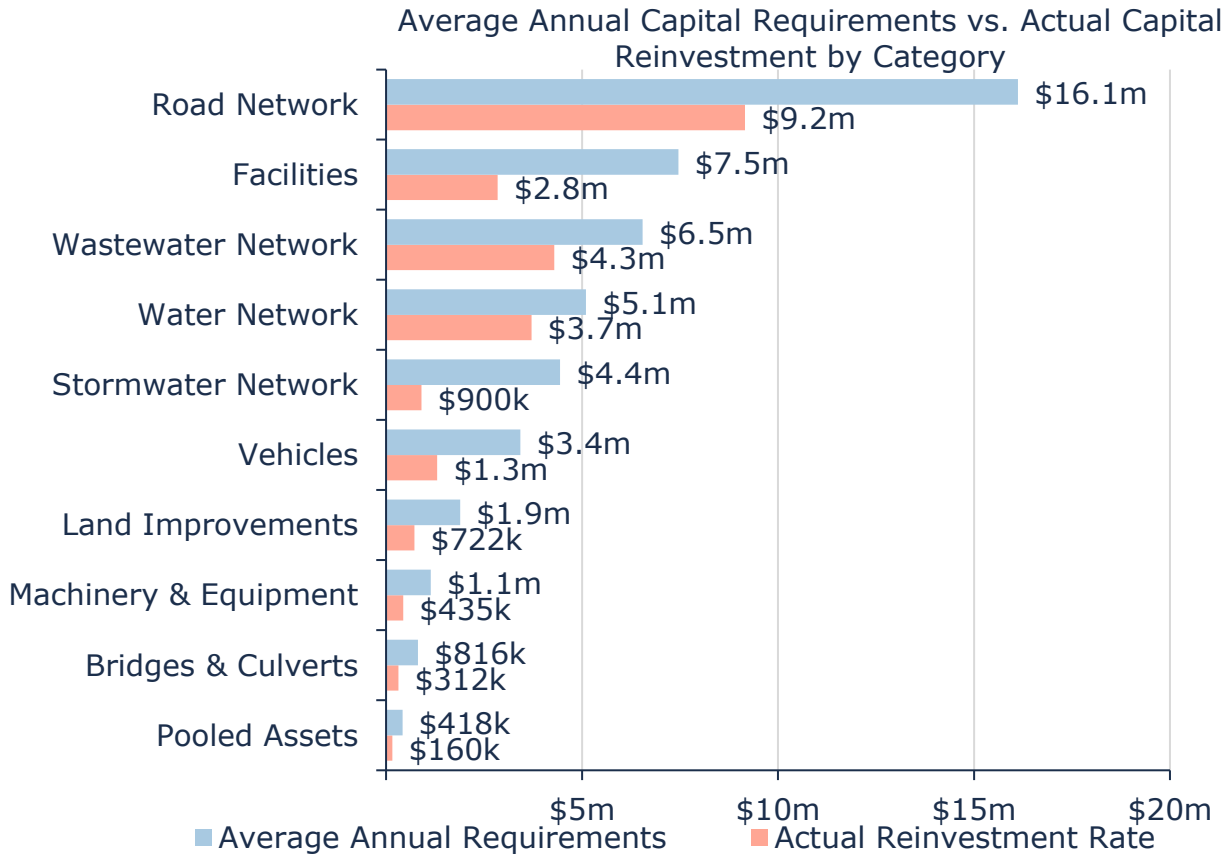


Figure 25: Target vs. Actual Reinvestment Rate

5.2.3 Understand Staff Insights

Staff involved in the daily operations, capital planning, and capital projects for the Town of Bradford West Gwillimbury were surveyed. The survey sought to better understand staff's assessment of the current performance of assets they work with and what service level changes they felt were appropriate. Key findings from these surveys are:

- Data confidence is generally high across most assets; there is lower data confidence in stormwater and facility assets and heavy-duty vehicle assets.
- Staffing is generally sufficient, but funding constraints and recent cost inflations do create financial pressure.
- Across all departments, there is a consensus that the LOS should be maintained or increased.

This indicates that the proposed LOS should be at least to maintain or to increase current service levels. Additionally, it indicates that operational considerations, especially regarding staffing levels, are recommended for consideration in operating budgets and associated long-term planning (i.e. hiring, duties etc.).

Bringing it all Together

Considering the findings noted in sections 5.2.1-5.2.3 above, the following details were considered most strongly in determining suitable proposed LOS options:

- Many residents indicate limited interest in increased taxation and/or rates to fund infrastructure. To determine if this is a viable option, the current capital investments should be modelled to understand the long-term implications to asset risk and condition. This is expected to demonstrate why increased investment is necessary for the long-term management of the Town's assets.
- Staff indicated that service levels should at least be maintained, if not increased. Residents also indicated an interest in maintaining service levels. Using asset conditions as of December 2024 as a representation of current service levels, there is value to determine what the long-term risk and investment requirement projections are if current service levels are maintained.
- The optimal investment is the average annual requirement, which is $47.4 million as noted in 3.2.6. It is recognized that this is a significant increase from current sustainable funding levels. Increasing taxes and rates gradually over a longer period would enable the Town to meet the optimal funding levels while keeping affordability constraints in mind.

5.2.4 Model three Proposed LOS Scenarios

Considering the above details the following three scenarios are the proposed LOS scenarios selected for consideration.

Table 11: Proposed LOS Options

Scenario	Details
1: Maintain Current Investment	Model the long-term impact of continuing with the current investment levels.
2: Maintain Current Condition	Model investments required to maintain current condition levels (based on average conditions as provided in tables & graphs).
3: Optimal Investment	Model optimal investment to meet the AAR, phased in over 10 years.

The above scenarios represent the proposed LOS options. General infrastructure and operational risks associated with each scenario option are presented in the next section of this report.

5.3 Proposed LOS Options: Analysis

To evaluate the proposed LOS options, their associated risks, affordability, and achievability were evaluated. The following sections outline the above noted considerations and analysis information.

5.3.1 Risks

Table 12 below identifies, defines, and ranks qualitative risks for each proposed LOS option.

Table 12: Risks associated with proposed LOS options

Risks Associated with Proposed LOS Options			
Scenario(s)	**Relative Severity**	**Risk Identified**	**Risk Defined**
2 3	Moderate High	Reliance on Grants	Councillors do not support increased capital funding requirements, and the additional investment can only be funded by conditional grants, as they become available. While grants and senior government funding reduces the burden on ratepayers, they are considered an unsustainable revenue source. The Town will be more vulnerable to changes in provincial and federal policy and funding programs, and less likely to meet the selected proposed LOS. Note: Scenario 1 does not hold this risk since capital funding matches the existing sustainable capital funding amounts.
1 2 3	High Moderate Low	Increased Infrastructure Backlog	The Town's current average annual capital investment is much less than the average annual capital requirement. Therefore, every year assets are underfunded, and lifecycle management is not optimal. Reduced and/or deferred lifecycle activities threaten reliability and increase the potential for costly (and unbudgeted) repairs to maintain service.
1 2 3	High Moderate Low	Increased Rate of Asset Failure	Underinvestment in assets will result in a lower average condition and an increased rate of asset failure. This will affect the reliability of infrastructure, and the quality of service provided.
1 2 3	High Moderate Low	Increased Severity of Asset Failure	Underinvestment in assets is correlated to an increased severity of asset failure. This may mean that assets are beyond the point of repair and require premature replacement. In some instances, this may result in a period where the Town does not have functional assets that are critical to their operations.

In addition to the above noted qualitative risks, there are measurable risks held by each asset. Risks are quantified based on the respective probability and consequence of asset failure models outlined in Appendix P: Risk Rating Criteria. Figure 12 below summarizes the weighted average start, average, and end risk values by scenario. Please note risk start represents the risk score at the end of year one, and risk end represents the risk score at the end of the last year of analysis (typically 2100 or 2125). This extended period of analysis is used to ensure each asset completes at least one iteration of replacement.

Table 13: Weighted Average Risk Scores by Scenario

Scenario	Risk Start	Average Risk	Risk End
1: Maintain Investment	7.93	9.93	10.47
2: Maintain Condition	7.96	8.34	7.96
3: Optimal Investment	6.61	8.34	7.91

This table indicates that across all periods, scenario 3 (optimal investment) holds the lowest weighted average risk and scenario 1 (maintain investment) holds the highest weighted average risk (excluding risk start value).

Risk over time has been modelled for each asset category and scenario. Summary graphs are provided in Appendix N: PLOS Scenario Comparisons. Typically, risk changes over time for each scenario as follows:

Scenario 1 (Maintain Investment): Condition and risk projections are the lowest performing of all three scenarios. The lower the percentage of the average annual requirement (AAR) funded and the shorter the average estimated useful life (EUL) of the group of assets, the more quickly conditions fall and risk rises. For non-core asset categories (vehicles, machinery and equipment, pooled assets, facilities) conditions decline within a decade or so, for core assets (road network, water, wastewater, stormwater, bridges and culvert) conditions decline less rapidly due to a higher average EUL and therefore a lower annual degradation rate.

Scenario 2 (Maintain Condition): Comparing all scenarios, condition and risk projections are in a middle position, but relatively close to scenario 3 (optimal investment) outputs.

Scenario 3 (Optimal Investment): In most cases, condition and risk outputs are best for this scenario. Investment levels have increased gradually for the first ten years under this scenario. This contrasts with scenario 2 (maintain condition) where investments are based on the goal to maintain condition targets and therefore in some years are higher than others. For this reason, for some asset categories scenario 2 (maintain condition) shows better outputs in condition or risk initially and then scenario 3 (optimal investment) provides the best outcomes over time.

5.3.2 Affordability

The overall increases required from current funding levels vary by scenario. Table 14 below summarizes the capital funding increases required by scenario and indicates that increases are lowest for scenario 1 (maintain investment), second highest for scenario 2 (maintain condition) and highest for scenario 3 (optimal investment).

Table 14: Scenario Affordability Comparison

Scenario	Annual Service Level Deficit: Tax	Annual Service Level Deficit: Rate	Cost Increase Rank
1: Maintain Investment	$0	$0	3 (Lowest Increase)
2: Maintain Condition	$8,431,574	$5,917,960	2 (Mid-ranking increase)
3: Optimal Investment	$16,331,406	$7,288,010	1 (Largest Increase)

The funding deficits across scenarios 2 (maintain condition) and 3 (maintain investment) reflect the growing gap between current sustainable capital funding levels ($23,842,000) and the additional investment required to prevent asset deterioration (Scenario 2: maintain condition) or achieve enhanced service levels (Scenario 3: optimal investment). This highlights the financial trade-off between affordability and long-term asset performance and risks

Some key considerations when reviewing affordability information for all proposed LOS options are:

- Like all Municipalities, the Town's reliance on a limited set of revenue tools (taxes, user rates, OCIF, and CCBF) constrains its financial flexibility. As a result, significant increases in funding requirements must be addressed primarily through local revenue generation, placing pressure on taxpayers and ratepayers. The revenue sources available to the Town are not expected to change in the future.
- The Town recognizes that due to affordability constraints under any scenario, tax and/or rate increases would require some level of funding phase-in. This means that rather than a one-time increase in taxes or rates, increases would occur each year for several years. Phase-in funding timelines of 5,10,15, and 20 years are explored for the selected proposed LOS in Section 6: Financial Strategy.

The Financial Strategy (Section 6) provides financial details including a strategy to collect the investment required to support the proposed LOS option selected.

5.3.3 Achievability

The ability to execute on any of the proposed LOS options is constrained by several factors at varying degrees of impact. These constraints are identified and defined below:

1. **Public and Political Acceptability**: While strong justifications may demonstrate the need and value of increasing capital investment to support proposed LOS, adoption often faces significant resistance due to the tax/rate impacts, construction disruptions, and changing priorities across election cycles.
2. **Procurement & Approval Timelines:** Municipal processes such as council approval, public consultation, and procurement rules can slow delivery of capital investment in the Town's assets. This may negatively impact investment timelines required under scenarios 2 (maintain condition) or 3 (optimal funding).
3. **Inflation and Cost Escalations:** construction inflation has been particularly volatile over the last several years. This has caused rapid increases in material costs associated with many infrastructure assets in addition to labor cost escalations and bids significantly greater than estimates. Even if funding increases are secured with inflationary adjustments included, the inflationary estimates may be less than actual inflation levels.
4. **Staff and Technical Capacity:** The ability to execute additional projects beyond current levels requires staff such as engineers, project managers, procurement and legal staff. While this impact can be reduced through the use of external consultants, there remains a need for internal project oversight and management, and this may become a limiting factor.
5. **Consultant and Contractor Market Constraints:** The availability of engineering and consultants, construction contractors and specialized trades to complete infrastructure projects may be less than the demand. This imbalance of supply and demand may lead to higher bid prices, fewer bids, and/or project delays due to scheduling backlogs that can inhibit the ability to execute the number and/or scale of projects required.

Each of the above factors are relevant to each proposed LOS option at varying degrees. As summarized in Table 15 below, these constraints are most acute for scenario 3 (optimal funding), but present for all scenarios, including scenario 1 (maintain funding). The ranking in Table 15 is based on the following definitions:

Low: The factor is anticipated to be an impediment; however, adoption and implementation is expected to be achievable without serious limitations.

Moderate: The factor is anticipated to be an impediment to the execution of project scale and/or timeline required by the scenario. Some adjustments (i.e. staff assignment) to internal operations or strategies (i.e. procurement) may be required to support.

High: The factor is anticipated to require changes to the Town's operation, processes, and/or standards to support implementation of the scenario. For example, procurement policy changes may be required to mitigate any existing limitations the policy may pose.

Very High: The factor will require multiple (and most likely significant) changes to operations, processes, and standards to support.

Table 15: Achievability Factors

	1: Maintain Current Investment	2: Maintain Condition	3: Optimal Investment
Public and Political Acceptability:	Low	Moderate-High	Very High
Procurement & Approval Timelines:	Low	Moderate-High	Moderate-High
Inflation and Cost Escalations:	Moderate	High	Very High
Staff and Technical Capacity:	Low	Moderate-High	Moderate-High
Consultant and Contractor Market Constraints	Low	Moderate-High	Moderate-High

5.4 Selected Proposed LOS

The three above noted scenarios were analyzed and the results were reviewed with key staff. Based on the information presented, the following staff recommendation was presented to council on Tuesday February 3rd, 2026:

- That report AM-2026-1 titled "Asset Management Plan Update – Proposed Levels of Service Selection" by received for information, and;
- That Council endorse **Scenario 3 (Optimal Investment)** over 10 years as the Town of Bradford West Gwillimbury's proposed level of service.

Council was presented with key details on each proposed LOS option and the associated achievability, risks, and affordability. Council held deliberations and ultimately voted to endorse Scenario 2 (Maintain Condition) phased in over a 20-year timeline. This selection represents the Town of Bradford's West Gwillimbury's proposed LOS, and this selection is reflected in the remaining sections of the AMP.

Selected Proposed LOS Option:
Scenario 2 (Maintain Condition)
20-Year Phase-In

5.4.1 Required Lifecycle Strategies

As the current level of capital funding is less than the funding required to achieve the proposed LOS, O. Reg. 588/17 requires the Town to identify lifecycle strategies to be undertaken. The most significant change to the lifecycle strategies required is an increased level of capital investment to support. Other lifecycle strategies such as asset inspection and maintenance are largely anticipated to continue, or it is recommended they be expanded from their current scope. The following table details current lifecycle strategies by asset category and changes required to support the Town's proposed LOS.

Table 16: Lifecycle Strategy Changes to Support Proposed LOS

Asset Category	Current Lifecycle Strategies Details	Lifecycle Changes to Reach PLOS
Road Network	Appendix A: Current Approach to Lifecycle Management	Increase capital spending to support annual investment of PLOS.
Bridges & Culverts	Appendix B: Current Approach to Lifecycle Management	Increase capital spending to support annual investment of PLOS.
Water Network	Appendix C: Current Approach to Lifecycle Management	Increase capital spending, integrate condition assessment data for water mains into Citywide data inventory.
Wastewater Network	Appendix D: Current Approach to Lifecycle Management	Increase capital spending, integrate condition assessment data for wastewater mains into Citywide data inventory.
Stormwater Network	Appendix E: Current Approach to Lifecycle Management	Increase capital spending, integrate condition assessment data for stormwater mains into Citywide data inventory.
Facilities	Appendix F: Current Approach to Lifecycle Management	Increase capital spending. Procure a Building Condition Assessment (BCA) to improve accuracy of inventory and associated conditions to better inform asset understanding and capital planning decisions.
Land Improvements	Appendix G: Current Approach to Lifecycle Management	Increase capital spending. Implementation of a condition assessment program for select assets (e.g. high-value assets).
Vehicles	Appendix H: Current Approach to Lifecycle Management	Increase capital spending. Implementation of a condition assessment program for select assets

Asset Category	Current Lifecycle Strategies Details	Lifecycle Changes to Reach PLOS
		(e.g. high-value assets).
Machinery & Equipment	Appendix I: Current Approach to Lifecycle Management	Increase capital spending. Implementation of a condition assessment program for select assets (e.g. high-value assets).
Pooled Assets	Appendix J: Current Approach to Lifecycle Management	Increase capital spending.

5.4.2 Risk Mitigation Measures

The above-mentioned lifecycle strategies, especially increased capital funding, are integral to the achievement of the proposed LOS. There are some risks associated with not implementing these recommendations such as worsened asset conditions and increased risks. The table below highlights some risk management strategies that the Town consistently applies. These reduce risks associated with not implementing increased capital funding.

Table 17: Risk Mitigation Measures

Management Strategy	Details
Strategic Project Coordination	As noted within the lifecycle strategies section of the road, water, wastewater, and stormwater appendices (A,C,D,E) where possible and beneficial capital projects are coordinated for efficiency. Since water, wastewater, and stormwater transmission and collection assets are typically located within the road allowance it is most efficient to coordinate replacement. This may sometimes result in deferring replacement and applying rehabilitation strategies like pipe relining to prolong asset life to allow for coordinated replacement of associated assets. Ultimately, coordinated replacement allows for more efficient investment and project execution outcomes.
Risk Based Considerations	Staff consider multiple factors when selecting which asset to invest in, and risk scores (as outlined in 2.3.2) are often a central consideration. Prioritizing investment to assets of high risk reduces the level of risks held by the Town and thereby improves the ability to meet the proposed LOS.
Data Enhancements	For several non-core asset categories, the Town continues to rely on age-based conditions. Implementing condition assessment programs improves the quality of data available. Generally, this results in higher conditions than age-based method estimates. Further, it allows for investment to be more effectively targeted. Condition assessment programs may be targeted to high-value and/or criticality assets to mitigate resource constraints associated with execution and upkeep of assessment

Management Strategy	Details
	programs. Additionally, integrating already collected asset condition data for water, wastewater, and stormwater linear assets will increase the accuracy of the asset inventory and more effectively target investment.
Financial Resources	The Town holds financial reserves (noted in 6.6) that are generally available to fund emergent needs, such as asset failure. Reserves are available for every asset category except pooled assets and balances are substantial enough to cover most unexpected asset failures. This financial resource strategy is a risk mitigation measure.

5.4.3 Proposed LOS Over 10 Years

Changes to Community and Technical Levels of Service for Scenario 2

Community Levels of Service are qualitative descriptions of service provided. They are provided by asset category in Appendices A to J.

The Town of Bradford West Gwillimbury anticipates that qualitative community LOS will change in this period in parallel with technical LOS. For example, if the average condition of assets declines the community LOS, which describes condition, will reflect a lower average condition. All asset categories will see adjustments to their technical LOS over time, with most changes due to natural degradation of assets and the level of investment they receive. Proposed LOS are informed by the above noted levels of investment; these values are summarized in the next section.

The proposed LOS is based on each asset category's metrics and the funding levels as discussed earlier. Table 18 to 26 summarize the proposed LOS over time. The trend box indicates how the metric is projected to change over the 10-year period.

O.Reg mandated LOS Metrics (Core-Assets)

Table 18: O.Reg Mandated Metrics (Core-Assets Only)

Category	Metric	2024	2025-2034	Trend
Road Network	Lane-km of arterial roads per land area (km/km^2)	0.024 km/km^2	2024 levels +/- 5%	Maintain
	Lane-km of collector roads per land area (km/km^2)	1.15 km/km^2		
	Lane-km of local roads per land area (km/km^2)	1.63 km/km^2		
Bridges & Culverts	% of bridges in the Town with loading or dimensional restrictions	5%	2024 levels +/- 5%	Maintain
Water Network	% of properties connected to the municipal water system	79.6%	2024 levels [5]	Maintain
	% of properties where fire flow is available	85.5%		
	# 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	2024 levels +/- 5%	Maintain

[5] Existing trends will generally continue with some increase expected due to most growth having municipal water services and sufficient fire flow.

Category	Metric	2024	2025-2034	Trend
	# 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	0.58	2024 levels +/- 25%	Maintain
Wastewater Network	% of properties connected to the municipal wastewater system	77.5%	2024 levels +/- 5%	Maintain
	# of connection-days per year having wastewater backups compared to the total number of properties connected to the municipal wastewater system	0.00019 connection-days / connection	2024 levels +/- 5%	Maintain
	# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	0	2024 levels +/- 5%	Maintain
Stormwater Network	% of properties in municipality designed to be resilient to a 100-year storm	17%	2024 levels +/- 5%	Maintain[6]
	% of the municipal stormwater management system designed to be resilient to a 5-year storm	81%	2024 levels +/- 5%	Maintain

Road Network: Technical LOS

Table 19: Road Network Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
For paved roads in the Town, the average pavement condition index value (%).	82[7]	80	78	75	72	68	65	62	56	54	Decrease
Lane-kilometers of paved roads in a condition state of less than 55%	10	21	50	86	50	136	86	173	108	253	Increase

[6] All new development meets storm resilience requirements. Expect increased rates over time.
[7] The increased condition between 2024 and 2026 is primarily due to the provision of updated condition assessments completed in late 2025.

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
For unpaved roads in the Town, the average surface condition.					Current +/- 10-15%						
Lane-kilometers of unpaved roads in a condition state of poor or worse (physical condition < 40).					Current +/- 10-15%						
Percentage of snow clearing completed within minimum maintenance regulation response requirements.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	Maintain[8]
Average response time in days to repair potholes	3 Days	3 Days	3 Days	3 Days	3 Days	3 Days	3 Days	3 Days	3 Days	3 Days	Maintain
Percentage of Sidewalks Inspected	100%	90%	90%	80%	80%	70%	70%	60%	60%	50%	Decrease
Number of Minimum Maintenance Standard (MMS) issues identified for sidewalks and curbs (and % addressed within MMS required timelines)						63%					Maintain

[8] 2024 Values calculated from Work logs, timesheets, and AVL. The goal and future projections is that the 2024 values will continue through to 2035.

Bridges & Culverts: Technical LOS

Table 20: Bridges & Structural Culverts, Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Average bridge condition index value (%).	77	76	74	73	74	70	69	68	66	65	Decreasing[9]
Number of Bridges in Fair or Worse Condition	2	2	2	16	6	7	8	10	10	10	Increasing
Average structural culvert condition index value (%)	81	82	80	78	76	74	72	70	68	66	Decreasing
Number of structural culverts in the Poor condition state (BCI < 60)	4	3	4	6	6	6	6	6	7	7	Decreasing

Water Network Technical LOS

Table 21: Water Network Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Number of water colour complaints (per connection).	0.0006-0.0019	0.0006-0.0020	0.0006-0.0021	0.0006-0.0022	0.0006-0.0023	0.0006-0.0024	0.0006-0.0025	0.0006-0.0026	0.0006-0.0027	0.0006-0.0028	Maintain

[9] While the selected PLOS is to maintain service levels, it is anticipated that bridge conditions will decline due to natural degradation of the asset and the decision to not prematurely replace them.

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Number of water taste and odor complaints (per connection).	0.0005-0.0016	0.0005-0.0017	0.0005-0.0018	0.0005-0.0019	0.0005-0.0020	0.0005-0.0021	0.0005-0.0022	0.0005-0.0023	0.0005-0.0024	0.0005-0.0025	Maintain
Number of water pressure complaints (per connection).	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	0.0-0.0005	Maintain
Percentage of water mains swabbed (%)	0	0	0	0	0	0	0	0	0	0	Maintain +/- 5%
Percentage of water mains flushed (%)	100	100	100	100	100	100	100	100	100	100	Maintain +/- 5%
Number of days with level zero water use restrictions[10]	120	120	120	120	120	120	120	120	120	120	Maintain +/- 5%
Number of days with level one water use restrictions	0	0	0	0	0	0	0	0	0	0	Maintain +/- 5%
Number of days with level two water use restrictions	18	18	18	18	18	18	18	18	18	18	Maintain +/- 5%

[10] Water use restriction levels defined in By-law 2014-17 Lawn Watering By-law.

Wastewater Network Proposed LOS

Table 22: Wastewater Network Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Number of odor complaints that result in corrective action (per connection)	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	0-0.0007	Maintain[11]
Total number of odor complaints (per connection)	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	0-0.0009	Maintain[12]
Average daily flow as a percentage of rated capacity	66 % (2024 value) +~5%[13]										Maintain

Stormwater Network

Table 23: Stormwater Network Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percentage of stormwater mains inspected over past 5 years.	70% +/- 10%										Maintain
Percentage of stormwater mains inspected at least once since installation.	70% +/- 10%										Maintain
Frequency of stormwater main flushing.[14]	1/8 of network per year										Maintain

[11] Rate of odor complaints resulting in corrective action not expected to materially change; some level of variation expected over the period.
[12] Rate of odor complaints not expected to materially change; some level of variation expected over the period.
[13] This value is expected to change overtime but is not expected to exceed 80%, the rated capacity of the wastewater treatment plant.
[14] Approximately one eighth of the network is completed each year.

Facilities

Table 24: Facilities Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percentage of facilities with formal condition assessments completed within the past five years (%)	0	0	8-10	11-20	21-35	36-45	46-60	61-70	71-80	81-92	Increase[15]
Kilowatt-hours of electricity used per square meter of gross floor area	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	Maintain +/- 5%[16]
Cubic meters of natural gas used per square meter of gross floor area	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	Maintain +/- 5%[17]
Cubic meters of water used per square meter of gross floor area	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Maintain +/- 5%
Annual maintenance cost as a percentage of replacement cost	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	Maintain

Vehicles

Table 25: Vehicles Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percent (%) of maintenance inspections completed	100	100	100	100	100	100	100	100	100	100	Maintain[18]

[15] Based on anticipated completion of 2-3 buildings per year.
[16] Corporate Energy Management Plan 2024 (annual energy audit).
[17] Corporate Energy Management Plan 2024 (annual energy audit).
[18] 100% completion fleet wide is necessary because without a valid inspection a commercial vehicle is considered unfit for use on our roads and the operator, owner etc can be

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percent (%) of assets that are in fair or better condition	26%	28%	26%	22%	23%	39%	39%	33%	21%	24%	Decrease

Machinery & Equipment

Table 26: Machinery & Equipment Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percent (%) of maintenance inspections completed	100	100	100	100	100	100	100	100	100	100	Maintain[19]
Percent (%) of assets that are in fair or better condition	39	34	35	35	40	37	32	36	32	39	Maintain

Land Improvements

Table 27: Land Improvements Technical LOS 2026-2035

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Hectares of community parks per 1,000 population	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	0.8-1.16	Maintain[2021]
Hectares of neighborhood parks	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	0.6-0.84	Maintain

subject to fines.
[19] 100% completion equipment wide is necessary because without a valid inspection a commercial equipment is considered unfit for use on our roads and the operator, and asset owners are subject to fines.
[20] The projected 2032 service level of 0.8 hectares is based on a population of 59,800 persons and the current parkland supply (including Henderson Memorial Park Phase 2 lands). The recommended parkland provision is at a rate of 2.0, which represents about 1.16 hectares.
[21] Parks areas (ha.) are collected from the Leisure Services Master Plan (LSMP) 2023.

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
per 1,000 population											
Hectares of parkettes per 1,000 population	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Maintain
Meters of multi-use asphalt pathways	14,230	14,230	14,230	14,230	14,230	14,230	14,230	14,230	14,230	14,230	Maintain
Average condition	44	43	46	46	43	43	44	43	43	43	Maintain
Percentage of assets beyond their expected useful life.	22%	19%	14%	9%	17%	14%	12%	8%	8%	10%	Decreasing
Percentage of assets fair or better condition	59%	53%	55%	50%	48%	45%	43%	46%	49%	52%	Maintain
Percentage of walking paths in fair or better condition	21%	21%	14%	17%	19%	19%	32%	33%	34%	49%	Increase
Number of reported major safety incidents in parks per year	0	0	0	0	0	0	0	0	0	0	Maintain[22]
Percentage of playgrounds achieving CSA compliance based on monthly inspections	100	100	100	100	100	100	100	100	100	100	Maintain[23]
Operating cost to provide parks service per 1,000 population	$18,872	$19,800 - $20,800	21800-22800	24000-25100	26400-27600	29000-30400	31900-33400	35100-36800	38600-40500	42500-44500	Increase[24]

[22] Claims are tracked; Clerks/Risk Management. Review and define what counts as major incident.
[23] Parks inspection staff/inspection reports. Parks staff are trained to inspect for CSA compliance so any issues should be identified on the inspections.
[24] Operating costs included in calculation: capital expenditures, contractual services, material & supplies, repairs & maintenance Divided by 2024 estimated population (last census completed in 2021)

Metric	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	Trend
Percentage of residential properties within 800 meters of a park	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	Maintain[25]

[25] 800m buffer area starts at the edges of the park, not the center. 800m buffer area includes properties that touch the buffer (the entire property does not have to be within the boundary). Indicate anticipated trend, include context above regarding 800 m buffer. % are calculated from GIS.

6. Financial Strategy

For an AMP to be effective and meaningful, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Town of Bradford West Gwillimbury to identify the financial resources required for sustainable asset management based on existing asset inventories, proposed LOS, and projected population growth requirements.

This plan identifies the financial requirements to meet the identified proposed LOS. It is based on the financial requirements for existing assets and meeting the proposed LOS. The financial plan considers and accounts for traditional and non-traditional sources of municipal funding, which are:

1. The financial requirements for:
    a. Existing assets
    b. Existing service levels
    c. Requirements of meeting the proposed LOS
    d. Requirements of anticipated growth (not incorporated as outlined in Section 4.2)
2. Use of traditional sources of municipal funds:
    a. Tax levies
    b. User fees
    c. Debt
    d. Development charges
3. Use of non-traditional sources of municipal funds:
    a. Reallocated budgets
    b. Partnerships
    c. Procurement methods
4. Use of Senior Government Funds:
    a. Canada Community-Building Fund (CCBF)
    b. Ontario Community Infrastructure Fund (OCIF)

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

If the financial plan component results in a funding shortfall, the Province requires the inclusion of a specific plan for managing the shortfall. In determining the legitimacy of a funding shortfall, the Province may evaluate a Municipality's approach to the following:

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

considered.

b. If user fees reflect the cost of the applicable service.

6.1 Proposed LOS: Annual Requirements & Capital Funding

6.1.1 Annual Requirements

The annual requirements represent the annual allocation required to meet the proposed LOS. For the Town of Bradford West Gwillimbury, the proposed LOS provides for an annual capital investment of $23,106,000 for tax funded assets and $14,713,000 for rate funded assets. Generally, this means that under this proposed LOS assets are being replaced later than recommended[26]. However, it should be noted that this level of investment is a significant increase from the current level of investment ($14,938,000 tax funded assets and $8,795,000 rate funded assets) and therefore the proposed LOS is still higher than it would be if existing levels of capital funding continued.

For most non-core asset categories, the annual requirement has been calculated based on a "replacement only" scenario, in which capital costs are only incurred at the construction and replacement of each asset. However, for the Road Network, bridges and culverts, water, and wastewater network lifecycle management strategies have been developed to identify capital costs that are realized through strategic rehabilitation and renewal of assets. This is informed by recommendations within the Roads Needs Study, Bi-annual Bridge Inspections, and the State of Good Repairs Report for many water and wastewater assets.

6.1.2 Annual Funding Available

Based on a historical analysis of sustainable capital funding sources, the Town is committing approximately $24,134,000 towards capital projects per year. Given the annual capital requirement of $37,820,000, there is currently a funding gap of $13,686,000 annually based on the proposed LOS to maintain condition. This does not reflect the optimal funding (Scenario 3). Figure 26 below summarizes the current annual capital investment from sustainable funding sources and compares it to the capital investment required to fund the proposed LOS. Increased investment is required for all asset categories, for some asset categories (e.g. facilities, water network) the increase is more substantial.

[26] Recommendations are informed by each assets Estimated Useful Life (EUL).

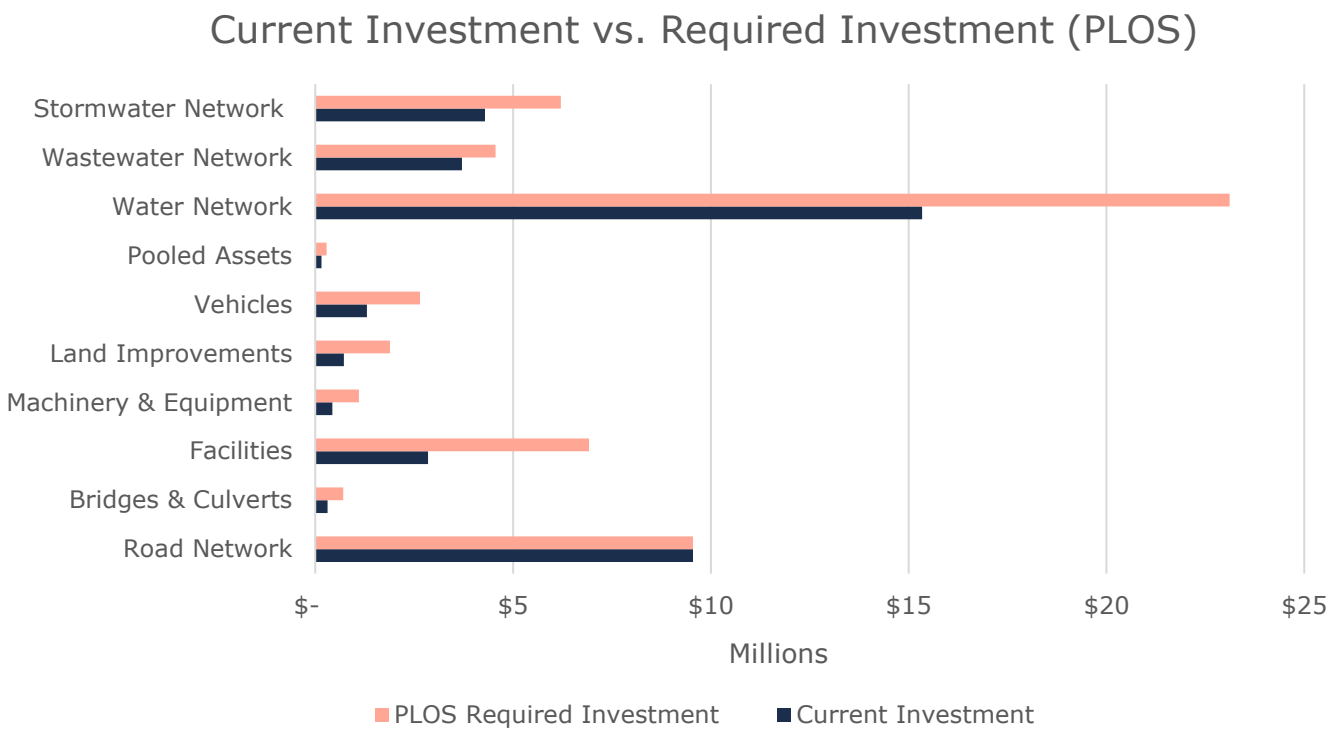


Figure 26: Current Investment Vs. Required Investment (PLOS)

6.2 Funding Objective

We have developed a scenario that would enable Town of Bradford West Gwillimbury to achieve full funding required to meet the selected proposed LOS within 1 to 20 years for the following assets:

1. **Tax Funded Assets:** Road Network, Bridges & Culverts, Facilities, Machinery & Equipment, Land Improvements, Vehicles, Pooled Assets

2. **Rate-Funded Assets:** Water Network, Wastewater Network, Stormwater Network

Note: For the purposes of this AMP, we have excluded gravel roads since they are a perpetual maintenance asset and end of life replacement calculations do not normally apply. If gravel roads are maintained properly, they can theoretically have a limitless service life.

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

6.3 Financial Profile: Tax Funded Assets

6.3.1 Current Funding Position

The following tables show, by asset category, Bradford West Gwillimbury's average annual capital investment requirements to meet the proposed LOS by year 20, their current funding positions, and funding increases required to achieve funding levels required for the selected proposed LOS. Please note: CCBF and OCIF amounts vary year to year, reported values reflect estimates.

Asset Category	Avg. Annual Require-ment	Annual Funding Available				Annual Deficit
		Taxes	CCBF	OCIF	Total Available	
Road Network	9,545,008	6,154,355	1,400,000	2,000,000	9,554,355	$-
Bridges & Culverts	710,393	311,675			311,675	$398,719
Facilities	6,924,145	2,848,151			2,848,151	$4,075,993
Machinery & Equipment	1,097,846	434,745			434,745	$663,102
Land Improvements	1,890,747	722,172			722,172	$1,168,574
Vehicles	2,645,251	1,307,315			1,307,315	$1,337,935
Pooled Assets	293,125	159,699			159,699	$133,426
Total	**23.106 M**	**11,938,112**	**1,400,000**	**2,000,000**	**15,338,112**	**7,768,003**

Table 28 Annual Available Funding for Tax Funded Assets

The average annual investment requirement for the above categories is $23,106,000. Annual revenue currently allocated to these assets for capital purposes is $15,338,000 leaving an annual deficit of $7,768,000. Put differently, the current level of investment is 66% of the investment needed to achieve the proposed LOS.

6.3.2 Full Funding Requirements

In 2025, the Town of Bradford West Gwillimbury had budgeted annual tax revenues of approximately $39,573,647. As illustrated in the following table, without consideration of any other sources of revenue or cost containment strategies, full funding would require the following tax change over time:

Asset Category	Tax Change Required for Full Funding
Road Network	0%
Bridges & Culverts	1.0%
Facilities	10.3%
Machinery & Equipment	1.7%
Land Improvements	3.0%
Vehicles	3.4%
Pooled Assets	0.3%
Total	**19.6%**

Table 29 Tax Increase Requirements for Full Funding

The following changes in costs and/or revenues over the next number of years should also be considered in the financial strategy:

a) Considering current debt obligations only, Bradford West Gwillimbury's debt payments for these asset categories will be decreasing from 2025 baseline levels over the next 20 years as follows:
    a. $20,508 by 2030 (5 years).
    b. $17,193 by2035(10 years)
    c. $51,369 by2040(15 years)
    d. $232,219 by 2045 (20 years)

Our scenario modeling includes capturing the above changes and allocating them to the infrastructure deficit outlined above. The table below outlines this concept and presents several options:

	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	7,768,403	7,768,403	7,768,403	7,768,403
Change in Debt Costs	(20,508)	(17,193)	(51,369)	(232,219)
Resulting Infrastructure Deficit:	7,747,895	7,751,585	7,717,409	7,536,559
Tax Increase Required	19.6%	19.6%	19.5%	19.0%
Annually (debt-reallocated):	3.7%	1.9%	1.2%	0.9%
Annually (No debt reallocation)	3.7%	1.9%	1.3%	1.0%

Table 30 Tax Increase Options 5-20 Years

6.3.3 Financial Strategy Recommendations

Considering all the above information, we recommend that at a minimum the Town select the 10-year option with strong consideration for the 5-year option. It is recommended to select a shorter phase-in period to reduce the risks associated with delayed investment. Such risks include:

- **Accelerated Asset Deterioration:** Deferred investments lead to faster decline in condition, increasing the volume of assets falling into poor or very poor condition.
- **Service Disruptions & Reliability Issues:** Aging assets are more likely to fail, increasing the potential for service delivery challenges such as road closures, drainage issues, facility downtime, and other service interruptions.
- **Increased Public Safety Risks:** Deteriorating assets elevate the risk of accidents, injuries, and damage, exposing the municipality to liability.
- **Rising Infrastructure Backlog:** Underfunding widens the existing reinvestment gap, creating a growing backlog that becomes more difficult and expensive to resolve

Based on the 10-year option, the following changes are recommended to support:

a) increasing tax revenues by 1.9% each year for the next 10 years solely for the purpose of phasing in the funding required to meet the proposed LOS for the asset categories covered in this section of the AMP.
b) Allocating the current CCBF and OCIF revenue as outlined previously.
c) Increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

1. It is recognized that the Town council officially selected a 20-year phase in option resulting in a 1% annual increase for 20 years.
2. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. By Provincial AMP rules, this periodic funding cannot be incorporated into an AMP unless there are firm commitments in place. We have included OCIF and CCBF formula-based funding, if applicable, since this funding is a multi-year commitment[27].
3. We realize that raising tax revenues by the amounts recommended above for infrastructure purposes will be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure. These risks are noted above.

[27] The Town should take advantage of all available grant funding programs and transfers from other levels of government. While OCIF has historically been considered a sustainable source of funding, OCIF may be subject to periodic review, policy updates, or funding adjustments. Accordingly, the Town should continue to monitor program developments and ensure that core asset management and financing strategies remain resilient to potential changes in external funding levels as there may be changes that impact its availability.

6.4 Financial Profile: Rate Funded Assets

6.4.1 Current Funding Position

The following tables show, by asset category, Bradford West Gwillimbury's average annual asset capital investment requirements needed to meet the proposed LOS, their current funding positions, and funding increases required.

Asset Category	Avg. Annual Requirement	Annual Funding Available				Annual Deficit
		Rates	CCBF	OCIF	Total Available	
Water Network	4,559,942	3,709,325			3,709,325	$850,617
Wastewater Network	6,206,258	4,294,157			4,294,157	$1,912,100
Stormwater Network	3,947,243	792,000			792,000	$3,155,243
Total	**14,713,442**	**8,795,482**			**8,795,482**	**5,917,960**

Table 31 Annual Available Funding for Rate Funded Assets

The average annual investment requirement for the above categories is $14,713,000. Annual revenue currently allocated to these assets for capital purposes is $8,795,000 leaving an annual deficit of $5,918,000. Put differently, currently 60% of the capital investment required to meet the selected proposed LOS is available.

6.4.2 Full Funding Requirements

Based on 2025 budgeted amounts, Bradford West Gwillimbury had annual water network revenues of $8,703,654. Wastewater revenues of $9,156,338 and stormwater network revenues of $1,800,000. As illustrated in the table below, without consideration of any other sources of revenue, full funding would require the following changes over time:

Asset Category	Rate Change Required for Full Funding
Water Network	9.8%
Wastewater Network	20.9%
Stormwater Network	175.3%

Table 32 Rate Increase Requirements for Full Funding

In the following tables, we have expanded the above scenario to present multiple phase-in period options of 5,10, 15 and 20 years. Please note there are no changes in debt projected over the period of analysis, therefore there is no debt change row included.

Water Network				
	5 Years	**10 Years**	**15 Years**	**20 Years**
Infrastructure Deficit	$850,617	$850,617	$850,617	$850,617
Rate Increase Required	9.8%	9.8%	9.8%	9.8%
Annually:	1.9%	1.0%	0.7%	0.5%

Table 33 Water Rate Increase Options 5-20 Years

Wastewater Network				
	5 Years	**10 Years**	**15 Years**	**20 Years**
Infrastructure Deficit	$1,912,100	$1,912,100	$1,912,100	$1,912,100
Rate Increase Required	20.9%	20.9%	20.9%	20.9%
Annually:	3.9%	2.0%	1.3%	1.0%

Table 34 Wastewater Rate Increase Options 5-20 Years

Stormwater Network				
	5 Years	**10 Years**	**15 Years**	**20 Years**
Infrastructure Deficit	$3,155,243	$3,155,243	$3,155,243	$ 3,155,243
Rate Increase Required	175.3%	175.3%	175.3%	175.3%
Annually:	22.5%	10.7%	7.0%	5.2%

Table 35: Stormwater Network Increase Options 5-10 Years

6.4.3 Financial Strategy Recommendations

Considering all the above information, we recommend the 5-year option for the water network, the 10-year option for the wastewater network and stormwater network. This involves reaching the full funding requirements of the selected proposed LOS option by:

a) Increasing rate revenues by 1.9% for the water network each year for the next 5 years. This will enable the funding required to meet the selected proposed LOS for the current asset inventory to be achieved by year 5.
b) Increasing wastewater and stormwater revenues by 2% and 10.7%[28] respectively each year for the next 10 years. This will enable the funding required to meet the selected proposed LOS for the current asset inventory to be achieved by year 10.
c) Increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

[28] While 10.7% as a crude number appears significant, when considering the nominal dollar impact based on the stormwater rate study projected average charge of $88, this is a modest increase.

Notes:

1. It is recognized that the Town's council selected the 20-year phase in option.
2. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. This periodic funding should not be incorporated into an AMP unless there are firm commitments in place.
3. We realize that raising rate revenues for infrastructure purposes may be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure and associated liabilities. These risks are summarized in section 6.3.3 above.
4. Any increase in rates required for operations would be in addition to the above recommendations.

6.5 Use of Debt

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

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

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

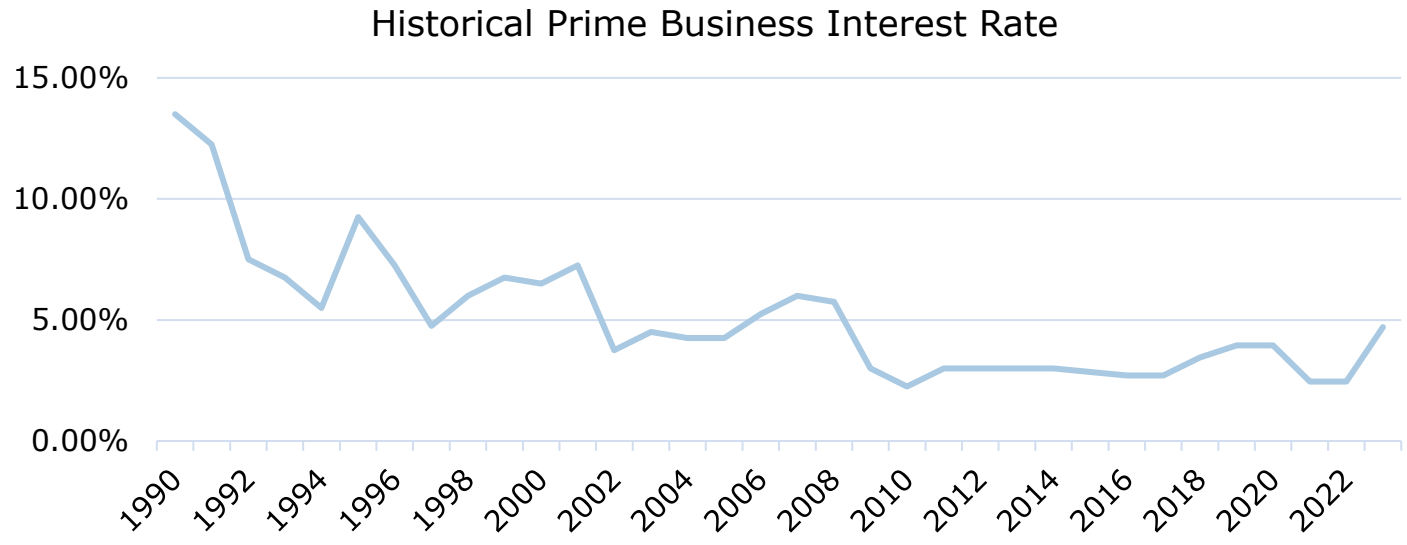


Figure 27 Historical Prime Rate

A change in 15-year rates from 5% to 7% would change the premium from 45% to 65%. Such a change would have a significant impact on a financial plan.

For reference purposes, the following table outlines the premium paid on a project if financed by debt. For example, a $1 million project financed at 3.0%[29] over 15 years would result in a 26% premium or $260,000 of increased costs due to interest payments. For simplicity, the table does not consider the time value of money or the effect of inflation on delayed projects.

Interest Rate	Number of Years Financed					
	5	10	15	20	25	30
7.0%	22%	42%	65%	89%	115%	142%
6.5%	20%	39%	60%	82%	105%	130%
6.0%	19%	36%	54%	74%	96%	118%
5.5%	17%	33%	49%	67%	86%	106%
5.0%	15%	30%	45%	60%	77%	95%
4.5%	14%	26%	40%	54%	69%	84%
4.0%	12%	23%	35%	47%	60%	73%
3.5%	11%	20%	30%	41%	52%	63%
3.0%	9%	17%	26%	34%	44%	53%
2.5%	8%	14%	21%	28%	36%	43%
2.0%	6%	11%	17%	22%	28%	34%
1.5%	5%	8%	12%	16%	21%	25%
1.0%	3%	6%	8%	11%	14%	16%
0.5%	2%	3%	4%	5%	7%	8%
0.0%	0%	0%	0%	0%	0%	0%

Table 36 Interest Premiums Paid

The following tables outline how Bradford West Gwillimbury has historically used debt for investing in the asset categories as listed.

[29] Current municipal Infrastructure Ontario rates for 15-year money is 4.03%.

Asset Category	Use of Debt in the Last Six Years					
	2025	**2020**	**2021**	**2022**	**2023**	**2024**
Road Network	2,683,402	0	3,342,274	3,177,556	3,012,838	2,848,120
Bridges & Culverts	0	0	0	0	0	0
Facilities	0	0	0	0	0	0
Land Improvements	0	79,390	65,101	50,058	34,222	17,550
Vehicles	0	0	0	0	0	0
Machinery & Equipment	0	0	0	0	0	0
Pooled Assets	0	0	0	0	0	0
Total Tax Funded	**2,683,402**	**79,390**	**3,407,374**	**3,227,613**	**3,047,059**	**2,865,670**
Water Network	0	211,706	173,602	133,487	91,258	46,801
Wastewater Network	0	317,559	260,402	200,231	136,887	70,202
Stormwater Network	0	0	0	0	0	0
Total Rate Funded	**0**	**529,265**	**434,004**	**333,719**	**228,145**	**117,003**
Total	**2,683,402**	**608,655**	**3,841,378**	**3,561,332**	**3,275,204**	**2,982,673**

Table 37 Bradford West Gwillimbury Use of Debt 2020-2025

Asset Category	Principal & Interest Payments in the Next Ten Years						
	2025	**2026**	**2027**	**2028**	**2029**	**2030**	**2035**
Road Network	245,619	241,517	237,416	233,469	229,213	225,111	228,426
Bridges & Culverts	679	679	679	679	679	679	679
Facilities	6,201	6,201	6,201	6,201	6,201	6,201	6,201
Land Improvements	1,572	1,572	1,572	1,572	1,572	1,572	1,572
Vehicles	2,846	2,846	2,846	2,846	2,846	2,846	2,846
Machinery & Equipment	947	947	947	947	947	947	947
Pooled Assets	348	348	348	348	348	348	348
Total Tax Funded	258,211	254,110	250,008	246,061	241,805	237,704	241,019
Water Network	4,237	4,237	4,237	4,237	4,237	4,237	4,237
Wastewater Network	5,440	5,440	5,440	5,440	5,440	5,440	5,440
Stormwater Network	3,692	3,692	3,692	3,692	3,692	3,692	3,692
Total Rate Funded	13,369	13,369	13,369	13,369	13,369	13,369	13,369
Total	**271,580**	**267,479**	**263,377**	**259,430**	**255,174**	**251,073**	**254,388**

Table 38 Bradford West Gwillimbury Principal and Interest Payments

The revenue options outlined in this plan allow the Town of Bradford West Gwillimbury to fully fund its long-term infrastructure requirements without further use of debt.

6.6 Use of Reserves

6.6.1 Available Reserves

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

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

By asset category, the table below outlines the details of the reserves currently available to Bradford West Gwillimbury.

Asset Category	Balance on December 31, 2024
Road Network	6,826,567
Bridges & Culverts	345,718
Facilities	3,159,242
Land Improvements	801,052
Vehicles	1,450,107
Machinery & Equipment	482,230
Pooled Assets	0
Total Tax Funded:	**13,064,915**
Water Network	16,084,247
Wastewater Network	21,938,002
Stormwater Network	0[30]
Total Rate Funded:	**38,022,249**

Table 39 Bradford West Gwillimbury Reserve Balances

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

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

These reserves are available for use in applicable asset categories during the phase-in period to full funding. This coupled with Bradford West Gwillimbury's judicious use of debt in the past, allows the scenarios to assume that, if required, available reserves and debt capacity can be used for high priority and emergency infrastructure investments in the short- to medium-term.

[30] Beginning in 2026, when a user-rate payment structure was introduced, the stormwater network will have a dedicated reserve fund. Before 2026, the stormwater network reserve funds were held within the road network reserve.

7. Recommendations & Key Considerations

7.1 Financial Strategies

1. Increase capital funding to assets so that the selected proposed LOS (Scenario 2: maintain condition) can be achieved. Considering the risks associated with extended phase-in periods alongside affordability constraints, the following is recommended:
    a. Increasing taxes by 1.9% per year over a period of 10 years;
    b. Increasing water rates by 1.9% per year over a period of 5 years; and
    c. Increasing wastewater rates by 2% per year over a period of 10 years.
    d. Increasing stormwater rates by 10.7% per year over a period of 10 years[31]

2. Continued allocation of OCIF and CCBF funding as previously outlined.

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

4. Continue to apply for project specific grant funding to supplement sustainable funding sources.

5. It is anticipated, based on the selected proposed LOS, that cash flow requirements may be higher in some years than others and that long-term cash flow planning and funding strategies may be required between 2026-2031 for vehicles, machinery and equipment, and pooled assets. It is recommended that the Municipality explore methods of addressing cash flow shortages as applicable to ensure that the investments required to meet the proposed LOS and the associated asset replacements are available.

7.2 Asset Data

1. Continuously review, refine, and calibrate asset data to improve accuracy. In particular:
    a. Bi- annual bridge and culvert inspections can be expected to result in revised condition, replacement cost, and rehabilitation recommendations. These should be updated in the asset registry.
    b. It is noted that there have been some assessments completed on the water, wastewater, and stormwater underground assets through the Pipeline assessment Certification Program (PACP) methodology. It is recommended that these details be incorporated into the database. Consideration can be given to the use of the structural condition grades for asset management considerations like risk and capital planning while the O & M condition grade may be most helpful from a maintenance management perspective.
    c. Regularly review and update asset replacement costs to ensure that forecasted investment requirements are based on the best and most recent estimates.
    d. When procuring any asset study consider if there are any additional data points of

[31] Please note the recommended rates do not reflect the phase-in period adopted by council on February 3rd, 2026. Council adopted a 20-year phase in period with rates of 1% for tax funded assets, 0.5% for the water network, 1% for the wastewater network, and 5.2% for the stormwater network.

value to collect and incorporate into the asset registry. Such data points may include risk model criteria, data to assist in asset operations (e.g. locational reference data), and/or general asset information otherwise (i.e. attributes). Evaluate the cost-benefit of data collection.

2. Facility assets are currently represented at the system category level (e.g. structure, mechanical, roof) only. However, a facility is comprised of numerous components each with varied estimated useful lives and often with unique in-service dates and assessed condition. Componentization of facility assets through a Building Condition Assessment (BCA) will provide more accurate information about the condition of facilities, when investment is required and what components require that investment. Where resources to execute Building Condition Assessments (BCA) are limited, consider selecting a few facilities that are of particular concern first and completing it in a phased approach. This recommendation aligns with Recommendation 26 within the Leisure Services Master Plan. Any facility's that are candidates for disposal would not be valuable to include in the BCA assessment scope; this may include those sited in Recommendations 28-30 of the Leisure Services Master Plan.

3. Consider the use of internal condition assessments for select asset categories such as Land Improvements, Vehicles, and Machinery & Equipment. Ensure that all internal assessments are completed in a standardized and uniform manner based on a clearly documented condition scale which includes descriptions and references examples. Implement the program with a regular schedule, standardized data collection and upload process, and assigned responsibilities. Consider the collection of photographs to support assessment details and the includes those photos within the asset registry

7.3 Risk & Levels of Service

1. Risk models can play an important role in identifying high criticality assets and determining appropriate risk mitigation measures. Risk mitigations include the acceptance of risk, the reduction of risk through capital investments, or the removal of risk through asset disposal. Initial risk models have been built into Citywide for all asset groups. These models reflect current data. As the data evolves, review the risk models to determine if adjustments are of benefit. Refer to recommendation 6.2. 1,d on strategies to efficiently gather data to support risk model enhancement.

2. The proposed LOS has been selected, and the projected LOS is noted within. Each year, measure the current LOS and compare it with the projected LOS. Where there is a material difference, work to understand the cause of it, and as appropriate mitigation measures.

7.4 Asset Management Policy Review

1. O. Reg. 588/17 requires that the Town's Asset Management Policy be reviewed at least once every five years. The Town's asset management policy should be reviewed to ensure it remains accurate, relevant, and effective. At a minimum the review should be

documented and consider the following:

a. Review date and documentation of public notification
b. Compliance with all 12 sections of the policy (Section 3 of O.Reg. 588/17)
c. Clarity of key components, especially consideration of Asset management in budget and financial planning (3,2), key principles (3,4), persons responsible for asset management (3,10), process to ensure alignment of asset management with key policy and associated plans (3,1,6,7).

Appendices

Core Assets

Appendix A: Road Network

The Town's road network comprises the largest share of its infrastructure portfolio, with a current replacement cost of more than $514.6 million, distributed primarily between HCB roads, LCB roads, and sidewalks. The Town also owns and manages other supporting infrastructure and capital assets, including streetlights, street signs, and traffic signals.

Inventory & Valuation

Table 40 and Figure 28 summarize the quantity and current replacement cost of the Town's various road network assets as managed in its primary asset management register, Citywide.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
HCB	196,642	Meters	$373,619,800	Cost/Unit
LCB	54,551	Meters	$49,095,900	
Sidewalks	163,870	Meters	$59,730,751	
Street Signs	7,724	Assets	$7,005,668	
Streetlights	3,500	Assets	$19,250,000	
Traffic Signals	197	Assets	$5,910,000	
TOTAL			**$514,612,000**	

Table 40 Detailed Asset Inventory: Road Network

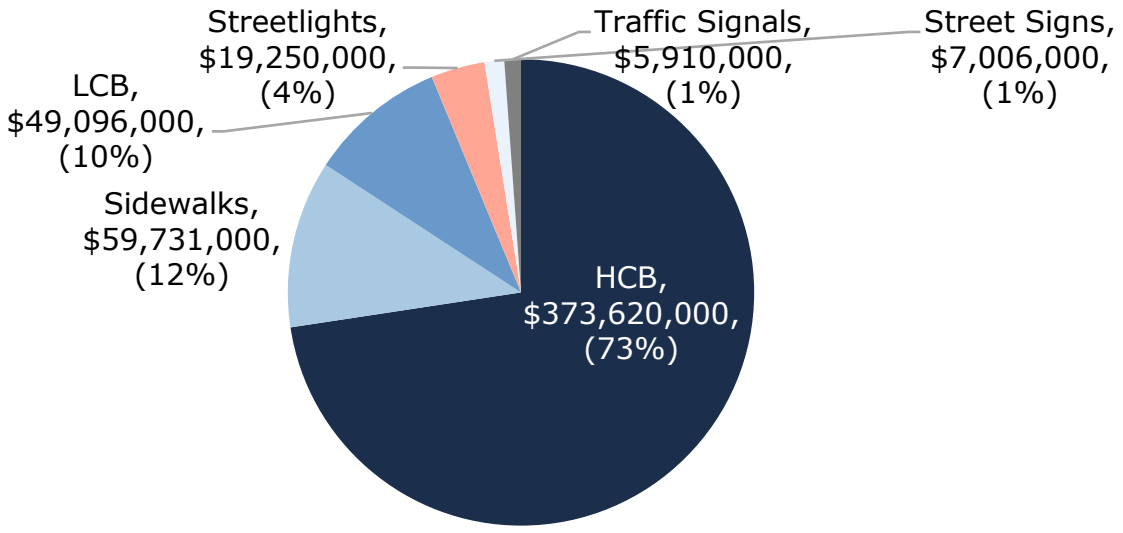


Figure 28 Portfolio Valuation: Road Network

Asset Condition

Figure 29 summarizes the replacement cost-weighted condition of the Town's road network. Based on a combination of field inspection data and age, 46% of assets are in fair or better condition; the remaining 54% of assets are in poor to very poor condition. Condition assessments were available for 96% of HCB roads and 100% of LCB roads, weighted by replacement cost. This condition data was projected from inspection date to current year to estimate their condition today. No condition data was available for sidewalks, streetlights, and traffic signals.

Assets in poor or worse conditions may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

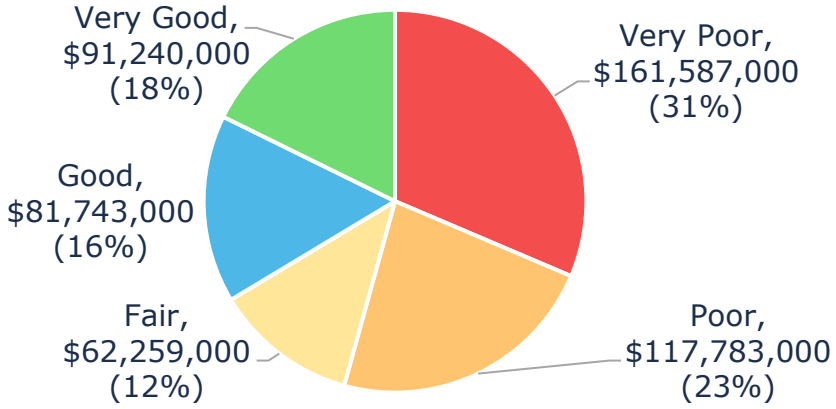


Figure 29 Asset Condition: Road Network Overall

As illustrated in Figure 30, based on condition assessments, the majority of the Town's HCB and LCB roads are in poor or worse condition.

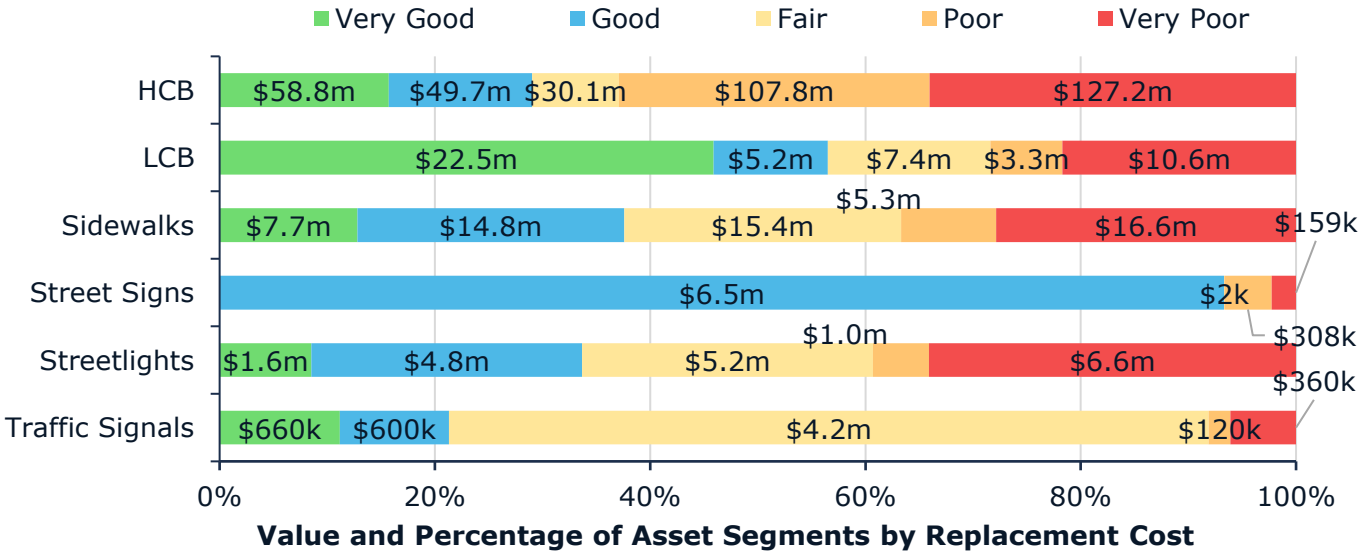


Figure 30 Asset Condition: Road Network by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential long-term replacement spikes.

Figure 31 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

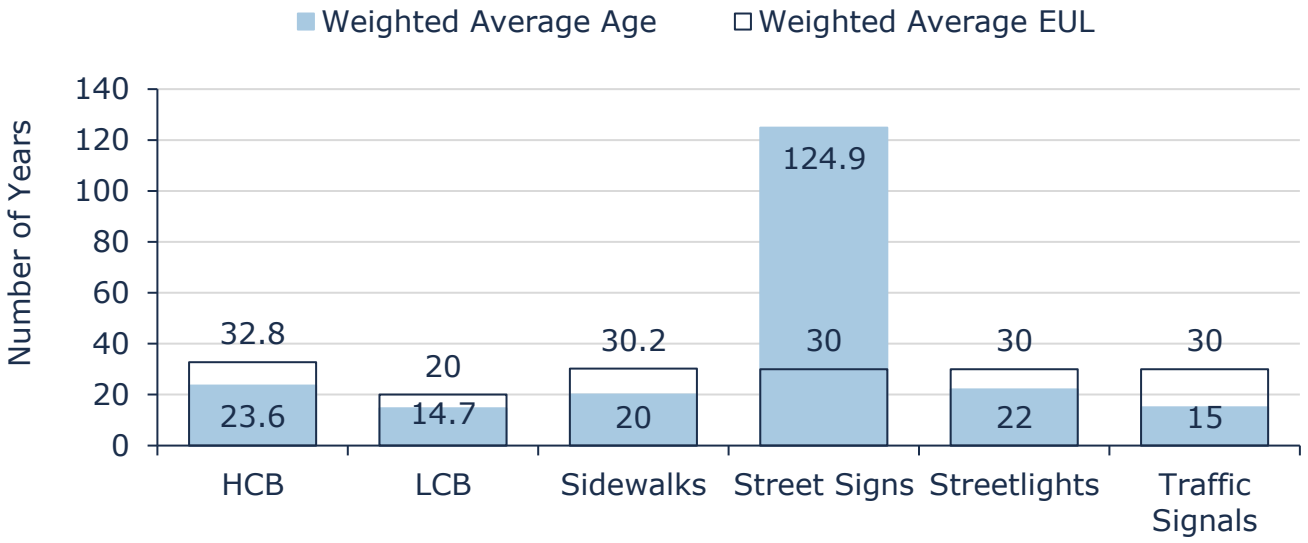


Figure 31 Estimated Useful Life vs. Asset Age: Road Network

Age analysis shows that all road network assets are approaching their expected useful life except for street signs, which remain in service well beyond their designed service life. However, this asset carries very low risk implications of failure, therefore it is often intentionally run to failure, sometimes while past its EUL.

Although asset age is an important measurement for long-term planning, condition assessments provide a more accurate indication of actual asset needs. Further, useful life estimates established as part of the PSAB 3150 implementation may not be accurate and may not reflect in-field asset performance.

Current Approach to Lifecycle Management

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including asset's characteristics, location, utilization, maintenance history and environment.

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	The most recent Roads Needs Study was prepared in 2024 by RJ Burnside & Associates Limited. Road inspections/assessments are conducted annually by internal staff and, generally, a Road Needs Study is conducted by an external consultant every 5 years.
	Supporting infrastructures such as sidewalks are assessed annually as per MMS. Streetlights are assessed to address a defect or damage repair.
	Maintenance activities in compliance with Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways. Examples of common summer maintenance activities include sidewalk repairs, grading, re-gravelling, dust control, ditching, roadside mowing, tree trimming, brush cleanup, road sign installation/maintenance, and line painting. Winter maintenance activities include snow plowing, salting, and snow removal.
	Pothole repairs are completed annually based on deficiencies identified through regular road patrols and feedback from the public.
Rehabilitation	Road rehabilitation activities are in most cases completed based on the recommendations from the Roads Needs Study. Please refer to Table 43 below for an overview of common road rehabilitation activities.
Replacement	Road replacement prioritization is determined by consideration of growth, risk, condition, health and safety, and social impact.
	Road reconstruction projects (that include road base & surface components) are identified based on road condition, risk, and sub-surface asset requirements (water/sanitary/storm water).

Table 41 Lifecycle Management Strategy: Road Network

The following lifecycle strategies have been developed as a proactive approach to managing the lifecycle of LCB and HCB roads. Instead of allowing the roads to deteriorate until replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

Paved Roads (LCB)			
Improvement	**Impact**	**Arterial, Collector, Local**	**Trigger**
Routine Maintenance (RM)	PCI+5	Pothole filling + edge crack repairs + shouldering	PCI of 87 to 100
Preventative Maintenance (PM)	PCI+10	Pothole filling + edge crack repairs + shouldering	PCI of 87 to 100
Resurfacing (R)	PCI+20	Double micro-surfacing	PCI of 55 to 86
Rehabilitation (REH)	PCI+40	Pulverize + double surface treatment + asphalt padding + ditch repairs	PCI of 45 to 54
Reconstruction (REC)	PCI=100	Pulverize + total base replacement + double surface treatment + gravel shoulders + ditch repairs	PCI less than 45

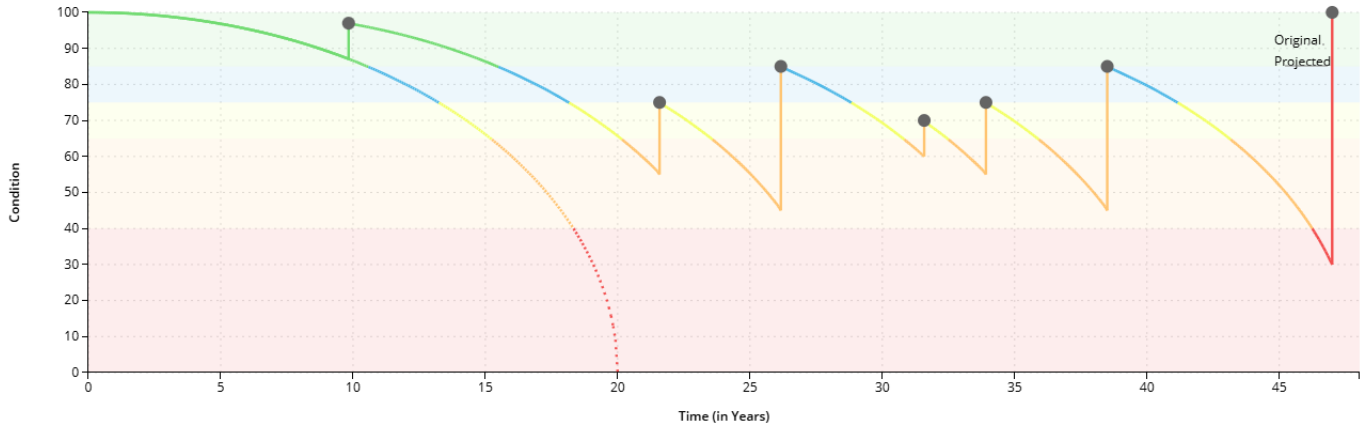
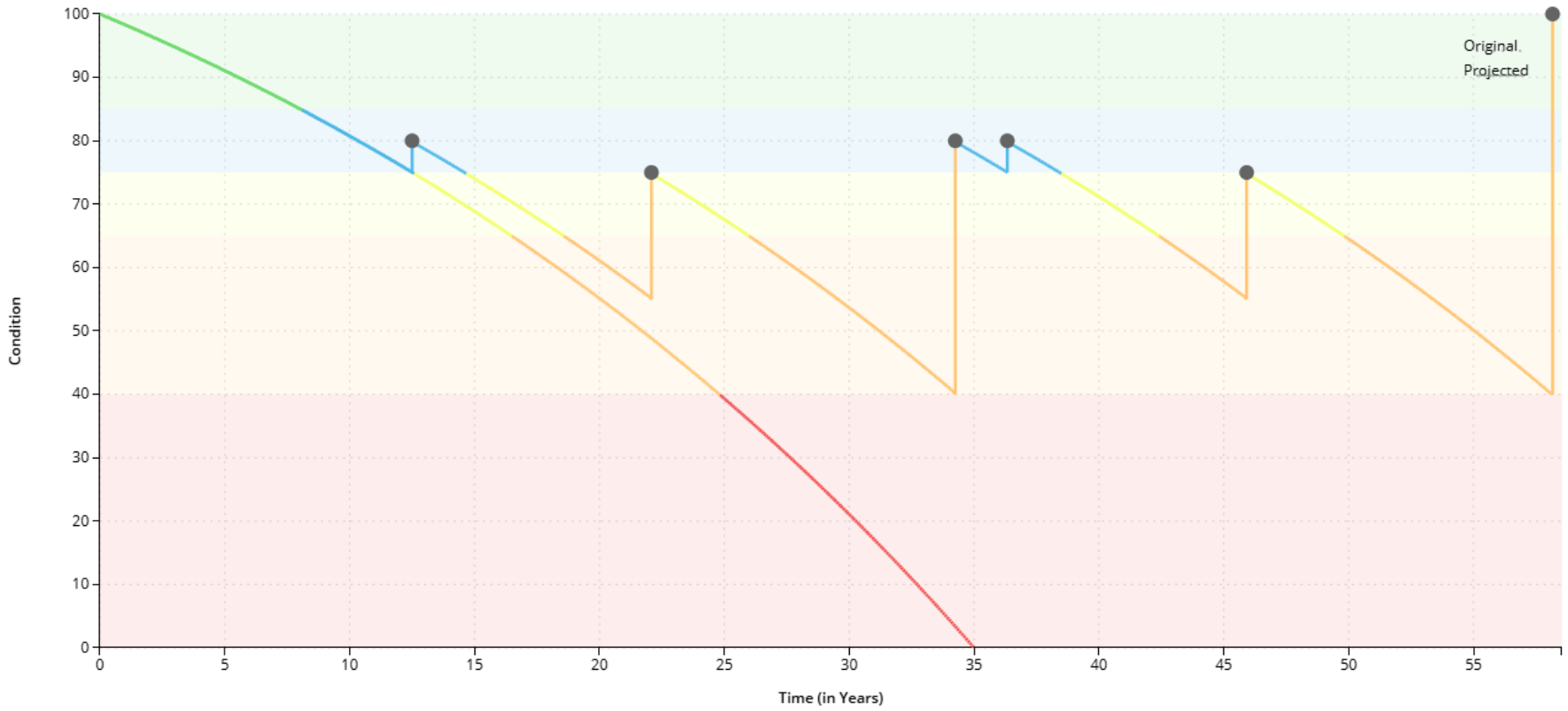


Table 42 Lifecycle Management Strategy: Road Network (LCB Roads)

Table 43: Lifecycle Strategies for Paved Roads Assets Based on Roads Need Study

Paved Roads (HCB)							
Improvement	**Impact**	**Arterial**	**Triggers**	**Collector**	**Triggers**	**Local**	**Triggers**
Routine Maintenance (RM)	PCI+5	Crack sealing	PCI of 80 to 90	Crack sealing	PCI of 80 to 93	Crack sealing	PCI of 80 to 93
Preventive Maintenance (PM)	PCI+10	Double micro-surfacing	PCI of 70 to 79	Double micro-surfacing	PCI of 71 to 79	Localized repairs	PCI of 55 to 79
Resurfacing (R)	PCI+20	Mill + 1 HMA (50 mm) + 30% curb replacement	PCI of 60 to 69	Mill + 1 HMA (50 mm) + 30% curb replacement	PCI of 55 to 70	Localized repairs	PCI of 40 to 54
Rehabilitation (REH)	PCI+40	Full-depth asphalt removal + 50% curb replacement + 3 HMA (2-50 mm & 1-40 mm)	PCI of 50 to 59	Full-depth asphalt removal + 50% curb replacement + 3 HMA (1-50 mm & 2-40 mm)	PCI of 45 to 54	Full-depth asphalt removal + 50% curb replacement + 2 HMA (1-50 mm & 1-40 mm)	PCI of 40 to 54
Reconstruction (REC)	PCI=100	Full-depth removal + total base & curb replacement + 3 HMA (2-50 mm & 1-40 mm)	PCI less than 50	Full-depth removal + total base & curb replacement + 3 HMA (1-50 mm & 2-40 mm)	PCI less than 45	Full-depth removal + total base & curb replacement + 2 HMA (1-50 mm & 1-40 mm)	PCI less than 40

Paved Roads (HCB)



Example Lifecycle Strategy – HCB Roads – Urban - Local

Table 44 Lifecycle Management Strategy Visualized: Road Network (HCB Roads)

Risk Analysis

The risk matrix below is generated using available asset data, including condition, replacement cost, roadside environment, and AADT. The risk ratings for assets without useful attribute data were calculated using only condition, and their replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 **Very Low**	5 - 7 **Low**	8 - 9 **Moderate**	10 - 14 **High**	15 - 25 **Very High**
$160,109,000 (30%)	$83,732,000 (16%)	$31,059,000 (6%)	$105,712,000 (20%)	$158,841,000 (29%)

Figure 32 Risk Matrix: Road Network

Levels of Service

The tables that follow summarize the Town's community levels of service for road network assets. The technical LOS is reported in section 5.3.2.

Community Levels of Service

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps of the road network in the municipality and its level of connectivity	The Town's transportation assets enable the movement of people and goods within the Town and provide connectivity to regional roads. In addition to passenger vehicles, the Town's transportation assets also support public transit, commercial truck traffic, movement of agricultural equipment, and reliable emergency vehicle access to all areas of the Town. The broader transportation network also supports other transportation modes such as walking and cycling. Please refer to Appendix O: Levels of Service Maps & Photos
Quality	Description or images that illustrate the different	The Town strives to maintain road and bridge surfaces to a level that supports comfortable

Service Attribute	Qualitative Description	Current LOS (2024)
	levels of road class pavement condition	passage of vehicles.
Safety	N/A	The Town strives to keep water off travel surfaces.
Efficiency	N/A	The Town endeavors to make travel times predictable.

Table 45 O. Reg. 588/17 Community Levels of Service: Road Network

Appendix B: Bridges & Culverts

The Town's transportation network also includes bridges and structural culverts, with a current replacement cost of $47.8 million.

Inventory & Valuation

Table 46 and Figure 33 summarizes the quantity and current replacement cost of bridges and culverts. The Town owns and manages 17 bridges, 25 structural culverts, and 3 pedestrian bridges.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Bridges	17	Assets	$24,494,914	CPI
Culverts	25	Assets	$21,963,762	
Pedestrian Bridges	3	Assets	$1,380,453	
TOTAL			**$47,839,000**	

Table 46 Detailed Asset Inventory: Bridges & Culverts

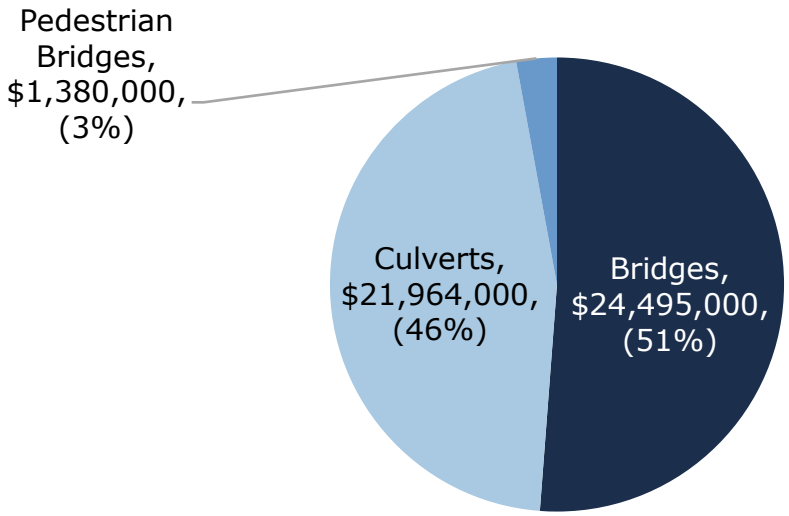


Figure 33 Portfolio Valuation: Bridges & Culverts

Asset Condition

Figure 34 summarizes the replacement cost-weighted condition of the Town's bridges and culverts. Based on the Town's recent Ontario Structures Inspection Manual (OSIM) assessments, 99% of bridges and culverts are in fair or better condition. Some elements or components of these structures may be candidates for replacement or rehabilitation in the medium term and

should be monitored for further degradation in condition. At only 1% of the total bridges and culverts portfolio, assets in poor or worse condition may require replacement in the immediate or short term.

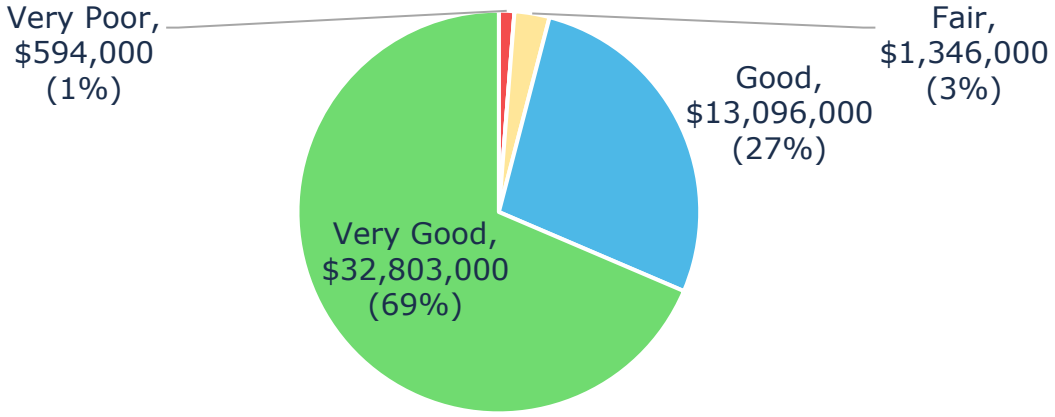


Figure 34 Asset Condition: Bridges & Culverts Overall

As further detailed in Figure 35, based on in-field condition assessments, $594,000 worth of culverts were assessed as being in very poor condition. Bridges and structures with a poor or worse rating (i.e., a bridge condition index of less than 60) are not necessarily unsafe for regular use. The OSIM ratings are designed to identify repairs needed to elevate condition ratings to a fair or higher.

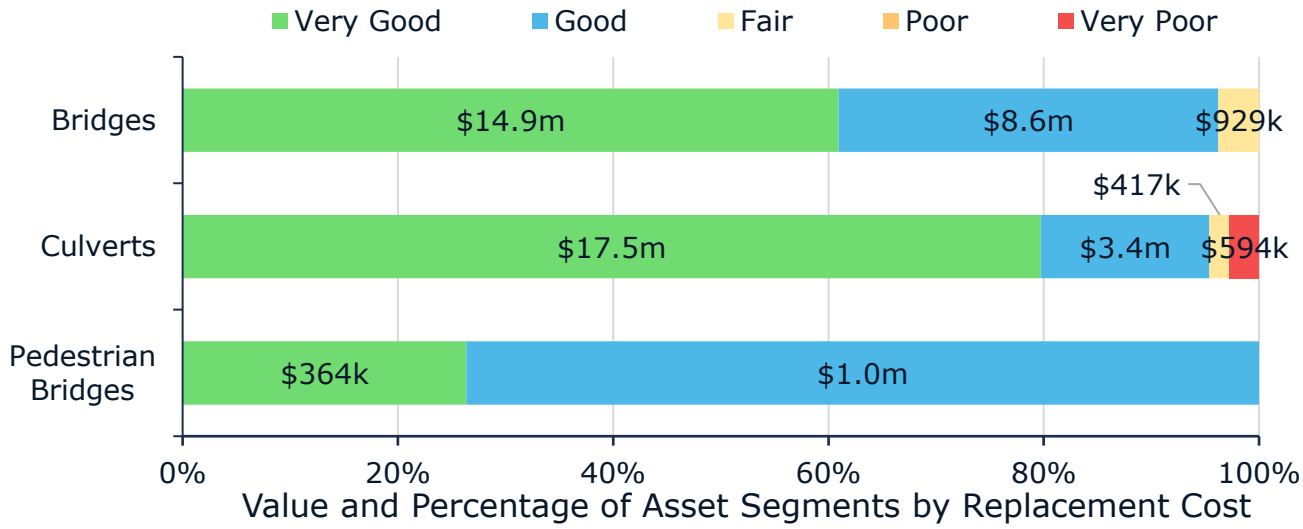


Figure 35 Asset Condition: Bridges & Culverts by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 36 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

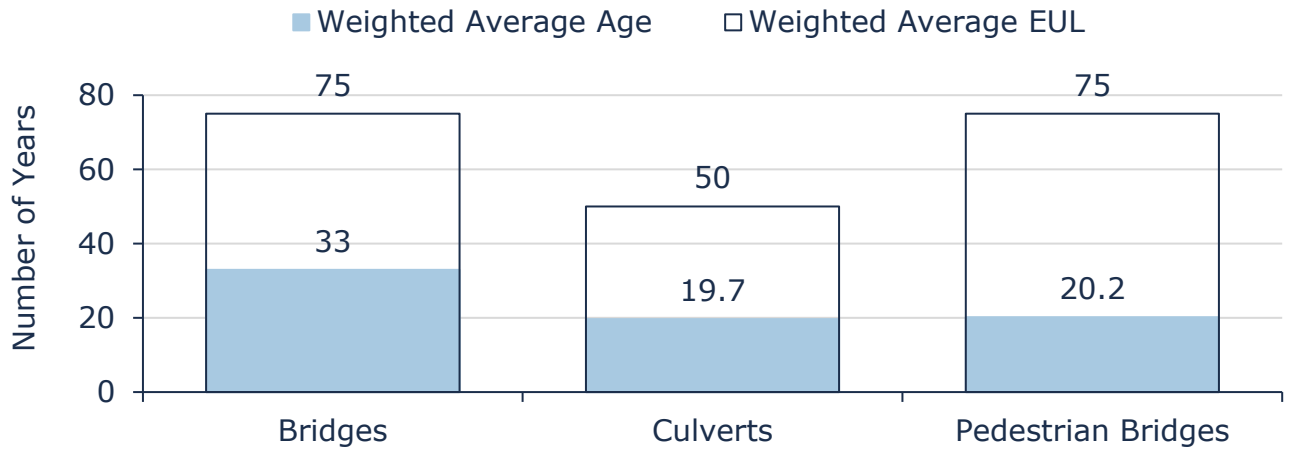


Figure 36 Estimated Useful Life vs. Asset Age: Bridges & Culverts

Age analysis reveals that on average, bridges, culverts, and pedestrian bridges are well within their expected useful lives. OSIM assessments should continue to be used in conjunction with age and asset criticality to prioritize capital and maintenance expenditures.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	Typical maintenance includes: ♦ Obstruction removal ♦ Cleaning/sweeping ♦ Erosion control ♦ Brush/tree removal
	Biennial OSIM inspection reports include a list of recommended maintenance activities that the Town considers and completes according to cost and urgency. The most recent assessment was completed in late 2025. The data within this report is based on the assessment completed in 2023.

Activity Type	Description of Current Strategy
Rehabilitation / Replacement	Biennial OSIM inspection reports include a Capital Needs List identifying recommended rehabilitation and replacement activities with estimated costs.

Table 47 Lifecycle Management Strategy: Bridges & Culverts

Risk Analysis

The risk matrix below is generated using available asset data, including condition, replacement costs, and deck area.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 **Very Low**	5 - 7 **Low**	8 - 9 **Moderate**	10 - 14 **High**	15 - 25 **Very High**
$29,482,000 (62%)	$8,693,000 (18%)	$9,070,000 (19%)	- (0%)	$594,000 (1%)

Figure 37 Risk Matrix: Bridges & Culverts

In addition to asset level risk, the Town may also face risk associated with not executing key lifecycle activities, including repairs, rehabilitation, and replacement of critical assets. These include:

- missed opportunities for cost savings and increases in lifecycle costs.
- deferral of vital projects, or further lending and borrowing.
- accelerated asset deterioration and premature failure, which may lead to public health and safety hazards, and disruption of services to the Town's residential and commercial base.
- a decline in public satisfaction with the Town's service standards and the resulting reputational damage.
- Bridges are inherently vital to the Town's transportation infrastructure, and their failures can disconnect communities, lead to public health and safety incidents, and can impede the efficient flow of residential and commercial traffic.

An asset's criticality rating, determined by the nature and magnitude of the consequences of its potential failure should be used to prioritize projects, particularly lifecycle management strategies. Using risk in conjunction with levels of service, and the recommended workplans in OSIM inspections, can assist in optimizing limited funds.

Levels of Service

The tables that follow summarize the Town's community levels of service for bridge and structural culvert assets. The technical LOS is reported in section 5.3.2.

Community Levels of Service

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	The Town's transportation assets support public transit, commercial truck traffic, movement of agricultural equipment, and reliable emergency vehicle access to all areas of the Town. The broader transportation network also supports other transportation modes such as walking and cycling.
Quality	Description or images of the condition of bridges & culverts and how this would affect use of the bridges & culverts	Please refer to Appendix O: Level of Service Maps & Photos.

Table 48 O. Reg. 588/17 Community Levels of Service: Bridges & Culverts

Appendix C: Water Network

The Water Division is responsible for treating, disinfecting, and distributing water to Town residents. They monitor the quantity and quality of the water in compliance with provincial requirements and deal with water quality concerns of the public.

Inventory & Valuation

Table 49 and Figure 38 summarize the quantity and current replacement cost of the Town's various water network assets as managed in its primary asset management register, Citywide Assets.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Booster Pumping Station	24,262	Assets	$3,850,128	User-Defined
Fire Hydrants	1,426	Assets	$20,677,000	Cost/Unit
Water Laterals	77,816	Meters	$49,091,109	
Water Mains	187,066	Meters	$137,500,111	
Water Valves	1,508	Assets	$14,800,804	
Wells, Towers, & Chambers	51,712	Meters	$52,146,004	
TOTAL			**$278,065,000**	

Table 49 Detailed Asset Inventory: Water Network

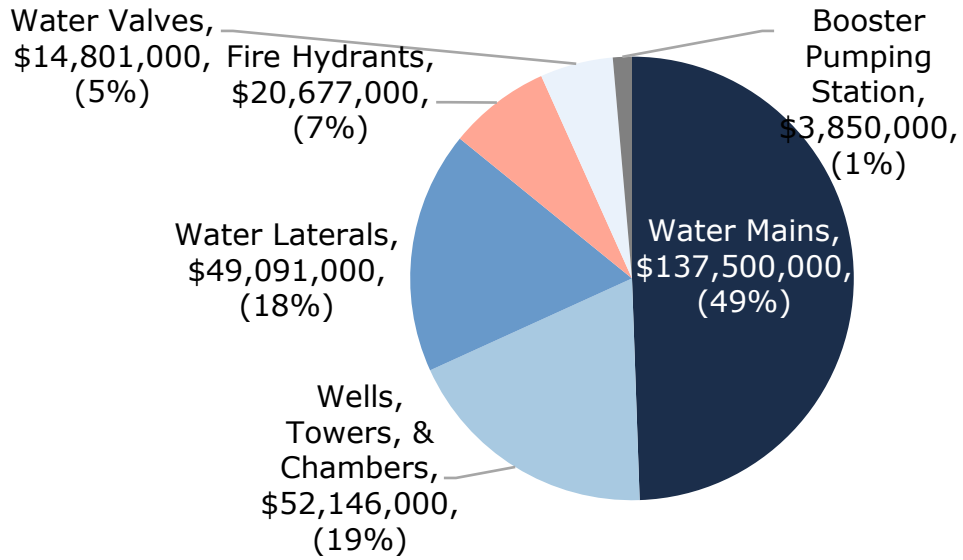


Figure 38 Portfolio Valuation: Water Network

Asset Condition

Figure 39 summarizes the replacement cost-weighted condition of the Town's water network. Based on a combination of field inspection data and age, 88% of assets are in fair or better condition; the remaining 12% of assets are in poor to very poor condition. Condition assessments were available for all booster pumping stations and 73% of wells, towers, and chambers. This condition data was projected from inspection date to current year to estimate their condition today. No condition data was available for fire hydrants, water laterals, water mains, and water valves.

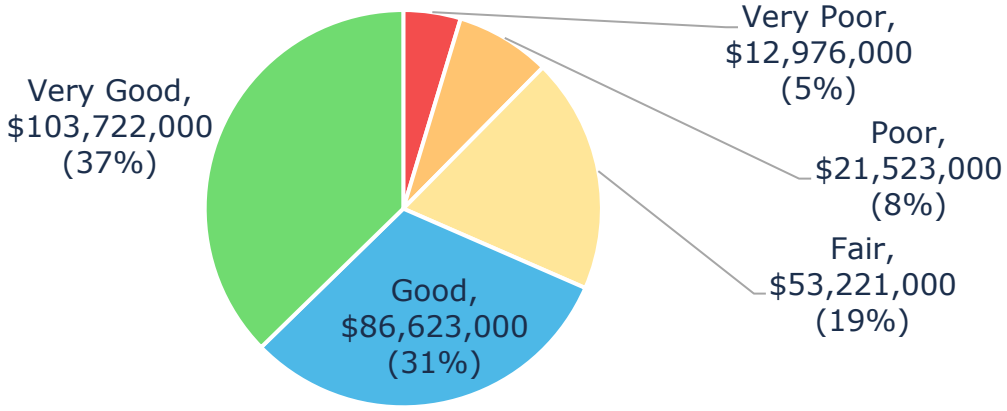


Figure 39 Asset Condition: Water Network Overall

As illustrated in Figure 40, more than 50% or booster pumping stations are in poor or worse. Other assets are in fair or better condition. However, more than $12 million worth of wells, towers & chambers assets are in poor or worse condition.

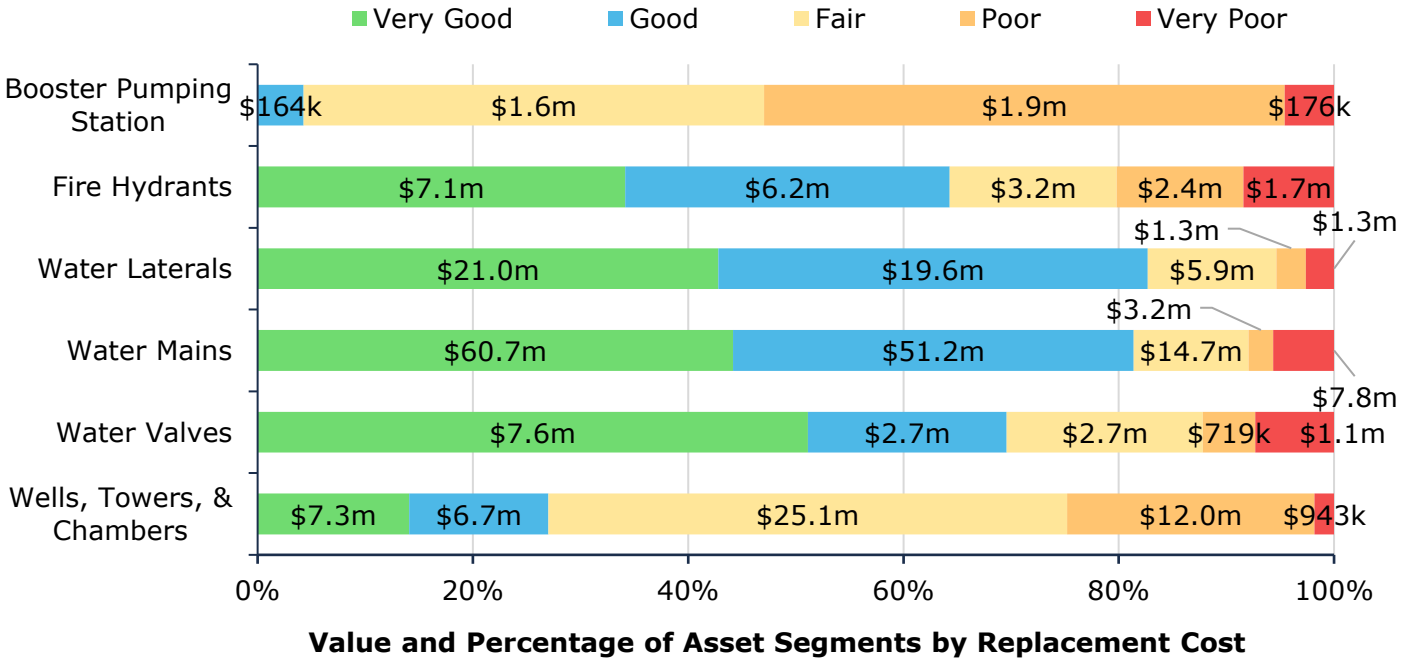


Figure 40 Asset Condition: Water Network by Segment

Grade	Condition	Description
1	Very Good	Operating as intended. Operable & well-maintained. Assets are expected to perform adequately with routine maintenance.
2	Good	Operating as intended; shows minor wear that has minimal impact on performance.
3	Fair	Operational performance lower than intended.
4	Poor	Operational performance much lower than intended.
5	Critical	Not performing as intended. Significant health and safety hazard.

Table 37 Asset Condition: Water Pollution Control Plant

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential long-term replacement spikes.

Figure 41 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

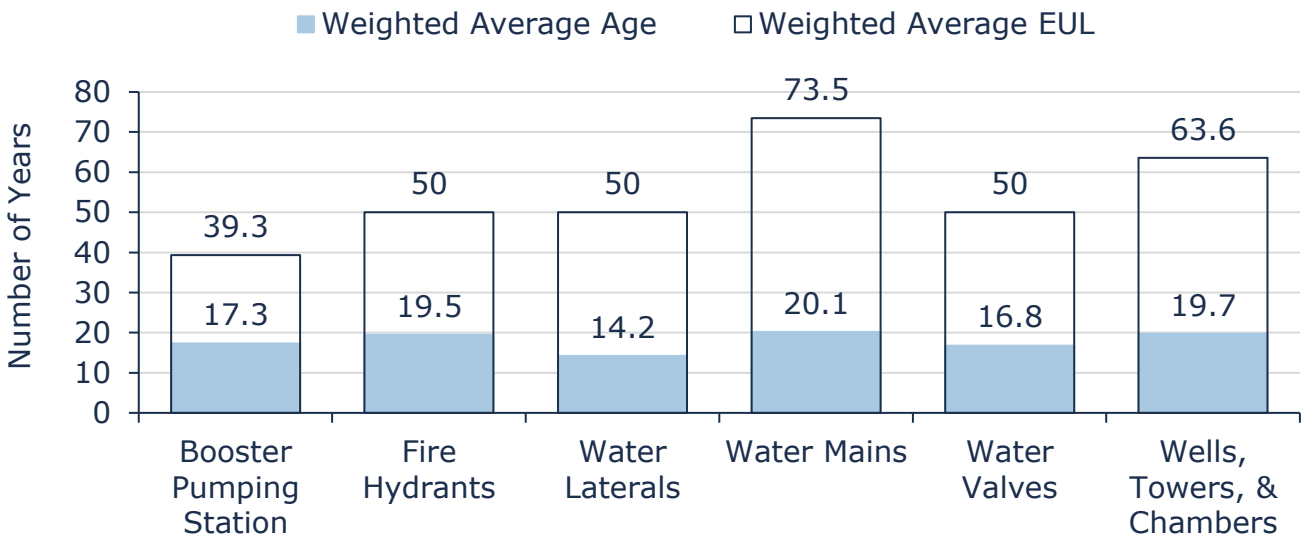


Figure 41 Estimated Useful Life vs. Asset Age: Water Network

Age analysis reveals that all water network assets are well within their estimated useful life.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	All watermains are flushed Town-wide spring and fall. Dead ends and problem areas are flushed more frequently as needed.
	Large diameter CPP transmission mains are inspected by electromagnetic and acoustic testing
	The State of the Good Repairs report includes condition assessment details for the water treatment plant, water chambers, booster pumping stations, wells, reservoirs, and standpipes. The condition assessments assist staff in evaluating investment decisions.
	• The Town has a comprehensive inspection and preventative maintenance program as part of the Drinking Water Quality Management Standard (DWQMS). This includes exterior inspections of towers and standpipes as well as ROV interior inspections of tanks and reservoirs. • Production wells are inspected, and pumping equipment are refurbished every 5 years. • Chambers are pumped and inspected annually. • Compliance has a full maintenance schedule that is reviewed

	annually.
	The State of the Good Repairs report also includes recommendations for capital reapirs and rehabilitations. These recommednations are an important consideration in project selection.
Rehabilitation/ Replacement	Similar to other sub-surface infrastructure, Staff attempt to coordinate water reconstruction projects with road reconstruction project to produce cost efficiencies Moreover, the Town has some areas where the roads are still in good shape and the watermains are declining in condition. Therefore, the Town has a watermain relining program to mitigate surface disruption and to mitigate remediation costs.

Table 50 Lifecycle Management Strategy: Water Network

Risk Analysis

The risk matrix below is generated using available asset data, including condition and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 **Very Low** $155,292,000 (56%)	5 - 7 **Low** $45,536,000 (16%)	8 - 9 **Moderate** $11,595,000 (4%)	10 - 14 **High** $40,844,000 (15%)	15 - 25 **Very High** $24,799,000 (9%)

Figure 42 Risk Matrix: Water Network

Levels of Service

The tables that follow summarize the Town's community levels of service for water network assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system	The water system provides potable water to Bradford West Gwillimbury's Urban Area, Bond Head Settlement Area and Hwy 400 Employment Area. Potable water is provided for residential and business consumption, as well as for recreational uses and maintenance operations. The scope of the Town's water system is illustrated in Appendix O. The water network map shows the geographical distribution of municipal water mains and facilities within the service area.
	Description, which may include maps of the user groups or areas of the municipality that have fire flow	The water system is managed with the goal of providing a safe and reliable water supply, minimizing service interruptions and occurrences of adverse water quality events (measured by occurrences of boil water advisories).
Reliability	Description of boil water advisories and service interruptions	The water system is managed with the goal of providing a safe and reliable water supply, minimizing service interruptions and occurrences of adverse water quality events (measured by occurrences of boil water advisories).
Capacity	N/A	The Town balances customer water demands with environmental and system capacity constraints.
Responsiveness	N/A	The Town is responsive to issues identified by water customers.
Cost	N/A	The Town strives to deliver service at an affordable cost to customers.
Efficiency	N/A	The Town strives to minimize water loss in the distribution system.

Table 51 O. Reg. 588/17 Community Levels of Service: Water Network

Appendix D: Wastewater Network

The wastewater network provides the essential service of wastewater collection, disposal, and treatment for the community, and has a current replacement value of over $296.4 million.

Inventory & Valuation

Table 52 and Figure 43 summarize the quantity and current replacement cost of the Town's various wastewater network assets as managed in its primary asset management register, Citywide Assets.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Chambers	27	Assets	$3,222,450	Cost/Unit
Force Mains	32,517	Meters	$23,217,490	Cost/Unit
Gravity Mains	134,905	Meters	$78,858,829	Cost/Unit
Manholes	2,071	Assets	$27,620,949	Cost/Unit
Pumping Stations	28	Assets	$59,884,146	CPI
WWTP	1,081	Assets	$103,648,197	User-Defined
TOTAL			**$296,452,000**	

Table 52 Detailed Asset Inventory: Wastewater Network

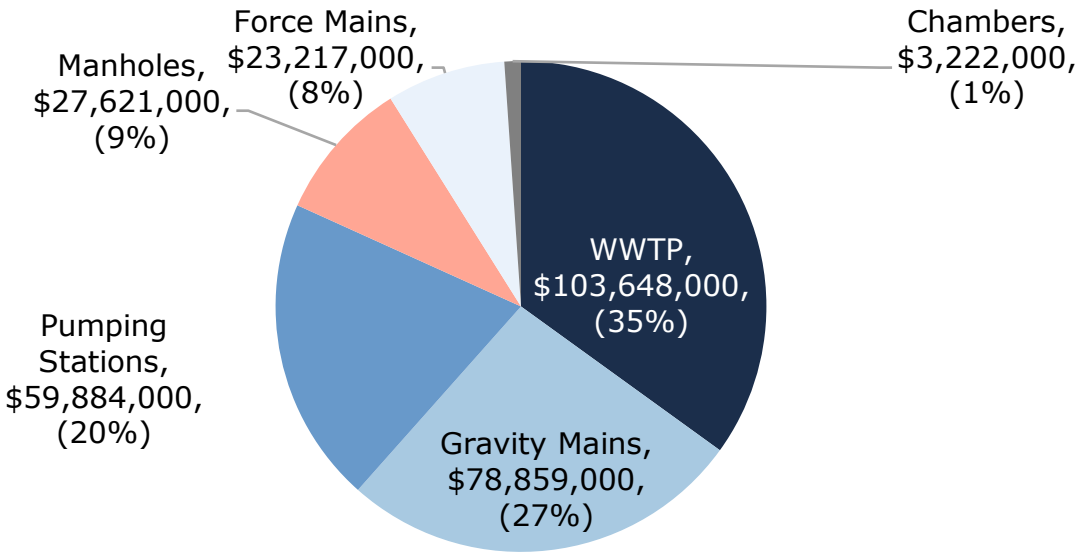


Figure 43 Portfolio Valuation: Wastewater Network

Asset Condition

Figure 44 summarizes the replacement cost-weighted condition of the Town's wastewater network[32]. Based on a combination of field inspection data and age, 85% of assets are in fair or better condition; the remaining 15% of assets are in poor to very poor condition. Condition assessments were available for all waste water treatment plant assets. This condition data was projected from inspection date to current year to estimate their condition today. No condition data was available for all other asset segments.

Assets in poor or worse condition may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition. As illustrated in Figure 44 the majority of the Town's wastewater network assets are in fair or better condition.

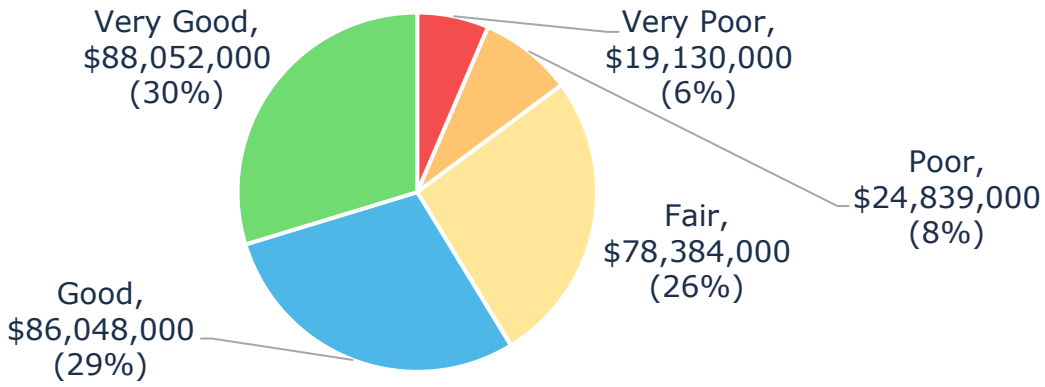


Figure 44 Asset Condition: Wastewater Network Overall

As illustrated in Figure 45, approximately 20% of pumping stations and WWTP assets (weighted by replacement costs) are in poor or worse condition.

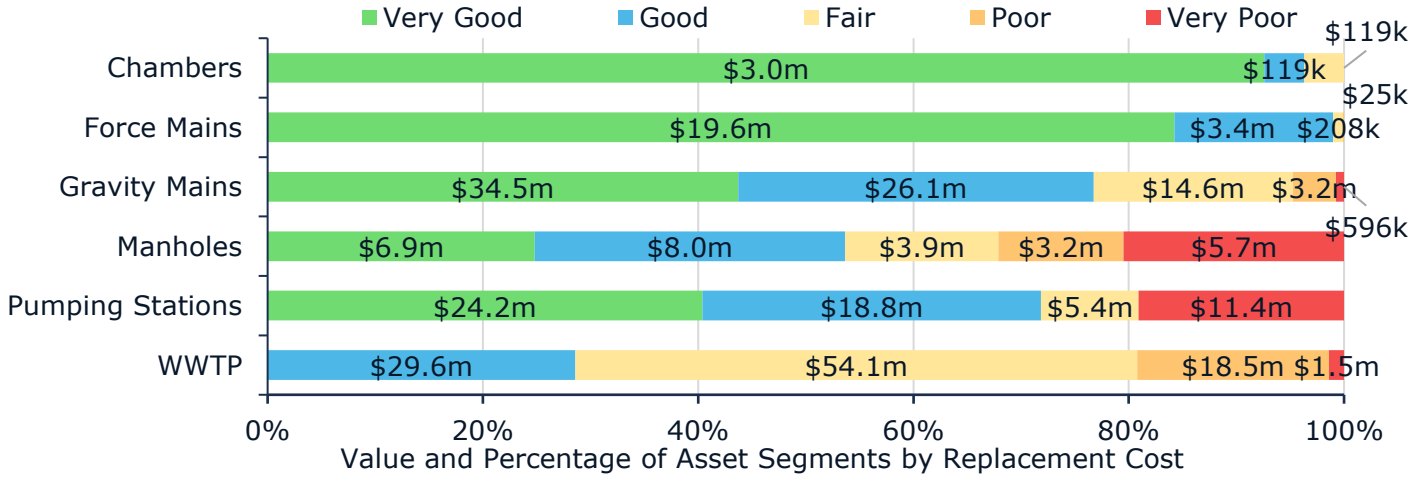


Figure 45 Asset Condition: Wastewater Network by Segment

[32] Wastewater asset condition information is in the process of being collected and was not available for inclusion in this AMP. The Town is actively compiling and assigning assessed condition data, which is expected to be incorporated into a future update of the Plan.

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential long-term replacement spikes.

Figure 46 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

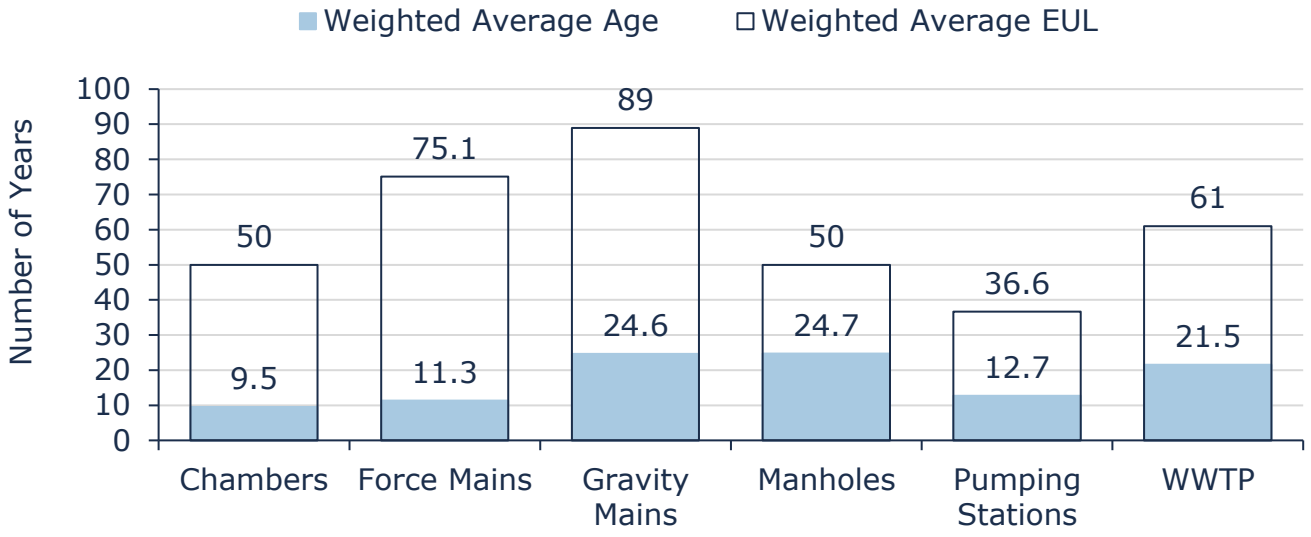


Figure 46 Estimated Useful Life vs. Asset Age: Wastewater Network

Age analysis reveals that all wastewater network assets are well within their estimated useful life.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
	The Town utilizes CCTV to inspect wastewater mains in subdivisions to identify potential issues. Most lines are inspected every 5 years. Inspection is currently ongoing for lateral assets.
Inspection & Maintenance	• In 2020, the Town procured an assessment of their wastewater treatment plant from a third-party engineering firm. The culmination of the assessments is reported in the State of the Good Repairs report. Collected details include condition assessments and recommendations for repairs and rehabilitations. This information assists staff in understanding asset conditions and in evaluating and selecting wastewater investments. • Annual pump inspections completed throughout the system (main pumps) • Entire town's mainline sewers flushed every 2 years (Town owned sewers) • Valve Chamber inspections and exercising for force mains bi-annually • Manhole inspections approx. every 5-10 years by third party contractor • Wet well cleanouts and inspections annually • I and I study Approx. every 5-10 years
Rehabilitations & Replacements	Capital investment decisions are largely driven by the results of the State of Good Repairs Report and the CCTV assessments. This is considered alongside other considerations like coordination with road projects and strategic initiatives.

Table 53 Lifecycle Management Strategy: Wastewater Network

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 **Very Low** $128,627,000 (43%)	5 - 7 **Low** $74,213,000 (25%)	8 - 9 **Moderate** $12,839,000 (4%)	10 - 14 **High** $60,598,000 (20%)	15 - 25 **Very High** $20,176,000 (7%)

Figure 47 Risk Matrix: Wastewater Network

Levels of Service

The tables that follow summarize the Town's community levels of service for wastewater network assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system	The Wastewater system serves residential, business, and institutional customers in the Bradford West Gwillimbury Urban Area, Bond Head Settlement Area and Hwy 400 Employment Area. The scope of the Town's wastewater system is illustrated in Appendix O. The maps show the geographical distribution of municipal wastewater mains within the service areas. The wastewater system is managed with the goal of providing reliable wastewater services. For example, the Town seeks to minimize wastewater backups.
Reliability	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Town's wastewater and stormwater collection systems are nominally separate, meaning that sanitary and stormwater flows are carried in different pipes with different destinations.
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches	N/A: There are no combined sewers in the Town.
	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into	stormwater inflows and infiltrates into the sanitary system from numerous sources.

Service Attribute	Qualitative Description	Current LOS (2024)
	streets or backup into homes	
	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to stormwater infiltration	The Town ensures that new infrastructure is installed correctly and functioning as intended. As an example, the Town inspects wastewater mains in subdivisions using CCTV to identify potential issues prior to assuming the assets.
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	The Town's Wastewater Treatment Plant discharges effluent into the West Holland River. Municipal staff put forth all efforts to operate the plant at maximum removal efficiency and within the rated capacity of the facility. The final effluent design objectives are identified in the facility's Environmental Compliance Approval (9725-8W4QSG).
Quality	N/A	The Town ensures that new infrastructure is installed correctly and functioning as intended. As an example, the Town inspects wastewater mains in subdivisions using CCTV to identify potential issues prior to assuming the assets. The Town minimizes odours from the wastewater system by maintaining assets properly and designing systems to minimize odours.
Capacity	N/A	The capacity of the wastewater system meets the needs of users. The Town monitors usage and plans for future needs to ensure that development will not be limited by the capacity of the wastewater system.
Stakeholder Engagement	N/A	The Town engages the public to ensure that the wastewater system is not misused. For example, the Town supports the "I don't flush" campaign that educates users about things that should not be disposed of through the wastewater system.

Table 54 O. Reg. 588/17 Community Levels of Service: Wastewater Network

Appendix E: Stormwater Network

The Town's stormwater network comprises of catch basins, non-structural culverts, sewer mains and other critical supporting capital assets with a total current replacement cost of approximately $275.3 million.

Inventory & Valuation

Table 55 and Figure 48 summarize the quantity and current replacement cost of all stormwater network assets available in the Town's asset register.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Catch Basins	3,705	Assets	$31,056,000	Cost/Unit
Maintenance Holes	2,162	Assets	$40,580,386	Cost/Unit
Non-Structural Culverts	742	Assets	$16,243,246	Cost/Unit
Storm Laterals	54,231	Meters	$26,517,648	Cost/Unit
Storm Outlets	22	Assets	$299,686	Cost/Unit
Stormwater Mains & Chambers	142,375	Meters	$160,649,767	Cost/Unit
TOTAL			**$275,347,000**	

Table 55 Detailed Asset Inventory: Stormwater Network

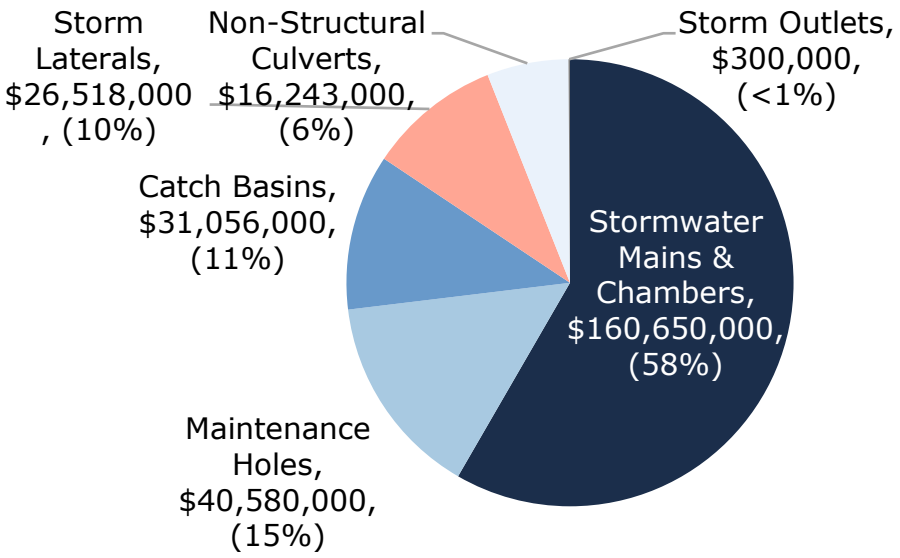


Figure 48 Portfolio Valuation: Stormwater Network

Asset Condition

Figure 49 summarizes the replacement cost-weighted condition of the Town's stormwater network assets. Based on a combination of assessed condition, and age data, approximately 17% of assets are in poor to very poor condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

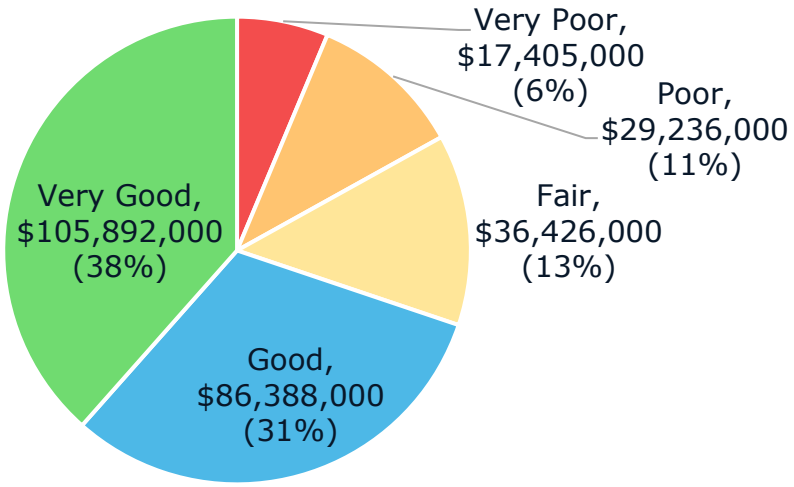


Figure 49 Asset Condition: Stormwater Network Overall

Figure 50 summarizes the age-based condition of stormwater network assets. The analysis illustrates that the majority of stormwater mains are in fair or better condition. However, more than 20% of catch basins and are in poor or worse condition.

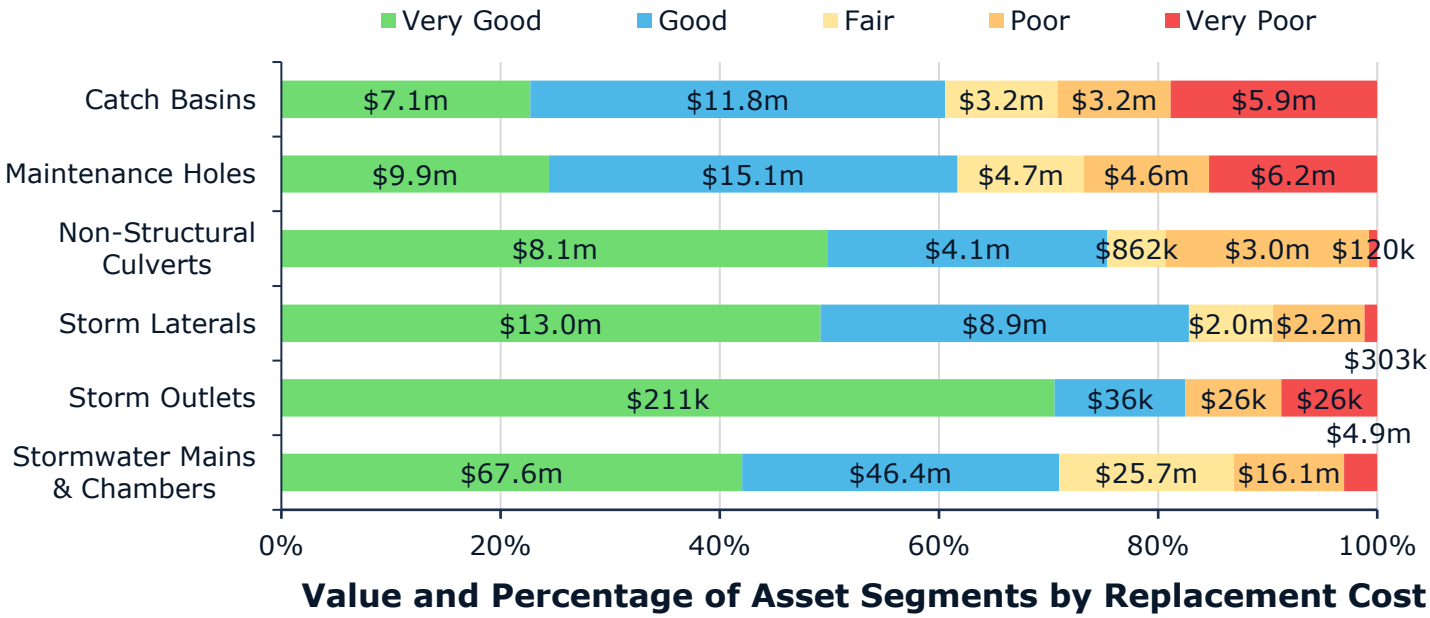


Figure 50 Asset Condition: Stormwater Network by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 51 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

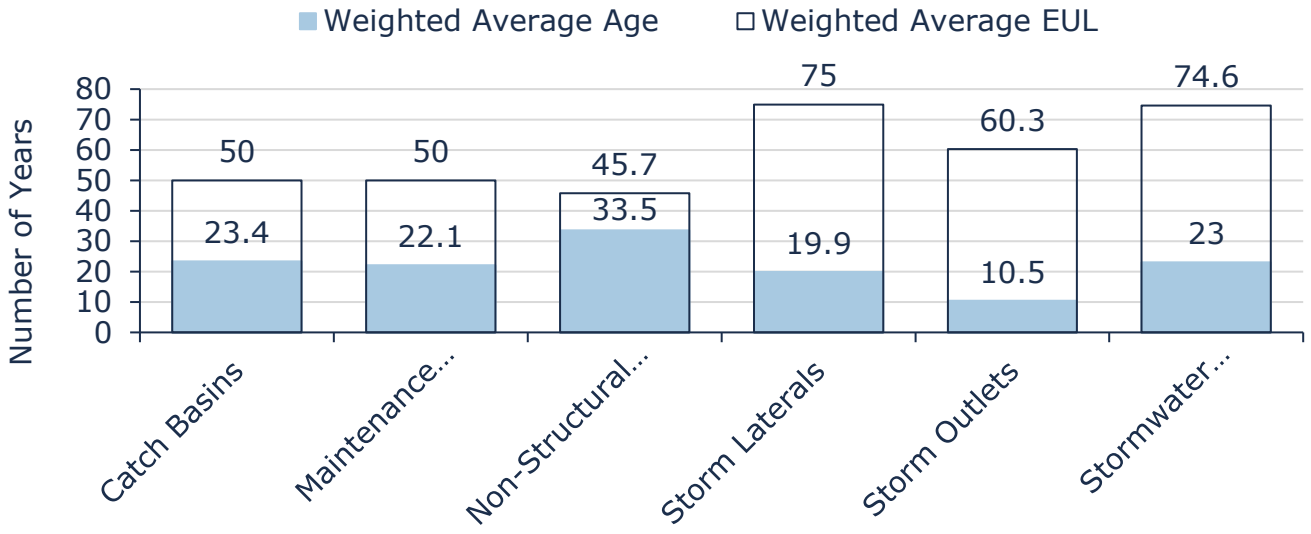


Figure 51 Estimated Useful Life vs. Asset Age: Stormwater Network

Age analysis reveals that on average, all storm water assets are well within their expected lifecycle. Age profiles and CCTV inspections will help to identify mains in need of replacements and/or upgrades.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Maintenance	Catch basins are cleaned every 2-years, and outlets are inspected regularly to ensure unobstructed flow
	The Town generally flushes 10-15% of stormwater network on an annual basis.
	Sections of stormwater mains are inspected to identify deficiencies. As of 2025, approximately 70% of the network had been inspected over the previous five years.
Replacement	Stormwater collection assets are considered to have simple lifecycles that do not require rehabilitation investments; instead, components are typically replaced at the end of their useful lives.

Table 56 Lifecycle Management Strategy: Stormwater Network

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 **Very Low**	5 - 7 **Low**	8 - 9 **Moderate**	10 - 14 **High**	15 - 25 **Very High**
$202,734,000 (74%)	$47,193,000 (17%)	$13,341,000 (5%)	$8,365,000 (3%)	$3,714,000 (1%)

Figure 52 Risk Matrix: Stormwater Network

Levels of Service

The tables that follow summarize the Town's community levels of service for the stormwater network assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Qualitative Description	Current LOS (2024)
Scope	Description, which may include map, of the user groups or areas of the Town that are protected from flooding, including the extent of protection provided by the municipal storm water network	The stormwater management system serves the Bradford West Gwillimbury Urban Area, Bond Head Settlement Area, specific sites in the Hwy 400 Employment Area and various rural estate residential developments. The scope of the Town's stormwater system is illustrated in Appendix O. The map shows the geographical distribution of municipal stormwater mains and ponds.
Reliability	N/A	The Town seeks to ensure the reliable operation of its stormwater management system through regular monitoring and maintenance of its stormwater infrastructure.
Stakeholder Engagement	N/A	The Town keeps the public informed about stormwater services and responds to concerns raised.

Table 57 O. Reg. 588/17 Community Levels of Service: Stormwater Network

Non-Core Assets

Appendix F: Facilities

The Town's facilities portfolio includes facilities for emergency services, community center and operations facilities, as well as sports and other assets. The total current replacement of facilities is estimated at more than $230 million.

Inventory & Valuation

Table 58 and Figure 53 summarize the quantity and current replacement cost of all buildings assets available in the Town's asset register. The majority of facilities are not componentized. The quantity listed represents the number of asset records currently available for each department.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Community Centre	128,747	Assets	$69,650,197	CPI
Emergency Services	57,875	Assets	$19,652,954	CPI
Municipal Building	11,356	Assets	$4,359,798	CPI
Operations	74,577	Square Feet	$22,424,699	CPI
Other	28,826	Square Feet	$9,652,423	CPI
Sports	196,817	Assets	$105,092,532	CPI
TOTAL			**$230,833,000**	

Table 58 Detailed Asset Inventory: Facilities

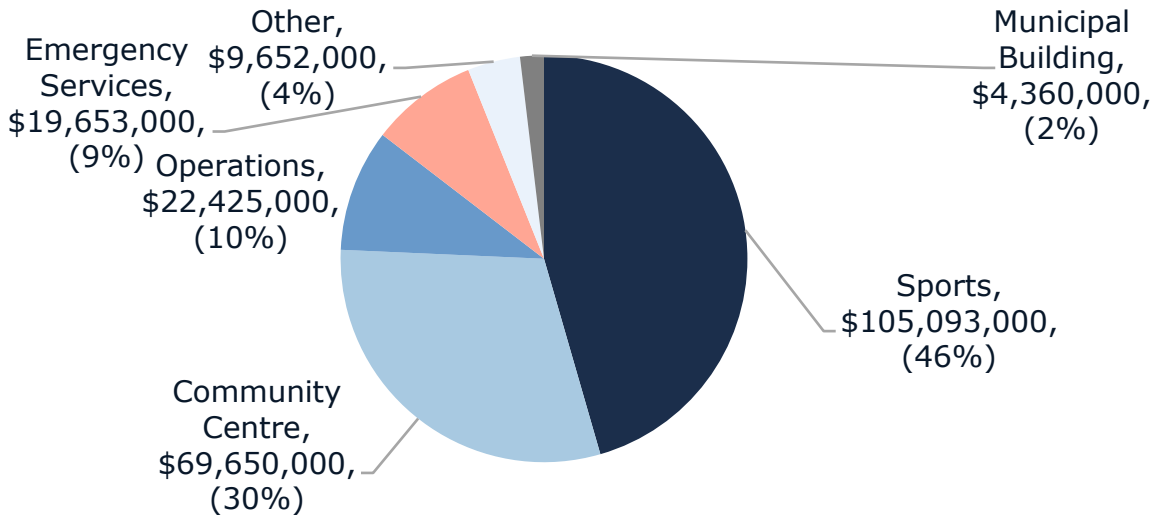


Figure 53 Portfolio Valuation: Facilities

Asset Condition

Figure 54 summarizes the replacement cost-weighted condition of the Town's facilities portfolio. Based a combination of age & assessed data, 62% of facilities assets are in fair or better condition; however, 38% in poor or worse condition.

These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

As facilities are not componentized, condition data is presented only at the site level, rather than at the individual element or component level within each building.

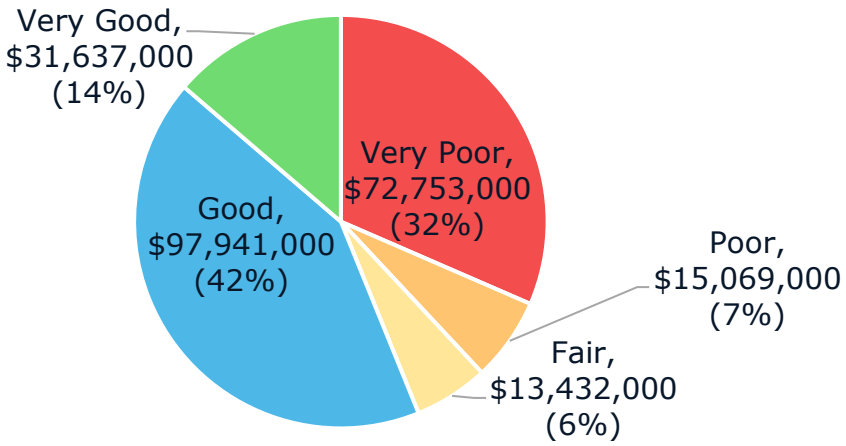


Figure 54 Asset Condition: Facilities Overall

Figure 55 summarizes the age-based condition of facilities by each department. A substantial portion of community center assets and all municipal office assets are in poor to worse condition. However, in the absence of componentization, this data has limited value. Componentization of assets and integration of condition assessments will provide a more accurate and reliable estimation of the condition of various facilities.

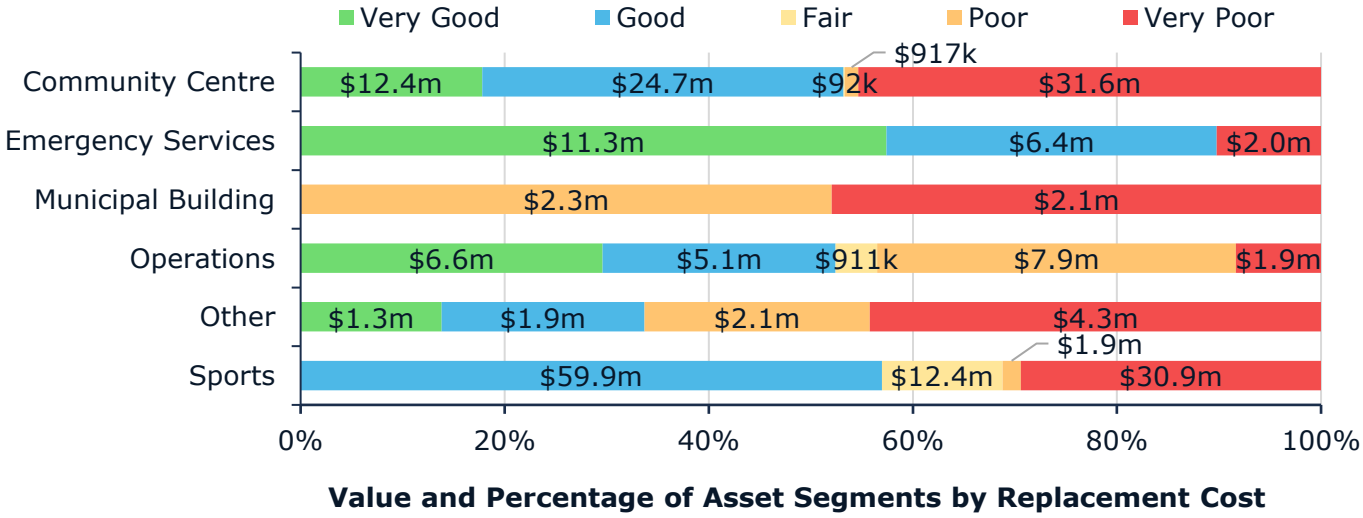


Figure 55 Asset Condition: Facilities by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 56 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

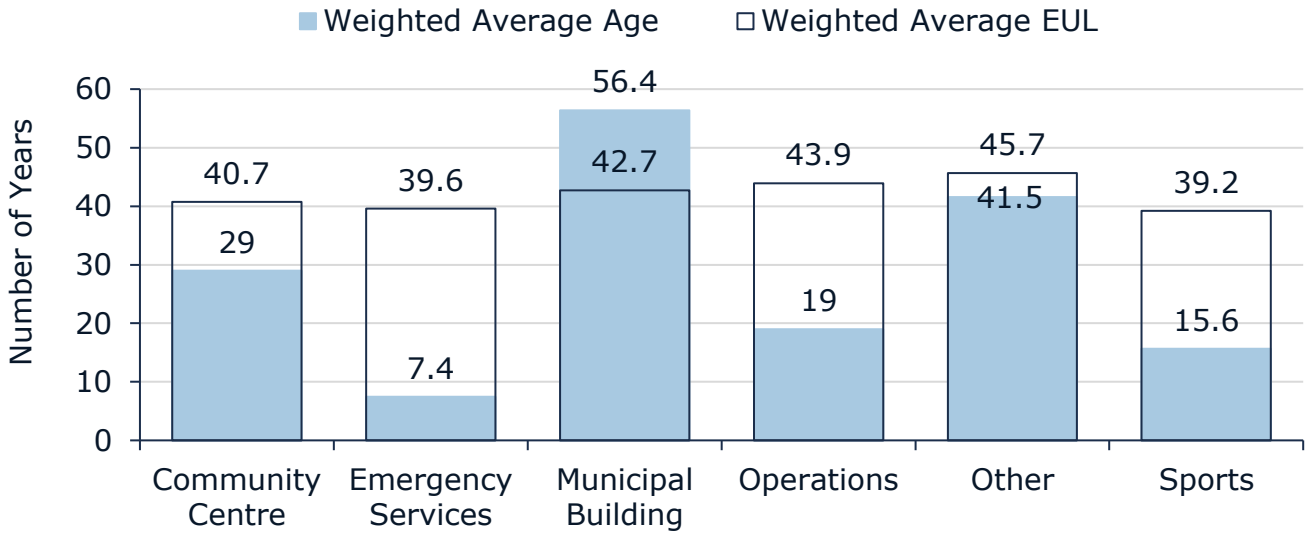


Figure 56 Estimated Useful Life vs. Asset Age: Facilities

Age analysis reveals that, based on acquisition years, municipal building assets remain in service well beyond their expected useful life. Once again, this analysis presented only at the site level, rather than at the individual element or component level. Useful and meaningful age analysis for buildings is entirely predicated on effective componentization.

Current Approach to Lifecycle Management

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.

Table 59 outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance	Maintenance is triggered by inspections idenfifying safety, accessibility, functionality, and structural issues.
	Routine/preventative maintenance is performed on assets such as HVAC equipment.
	All other maintenance activities are completed on a reactive basis when operational issues are identified through complaints and/or service requests.
Rehabilitation/ Replacement	Rehabilitations such as roof replacements or HVAC component replacements are considered on an as needed basis.
	The primary considerations for asset replacement are asset failure, availability or grant funding, safety issues, and volume of use.
Inspections	All buildings receive a health and safety inspections on a regular basis (some monthly, and others yearly), which involve a building walkthrough to identify defects and safety hazards.

Table 59 Lifecycle Management Strategy: Facilities

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix classifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 Very Low $510,000 (<1%)	5 - 7 Low $32,470,000 (14%)	8 - 9 Moderate $875,000 (<1%)	10 - 14 High $97,228,000 (42%)	15 - 25 Very High $99,750,000 (43%)

Figure 57 Risk Matrix: Facilities

Levels of Service

The tables that follow summarize the Town's community levels of service for facility assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Current LOS (2024)
Quality	The Town strives to maintain its facilities at a level that provides pleasant user experience.
Efficiency	The Town strives to reduce emissions of greenhouse gases and avoid unnecessary operating costs.
Accessibility	The Town strives to ensure accessibility in all facilities in accordance with the requirements of the Ontarians with Disabilities Act, 2001 (ODA), Accessibility for Ontarians with Disability Act, 2005 (AODA) and the Ontario Human Rights Code (The Code).
Availability	The Town strives to align capacity of facilities to service demand.

Table 60 Community Levels of Service: Facilities

Appendix G: Land Improvements

The Town's land improvements portfolio includes fields and courts, outdoor seating and receptacles, park facilities & structures, and walking paths. The total current replacement of land improvements is estimated at approximately $37.5 million.

Inventory & Valuation

Table 61 and Figure 58 summarize the quantity and current replacement cost of all land improvements assets. Fields and courts account for the largest share of the land improvements asset group.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Fields and Courts	103	Assets	$17,394,748	User-Defined
Outdoor Seating & Receptacles	247	Assets	$1,338,304	User-Defined
Parks Facilities	31	Assets	$4,282,088	User-Defined
Play Structures	49	Assets	$5,978,019	User-Defined
Walking Paths	15,953	Meters	$8,557,472	User-Defined
TOTAL			**$37,551,000**	

Table 61 Detailed Asset Inventory: Land Improvements

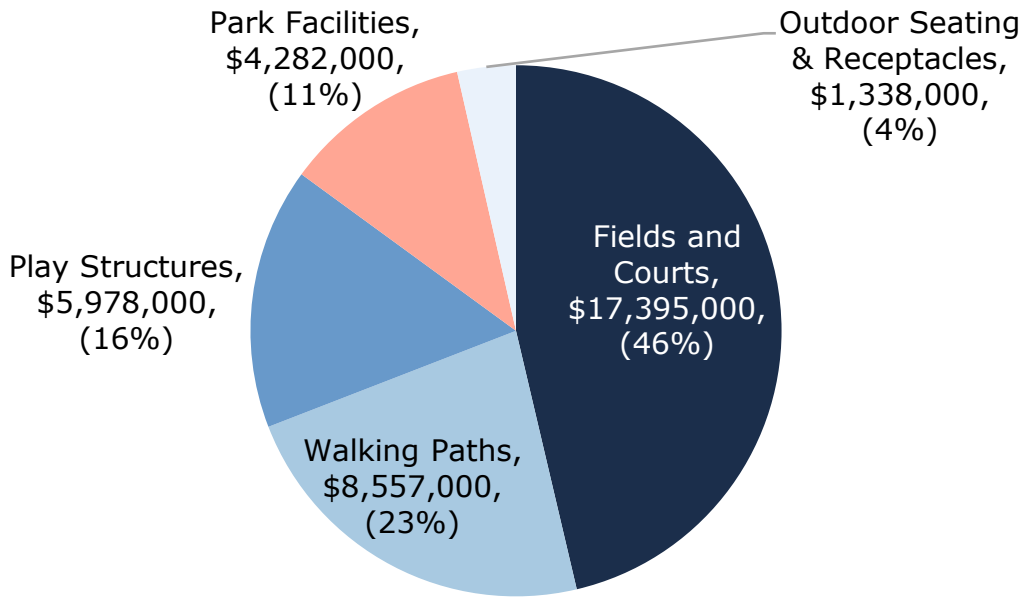


Figure 58 Portfolio Valuation: Land Improvements

Asset Condition

Figure 59 summarizes the replacement cost-weighted condition of the Town's land improvements portfolio. Based on age data only, 60% of assets are in fair or better condition, the remaining 40% are in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

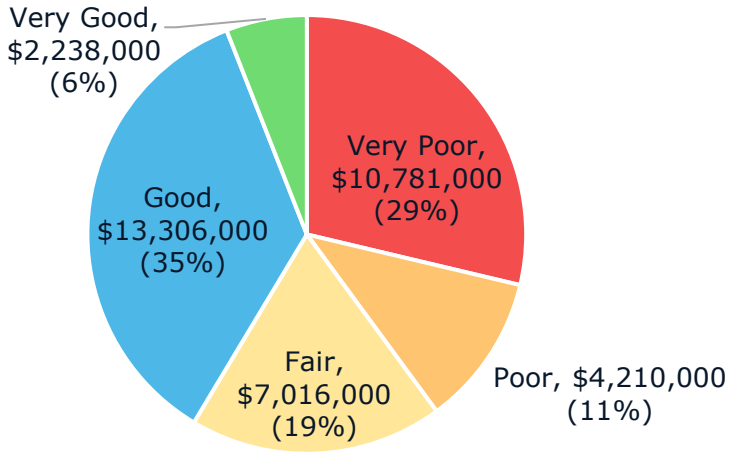


Figure 59 Asset Condition: Land Improvements Overall

Figure 60 summarizes the age-based condition of land improvements by each department. More than 50% of walking paths, and 40% of fields and courts are in poor or worse condition.

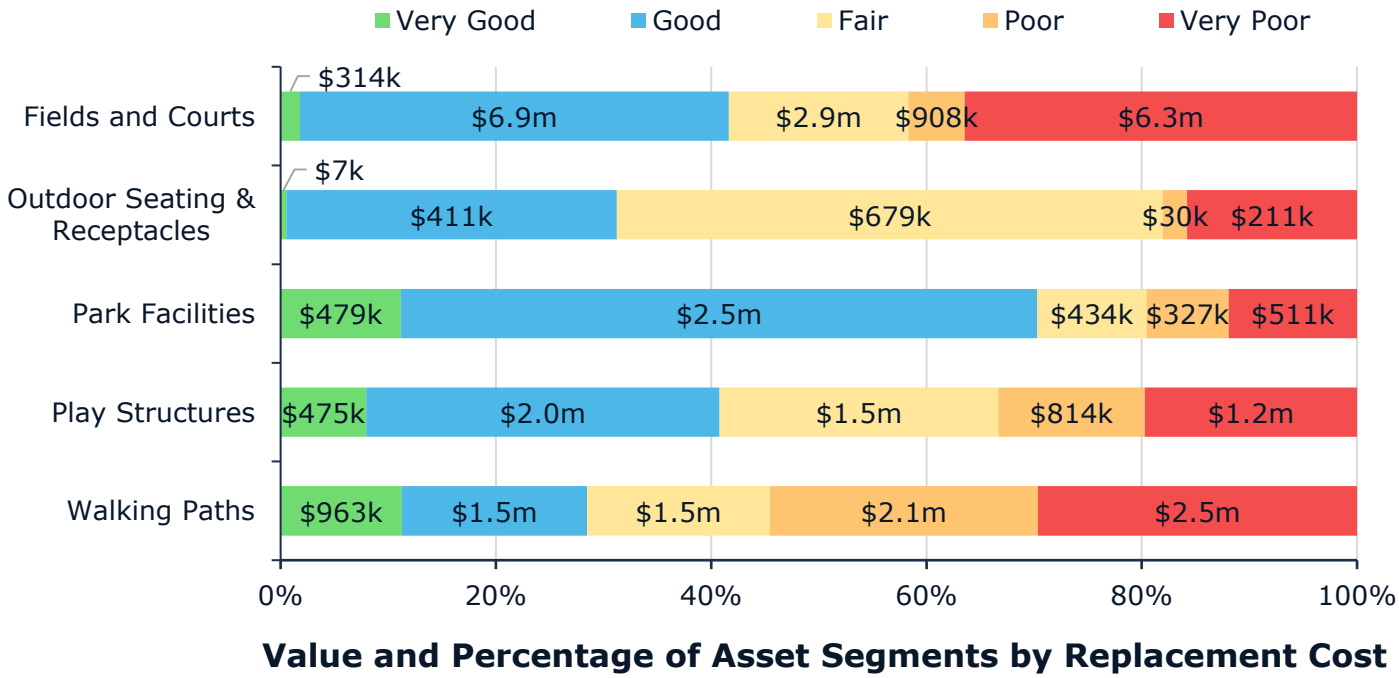


Figure 60 Asset Condition: Land Improvements by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 61 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

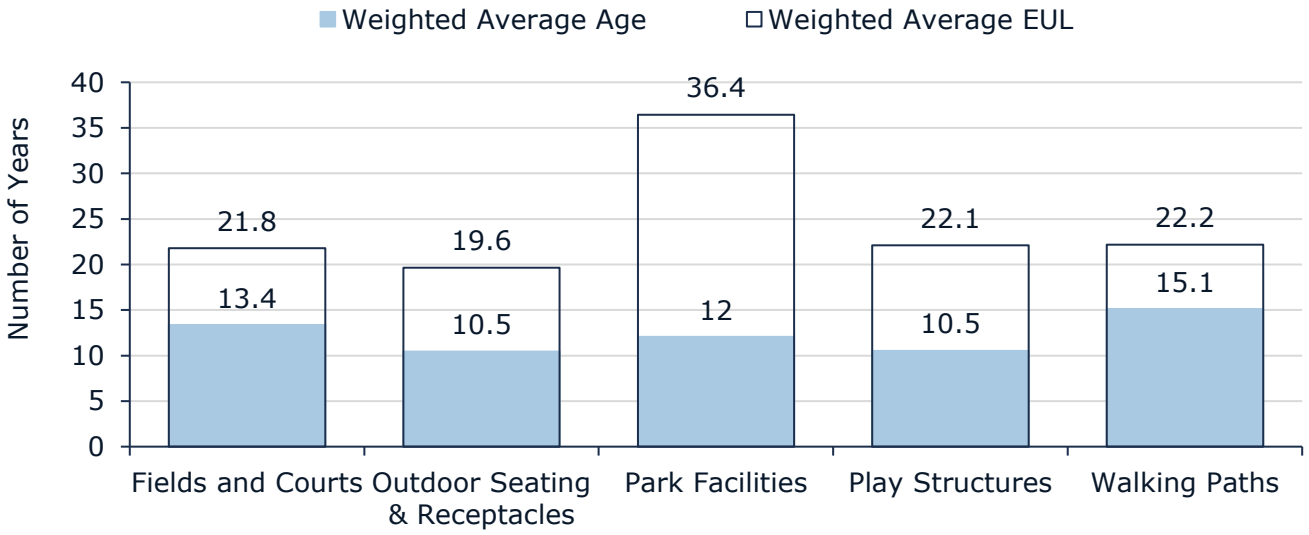


Figure 61 Estimated Useful Life vs. Asset Age: Land Improvements

Age analysis reveals that, all land improvements assets are well within their estimated useful life.

Current Approach to Lifecycle Management

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.

Table 62 outlines the Town's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance	Maintenance activities are completed on a reactive basis when operational issues are identified, through complaints, service requests, or ad-hoc inspections
Rehabilitation / Replacement	Without the availability of up-to-date condition assessment information replacement activities are purely reactive in nature
Inspections	Inspections are conducted on an ad-hoc basis

Table 62 Lifecycle Management Strategy: Land Improvements

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$6,752,000 (18%)	$4,965,000 (13%)	$3,784,000 (10%)	$9,233,000 (25%)	$12,817,000 (34%)

Figure 62 Risk Matrix: Land Improvements

Levels of Service

The tables that follow summarize the Town's community levels of service for land improvement assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Current LOS (2024)
Scope	The Town strives to align capacity of parks to service demand.

Service Attribute	Current LOS (2024)
Quality	The Town strives to maintain its parks at a level that provides a pleasant user experience.
Safety	The Town strives to ensure the safety of park visitors.
Efficiency	The Town strives to avoid unnecessary park operating costs.
Accessibility	The Town strives to ensure accessibility in all facilities in accordance with the requirements of the Ontarians with Disabilities Act, 2001 (ODA), Accessibility for Ontarians with Disability Act, 2005 (AODA) and the Ontario Human Rights Code (The Code).
Availability	The Town's parks and park amenities are typically available for use.

Table 63 Community Levels of Service: Land Improvements

Appendix H: Vehicles

The Town's vehicles portfolio includes 154 assets that support a variety of general and essential services, including public works, administration and emergency services. The total current replacement of vehicles is estimated at approximately $28.7 million.

Inventory & Valuation

Table 64 and Figure 63 summarize the quantity and current replacement cost of all vehicles assets available in the Town's asset register. Heavy duty vehicles account for the largest share of the vehicles portfolio.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Heavy Duty Vehicle	24	Assets	$18,266,304	User-Defined
Light Duty Vehicle	79	Assets	$5,691,917	User-Defined
Medium Duty Vehicle	19	Assets	$4,293,248	User-Defined
Trailers	32	Assets	$526,781	CPI
TOTAL			**$28,778,000**	

Table 64 Detailed Asset Inventory: Vehicles

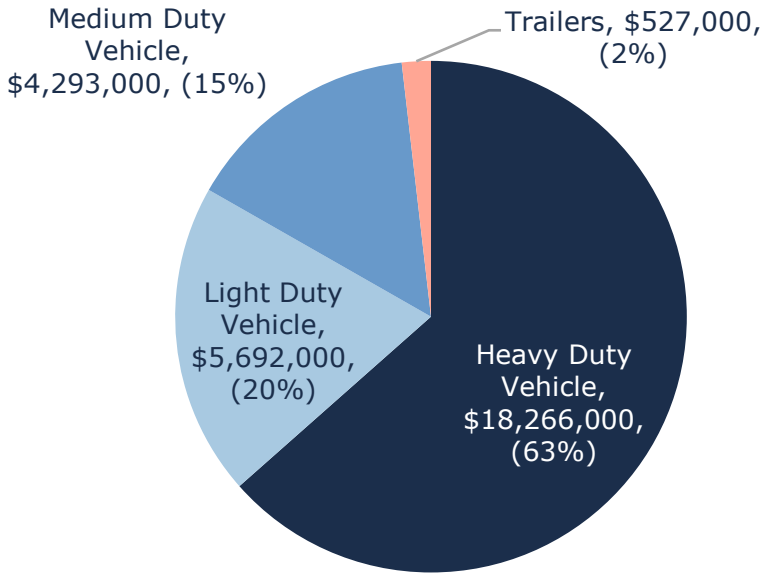


Figure 63 Portfolio Valuation: Vehicles

Asset Condition

Figure 64 summarizes the replacement cost-weighted condition of the Town's vehicles portfolio. Based primarily on age-based data, 35% of vehicles are in fair or better condition, with the remaining 65% in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

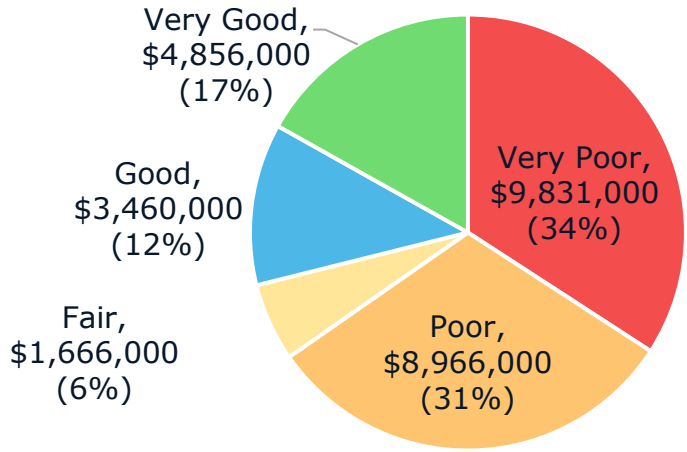


Figure 64 Asset Condition: Vehicles Overall

Figure 65 summarizes the condition of vehicles by each department. More than 50% of light, medium, and heavy duty vehicles are in poor or worse condition.

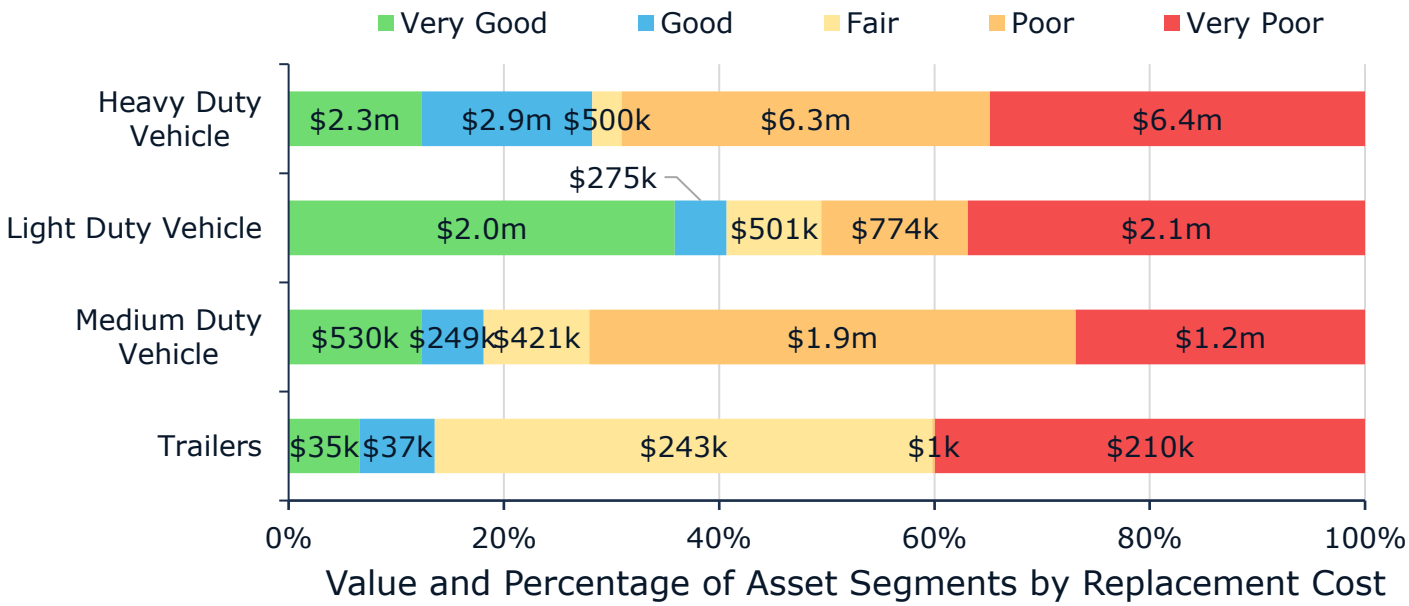


Figure 65 Asset Condition: Vehicles by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 66 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

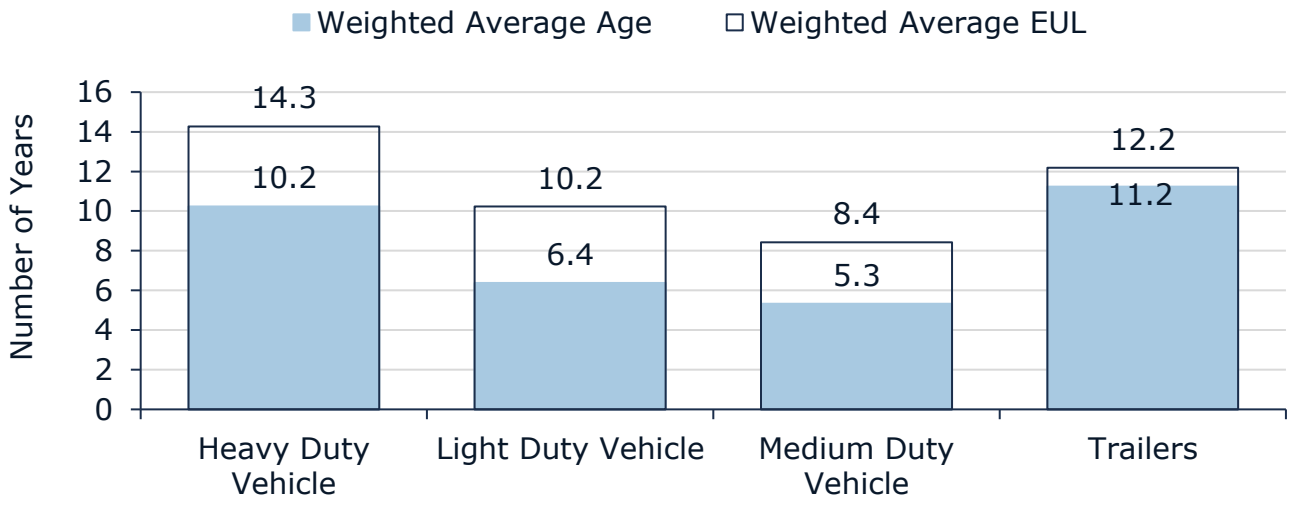


Figure 66 Estimated Useful Life vs. Asset Age: Vehicles

Age analysis reveals that, on average, most vehicles are in the latter stages of their expected life.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	The Town implements a preventive maintenance program designed to ensure that assets remain safe for their intended uses and adhere to legislative requirements. This program aims to prolong the use of the assets and reduce operational problems caused by poor maintenance.
	• The Town tracks maintenance inspection rates as a LOS. • The Town has an in-house mechanic to conduct fleet inspections, maintenance, and repairs. • Fire department utilizes Town mechanic whenever possible and have a 3rd party EVT that attends the station on a scheduled basis to repair and maintain Fire fleet & equipment.
	To maintain station air quality and vehicle performance, the Fire Service utilizes an air filtration system for diesel emission control, complying with Ministry of Labor guidance.
Rehabilitations & Replacement	• As noted in the Fire Master Plan, it is recommended that the Town explore installation of AVL technology on the fleet to improve monitoring and management. • As of 2025, the Transportation department has 2 AVL systems with the department fleet. However, Fire vehicles don't use any AVL technology yet.
	Asset replacements are guided primarily by the Town's fleet management policy.
	• As noted in the Fire Master Plan, it is recommended that the Fire Service formalize and adopt a specific apparatus replacement plan supported by Council policy and budget. • Fire apparatus is replaced based on a 15-year front line service and five as secondary with a max service life of 20 years.

Table 65 Lifecycle Management Strategy: Vehicles

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 Very Low $3,277,000 (11%)	5 - 7 Low $5,768,000 (20%)	8 - 9 Moderate $1,305,000 (5%)	10 - 14 High $4,626,000 (16%)	15 - 25 Very High $13,803,000 (48%)

Figure 67 Risk Matrix: Vehicles

Levels of Service

The tables that follow summarize the Town's community levels of service for vehicle assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Current LOS (2024)
Scope	Proper lifecycle management of vehicles, equipment, and machinery, including acquisition, disposal, maintenance, and repairs, is crucial for sustainable town service delivery. These assets play a vital role in facilitating or enhancing the quality of service provided while also contributing to a professional image within the community.
Safety	The Town's preventive maintenance program ensures assets are safe for use for their intended purposes and adhere to legislative requirements, prolonging use and reducing operational problems due to poor maintenance.
Reliability	Regularly assessing the condition of vehicles, equipment, and machinery maximizes their functionality and utilization. It also establishes a condition level that guides asset reallocation and replacement.

Table 66 Community Levels of Service: Vehicles

Appendix I: Machinery & Equipment

The Town's machinery & equipment portfolio includes 119 assets that support a variety of general and essential services. The total current replacement of machinery & equipment is estimated at approximately $11.7 million.

Inventory & Valuation

Table 70 and Figure 68 summarize the quantity and current replacement cost of all machinery & equipment assets available in the Town's asset register.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Heavy Duty Equipment	10	Assets	$4,750,000	User-Defined
Light Duty Equipment	70	Assets	$6,665,203	User-Defined
Small Equipment	39	Assets	$333,943	CPI
TOTAL			**$11,749,000**	

Table 67 Detailed Asset Inventory: Machinery & Equipment

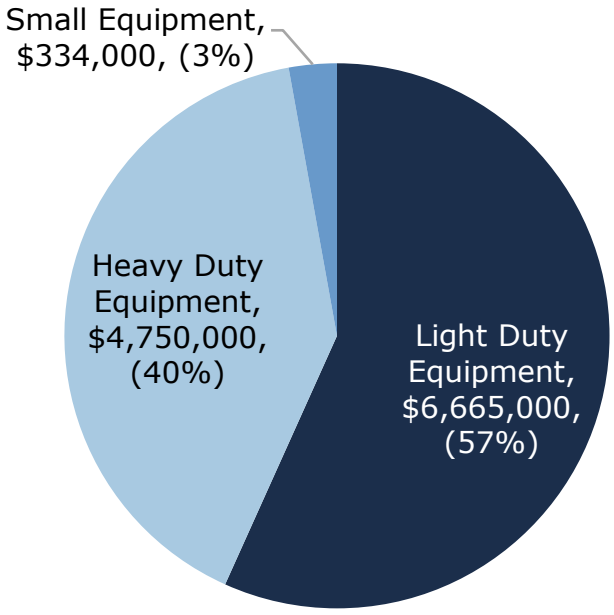


Figure 68 Portfolio Valuation: Machinery & Equipment

Asset Condition

Figure 69 summarizes the replacement cost-weighted condition of the Town's machinery & equipment portfolio. Based only on age data, 66% of assets are in fair or better condition; the remaining 34% are in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

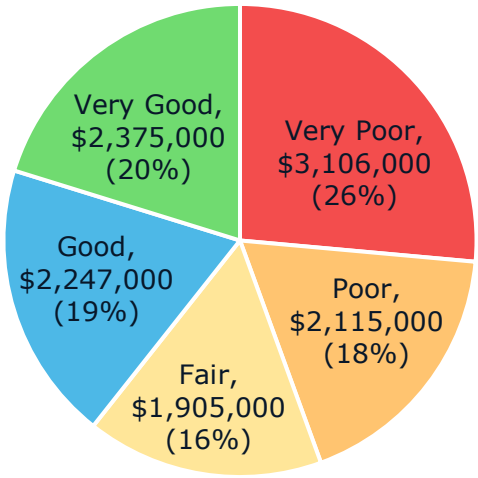


Figure 69 Asset Condition: Machinery & Equipment Overall

Figure 70 summarizes the age-based condition of machinery & equipment by each department. The majority of assets that support fire services are in fair or better condition. Majority of light duty equipment are in poor or worse condition.

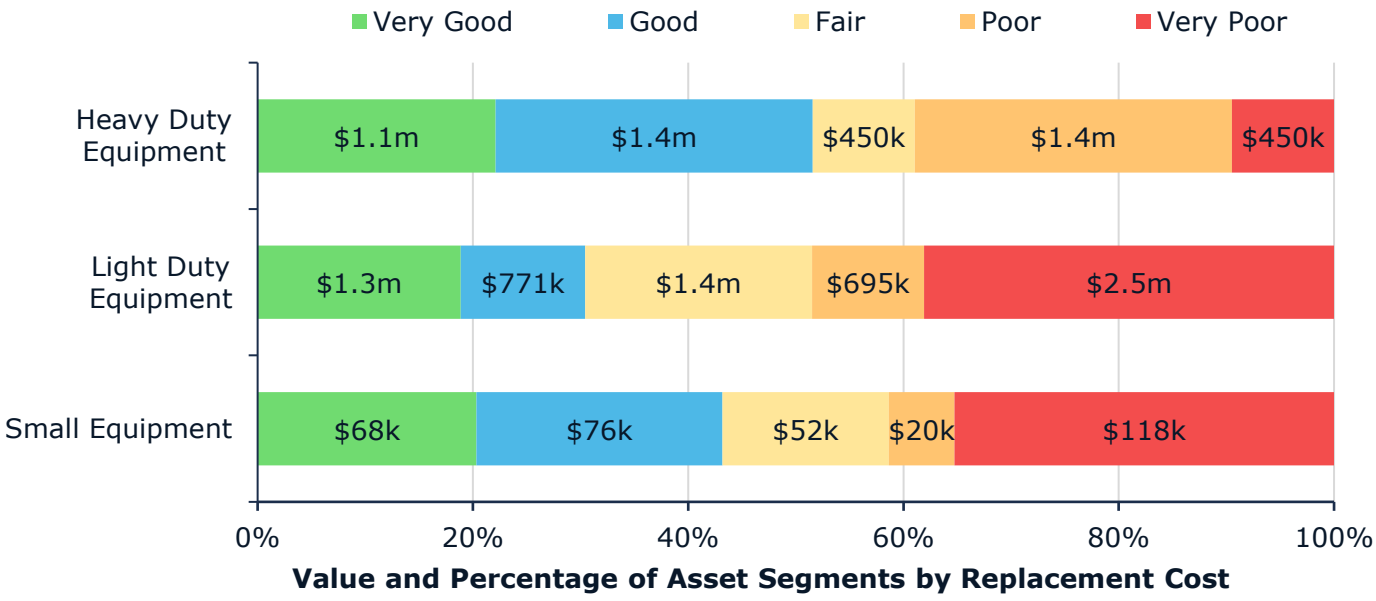


Figure 70 Asset Condition: Machinery & Equipment by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 71 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

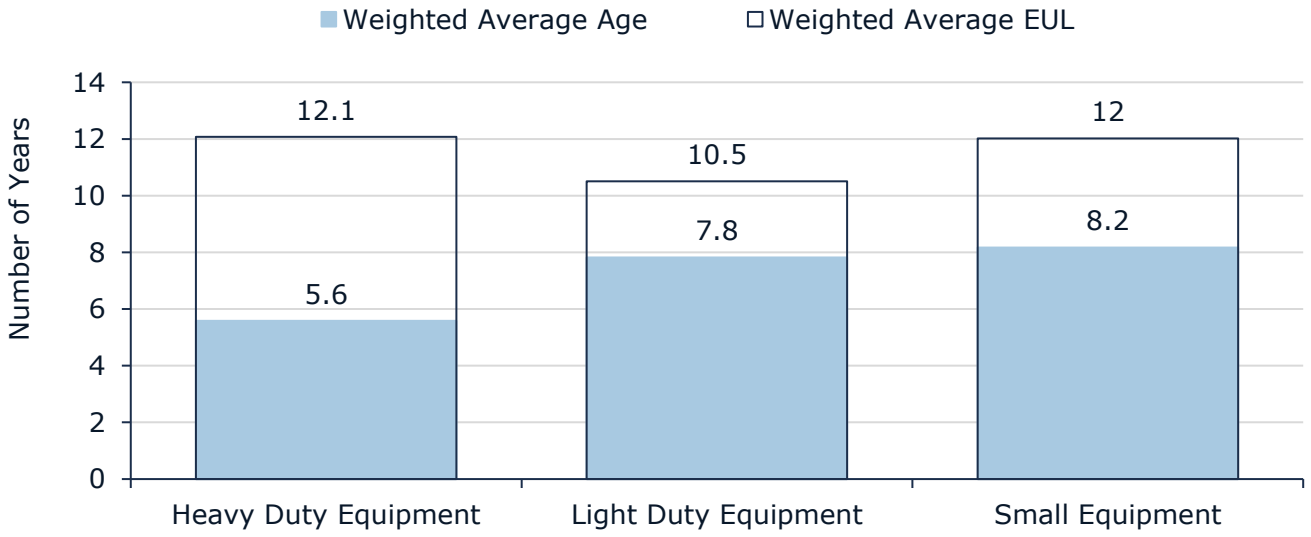


Figure 71 Estimated Useful Life vs. Asset Age: Machinery & Equipment

Age analysis reveals that, all machinery & equipment assets are well within their estimated useful life.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	Machinery and eqipment assets, especially heavy and light duty assets, are regularly inspected
	A preventative maintenance program is in place to ensure asset remain safe for intended use and comply with legislative requirements
	All other maintenance activities are completed on a reactive basis when operational issues are identified (e.g., mechanical breakdown, deficiencies identified during daily inspections)
Replacement	Assets are generally forecasted for replacement based on their age. The Town uses specific age and usage criteria to guide the replacement of different types of equipment. For example, heavy-Duty equipment is typically replaced between 14-20 years or 8,000-10,000 hours.

Table 68 Lifecycle Management Strategy: Machinery & Equipment

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement cost.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$3,486,000 (30%)	$1,774,000 (15%)	$2,027,000 (17%)	$2,222,000 (19%)	$2,240,000 (19%)

Figure 72 Risk Matrix: Machinery & Equipment

Levels of Service

The tables that follow summarize the Town's community levels of service for machinery and equipment assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Current LOS (2024)
Scope	Proper lifecycle management of vehicles, equipment, and machinery, including acquisition, disposal, maintenance, and repairs, is crucial for sustainable town service delivery. These assets play a vital role in facilitating or enhancing the quality of service provided while also contributing to a professional image within the community.
Safety	The Town's preventive maintenance program ensures assets are safe for use for their intended purposes and adhere to legislative requirements, prolonging use and reducing operational problems due to poor maintenance.
Reliability	Regularly assessing the condition of vehicles, equipment, and machinery maximizes their functionality and utilization. It also establishes a condition level that guides asset reallocation and replacement.

Table 69 Community Levels of Service: Machinery & Equipment

Appendix J: Pooled Assets

The Town's pooled assets portfolio includes 87 pooled assets that support a variety of general and essential services, including fire. The total current replacement of pooled assets is estimated at approximately $3.2 million.

Inventory & Valuation

Table 70 and Figure 68 summarizes the quantity and current replacement cost of all pooled assets available in the Town's asset register.

Segment	Quantity	Unit of Measure	Replacement Cost	Primary RC Method
Computer Hardware	3	Assets	$140,541	CPI
Fire Equipment	47	Assets	$1,866,364	CPI
Furniture & Fixtures	19	Assets	$885,118	CPI
Printers/Others	18	Assets	$319,795	CPI
TOTAL			**$3,212,000**	

Table 70 Detailed Asset Inventory: Pooled Assets

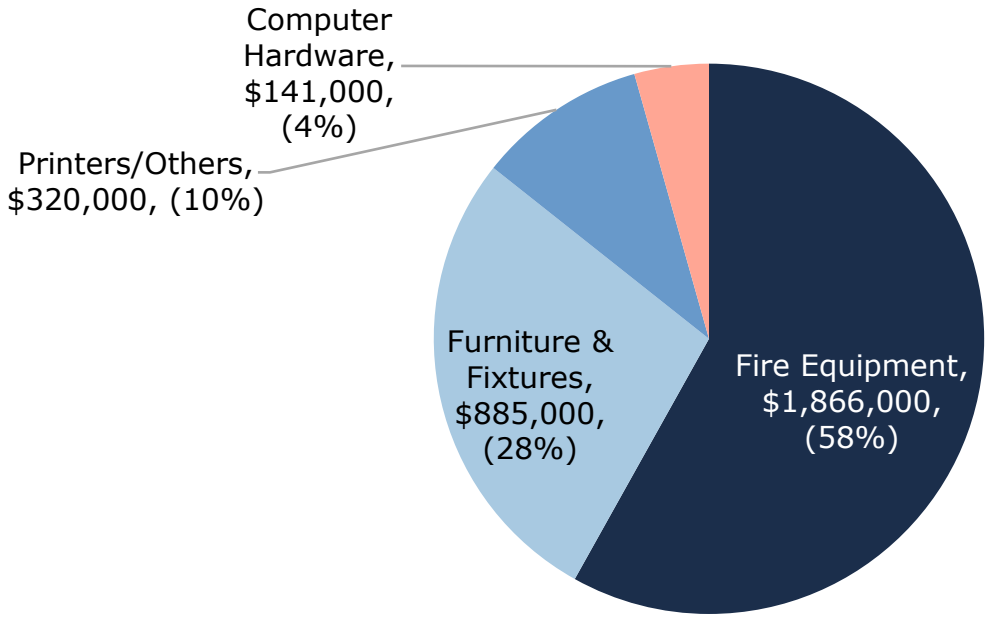


Figure 73 Portfolio Valuation: Pooled Assets

Asset Condition

Figure 69 summarizes the replacement cost-weighted condition of the Town's pooled assets portfolio. Based only on age data, 59% of assets are in fair or better condition; the remaining 41% are in poor or worse condition. These assets may be candidates for replacement in the short term; similarly, assets in fair condition may require rehabilitation or replacement in the medium term and should be monitored for further degradation in condition.

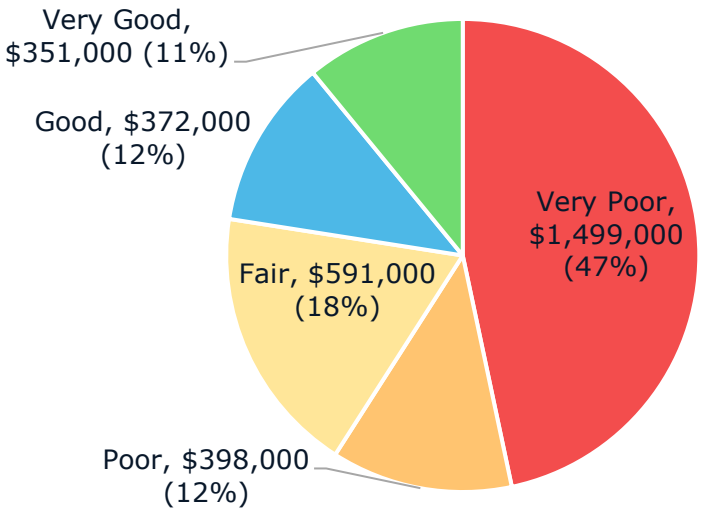


Figure 74 Asset Condition: Pooled Assets Overall

Figure 70 summarizes the age-based condition of pooled assets by each department. The majority of fire equipment, and printers/others' assets are in poor or worse condition.

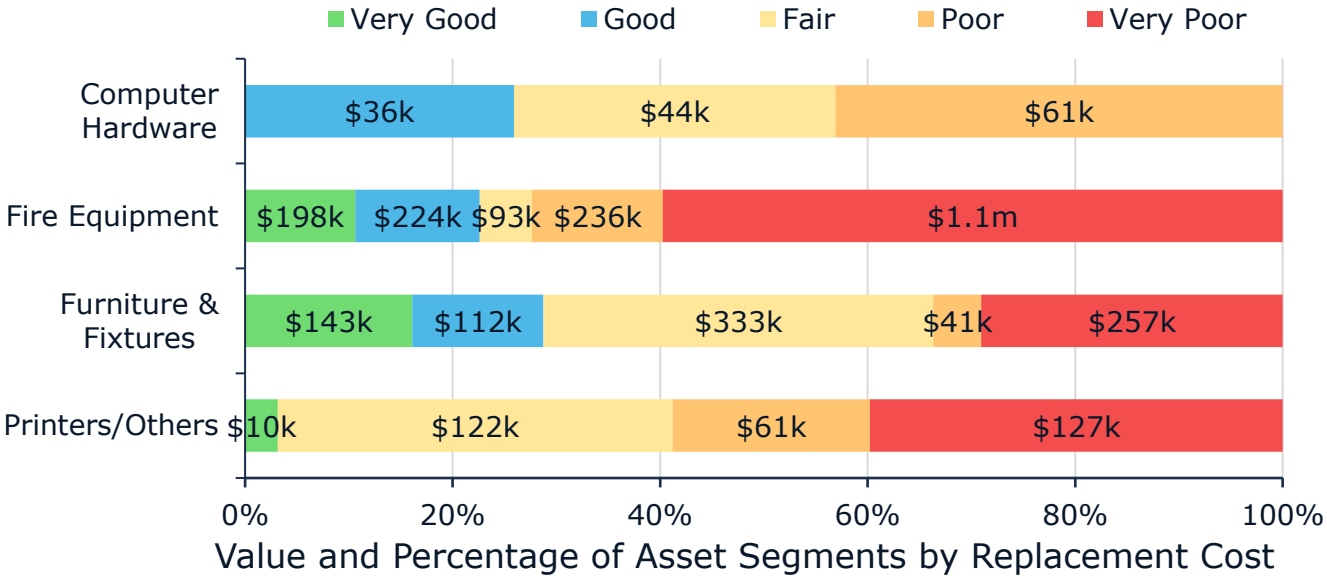


Figure 75 Asset Condition: Pooled Assets by Segment

Age Profile

An asset's age profile comprises two key values: estimated useful life (EUL), or design life; and the percentage of EUL consumed. The EUL is the serviceable lifespan of an asset during which it can continue to fulfil its intended purpose and provide value to users, safely and efficiently. As assets age, their performance diminishes, often more rapidly as they approach the end of their design life.

In conjunction with condition data, an asset's age profile provides a more complete summary of the state of infrastructure. It can help identify assets that may be candidates for further review through condition assessment programs; inform the selection of optimal lifecycle strategies; and improve planning for potential replacement spikes.

Figure 71 illustrates the average current age of each asset type and its estimated useful life. Both values are weighted by the replacement cost of individual assets.

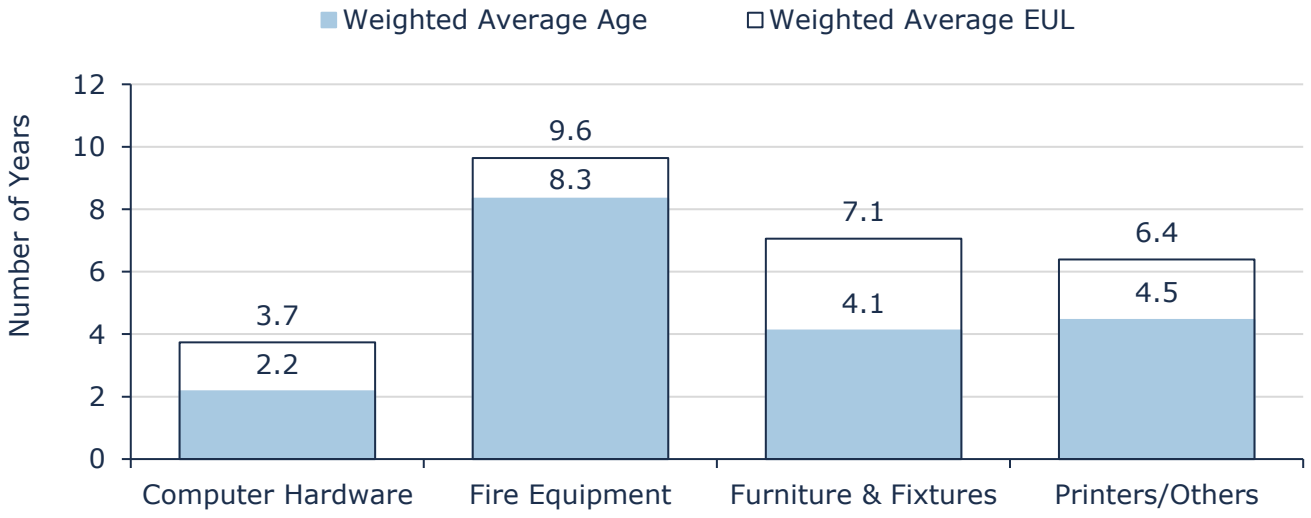


Figure 76 Estimated Useful Life vs. Asset Age: Pooled Assets

Age analysis reveals that, on average, all pooled assets are well within their expected useful life.

Current Approach to Lifecycle Management

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

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

Activity Type	Description of Current Strategy
Inspection & Maintenance	Staff conduct informal assessments on an ongoing basis to identify specific replacement needs.
	Fire equipment such as Self-Contained Breathing Apparatus (SCBA) and bunker gear receive regular maintenance to ensure firefighter safety
Replacement	• Most assets are planned for replacement based on their age and estimated useful life remaining. In some cases, assets are intentionally in use until their date of failure. This typically applies to assets that can be quickly and easily replaced, have redundancy and/or are of low criticality. • Fire equipment has an operational shelf life, and replacement is forecasted in the Fire department's capital replacement budget accordingly.

Table 71 Lifecycle Management Strategy: Machinery & Equipment

Risk Analysis

The risk matrix below is generated using available asset data, including condition, and replacement costs.

The matrix stratifies assets based on their individual probability and consequence of failure, each scored from 1 to 5. Their product generates a risk index ranging from 1-25. Assets with the highest criticality and likelihood of failure receive a risk rating of 25; those with lowest probability of failure and lowest criticality carry a risk rating of 1. As new data and information is gathered, the Town may consider integrating relevant information that improves confidence in the criteria used to assess asset risk and criticality.

These risk models have been built into the Town's Asset Management Database (Citywide Assets). See *Risk & Criticality* section for further details on approach used to determine asset risk ratings and classifications.

1 - 4 Very Low	5 - 7 Low	8 - 9 Moderate	10 - 14 High	15 - 25 Very High
$892,000 (28%)	$1,126,000 (35%)	$256,000 (8%)	$617,000 (19%)	$321,000 (10%)

Figure 77 Risk Matrix: Pooled Assets

Levels of Service

The tables that follow summarize the Town's community levels of service for pooled assets. The technical LOS is reported in section 5.3.2

Community Levels of Service

Service Attribute	Current LOS (2024)
Scope	Proper lifecycle management of vehicles, equipment, and machinery, including acquisition, disposal, maintenance, and repairs, is crucial for sustainable town service delivery. These assets play a vital role in facilitating or enhancing the quality of service provided while also contributing to a professional image within the community.
Safety	The Town's preventive maintenance program ensures assets are safe for use for their intended purposes and adhere to legislative requirements, prolonging use and reducing operational problems due to poor maintenance.
Reliability	Regularly assessing the condition of vehicles, equipment, and machinery maximizes their functionality and utilization. It also establishes a condition level that guides asset reallocation and replacement.

Table 72 Community Levels of Service: Machinery & Equipment

Analysis Reference Files

Appendix K: Resident Survey

Resident Questionnaire

The Town of Bradford West Gwillimbury: is committed to providing a high quality of life and exceptional services for our residents. As our community evolves, we must invest your tax dollars wisely to maintain and improve our infrastructure, including roads, bridges, and other municipal services. Your input is crucial for strategic planning and asset management. This brief (10 min) Resident Questionnaire provides you with an opportunity to share your thoughts on our strengths and areas for improvement, as well as your feedback on our priorities for the coming years. The information gathered will be used to develop the forward-looking proposed levels of service for the 2025 Bradford West Gwillimbury Asset Management Plan, in accordance with Ontario Regulation 588/17, which mandates municipalities to establish a strategic asset management policy and maintain an asset management plan for core and non-core municipal infrastructure assets.

We thank you in advance for completing this questionnaire. If you have questions, please contact us on Town's website.

Questions:

1. What is your current residency status in the Town of Bradford West Gwillimbury?

- Full-time resident – tenant
- Full-time resident – property owner
- Part-time resident – tenant
- Part-time resident – property owner
- Seasonal resident – property owner
- I own property within the Town but do not reside here

2. Which planning area best describes where you live within the Town?

- Urban (reside within a village, town, or city)
- Semi-urban (reside within a hamlet or rural subdivision)
- Rural (reside on a rural residential lot or farm)

3. Family Structure

- Single
- Married/common law partner
- Married with children
- Retired single/spouse
- Other

4. Please select your age range:

- 15 - 29 years
- 30 - 44 years
- 45 - 64 years
- 65 years plus

5. Have you read the Town's Asset Management Plan?

- Yes
- No (You can view the AMP on the Town's website here: Bradford West Gwillimbury Asset Management Plan)

6. Please indicate how you would prefer to learn about municipal issues/events/initiatives such as the Asset Management Plan: (Select all that apply)

- In-person information sessions with Council and staff
- Town's website
- Town's social media
- Newspaper (print)
- Radio
- Email
- Mail

7. Please indicate how important the following features are in making the Town of Bradford West Gwillimbury a great place to live:

Service	**Low Importance** (i.e. I use it monthly or rarely)	**Mid Importance** (i.e. I use weekly)	**High Importance** (i.e. I use it daily)	**N/A** (i.e. I don't use it)
Recreation or sports facilities				
Heritage or Historical Sites				
Arts, Culture, and Heritage Opportunities				
Affordable living				
Building Services and Bylaw Enforcement				
Programs and support for seniors				
Maintenance of Public Property				
Safe and Well-Maintained Roads and Bridges				
Economic Investment and Local Jobs				
Communication From the Town				
Emergency Services				
Public safety and community spirit				

8. How important are the following municipal services to your household?

Service	**Low Importance** (i.e. I use it monthly or rarely)	**Mid Importance** (i.e. I use weekly)	**High Importance** (i.e. I used daily)	**Not Applicable** (i.e. I don't use it)
Roads and Bridges				
Waste Management Services				
Emergency Services				
Land Use and Development Planning				
Maintenance of public property				
Economic Development Initiatives				
Historical Sites and Services				
Stormwater Management				
Natural attractions and conservation areas				
Arts, culture, and heritage opportunities				
Building services and bylaw enforcement				
Water Services				
Wastewater Services				

9. How would you describe your experience with the *availability* of the following infrastructure?

Dissatisfied: Insufficient availability, unacceptable quality of performance/condition

Somewhat Satisfied: somewhat meets user needs, minimum quality requirements for performance and/or condition usually met

Satisfied: meets user needs majority of the time, functional requirements consistently met

Unsure: do not use the asset grouping enough to have meaningful understanding of functionality and/or reliability of performance

Not Applicable: I do not use this asset grouping (i.e. I have well water)

Infrastructure	Dissatisfied	Somewhat Satisfied	Satisfied	Unsure	Not Applicable
Roads					
Bridges					
Energy Management					
Outdoor Open Spaces, Parks, and Trails					
Waste Management					
Water Services					
Wastewater Services					
Emergency Services Vehicles and Equipment					

Reliability and Condition:

Dissatisfied: Unacceptable reliability, unacceptable quality of performance/condition (e.g. "the asset is frequently not in service, and when it is it performs poorly")

Somewhat Satisfied: minimum quality requirements for performance and/or condition are *usually* met (e.g. most of the time the asset is in service, and the condition is okay for my needs")

Satisfied: meets user needs *majority* of the time, functional requirements consistently met, and condition is satisfactory (e.g. "I'm confident the asset will be able to service my needs")

Unsure: do not use the asset grouping enough to have meaningful understanding of functionality and/or reliability of performance

Not Applicable: I do not use this asset grouping (i.e. I have well water)

Infrastructure	Dissatisfied	Somewhat Satisfied	Satisfied	Unsure	Not Applicable
Roads					
Bridges					
Energy Management					
Outdoor Open Spaces, Parks, and Trails					
Waste Management					
Water Services					
Wastewater Services					
Emergency Services Vehicles and Equipment					

Safety:

Dissatisfied: There are consistent issues with assets being safe to use.

Somewhat Satisfied: The asset is safe for use most of the time, but not always.

Satisfied: I am not concerned about the safety of the asset whenever I use it.

Unsure: do not use the asset grouping enough to have meaningful understanding of its safety (e.g. I do not use Parks and Trails)

Not Applicable: I do not use this asset grouping (i.e. I have well water)

Infrastructure	Dissatisfied	Somewhat Satisfied	Satisfied	Unsure	Not Applicable
Roads					
Bridges					
Energy Management					
Outdoor Open Spaces, Parks, and Trails					
Waste Management					
Water Services					
Wastewater Services					
Emergency Services Vehicles and Equipment					

10. In your experience with the municipal services offered, would you decrease, maintain, or increase service levels for each of the services provided?

- Decrease Service Levels: Reduced availability of assets, reduced condition of asset (i.e., lower ride comfort for roads)
- Maintain Service Levels: Existing availability and condition of assets
- Increase Service Levels: Increased availability of assets, improved condition of assets (i.e. higher ride comfort for roads)
- Not Applicable: I do not interact with this asset grouping (i.e. I use well water, not municipal water)

Service	Decrease Service Levels	Maintain Service Levels	Increase Service Levels	Not Applicable
Roads and Bridges				
Waste Management Services				
Emergency Services				
Land Use and Development Planning				
Maintenance of public property				
Economic Development Initiatives				
Historical Sites and Services				
Stormwater Management				
Water Services				
Wastewater Services				
Natural attractions and conservation areas				
Arts, culture, and heritage opportunities				
Building services and bylaw enforcement				

11. For each of the following services, indicate your preference for spending and willingness to pay for improvements:

Not Willing: Not willing to pay any more for this service than current. This may result in reduced condition and lower reliability of the asset.

Somewhat Willing: I would be *hesitant but ultimately willing* to pay slightly more (i.e. 5-10%) than I am currently paying if the quality is improved slightly

Willing: I would *happily pay* slightly more (i.e. 5-10%) than I am currently paying if the quality is improved slightly.

Not Applicable: I do not pay for these services currently (i.e., I have well water and do not pay for municipal water)

Service	Not Willing	Somewhat Willing	Willing	Not Applicable
Roads and Bridges				
Waste Management Services				
Emergency Services				
Land Use and Development Planning				
Maintenance of public property				
Economic Development Initiatives				
Historical Sites and Services				
Stormwater Management				
Natural attractions and conservation areas				
Water Services				
Wastewater Services				

Service	Not Willing	Somewhat Willing	Willing	Not Applicable
Arts, culture, and heritage opportunities				
Building services and bylaw enforcement				

12. The Town is growing. This means spending on infrastructure services may need to change over time to meet the evolving needs of the community. How important are the following factors in deciding if the Town's spending on infrastructure is best for the community?

Highly Important: These factors should be the primary drivers for consideration

Somewhat Important: These factors are helpful considerations, but not primary considerations

Less Important: These have the least weight on decisions, but they still may be relevant to note

Not Applicable: These do not apply to making spending decisions, in my opinion.

Factor	Less Important	Somewhat Important	Highly Important	Not Applicable
Preserve the Current Character and Charm				
Attract New Residents				
Attract New Businesses				
Limit Cost Increase to Residents				
Support the Local Economy				
Protect the Environment				
Support the Older Population				
Support Young Families and Singles				
Support the Vulnerable Population				

13. In your opinion, the Town is making the right investments in infrastructure for its current residents:

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Unsure

14. In your opinion, the Town is making the right investments in infrastructure for its future:

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Unsure

15. In your opinion, the Town is overspending on any service areas:

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Unsure

If so, in which areas: _____.

Any other thoughts/comments?

Appendix L: Infrastructure Report Card

Asset Category	Replacement Cost	Average Condition	Financial Capacity	
Road Network	**$514.6 m**	**Fair**	Annual Requirement (PLOS):	$9,545,000
			Funding Available:	$9,555,000[33]
			Annual Surplus:	**$10,000**
Bridges & Culverts	**$47.8 m**	**Very Good**	Annual Requirement (PLOS):	$710,000
			Funding Available:	$312,000
			Annual Deficit:	**$399,000**
Water Network	**$278.1 m**	**Good**	Annual Requirement (PLOS):	$4,560,000
			Funding Available:	$3,709,000
			Annual Deficit:	**$851,000**
Wastewater Network	**$296.4 m**	**Good**	Annual Requirement (PLOS):	$6,206,000
			Funding Available:	$4,294,000
			Annual Deficit:	**$1,912,000**
Stormwater Network	**$275.3 m**	**Good**	Annual Requirement (PLOS):	$3,947,000
			Funding Available:	$792,000
			Annual Deficit:	**$3,155,000**
Facilities	**$230.8 m**	**Fair**	Annual Requirement (PLOS):	$6,924,000
			Funding Available:	$2,848,000
			Annual Deficit:	**$4,076,000**
Land Improvements	**$37.6 m**	**Fair**	Annual Requirement (PLOS):	$1,891,000

[33] Includes OCIF and CCBF estimates which are subject to change.

Asset Category	Replacement Cost	Average Condition	Financial Capacity	
			Funding Available:	$722,000
			Annual Deficit:	**$1,169,000**
Vehicles	**$28.8 m**	**Poor**	Annual Requirement (PLOS):	$2,645,000
			Funding Available:	$1,307,000
			Annual Deficit:	**$1,534,000**
Machinery & Equipment	**$11.7 m**	**Fair**	Annual Requirement (PLOS):	$1,098,000
			Funding Available:	$435,000
			Annual Deficit:	**$663,000**
Pooled Assets	**$3.2 m**	**Poor**	Annual Requirement (PLOS):	$293,000
			Funding Available:	$160,000
			Annual Deficit:	**$201,000**

Appendix M: 10-Year Capital Requirements

The financial requirements for scenario 2 (maintain conditions) reflect the total annual capital investment required (Required Annual Allocation). In some years, actual capital investments will be greater than or less than the total forecasted investment.

Road Network											
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Required Annual Allocation (PLOS)	$9.5m										
Total Forecasted Investment	$5.8m	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Bridges & Culverts											
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Required Annual Allocation (PLOS)	$710k										
Total Forecasted Investment	$0	$656k	$1.5m	$0	$153k	$25k	$0	$194k	$0	$0	$0

Water Network											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$4.6m					
Total Forecasted Investment	$7.3m	$0	$2.1m	$352k	$4.2m	$503k	$92k	$147k	$7.4m	$2.6m	$701k

Wastewater Network											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$6.2m					
Total Forecasted Investment	$5.2m	$565k	$2.3m	$1.6m	$1.4m	$1.6m	$5.2m	$3.5m	$803k	$12.4m	$10.6m

Stormwater Network											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$3.9m					
Total Forecasted Investment	$7.6m	$100k	$2.1m	$659k	$462k	$552k	$329k	$2.5m	$1.3m	$2.1m	$1.6m

Facilities											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$6.9m					
Total Forecasted Investment	$0	$0	$0	$2.2m	$7.6m	$5.9m	$0	$0	$0	$38.1m	$0

Land Improvements											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$1.9m					
Total Forecasted Investment	$0	$1.4m	$3.0m	$2.1m	$848k	$2.0m	$2.1m	$1.7m	$2.0m	$2.1m	$2.1m

Vehicles											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$2.6m					
Total Forecasted Investment	$4.4m	$2.7m	$2.6m	$3.4m	$1.7m	$3.2m	$4.1m	$780k	$3.0m	$2.5m	$2.5m

Machinery & Equipment											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$1.1m					
Total Forecasted Investment	$1.9m	$944k	$1.1m	$1.2m	$1.4m	$872k	$990k	$1.4m	$832k	$1.1m	$910k

Pooled Assets											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Required Annual Allocation (PLOS)						$293k					
Total Forecasted Investment	$178k	$620k	$0	$296k	$312k	$230k	$256k	$313k	$302k	$265k	$318k

Appendix N: Proposed LOS Scenario Comparisons

The following graphs illustrate how the average condition scores and average risks ratings are forecasted to change over time by scenario for each asset category. For all categories, excluding the road network, the green dotted line represents scenario 1 (current investment), the blue dotted line represents scenario 2 (maintain condition) and the purple dotted line represents scenario 3 (optimal funding, phased).

Road Network – Condition

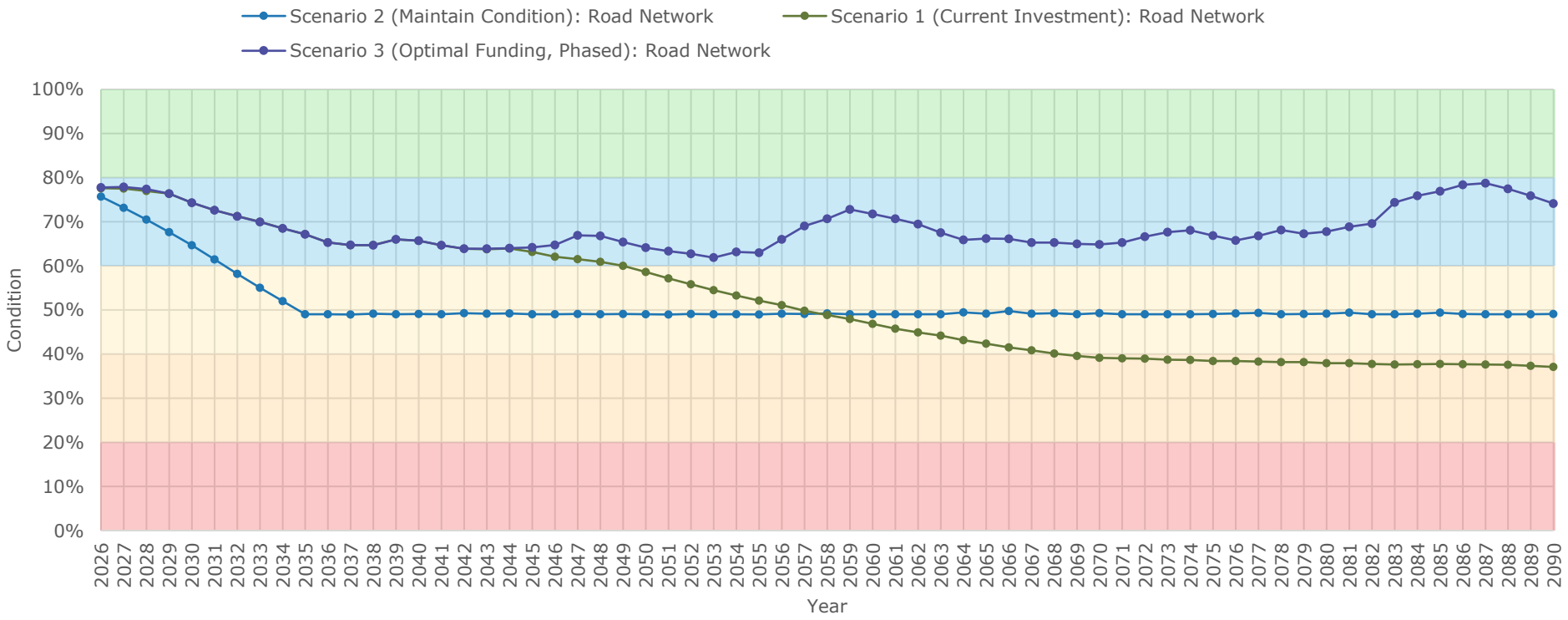


Figure 78: Road Network Condition by Scenario

Road Network – Risk

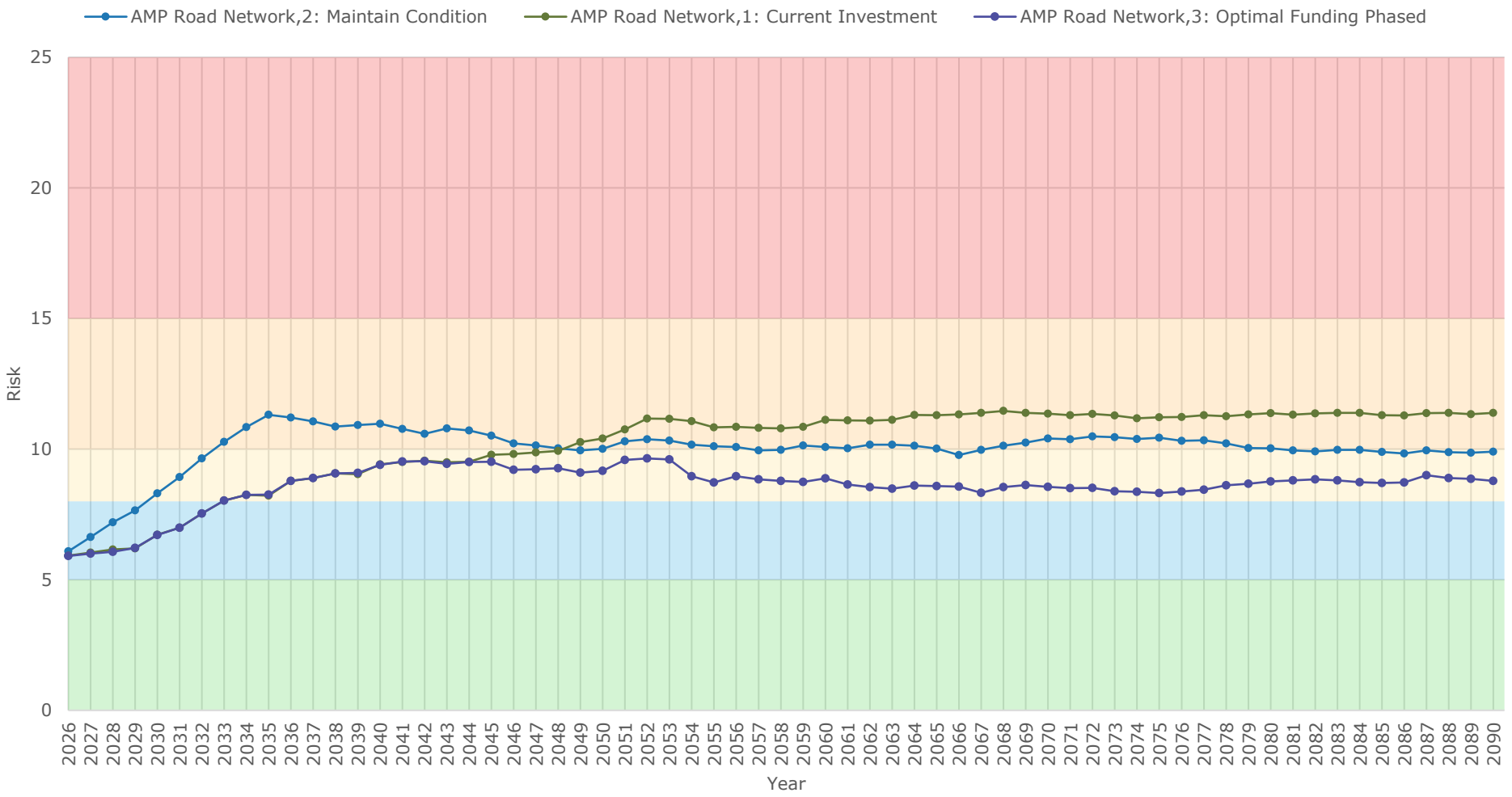


Figure 79: Road Network Risk Comparison

Bridges & Culverts – Condition

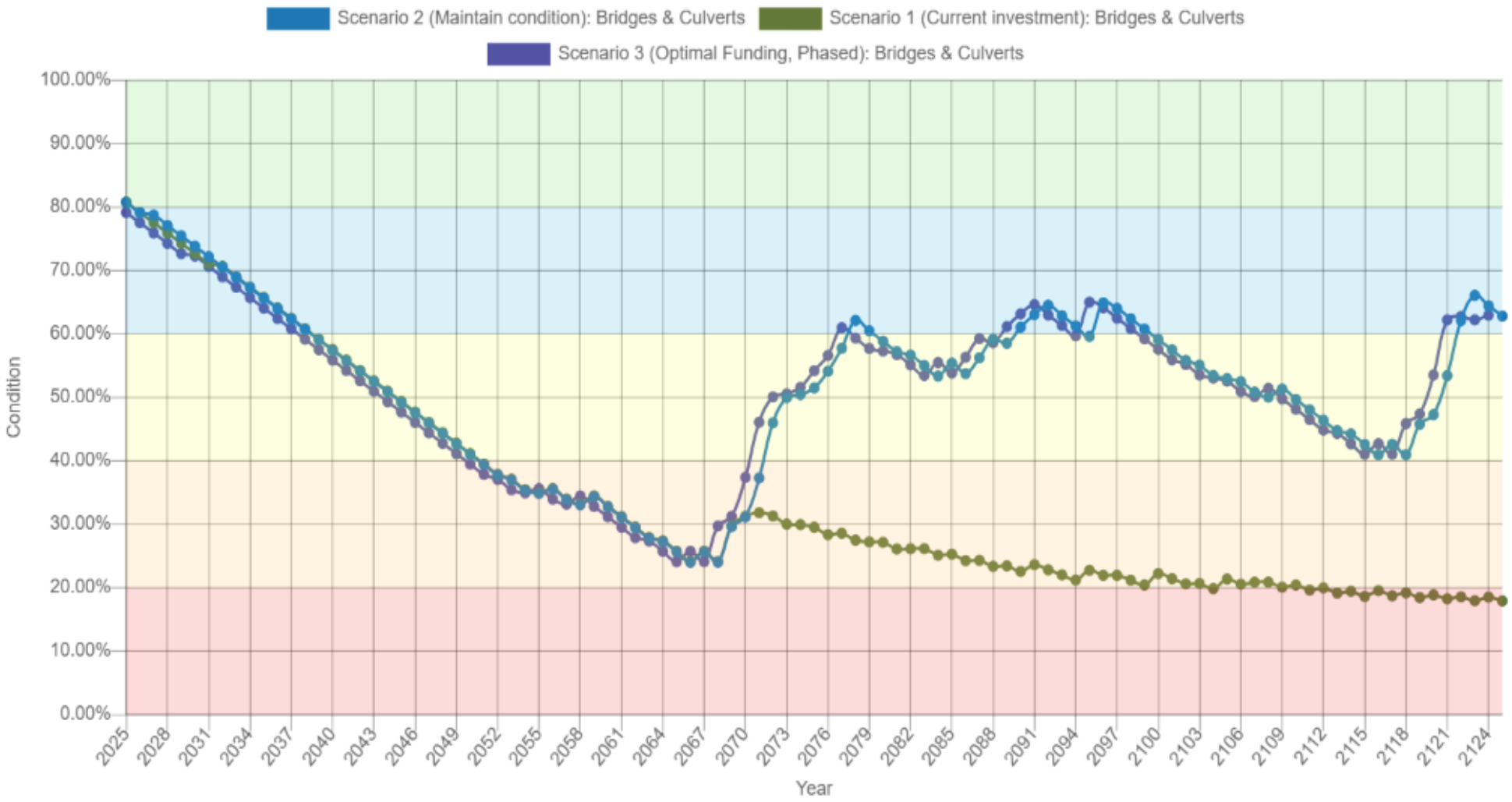


Figure 80: Bridges & Culverts Condition by Scenario

Bridges & Culverts - Risk

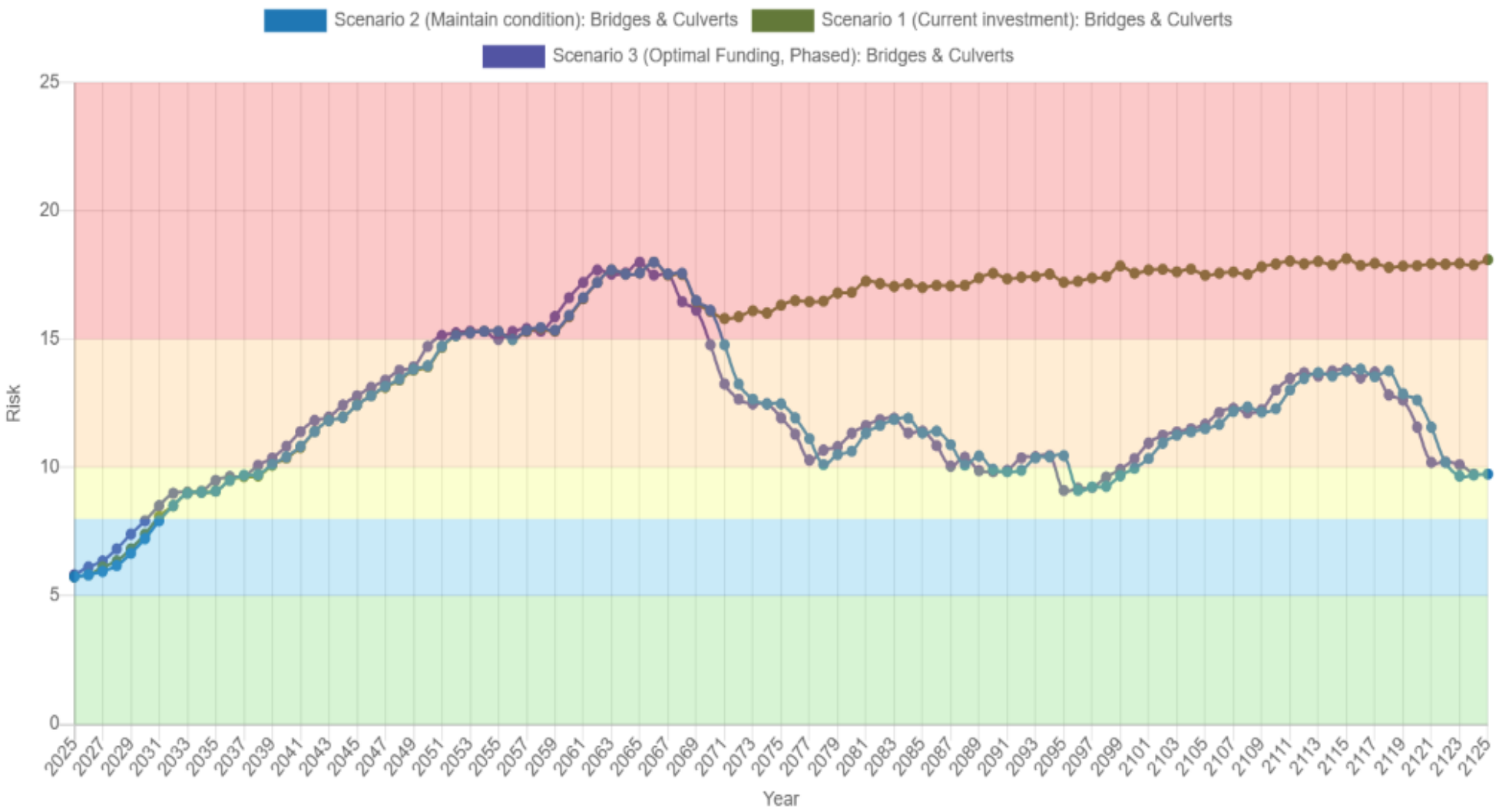


Figure 81: Bridges & Culverts Risk Comparison

Water Network - Condition

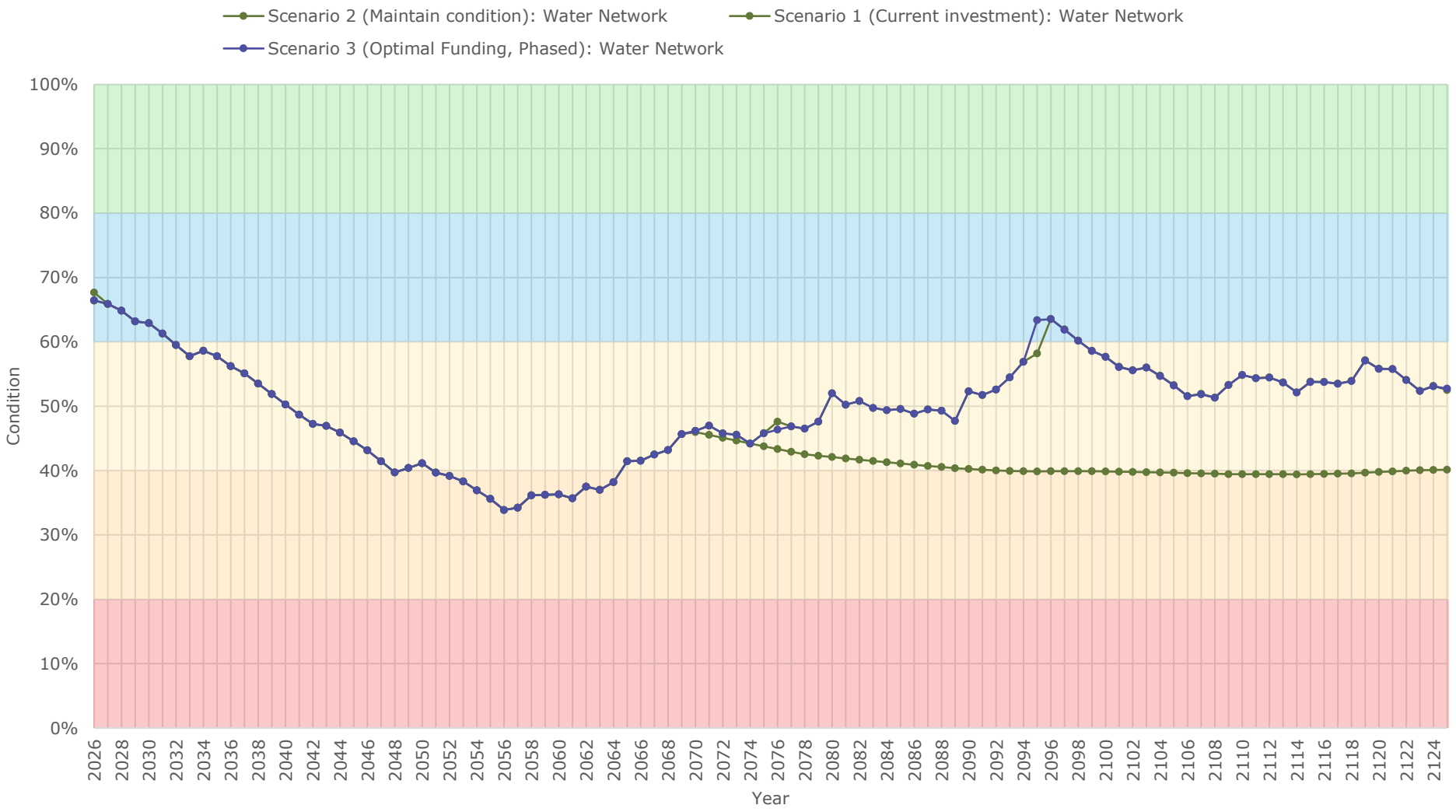


Figure 82: Water Network Condition by Scenario

Water Network - Risk

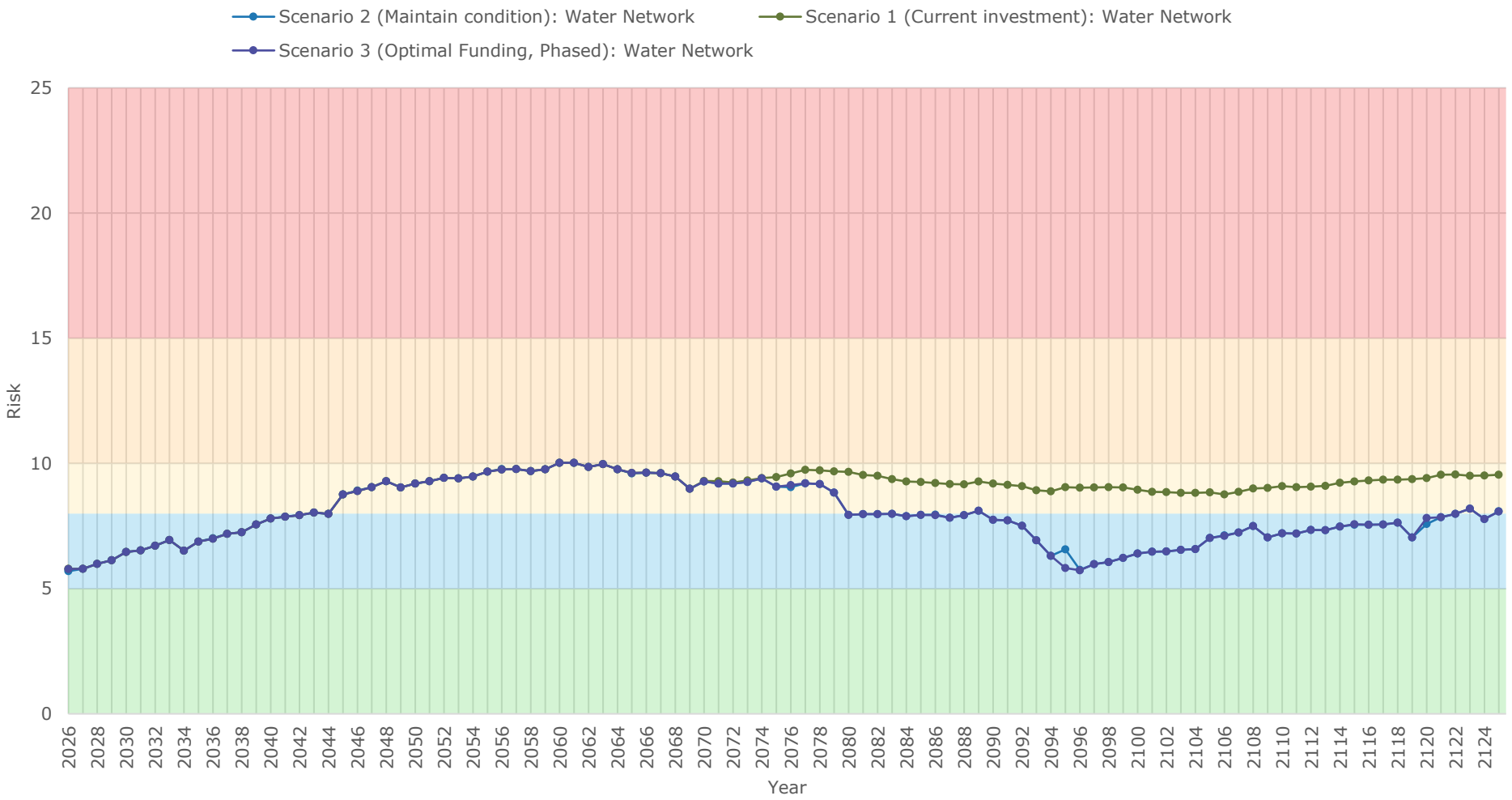


Figure 83: Water Network Risk Comparison

Wastewater Network - Condition

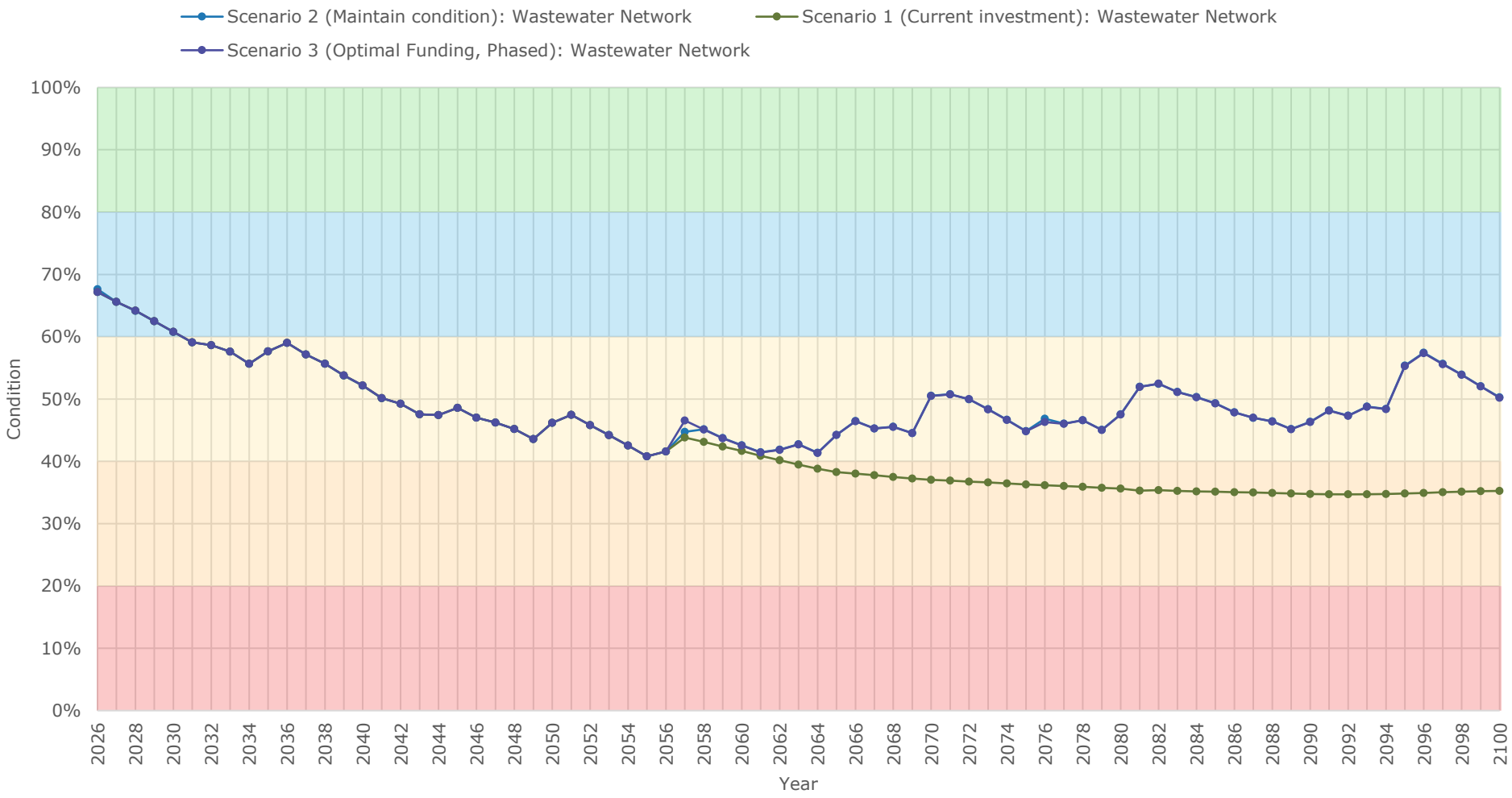


Figure 84: Wastewater Network Condition by Scenario

Wastewater Network - Risk

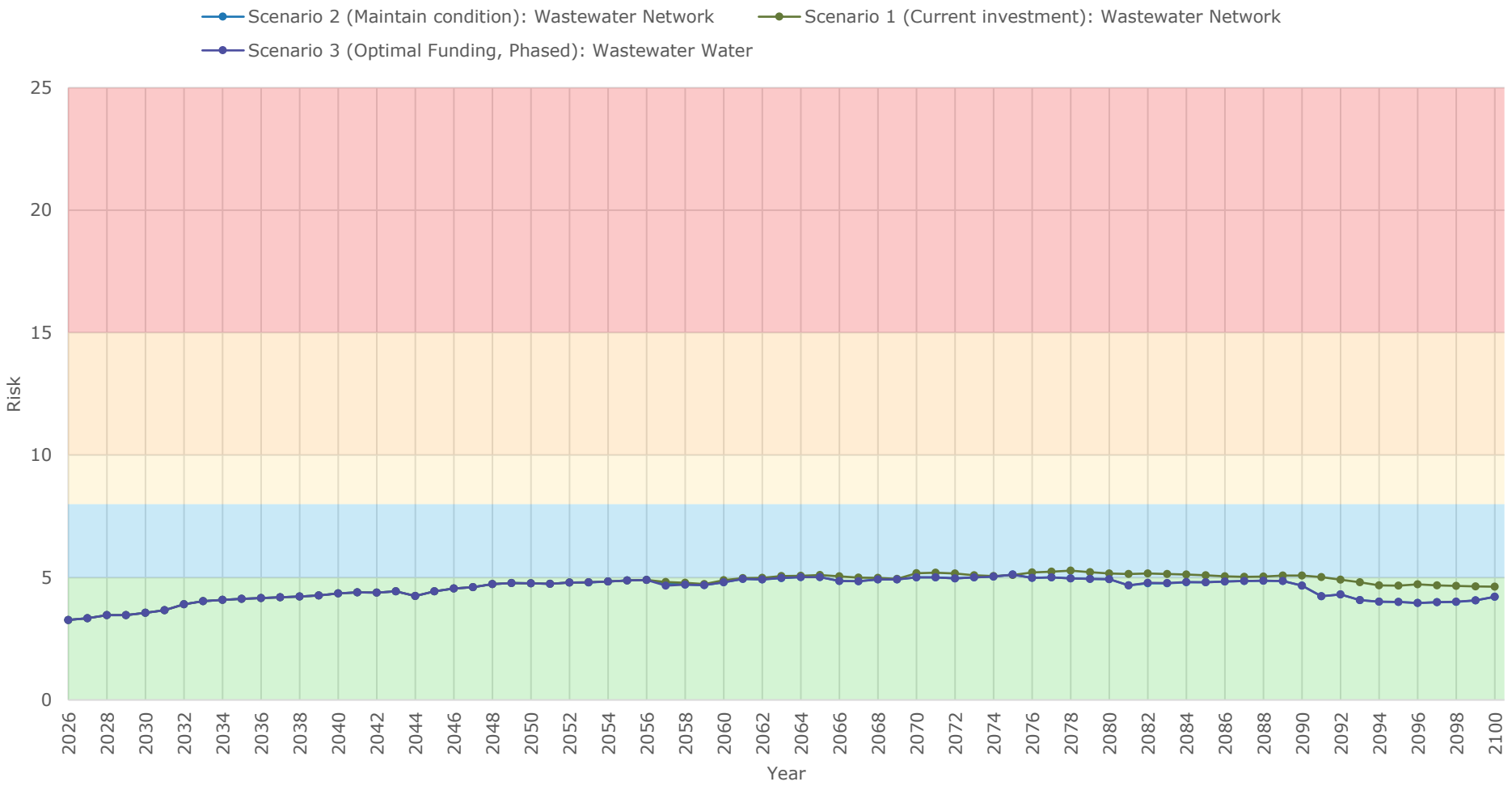


Figure 85: Wastewater Network Risk Comparison

Stormwater Network - Condition

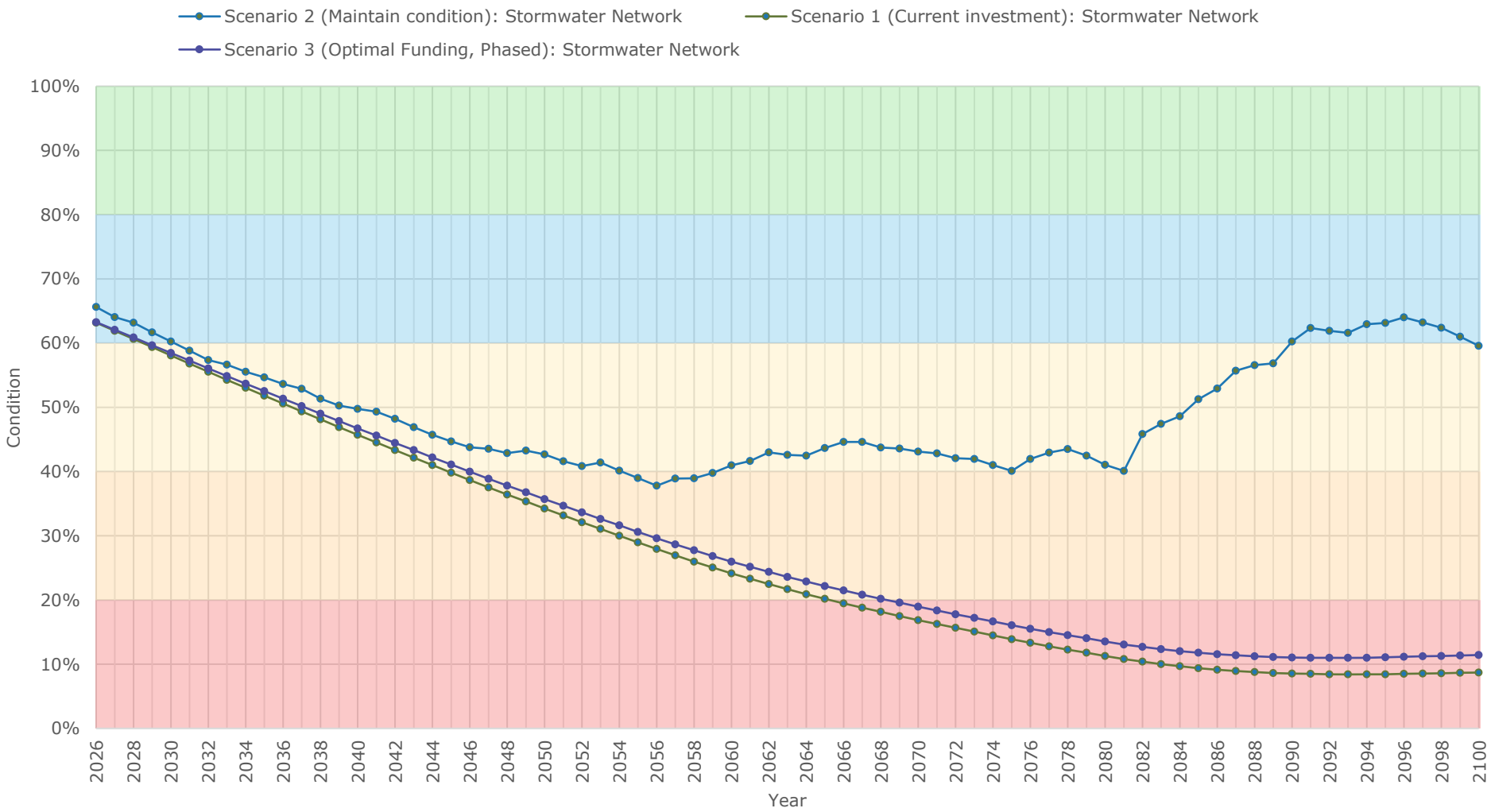


Figure 86: Stormwater Network Condition by Scenario

Stormwater Network – Risk

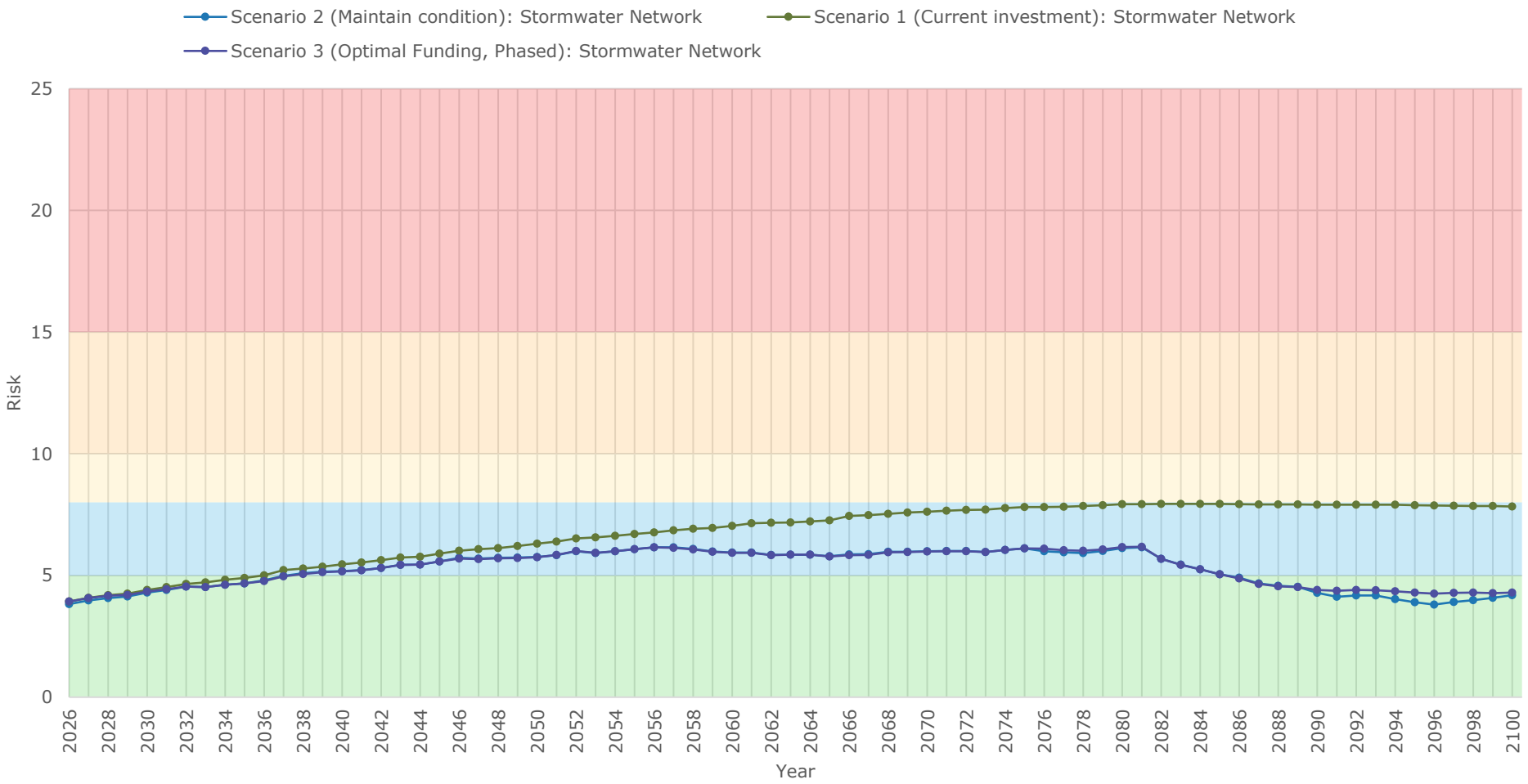


Figure 87: Stormwater Network Risk Comparison

Facilities - Condition

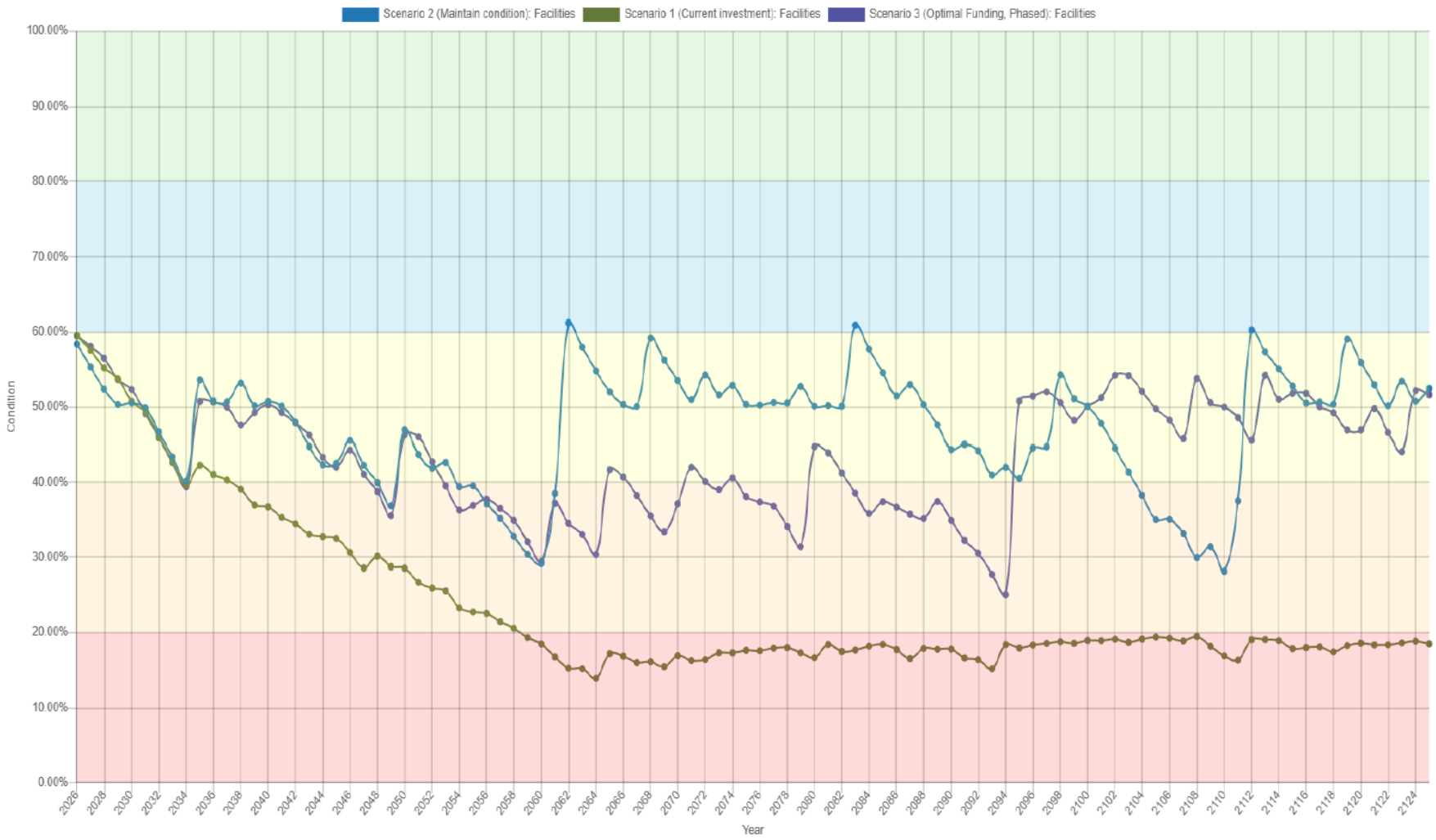


Figure 88: Facilities Condition by Scenario

Facilities - Risk

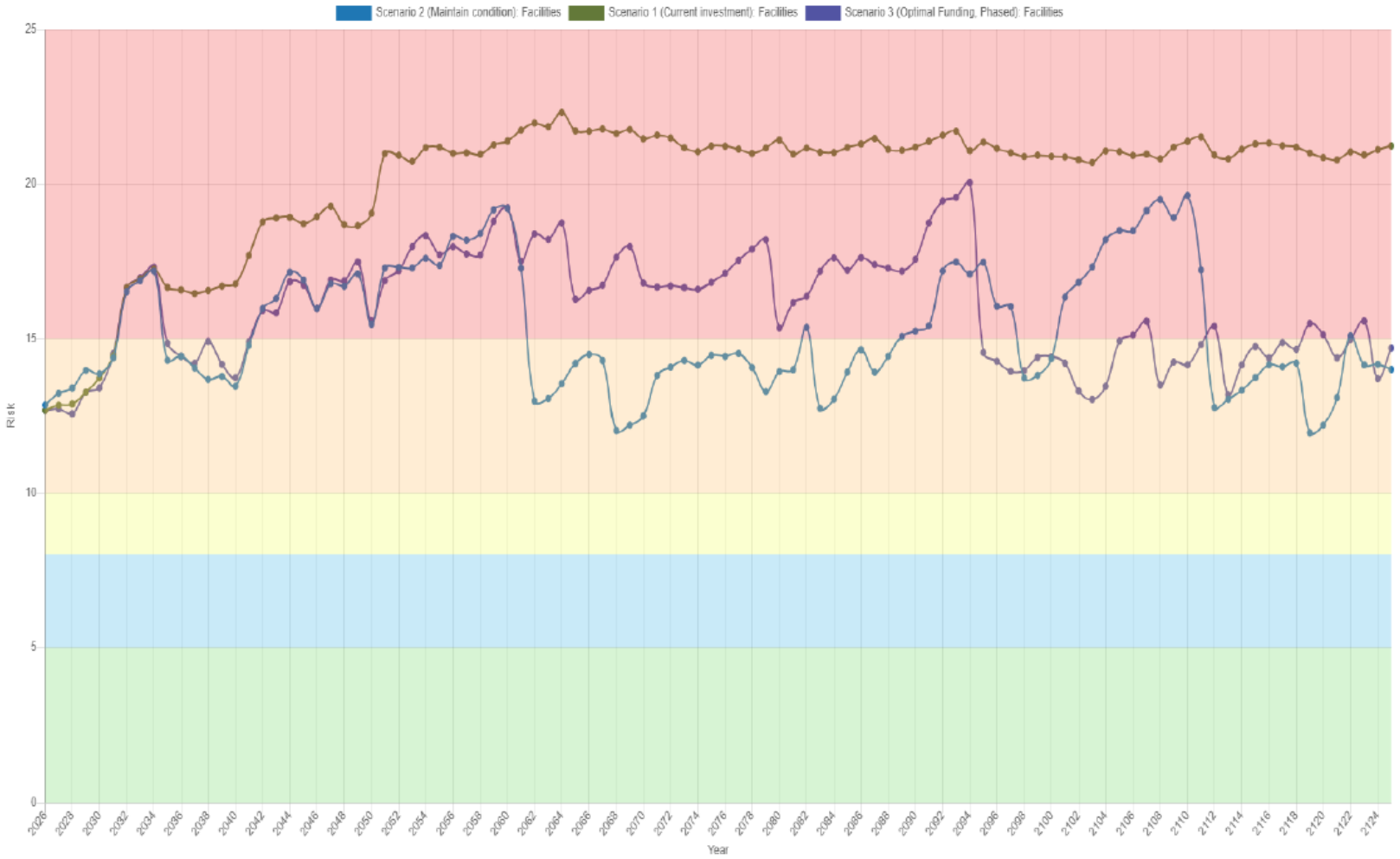


Figure 89: Facilities Risk Comparison

Land Improvements - Condition

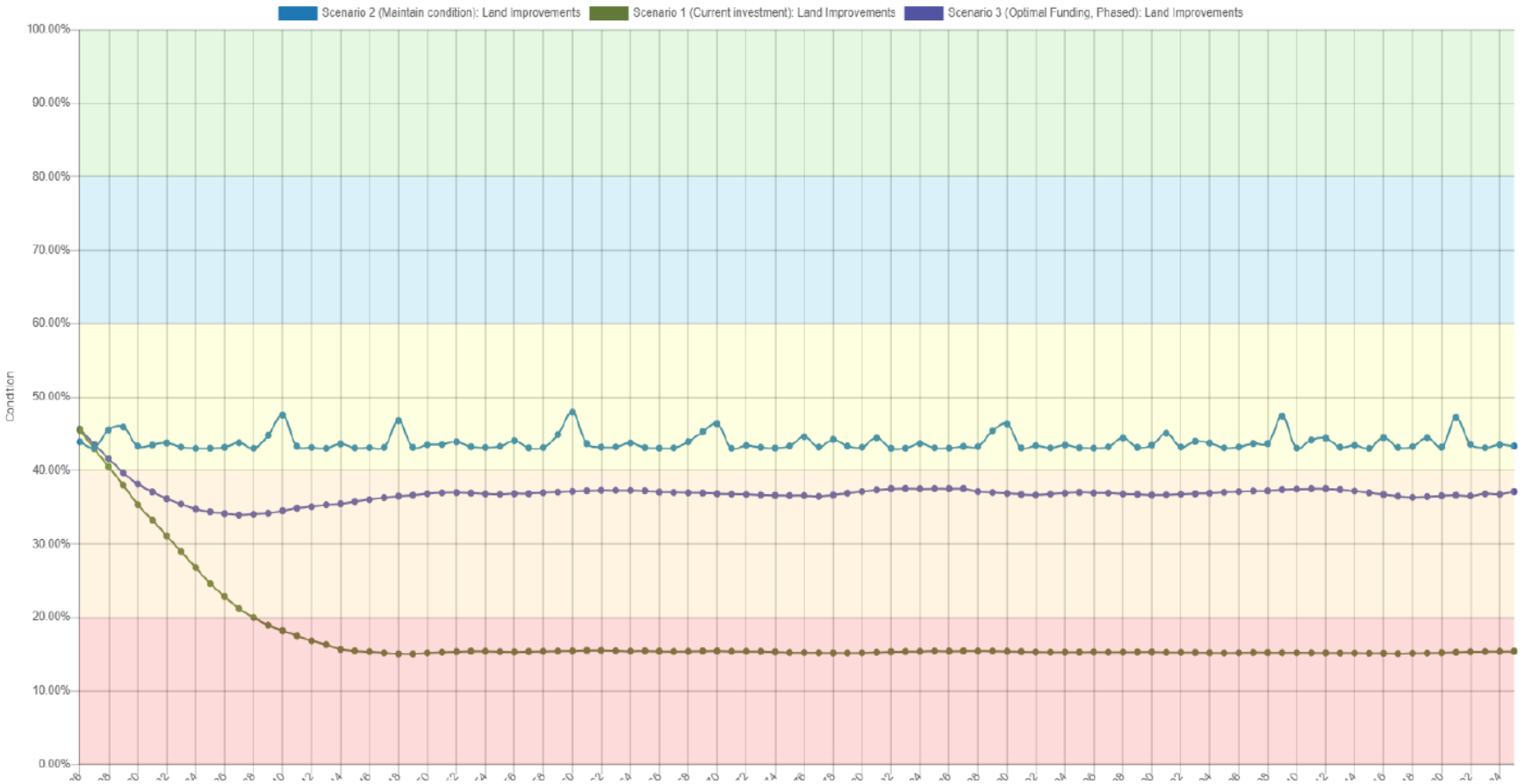


Figure 90: Land Improvements Condition by Scenario

Land Improvements - Risk

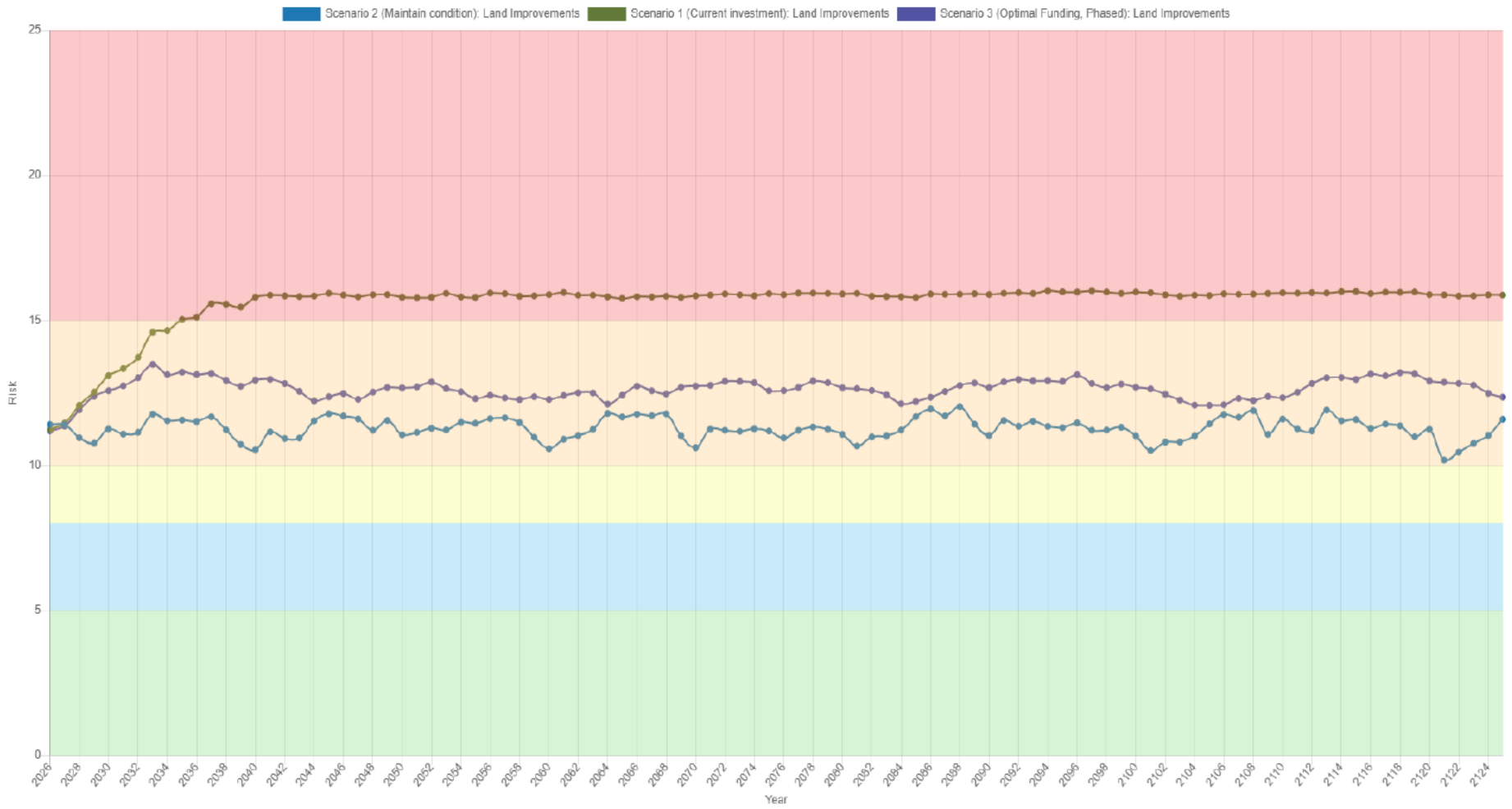


Figure 91: Land Improvements Risk by Scenario

Vehicles – Condition

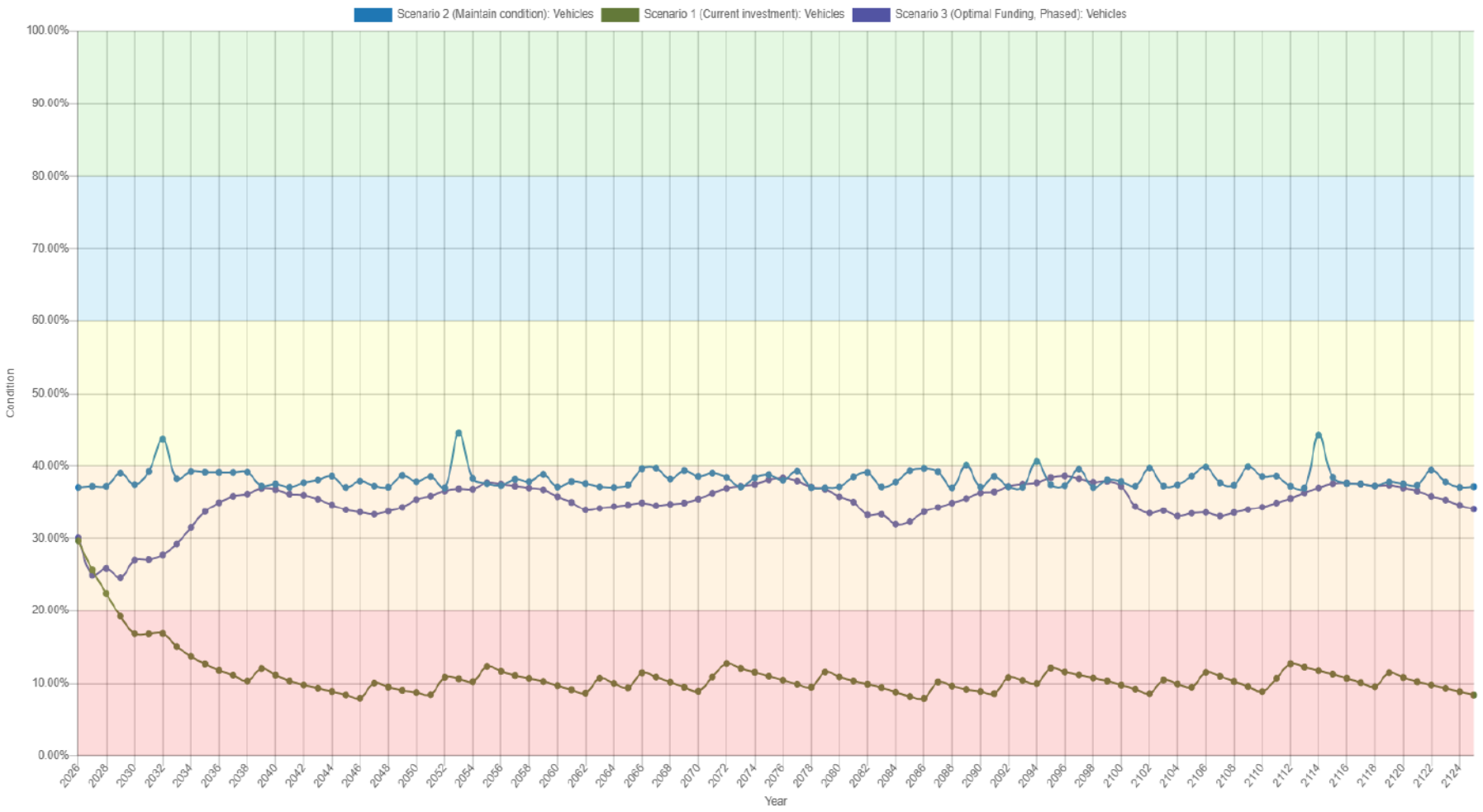


Figure 92: Vehicles Condition Comparison

Vehicles – Risk

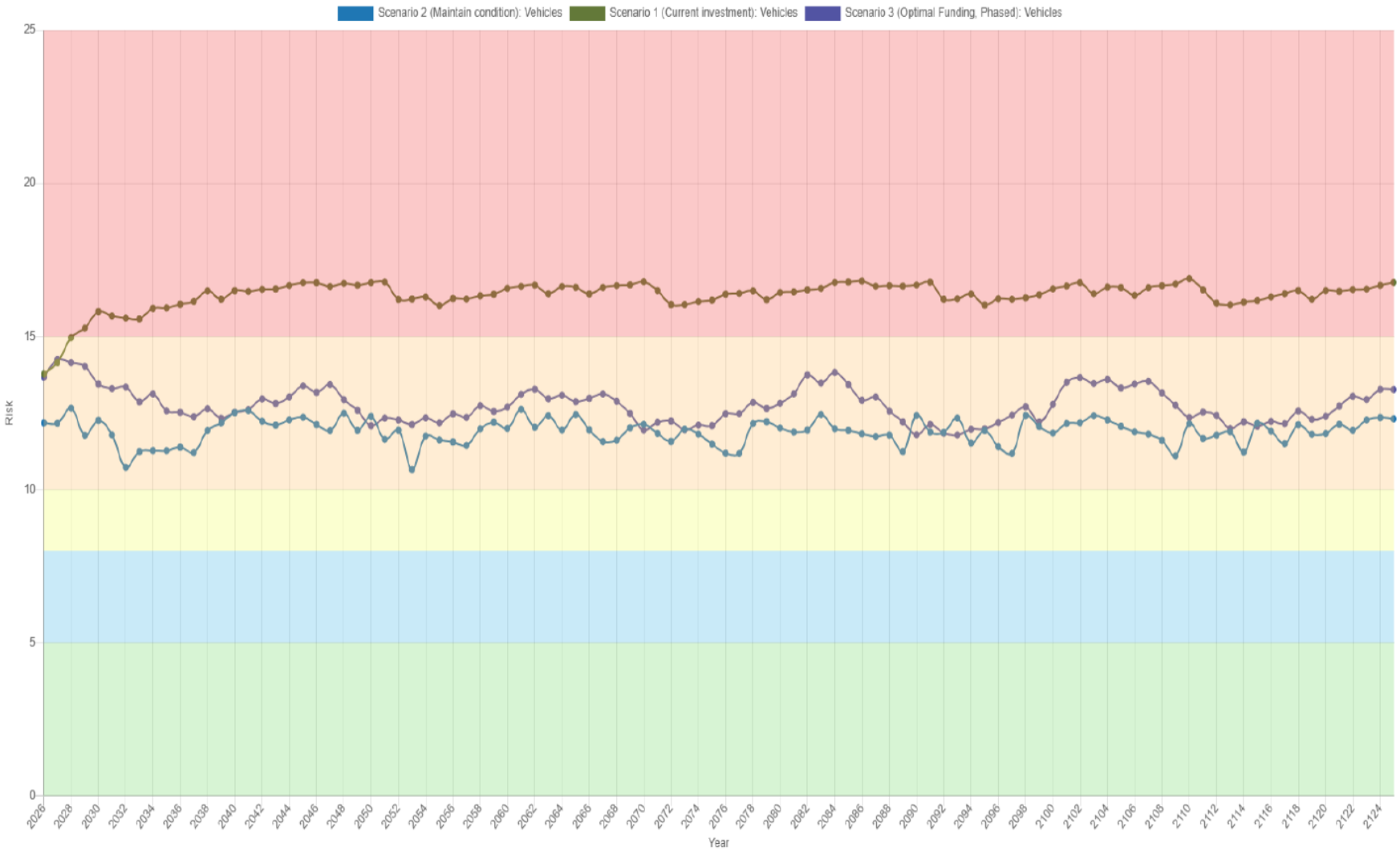


Figure 93: Vehicles Risk Comparison

Machinery & Equipment – Condition

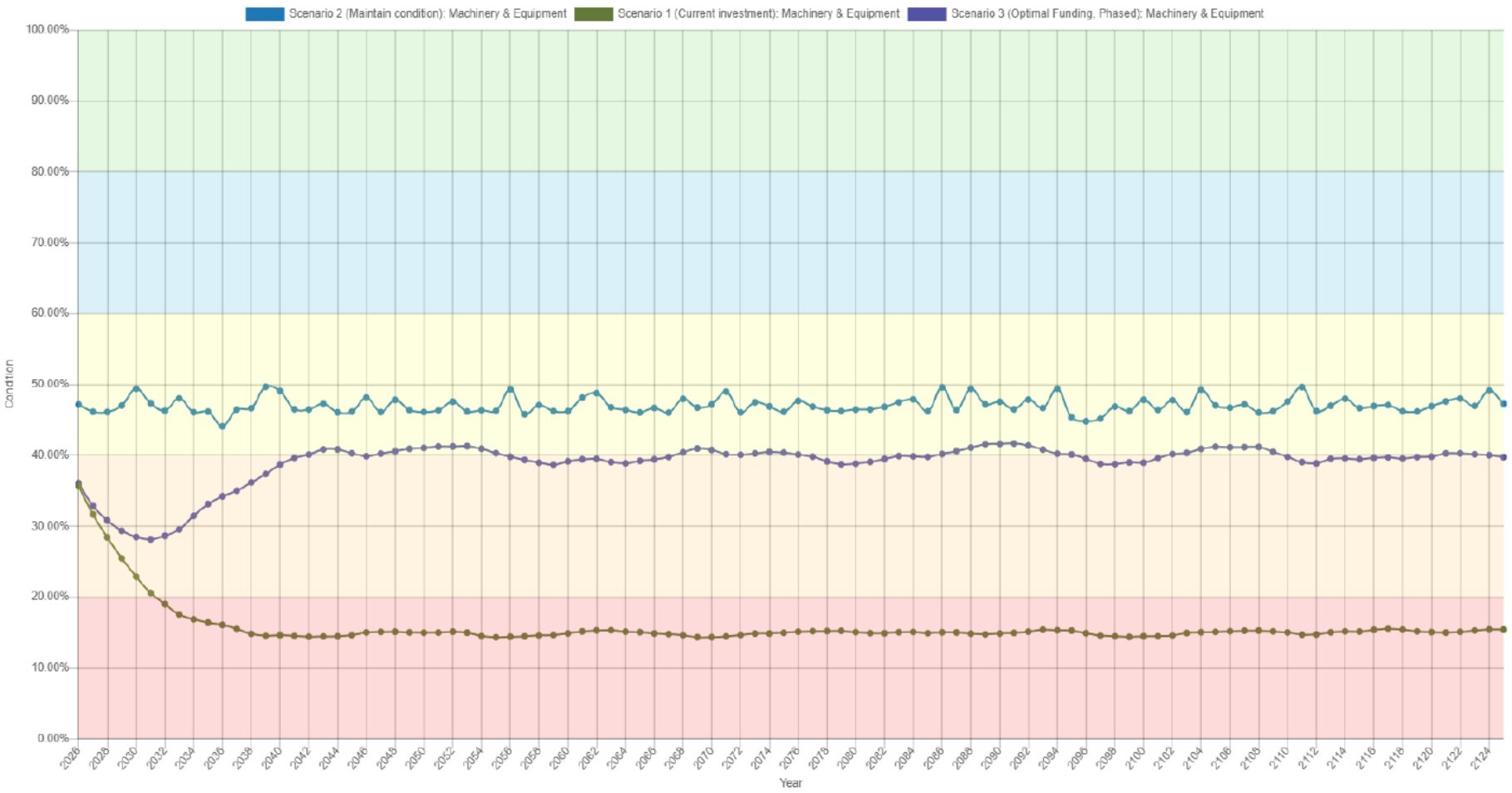


Figure 94: Machinery & Equipment Condition Comparison

Machinery & Equipment – Risk

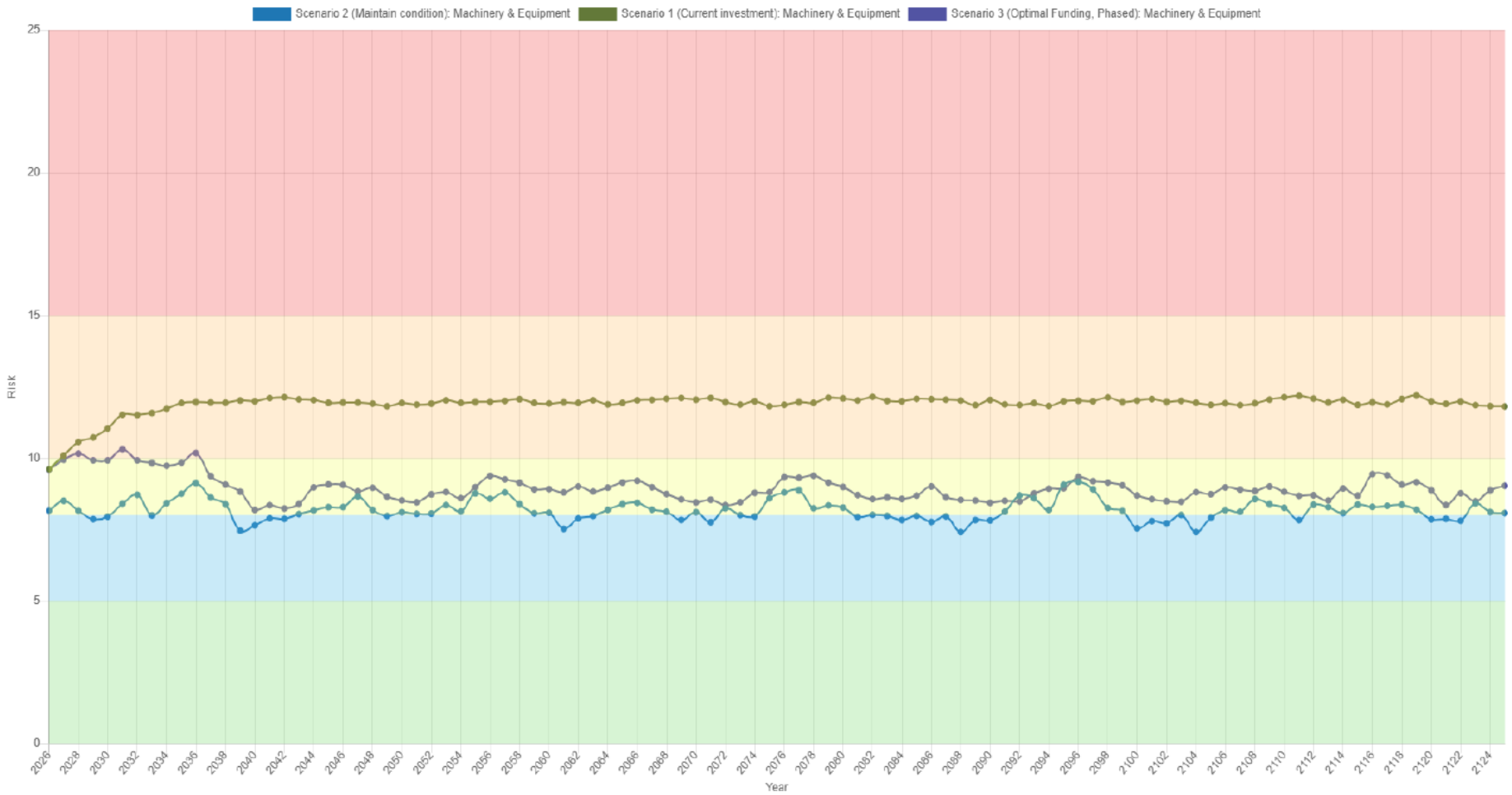


Figure 95: Machinery & Equipment Risk Comparison

Pooled Assets – Condition

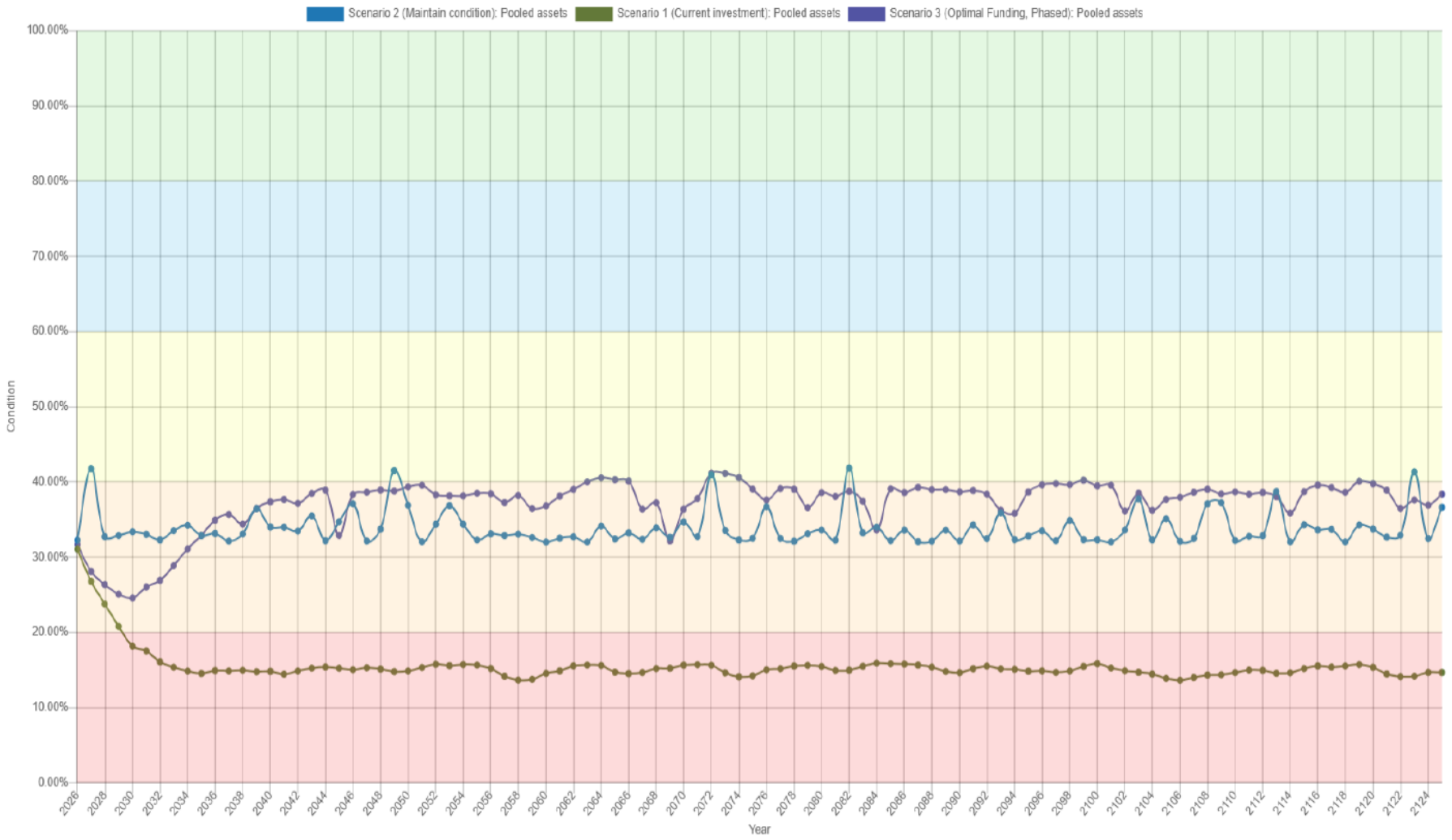


Figure 96: Pooled Assets Condition Comparison

Pooled Assets – Risk

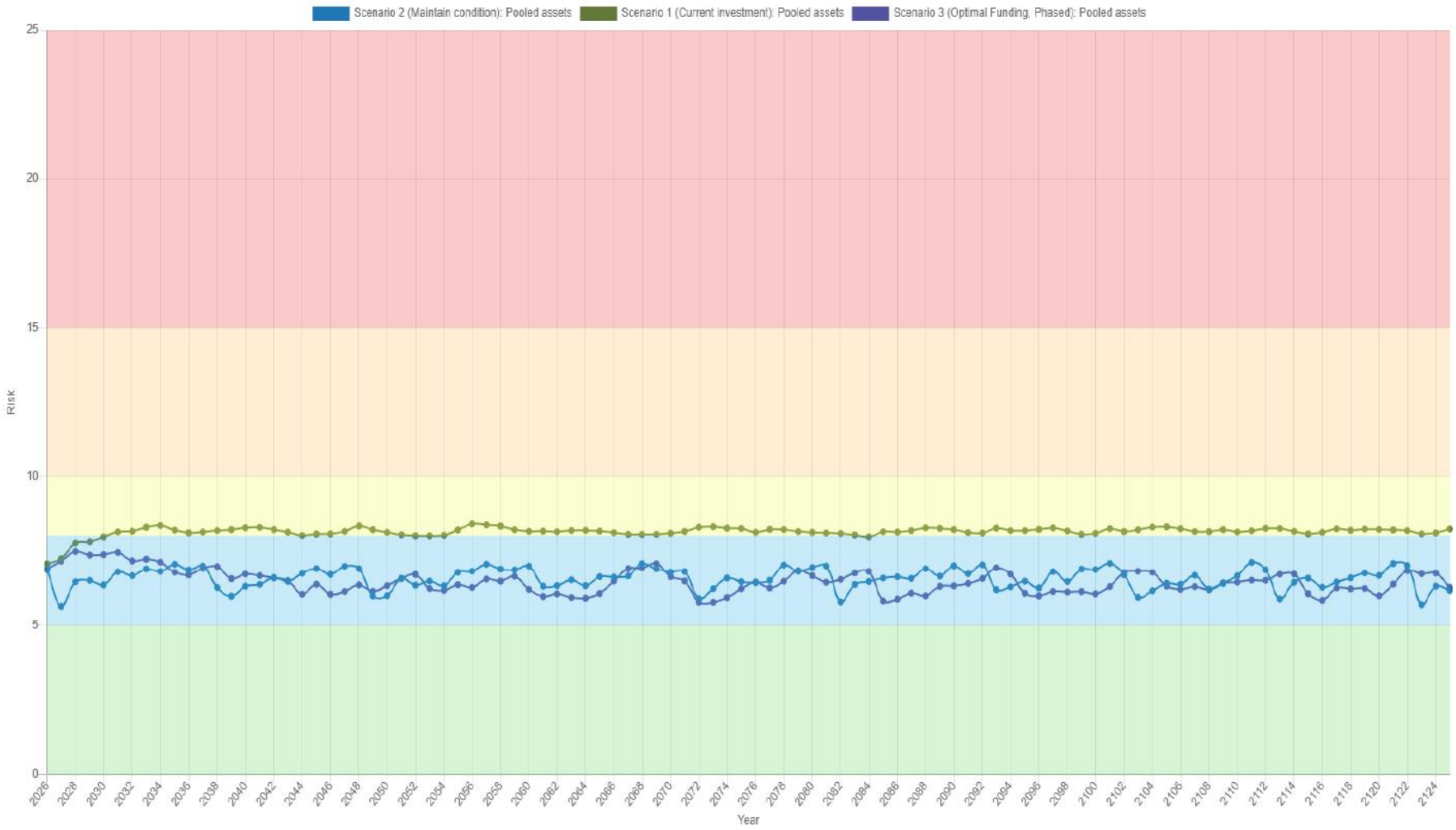
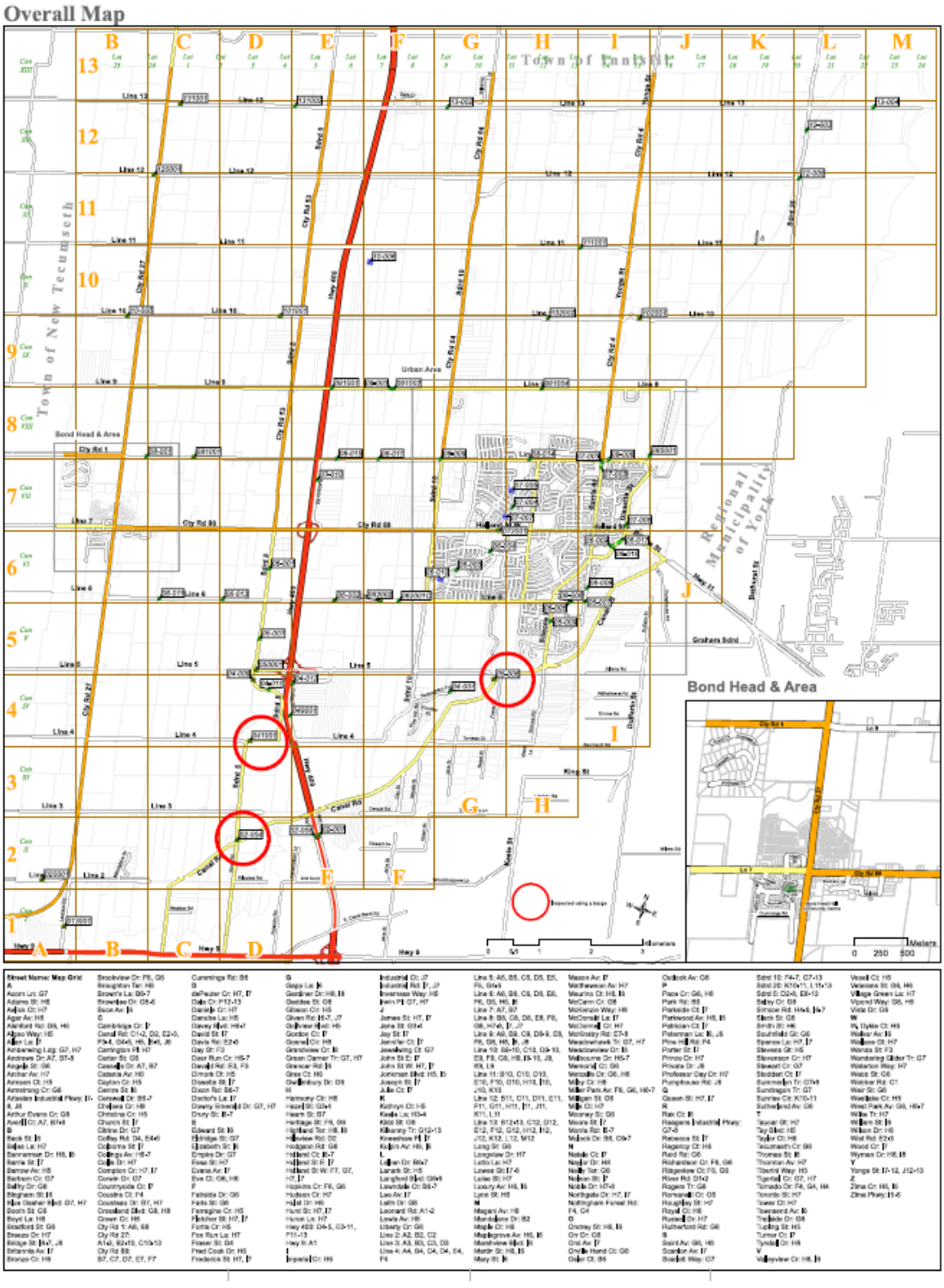


Figure 97: Pooled Assets Risk Comparison

Appendix O: Level of Service Maps & Photos

Location of Structures - Overall



Location of Structures – Urban Area



Example of a bridge in good condition – Holland Street Bridge – BCI: 90.7



North Elevation



Looking South Through Barrel



Typical Light Spalling Along North Headwall



West Abutment



Wide Separation Crack Along Height of Northeast Wingwall



Narrow Stained Crack on North Headwall

Example of a bridge in fair condition – Bridge 101001 – BCI: 44.1



North Elevation



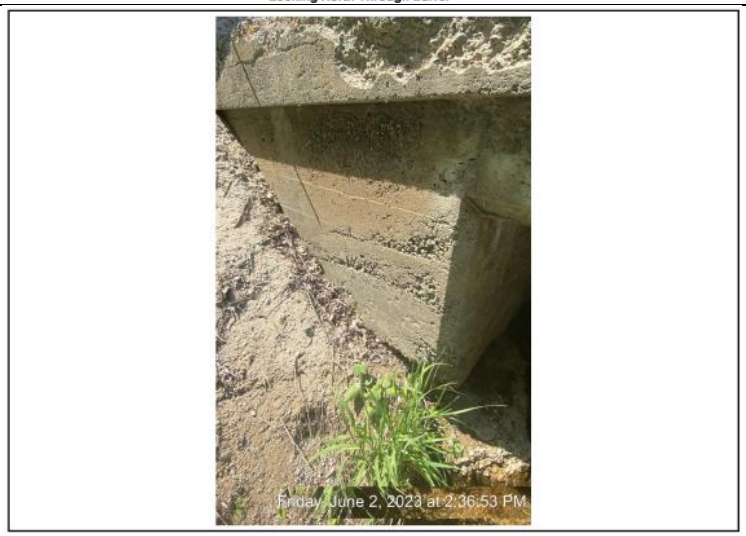
South Elevation



Looking North Through Barrel



Severe Disintegration on South Headwall



Severe Honeycombing on Southwest on West Abutment



Severe Erosion on East Abutment

Example of a culvert in good condition – McKinstry Road– BCI: 94.3



Looking North at Roadway over Culvert



West Elevation



Looking West Through Barrel



Looking East Upstream



Breakdown of Coating Above Waterline



Typical Guide Rail

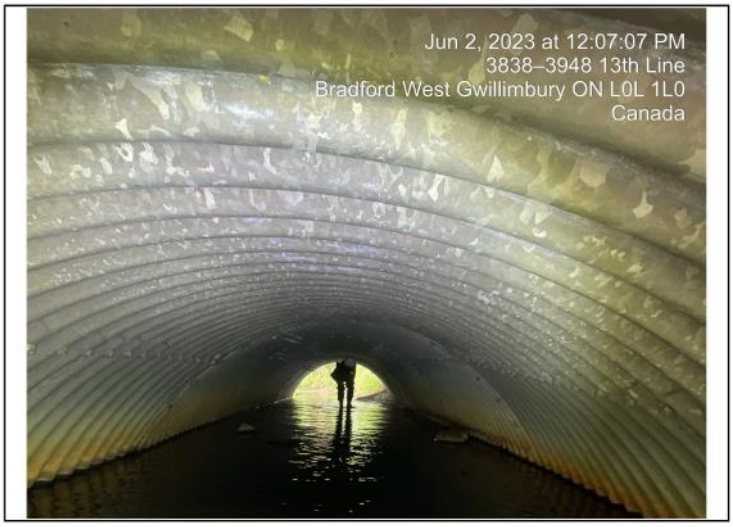
Example of a culvert in fair condition – Culvert 131002 – BCI: 59.9



Looking West at Roadway over Culvert



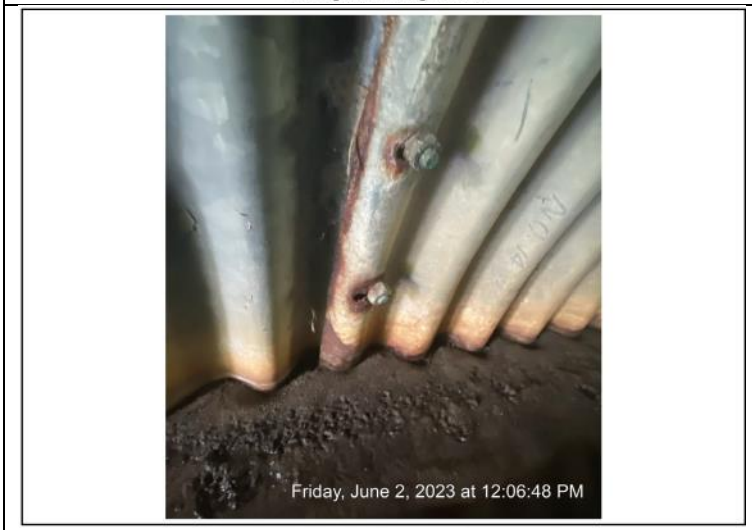
South Elevation



Looking North Through Culvert



Deformation on North Barrel Rim



Localized Perforation at Bolts Location



Looking South Upstream

Example of a culvert in poor condition – Coffey Road – BCI: 34.2



West Elevation



Looking West Through Barrel



Looking East Through Barrel



Looking West at Moderate Sag of Barrel

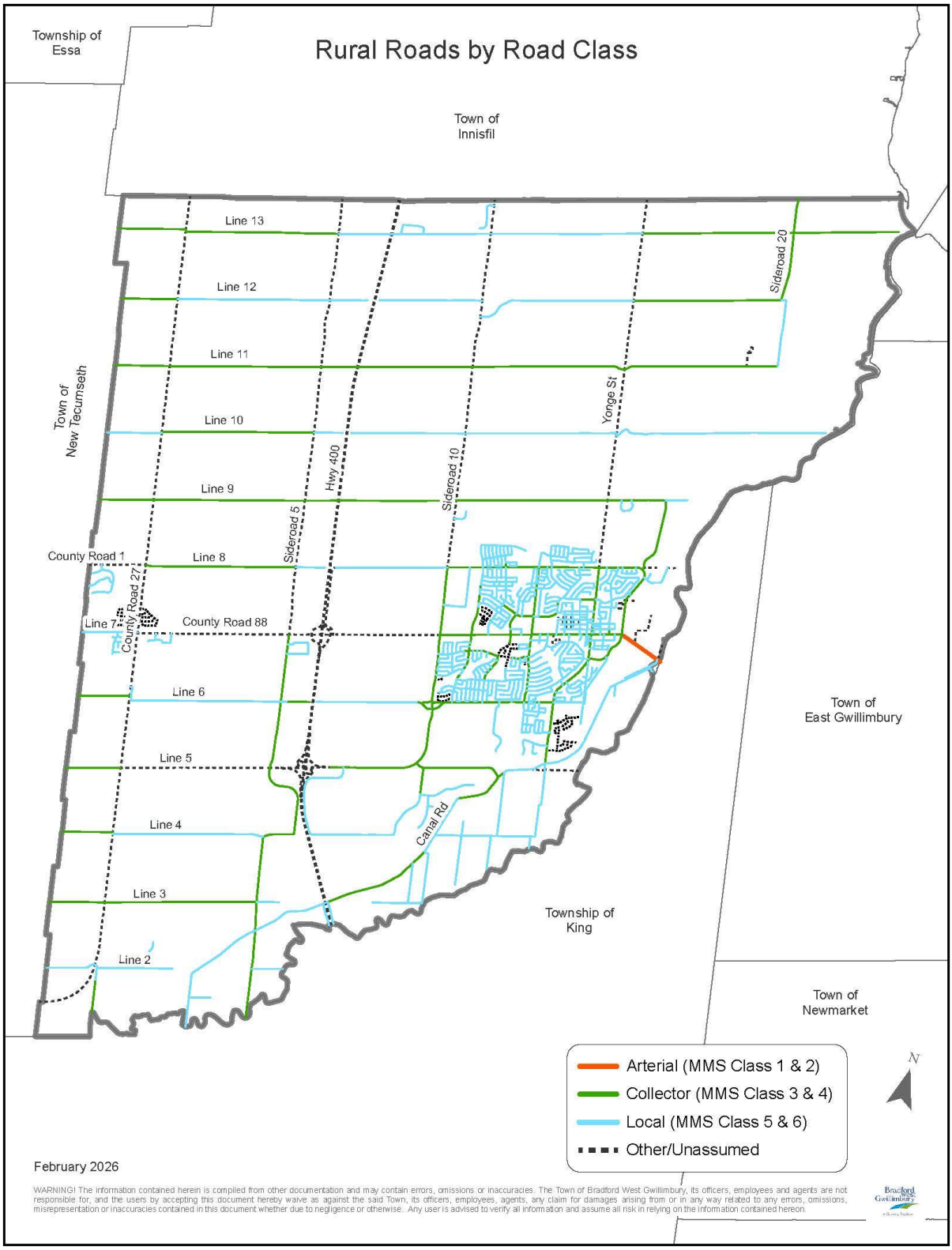


Discolouration and Pitting on Top of Barrel at West Outlet

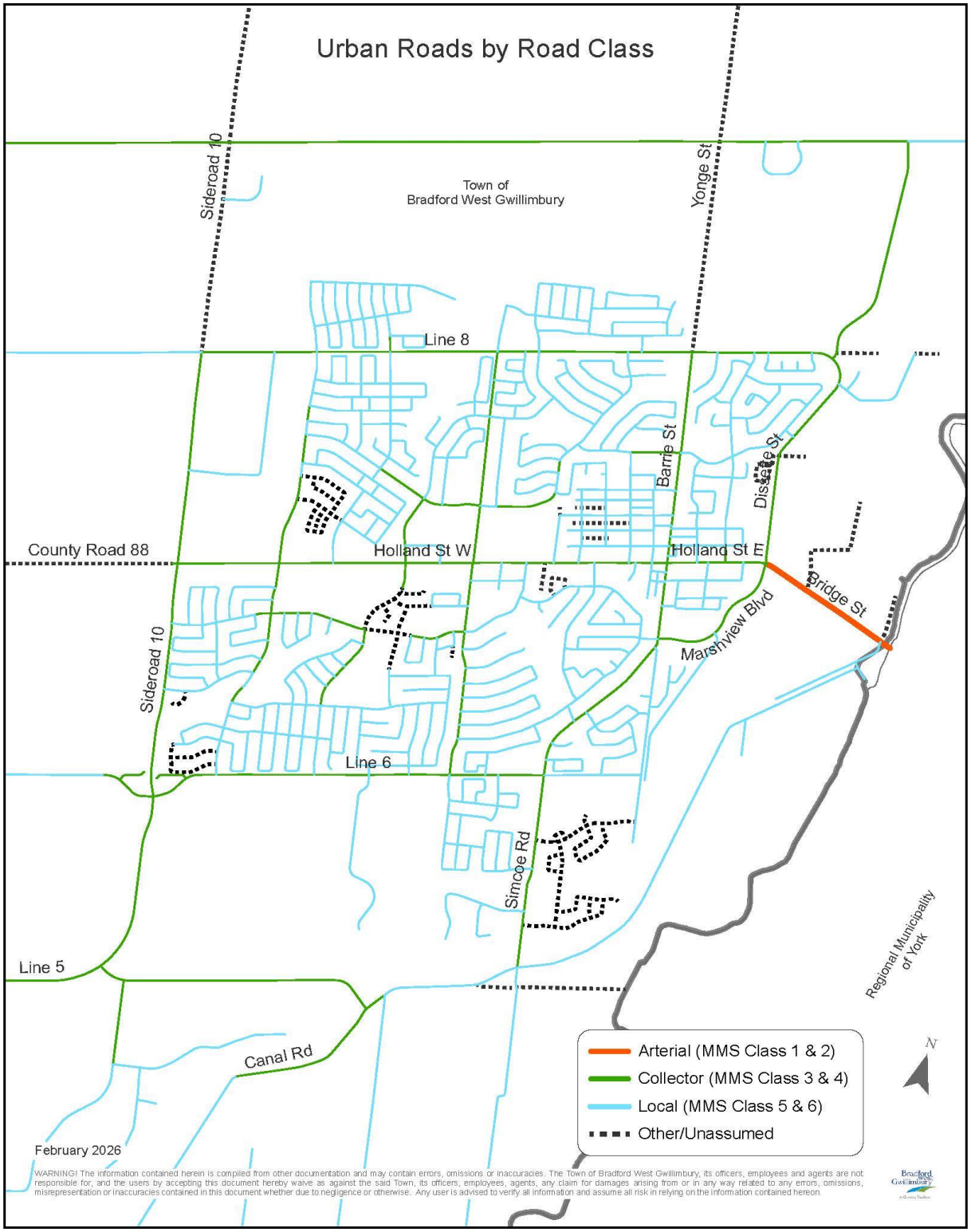


Minor Deformation on Barrel Rim at West Outlet

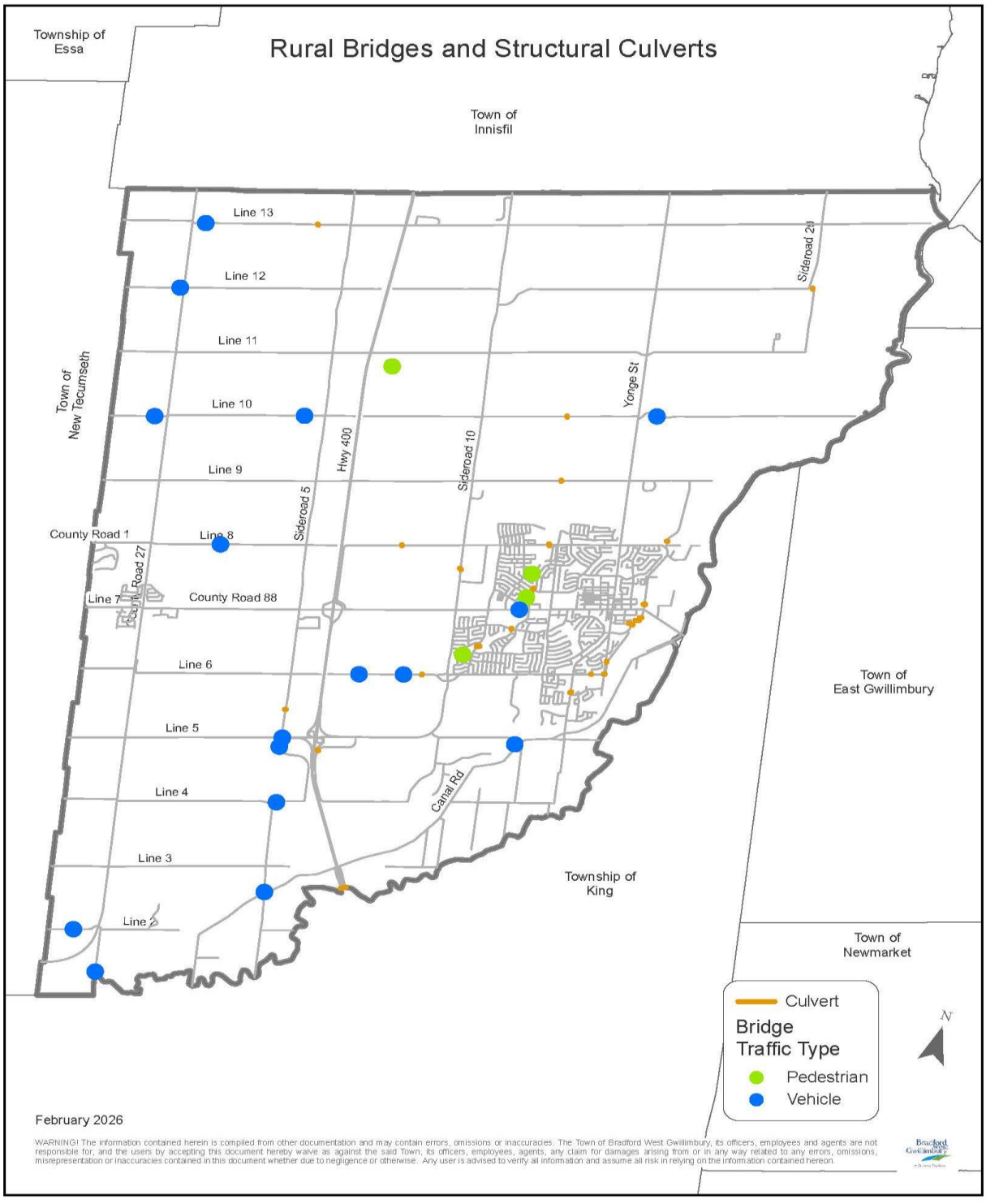
Road Network: Rural Roads



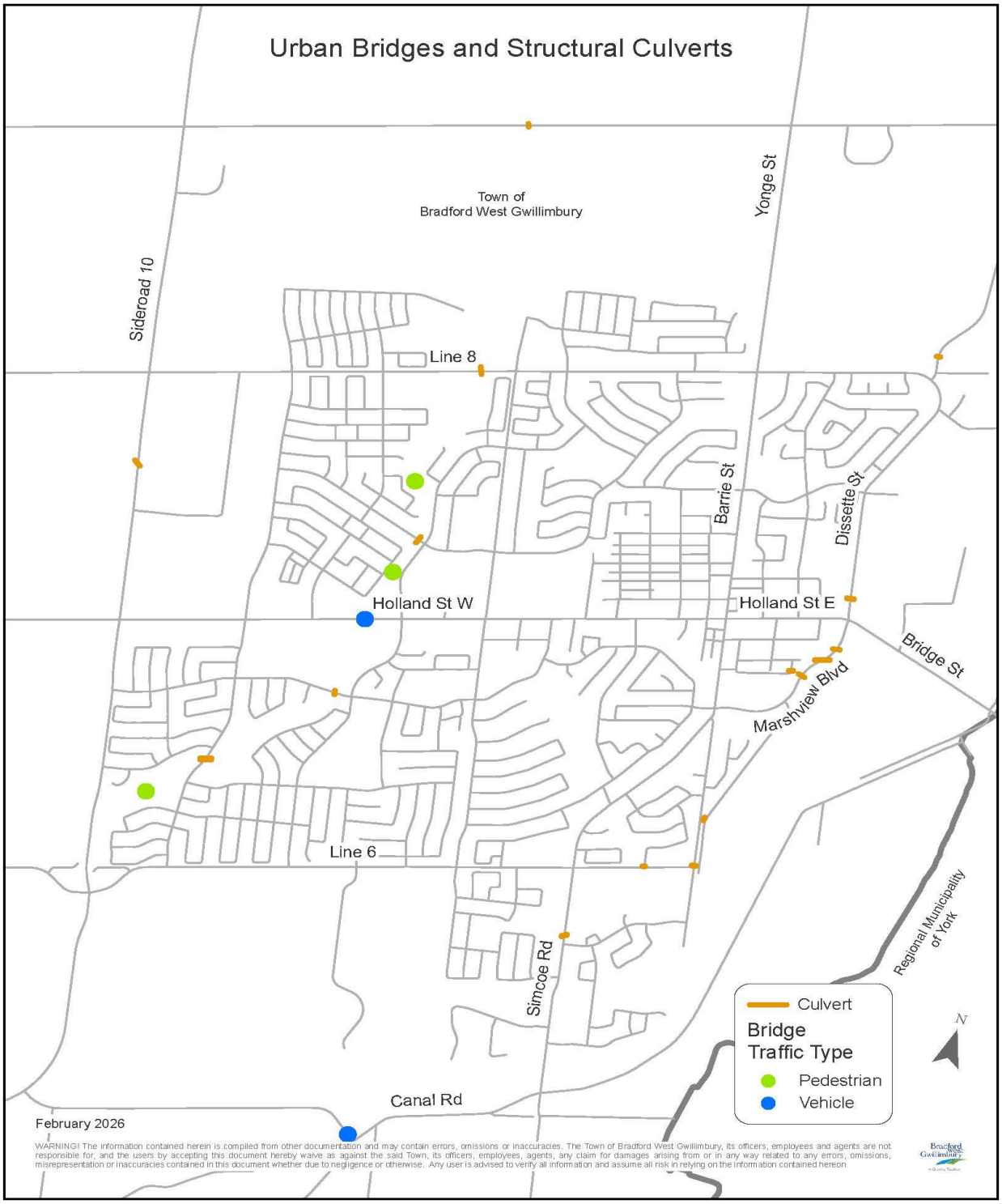
Road Network: Urban Roads



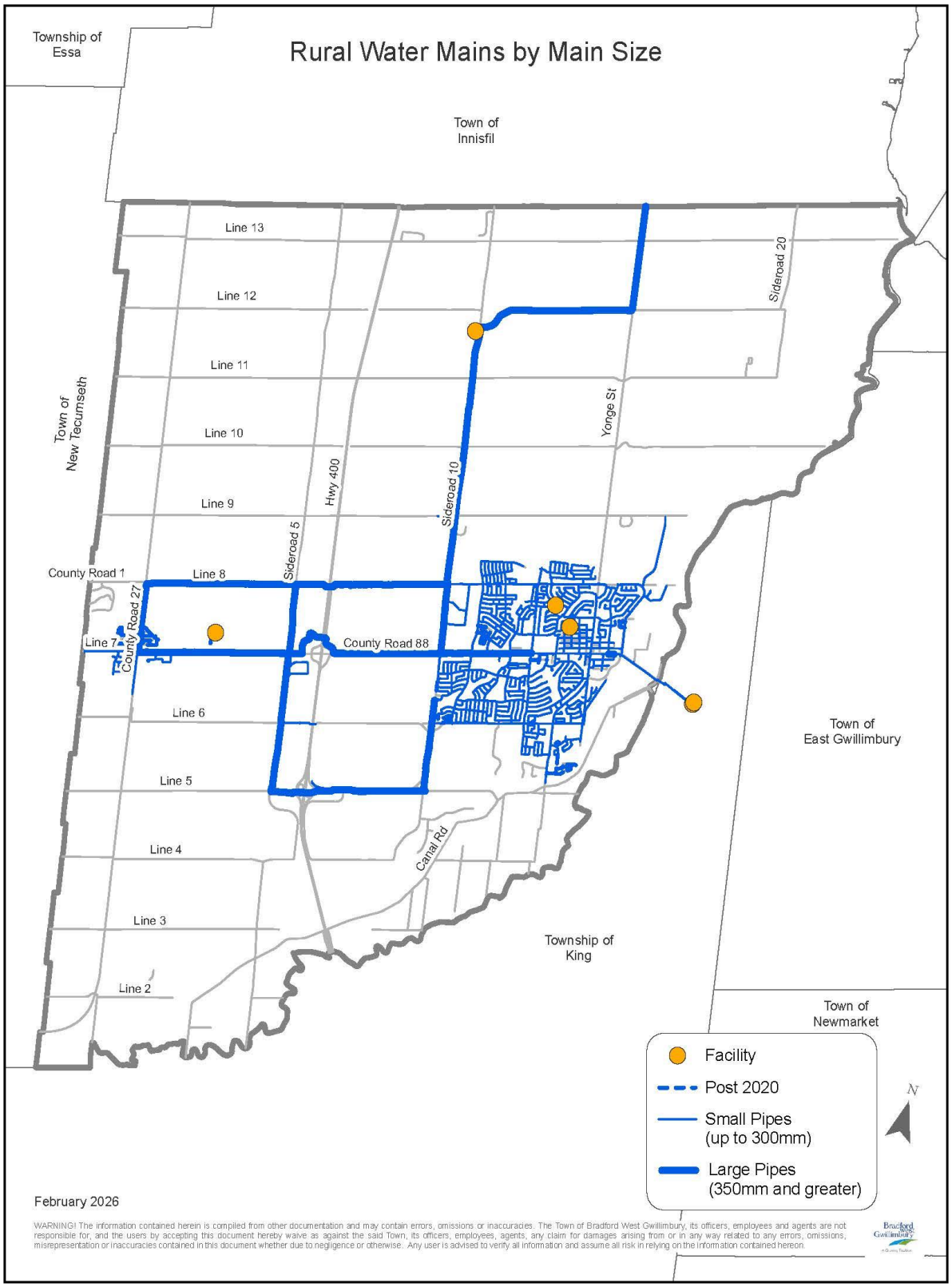
Bridges & Culverts: Rural



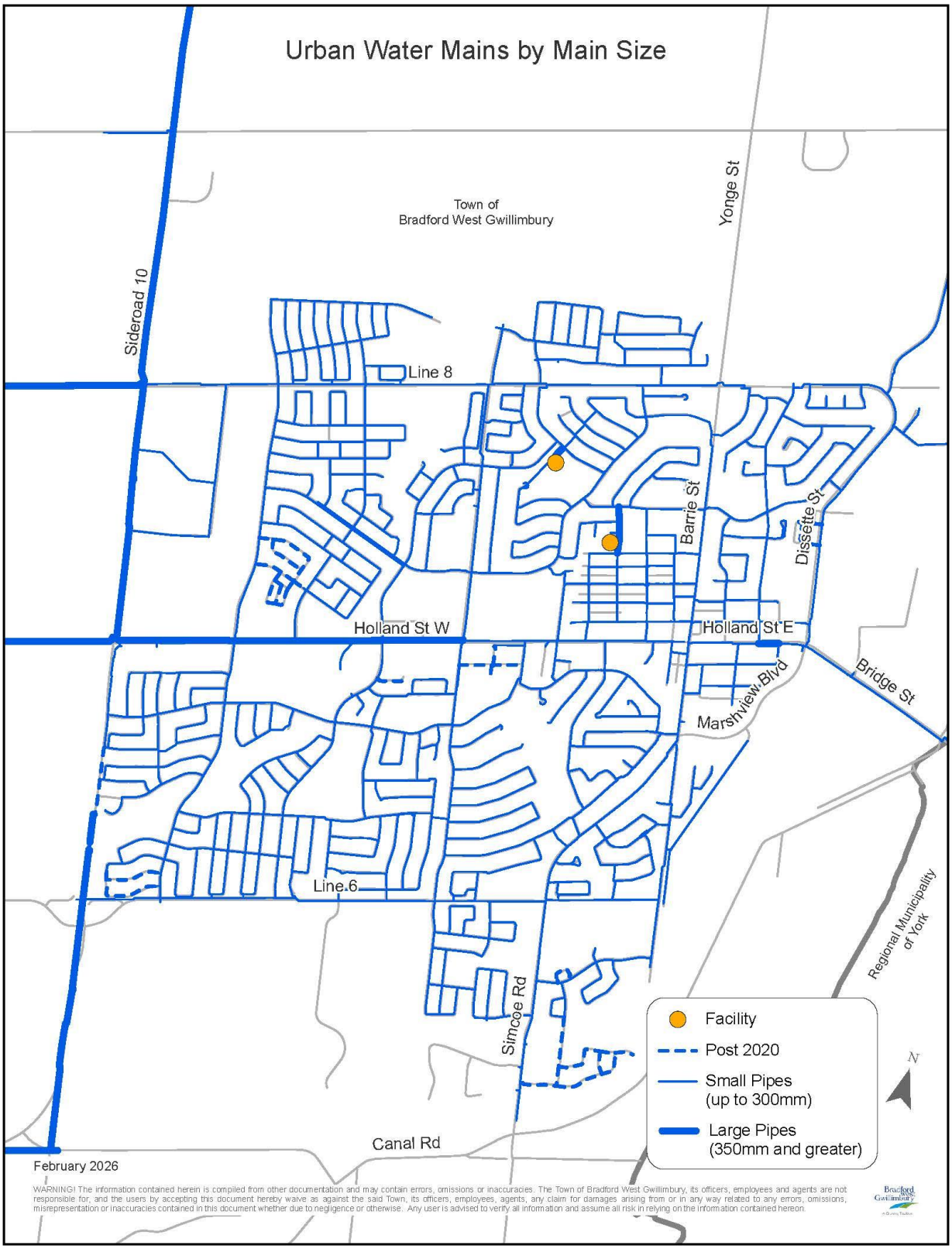
Bridges & Culverts: Urban



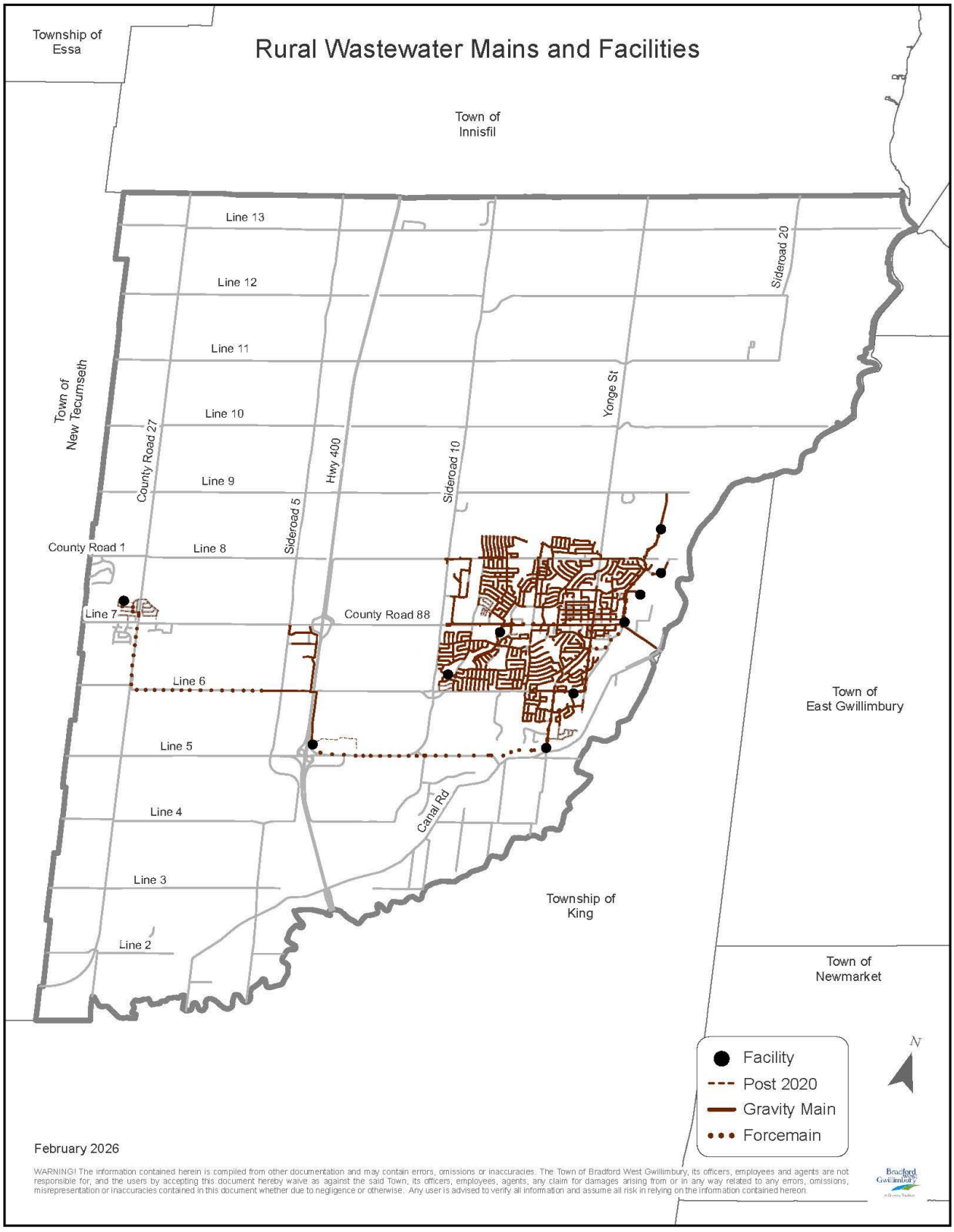
Water Network: Rural Water Mains



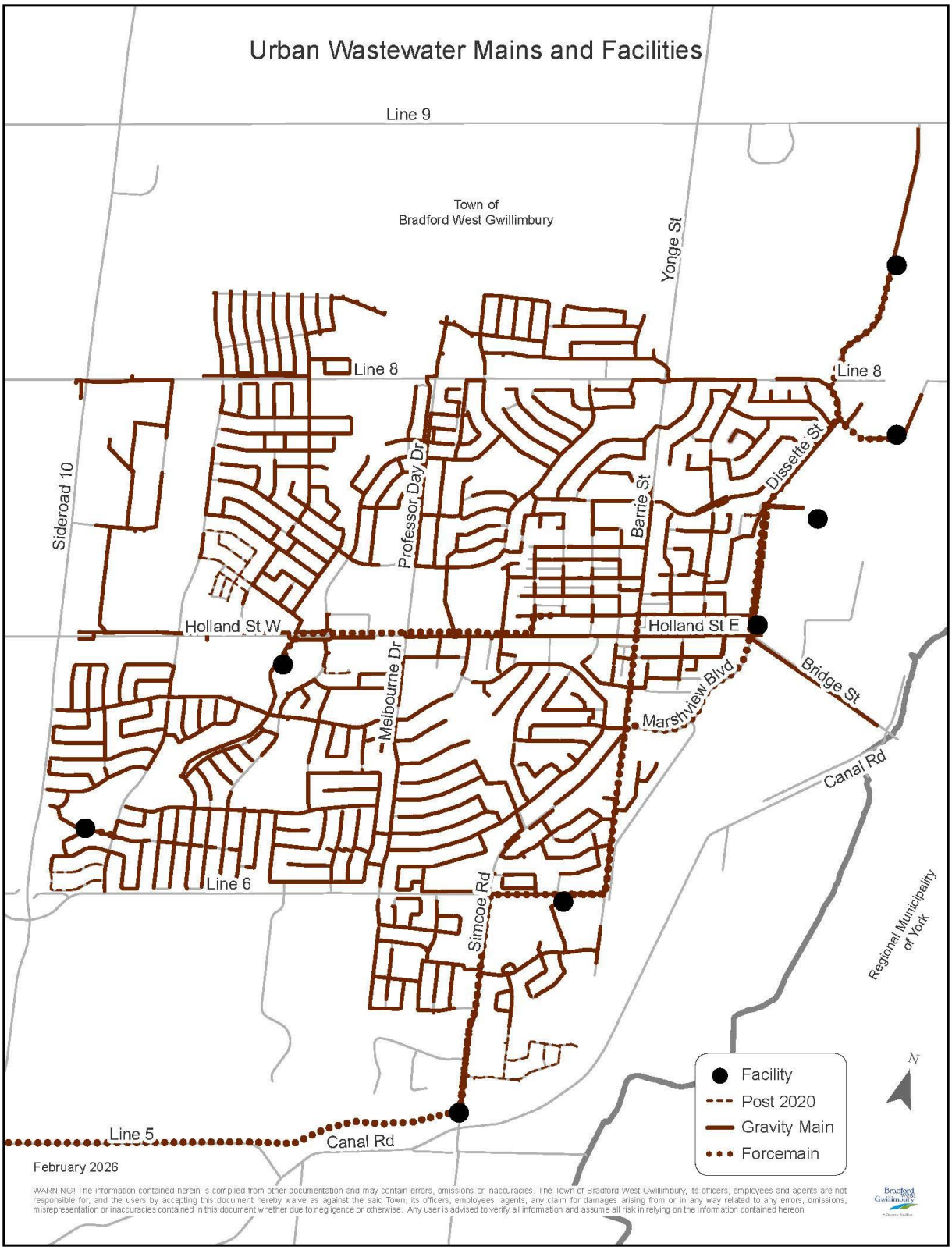
Water Network: Urban Water Mains



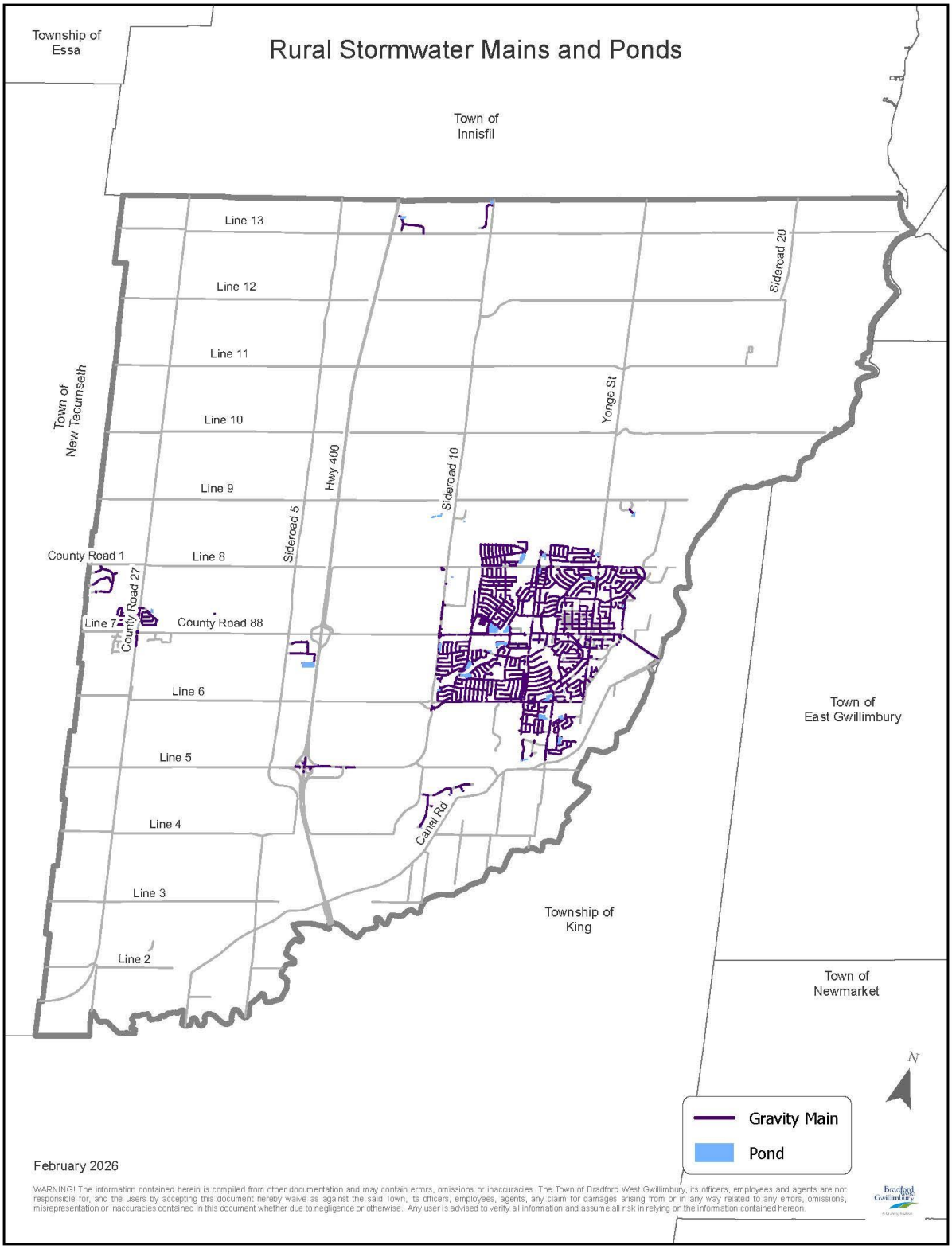
Wastewater Network: Rural Mains and Facilities



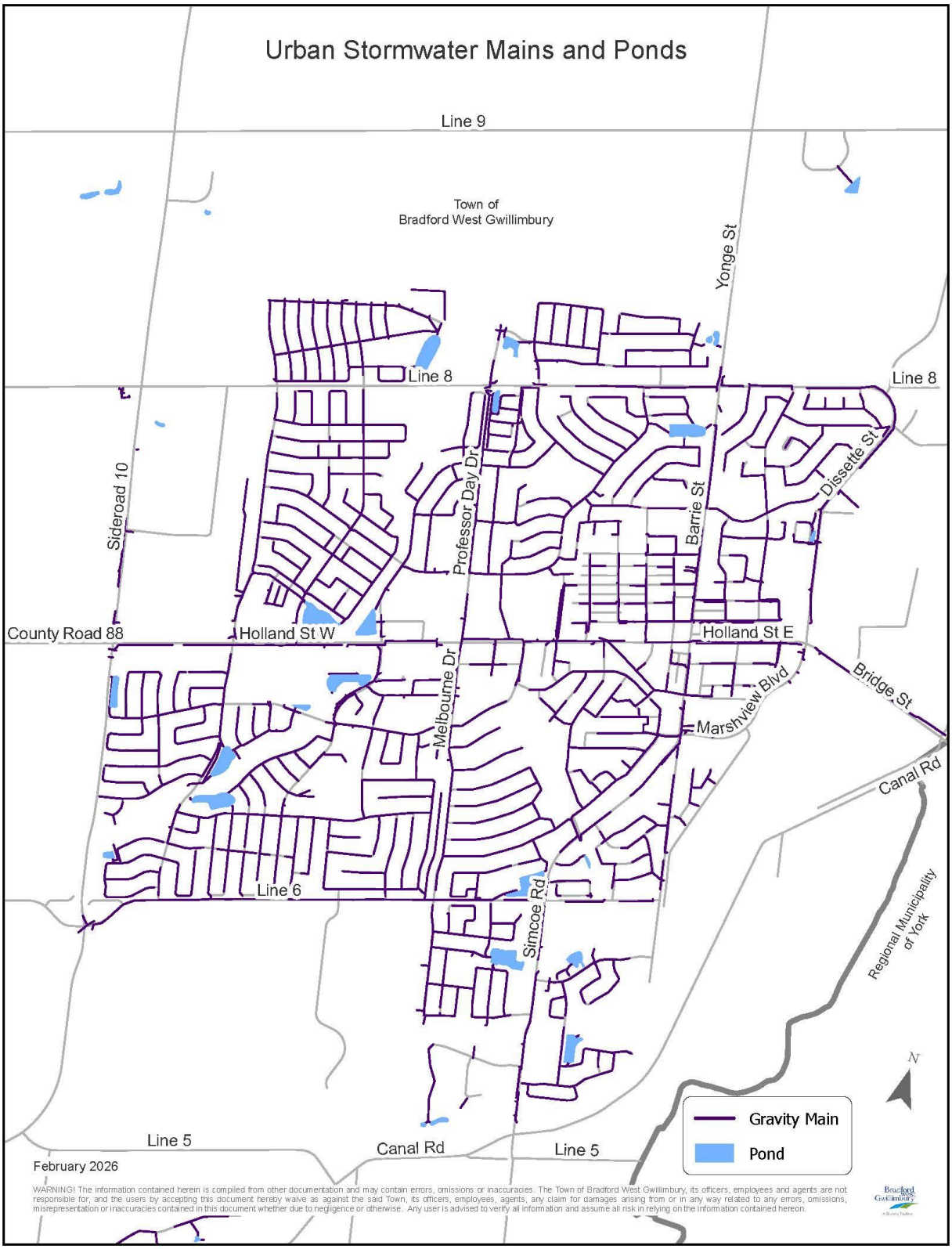
Wastewater Network: Urban Mains and Facilities



Stormwater Network: Rural Mains and Ponds



Stormwater Network: Urban Mains and Ponds



Appendix P: Risk Rating Criteria

Probability of Failure

Asset Category	Risk Classification	Risk Criteria	Value/Range	Probability of Failure Score
Road Network	Economic (100%)	Condition (100%)	0-39	5 – Very Likely
			40-64	4 - Likely
			65-74	3 - Possible
			75-84	2 - Unlikely
			84-100	1- Rare
Storm Culverts	Economic (70%)	Condition (100%)	0-19	5 – Very Likely
			20-39	4 - Likely
			40-59	3 - Possible
			60-79	2 - Unlikely
			80-100	1- Rare
	Operational (30%)	Material (100%)	HDPE Plastic Pipe, Liner, PVC	2 - Unlikely
			Concrete Pipe, Reinforced Cast-in-Place Concrete, Reinforced	3 - Possible

Asset Category	Risk Classification	Risk Criteria	Value/Range	Probability of Failure Score
			Precast Concrete, Unknown	
			Corrugated Steel Pipe	4 - Likely
Water Chambers, WPCP, Wells, Standpipes, Chambers, Booster Pumping Stations	Economic (100%)	Condition (100%)	5	5 – Very Likely
			4	4 - Likely
			3	3 - Possible
			2	2 - Unlikely
			1	1- Rare
All Other Assets	Economic (100%)	Condition (100%)	0-19	5 – Very Likely
			20-39	4 - Likely
			40-59	3 - Possible
			60-79	2 - Unlikely
			80-100	1- Rare

Consequence of Failure

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
Bridges & Structural Culverts	Economic (75%)	Replacement Cost (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe
	Operational (25%)	Deck Area (m2) (100%)	0-100	1-Insignificant
			101-200	2- Minor
			201-300	3- Moderate
			301-400	4- Major
			401+	5- Severe
Gravel Roads	Operational (50%)	Roadside Environment	Rural, Semi-Urban	2- Minor
			Urban	3- Moderate
	Social (50%)	AADT	0-50	1-Insignificant
			51-100	2- Minor
			101-150	3- Moderate
			151-200	4- Major
			201-250	5- Severe
HCB Roads	Economic (60%)	Replacement Cost (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
	Operational (20%)	Roadside Environment	Rural, Semi-Urban	2- Minor
			Urban	3- Moderate
	Social (20%)	AADT	0-500	1-Insignificant
			501-2,000	2- Minor
			2,001-5,000	3- Moderate
			5,001-10,000	4- Major
			10,001-30,000	5- Severe
LCB Roads	Economic (60%)	Replacement Cost (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe
	Operational (20%)	Roadside Environment	Rural, Semi-Urban	2- Minor
			Urban	3- Moderate
	Social (20%)	AADT	0-250	1-Insignificant
			251-500	2- Minor
			501-1,000	3- Moderate
			1,001-2,000	4- Major
			2,000-3,500	5- Severe
Storm Culverts	Economic (70%)	Replacement Cost (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
			$700,001+	5- Severe
	Social (30%)	Diameter (mm) (100%)	0-500	1-Insignificant
			501-1,000	2- Minor
			1,001-1,500	3- Moderate
			1,501-2,000	4- Major
			2,001-2,500	5- Severe
Water Chambers Wells, Standpipes, Chambers, Booster Pumping Station	Economic (60%)	Replacement Cost with Events (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe
	Operational (40%)	Consequence of Failure (100%)	1	1-Insignificant
			2	2- Minor
			3	3- Moderate
			4	4- Major
			5	5- Severe
WPCP	Economic (60%)	Replacement Cost with Events (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe
	Operational (40%)	Service Delivery Failure Consequence	0-5	1-Insignificant
			6-10	2- Minor

Asset Category	Risk Classification	Risk Criteria	Value/Range	Consequence of Failure Score
		(100%)	11-15	3- Moderate
			16-20	4- Major
			21-25	5- Severe
All Other Assets	Economic (100%)	Replacement Cost With Events (100%)	$0-50,000	1-Insignificant
			$50,001-200,000	2- Minor
			$200,001-500,000	3- Moderate
			$500,001-700,000	4- Major
			$700,001+	5- Severe