Centre Wellington

2025 ASSET MANAGEMENT PLAN

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List of Acronyms and Abbreviations

ADT	Average Daily Traffic
CCBF	Canada Community-Building Fund (formerly Federal Gas Tax)
CCTV	Closed-Circuit Television
CoF	Consequence of Failure
CPI	Consumer Price Index
DC	Development Charges
DCL	Dedicated Capital Levy
FIR	Financial Information Return
IIMM	International Infrastructure Management Manual
LOS	Levels of Service
m^3	Cubic metres
MPMP	Municipal Performance Measurement Program
NRBCPI	Non-Residential Building Construction Price Index
NWWBI	National Water and Wastewater Benchmarking Initiative
OCI	Overall Condition Index
OCIF	Ontario Community Infrastructure Fund
O.Reg 588/17	Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure
OLG	Ontario Lottery and Gaming
OSIM	Ontario Structure Inspection Manual
PoF	Probability of Failure
PRI	Pavement Roughness Index
PSAB	Public Sector Accounting Board
P3	Public-Private Partnership
RFP	Request for Proposal
RFQ	Request for Quotation
RSL	Remaining Service Life
SDI	Surface Distress Index
SO	Statutes of Ontario
UL	Useful Life
VPSC	Victoria Park Seniors Centre
WSIB	Workplace Safety and Insurance Board

EXECUTIVE SUMMARY

The Township of Centre Wellington provides a variety of services to its residents, businesses, and other stakeholders, including the maintenance of roads and other transportation related services, water supply and distribution, wastewater collection and treatment, fire services, various parks, recreation and cultural services, land use and development planning, and a wide range of other services.

Asset management planning is an integrated set of processes and practices that attempts to minimize the lifecycle costs of owning, operating, and maintaining assets, at an appropriate level of risk, while delivering services at established levels. Asset management consists of more than just the development of an asset management plan. Asset management is a process that results in clear and effective decision making regarding the provision of services within the Township. An asset management plan is an output from that process.

State of Township Assets

The Township presently owns and manages tax supported capital assets with a 2024 replacement value of approximately $875.3 million. Approximately 62% of these tax supported assets are roads related (i.e. road base and surface). Approximately 15% relate to bridges and major culverts.

The Township also owns and manages water capital assets with a 2024 replacement value of approximately $134.9 million and wastewater capital assets with a 2024 replacement value of approximately $175 million.

In total, the Township owns and manages assets with a combined 2024 replacement value of approximately $1.2 billion.

Assets within this plan are categorized as follows:

1. Roads Related Assets
2. Bridges and Culvert Assets
3. Facility Assets
4. Vehicles
5. Equipment
6. Land Improvements
7. Water Network Assets
8. Wastewater Network Assets
9. Stormwater Network Assets

Levels of Service

The most important outcomes of the Township's asset management planning practices are an understanding of the services and service levels, and balancing these service levels, risk, and costs associated with providing services to residents and businesses. This Asset Management Plan reflects the current services and levels of service delivered as well as defined target services and levels of service, including assessments of how the Township will fund changes in services and service levels, in moving from "current levels" to "target levels".

Asset Management Strategy

The asset management strategy reviews and quantifies the many costs involved in the management of assets through the asset management planning process. This includes asset specific lifecycle costs as well as more indirect "non-infrastructure solutions", such as studies and master plans that assist in the management of assets. The direct costs associated with asset ownership can be broken down into various lifecycle costing categories, such as operating costs, maintenance costs, rehabilitation costs, replacement costs, and expansion (or growth) related costs.

One of the factors influencing the longevity of Township assets is the demand for the services provided by those assets. Demand will change over time, both in terms of service quality and quantity as well as the types of services required. Demand can be driven by several factors, including population growth, demographic shifts, changes in the types of services provided, the ways in which the Township is expected to provide those services, land-use changes, economic development trends, and environmental changes. Anticipated changes in demand should be considered and accounted for within an asset management plan.

Risk assessments are incorporated into the asset management planning process to identify critical (or higher risk) areas to prioritize asset investments. In many cases, the demand for asset investment exceeds the actual funding available, requiring the need to allocate funds based on a risk management approach.

Financing Strategy

The financing strategy for an asset management plan outlines the key funding sources used to finance asset management related costs, including methodologies and strategies proposed for each funding source.

To fund the tax supported needs identified through the asset management planning process, the Township utilizes a number of internal and external sources of funding. There is a level of risk associated with relying on external sources of funding over a long-term forecast. While internal sources are more controllable, external sources are uncontrollable and subject to change. This makes long-term planning more difficult.

While the Township has made significant progress in funding bridges and culverts (reaching 65% of optimal annual investments), only 52% of the optimal annual investment has been achieved for other tax supported assets. An equivalent increase in taxation of 1.98% is needed annually to invest in tax supported assets in order to make meaningful progress towards optimal annual asset investment levels. If assessment growth each year falls between 2% and 3%, then the net impact on taxation would be between 1.25% and 1.50% annually.

The Township has made significant progress in funding water and wastewater supported assets, reaching 60% and 61% of optimal annual investments for each service segment. Rate increases identified in the Township's Water and Wastewater Rate Study support the ongoing operations of the water and wastewater systems as well as planned increases to asset investment over the forecast period, with the goal of reaching system financial sustainability, including realizing optimal annual asset investments.

Monitoring and Continuous Improvement

The ongoing monitoring and continuous improvement of Township asset management practices ensures that:

- Compliance with asset management legislation is achieved and maintained; and
- Asset management practices are implemented in a methodical way which best serves the interests of the Township and its residents, ensuring efficiency and integration into day-to-day operations.

Asset management activities at the Township are not conducted in isolation. They are integrated with the policies and practices of Wellington County and the other lower-tier municipalities, whose assets connect with those of the Township.

As an organization, the Township's asset management capacity is at an intermediate level, with informal AM practices in each department. While these practices vary in completeness and complexity, the common theme across the organization is the need to improve the degree of consistency in data collection and management practices, formalize risk assessment procedures, and work toward continually improving data quality.

Conclusion and Recommendations

The backbone of the Township's asset management planning practices is an understanding of the services and service levels expected and how Township assets assist in providing these services. A balance is required between providing high levels of service and the costs associated with those services. From an asset funding perspective, a balance is needed between financing the cost of implementing asset management recommendations and the risk associated with deferring asset lifecycle investment.

Asset management planning is a journey that will evolve over time as new data, assumptions and strategies are brought forward. Recommendations are provided in this document that will assist in this evolution and will ensure the Township is constantly moving forward in its asset management maturity.

The table below provides a summary of recommendations that are outlined in each chapter. It is important to note that these recommendations will need to be brought forward into other processes and initiatives for ultimate approval, such as the annual budget process.

Chapter Reference	Description
Overall	Recognize that asset management planning is a journey that requires continuous improvement and updates.
Chapter 3	Consider the costs associated with providing services at expected levels when developing the annual budget.
Chapter 4	Consider the following when developing the annual budget: a) All asset management related costs (non-infrastructure solutions and lifecycle costs) required to provide Township services. b) The risks (both corporate and asset related) of deferring various asset lifecycle costs. c) The impacts of demand on Township assets, including anticipated growth.

	d) Recognition that "critical assets" play a significant role in providing services and have a high consequence of failure. e) Priority assets represent assets in each category with the highest asset risk, and future short/medium-term lifecycle costs should focus on these assets.
Chapter 5	Consider the following when developing the annual budget: a) Staff to closely monitor external sources of funding trends, given the associated risks of relying on this funding from an asset management perspective. b) OCIF funding received will continue to be dedicated to bridge, culvert, and roads related rehabilitation and replacement needs. c) The OLG Allocation Policy is to be reviewed annually to maximize funding available for asset management purposes. d) Planned debt payments over the ten-year capital forecast are not to exceed 15% of Township revenues. e) A proportion of annual taxation assessment growth is to be allocated to asset investment as outlined in chapter 5. f) To provide meaningful increases in tax supported asset investment over time, an annual increase equivalent to a 2.0% increase in taxation is needed. Other available funding increases, such as a proportion of assessment growth would reduce the net impact on taxation. g) To continue to follow Water and Wastewater Rate Study recommended rate increases.
Chapter 6	Continue to monitor and continuously improve Township asset management planning practices. a) Continue to work with the County and associated lower-tier municipalities in the advancement of asset management planning. b) Continuous improvement of asset data quality (i.e. completeness and accuracy) for all asset categories over time. c) Progression of short/medium-term and long-term continuous improvement targets.

MESSAGE FROM THE CAO

Effective asset management planning is becoming more and more critical, given the evolving municipal landscape. Assets are more expensive to operate, maintain, and replace. Funding from other levels of government is declining and more difficult to obtain. Asset management planning provides a long-term vision that strives to balance risk and affordability while providing services to residents and businesses of Centre Wellington.

Asset management practices are becoming fully integrated into day-to-day Township operations, playing a role in almost everything we do, with the Asset Management Plan being one of the most critical Township documents, along with the Strategic Plan and the annual Budget. These documents provide the overall strategic and operational direction for the corporation.

This is the second staff prepared Asset Management Plan for the Township. Staff take a lot of pride and ownership in this 2025 Asset Management Plan. They have detailed knowledge and understanding of Township assets and the ability for those assets to provide services, which enhances the plan accuracy and effectiveness.

The recommendations contained within this report are critical to the overall success of the Township in providing services at desired levels over the long term. Approval of these recommendations as well as a continuous improvement approach to asset management planning going forward are the keys to success.

I would like to thank the staff members involved in the creation of this Asset Management Plan, especially the members of our Township Asset Management Committee. Every time we create a new Plan, it is an enhanced and more accurate version of the previous Plan. You are making significant contributions to the long-term success of the Township, and you should be very proud of that accomplishment!

As the Executive Lead for the Township's asset management planning practices, I endorse this comprehensive 2025 Asset Management Plan.

Dan Wilson CPA, CA
Chief Administrative Officer
Township Asset Management Executive Lead

MESSAGE FROM THE TREASURER

With this being the second iteration of an internally developed Asset Management Planning document for the Township, I feel that staff, with council support, have made significant progress in maturing asset management planning practices internally. Since the release of the 2022 Asset Management Plan, Township Staff have implemented many process enhancements, and technologies that support data driven decision making, data maturity, and better insights into the utilization of Township owned assets. While this may not be immediately evident to the end-users of the Township's assets, it provides a solid foundation of understanding of service delivery provision, timing of needed lifecycle interventions, and supports minimizing total cost of ownership.

This updated Asset Management Plan ensures compliance with regulatory requirements and provides both residents and Council with insight into evidence-based priority projects to ensure both service delivery and levels of service are maintained, while balancing risk and cost is the goal of asset management planning. Significant time and outreach have been conducted in support of defining Levels of Service delivery and establishing targets for this Asset Management Plan update. The Township is well positioned to deliver on these targets and provide regular updates to the residents and the Council of Centre Wellington.

The Asset Management Plan represents the culmination of efforts by many team members. This document will inform the Township of Centre Wellington for years to come. All contributions from the asset management team should be both recognized and celebrated.

Adam McNabb MBA, CPA, CGA
Managing Director of Corporate Services & Treasurer
Asset Management Committee Chair

CHAPTER ONE

INTRODUCTION

CHAPTER 1: INTRODUCTION

The Township of Centre Wellington provides a variety of services to its residents, businesses, and other stakeholders, including the maintenance of roads and other transportation related services, water supply and distribution, wastewater collection and treatment, fire services, various parks, recreation and cultural services, land use and development planning, and a wide range of other services.

The Township provides many of these services by maintaining various infrastructure and other assets. Assets are physical things that have potential or actual value to the Township. This includes everything from roads and bridges to parks and equipment. All of these assets contribute to providing services across the Township. Asset management planning analyzes how to provide these services in a cost-efficient and sustainable manner.

Assets are essential to the delivery of Township services. They allow for the efficient flow of people and products, support cultural enrichment and economic development initiatives, and contribute to the quality of life for residents. Fundamentally, assets exist to provide services to the community.

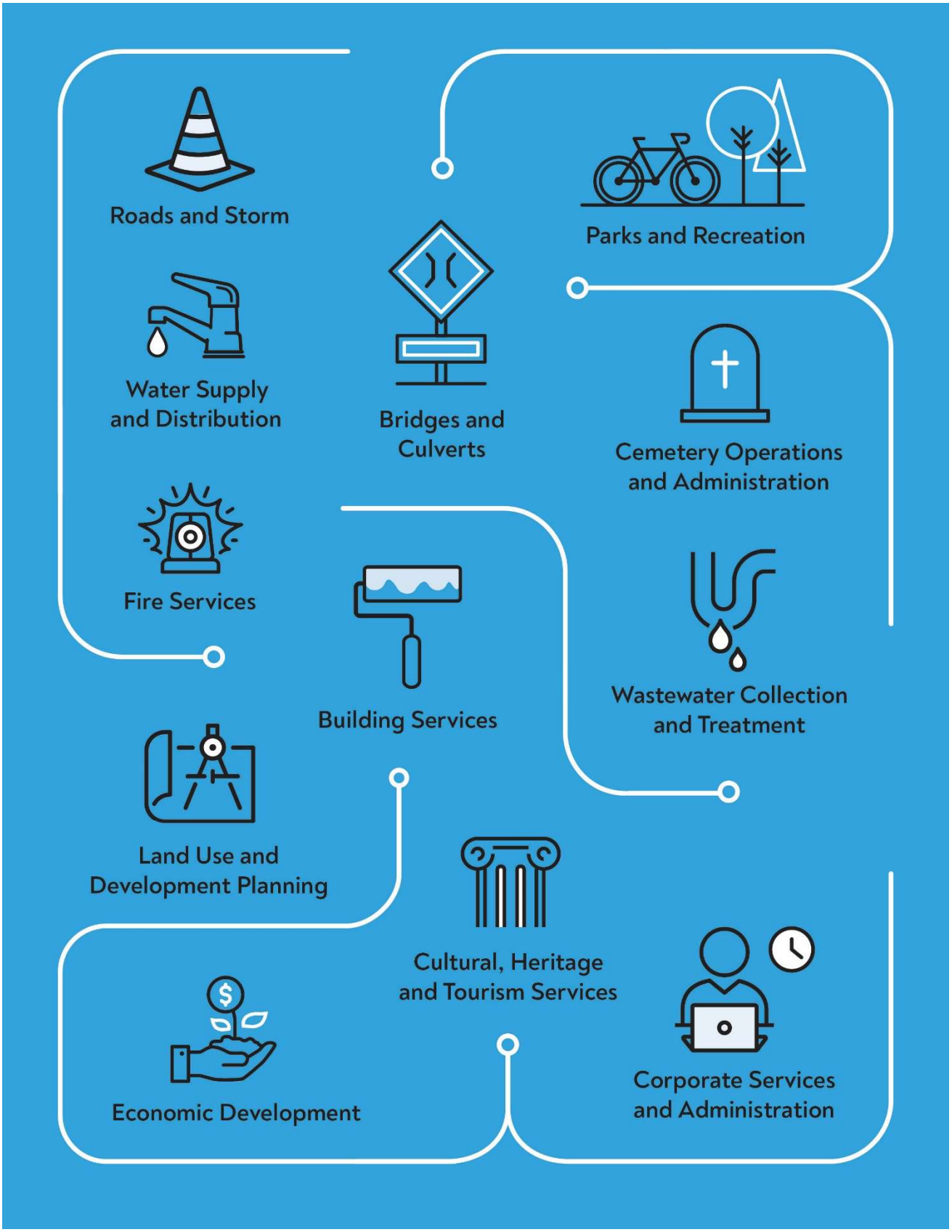
The Township maintains a range of assets, including:

- 468 km of roadways
- 112 bridges and major culverts
- 120 km of watermains
- 110 km of wastewater mains
- 117 km of stormwater mains
- 274 acres of parks and open spaces
- 89 facilities
- Various vehicles, machinery, equipment, and land improvements

Construction of infrastructure surged across Canada from the 1950's to 1970's due to growth, modernization, and urbanization following the end of WWII. The following decades saw little investment in infrastructure maintenance, and as a result, a significant proportion of infrastructure across Canada has fallen into disrepair. Poor planning and under-investment have left Ontario with the most serious infrastructure deficit in our history. The burden of this deficit falls largely on municipalities who own roughly 60% of all public infrastructure but receive only $0.08 of every tax dollar collected.

In 2009, all municipalities across Canada were required to incorporate Tangible Capital Asset reporting on their financial statements. This gave municipalities a better understanding of what assets they owned, and their financial value. Accounting for tangible capital assets in annual financial reports assists municipalities in understanding the rate of asset deterioration, or "consumption", from a financial perspective, and helps with anticipating infrastructure investment needs. Asset management planning takes this to the next level by determining future lifecycle needs of each asset.

The Township maintains over $1.3 Billion in assets (2024 replacement value). Some assets are relatively new, or recently repaired, while others are approaching or are at the end of their estimated useful life and have significant investment needs. The Township is faced with an aging and deteriorating asset base and has limited funding sources to rehabilitate or replace these assets. The Township must balance the maintenance needs of new assets with the more capital-intensive repair and rehabilitation needs of aging assets.


Roads and Storm
Parks and Recreation
Water Supply and Distribution
Bridges and Culverts
Cemetery Operations and Administration
Fire Services
Building Services
Wastewater Collection and Treatment
Land Use and Development Planning
Cultural, Heritage and Tourism Services
Economic Development
Corporate Services and Administration

WHAT IS ASSET MANAGEMENT PLANNING?

Asset management planning is an integrated set of processes and practices that attempts to minimize the lifecycle costs of owning, operating, and maintaining assets, at an appropriate level of risk, while delivering services at established levels. Beyond the legislated requirement for asset management planning, the core catalysts for establishing Township-wide asset management planning practices include:

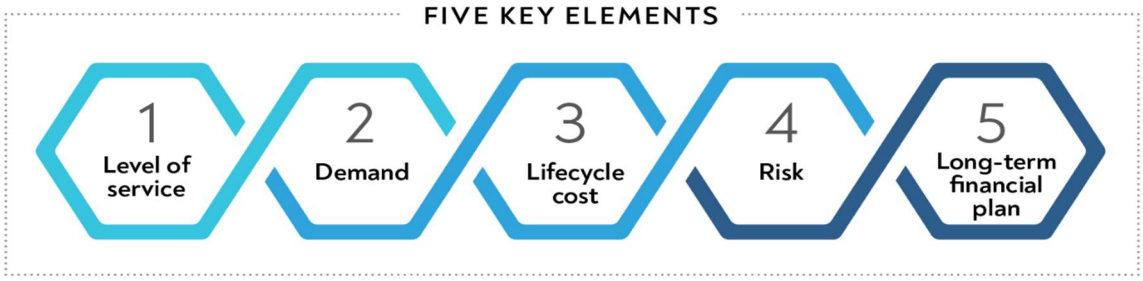
> Asset management planning is the process of making the best possible decisions regarding the building, operation, maintenance, rehabilitation, replacement, and disposition of assets.

- Anticipated growth and the demand for assets/services.
- The impacts of climate change.
- The increasing costs associated with providing services to stakeholders, such as residents.
- A challenging municipal funding model, and the need to increase asset investment.

Asset management planning allows the Township to make informed asset investment decisions, prioritize asset investments, enhance financial performance, manage risk, progress organizational sustainability, and improve the overall efficiency and effectiveness of providing services.

The key elements of asset management planning[1] are:

1. Providing a defined level of service and monitoring performance.
2. Managing the impact of demand changes (growth as well as decline) through demand management, infrastructure investment, and other strategies.
3. Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet that defined level of service.
4. Identifying, assessing, and appropriately controlling risks.
5. Having a long-term financial plan which identifies required expenditures and how they will be funded.



The Township has always been conducting asset management planning practices. It is in the nature of the responsibilities of providing services. Formally, the Township has been creating Asset Management Plans since 2013. Asset Management Plans have been presented and approved by Township Council in 2013, 2014, 2016, and 2022 prior to this Plan.

[1] International Infrastructure Management Manual (IIMM) page 1.8

ASSET MANAGEMENT LEGISLATION

Asset planning has been identified by the Province of Ontario as a priority for a number of years. The following timeline illustrates the progression of asset management planning in Ontario municipalities since the year 2000.

Year	Action
2000	Province communicates the need to start asset planning.
2002	The Walkerton Inquiry outlines the need to have full cost pricing (water).
2009	Public Sector Accounting Board (PSAB) section 3150 is approved, requiring municipalities to maintain an inventory of capital assets owned.
2012	Asset Management "Building Together" guide is published, providing asset management best practices to Ontario municipalities.
2014	The Province starts linking grant funding to the requirement to have an asset management plan.
2016	The Infrastructure for Jobs and Prosperity Act is passed, making asset management a legislated requirement for public sector entities in Ontario.
2017	Ontario Regulation 588/17 is passed, providing more detailed asset management requirements for municipalities in Ontario.
2019	Strategic Asset Management Policy required to be implemented in all municipalities in Ontario (as per Ontario Regulation 588/17).

Ontario Regulation 588/17 relating to asset management planning for municipal infrastructure was passed in December 2017, providing specifics regarding asset management planning requirements for Ontario municipalities. A phased in approach to compliance was established by the province from 2019 to 2024. A Strategic Asset Management Policy was required to be in place in 2019, representing the first requirement of the regulation. In March 2021, due to the impacts of COVID-19 on municipalities, the province provided a 1-year extension for all remaining compliance due dates. The updated due dates are as follows:

Date	Requirement	Description
July 1, 2019	Strategic Asset Management Policy	The policy identifies municipal goals the asset management plan supports, how the budget is informed, asset management planning principles, considerations for climate change, and a commitment to provide opportunities for stakeholder input.
July 1, 2022	Asset Management Plan (Core Assets)	The plan must address current levels of service and the associated costs of maintaining that service for water, wastewater, roads, bridges, culverts and storm water assets.
July 1, 2024	Asset Management Plan (All Township Assets)	The plan must address current levels of service and the associated costs of maintaining that service for all municipal assets.
July 1, 2025	Proposed Levels of Service	Builds on the 2024 requirement by including a discussion of proposed levels of service, what activities will be required to meet proposed levels of service, and a strategy to fund those activities

This Asset Management Plan is compliant with the July 1, 2025 regulatory requirements.

ASSET MANAGEMENT PLANNING AS A PROCESS

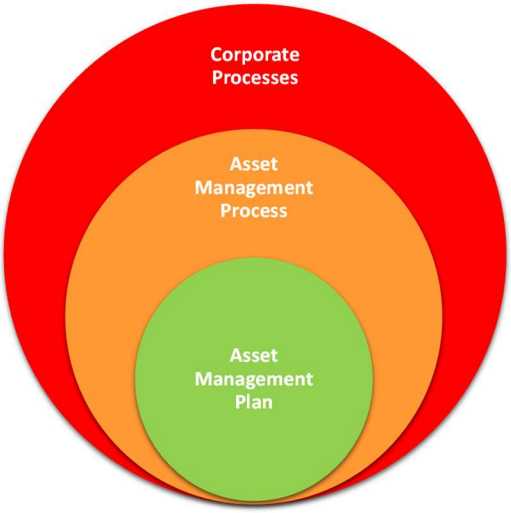
Asset management consists of more than just the development of an asset management plan. Asset management is a process that results in clear and effective decision making regarding the provision of services within the Township. An asset management plan is an output from that process. The asset management process is integrated with other corporate processes, so that decisions are made based on the strategic direction of the Township.

The asset management process includes the following key areas:

- ✓ Policies and strategies.
- ✓ Integration with day-to-day operations.
- ✓ Plans for updates and continuous improvements to the planning process.
- ✓ Use of tools, such as best practices and software.
- ✓ An internal governance structure.
- ✓ Council approval and support.
- ✓ Public engagement and communication.
- ✓ Asset management plan development.

An advanced asset management planning program consists of:

1. Knowing what assets the Township owns, and having confidence in asset inventory data.
2. Accurately reflecting the levels of service expected by residents and businesses, and their willingness to pay for these services. Ensuring that the Township provides services in the most cost-effective manner.
3. Ability to predict future demand, so that the impact on assets and future asset investment requirements can be planned.
4. Knowledge of physical condition of assets, to predict future maintenance and renewal requirements, costs, liabilities, and risks.
5. Knowledge of the performance of Township assets, and how reliable they are: being able to track the type of asset failure, the number of customers affected, and being able to predict when performance will drop to an unacceptable level.
6. Knowledge of current utilization and ultimate capacity: knowing when to upgrade or augment existing assets.
7. Ability to analyze alternative options to address performance gaps.
8. Being able to set priorities that align with available budgets.



With limited available funding, municipalities must make key decisions, including:

- Choosing between fixing assets immediately or delaying maintenance.

- Reducing levels of service or eliminating services that are currently provided.
- Increasing tax rates and user fees to help bridge the funding gap.
- Delaying new projects.
- Defining critical infrastructure and prioritizing urgent needs.

STRATEGIC ASSET MANAGEMENT POLICY

The Township has a Council approved Strategic Asset Management Policy, outlining the approach to asset management planning across the corporation. The following provides a high level summary of this document.

Approach: *Asset management planning is an integrated approach, involving all Township departments, to deliver services to the community through the effective management of assets.*

Ensure integration of the following:

Strategic Alignment: *Asset management planning will be integrated and aligned with Township goals, objectives, plans and processes.*

Ensure alignment of the following:

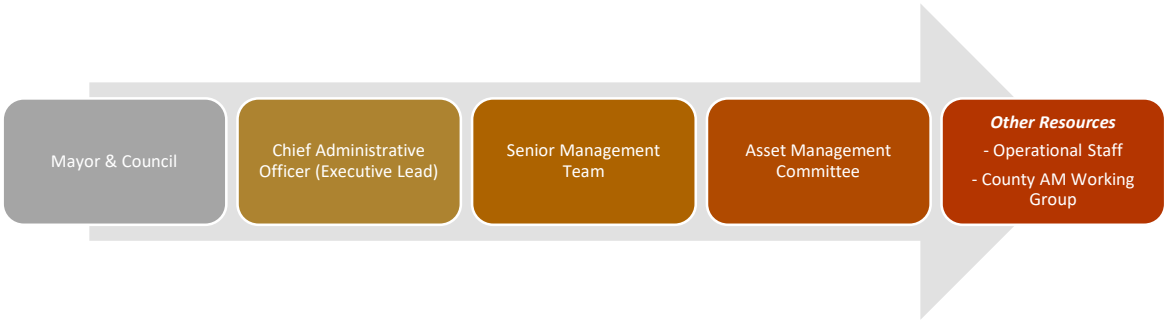
Guiding Principles: *Asset management planning shall be conducted following key guiding principles:*

- Forward looking.
- Take into account any budgets or fiscal plans.
- Investment decisions will be based on clearly identified priorities.
- The Township will promote economic competitiveness, productivity, job creation and training.
- Be evidence based and transparent.
- Consistency of core public services.
- Environmentally conscious.
- Ensure health and safety in the construction, maintenance, use, and operation of assets.
- Community focused.
- Opportunities for innovative technologies, services, and practices.
- Ensure integration with other municipal and provincial plans.
- Assets will be considered from a service context and consider their interrelationships.
- A risk-based approach will be used.
- Focus on the reduction of lifecycle costs.
- Consider the impacts of climate change.

Governance: *Asset Management Planning requires the commitment of key stakeholders across the Organization.*

- **Council:** Overseeing the provision of services, final decision maker for asset management planning.
- **Chief Administrative Officer:** Executive Lead of the asset management process. Emphasizes a corporate approach.
- **Senior Management Team:** Overseeing asset management planning activities. Promotes the process to their staff.
- **Asset Management Committee:** Coordinating the asset management planning activities of the Township. Includes representatives from all departments.

Asset Management Governance Structure:



Stakeholder Engagement: *The Township will foster informed dialogue and engagement with relevant stakeholders throughout the asset management planning process.*

Engagement that will be developed over time, including:

Development: *The Township will prepare Asset Management Plans at a minimum, every 5 years, using up-to-date asset data and a refined levels of service analysis.*

TOWNSHIP 2025 ASSET MANAGEMENT PLAN

This Asset Management Plan builds upon the foundation of asset management planning that was included in the 2022 Plan. However, many improvements have been made. With a goal of meeting legislative requirements, this Plan evolved into a tool that will benefit staff operationally as well as strategically through the annual budget process. This Plan was, once again, developed internally by Township staff, providing not only a level of ownership but also pride.

The remainder of the Asset Management Plan is divided into the following chapters:

1. Chapter 2: State of Township Assets – A snapshot of the overall state of Township assets, including replacement cost, condition, risk assessments and long-term funding needs, by asset category.

2. Chapter 3: Levels of Service – A review of the services and service levels provided as well as the impacts of progressing towards target service levels.
3. Chapter 4: Asset Management Strategy – A summary of the costs associated with maintaining Township assets, including a look into demands on assets/services.
4. Chapter 5: Financing Strategy – An overview of the funding sources available to fund asset management needs including recommendations on funding increases.
5. Chapter 6: Monitoring and Continuous Improvement – An outline of ways in which the Township's asset management process can be improved over time.
6. Chapter 7: Conclusion and Recommendations – A summary of recommendations provided in each chapter of the Asset Management Plan.
7. Appendices – Key information that supports the Asset Management Plan, including key concepts, maps, detailed levels of service tables, and listing of priority assets from each category.
8. Technical Appendix (separate cover) – A detailed listing of Township assets.

CHAPTER TWO

STATE OF TOWNSHIP ASSETS

CHAPTER 2: STATE OF TOWNSHIP ASSETS

ASSET SUMMARY

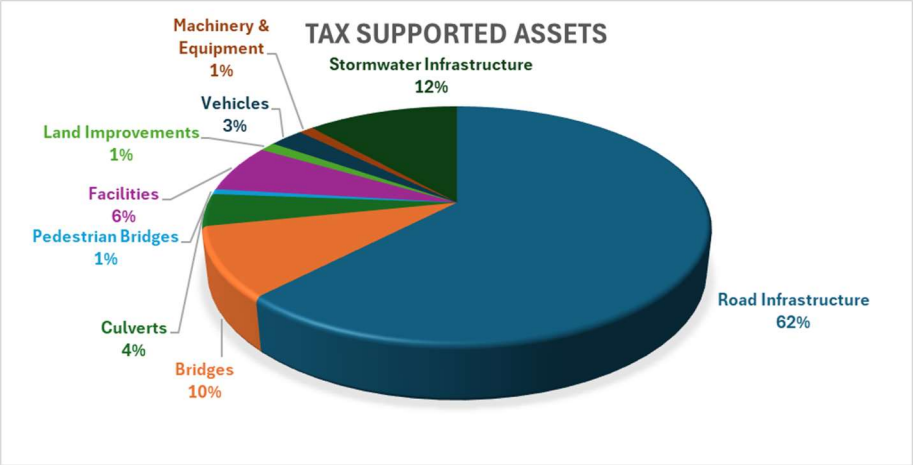
The Township presently owns and manages tax supported capital assets with a 2024 replacement value of approximately $875 million.

Table 2-1
Tax Supported Assets (2024$)

Asset Type	Replacement Cost (2024$)
Road Infrastructure	544,940,710
Bridges	83,605,435
Culverts	38,530,999
Pedestrian Bridges	6,174,158
Facilities	57,181,860
Land Improvements	10,756,829
Vehicles	22,931,000
Machinery & Equipment	9,624,955
Stormwater Infrastructure	101,535,766
Total Tangible Capital Assets (Tax Supported)	**875,281,712**

Approximately 62% of these tax supported assets are roads related (i.e. road base and surface). Approximately 15% relate to bridges and major culverts.

Figure 2-1
Tax Supported Assets Distribution Based on Replacement Cost



In addition to the tax supported assets, the Township owns, operates, and maintains rate supported infrastructure to deliver water and sewer services for residents and businesses of Centre Wellington – these are detailed next.

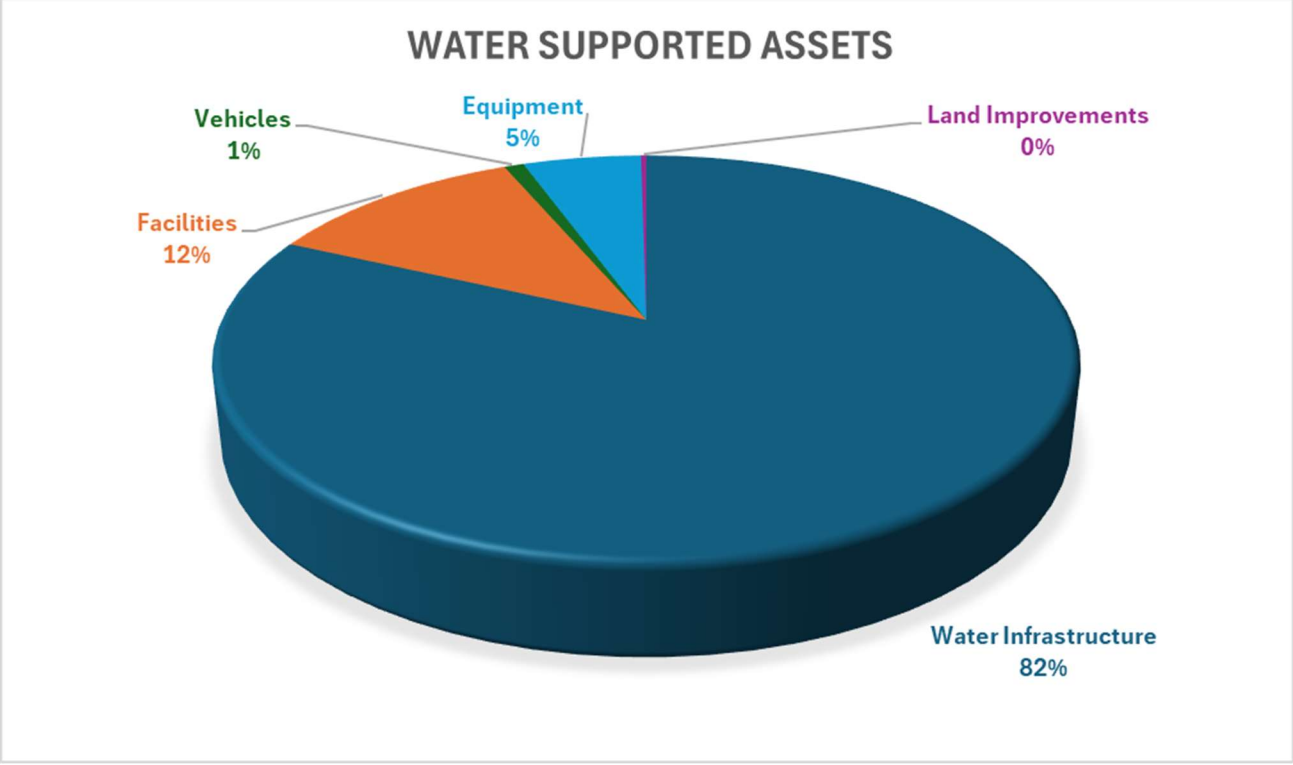
The Township presently owns and manages water capital assets with a 2024 replacement value of approximately $134.9 million.

Table 2-2
Water Supported Assets (2024$)

Asset Type	Replacement Cost (2024$)
Water Infrastructure	110,447,534
Facilities	15,767,884
Vehicles	1,185,000
Equipment	7,170,457
Land Improvements	324,844
Total Tangible Capital Assets (Water Supported)	**134,895,719**

The majority of water capital asset value resides in underground linear infrastructure.

Figure 2-2
2024 Water Assets Distribution
Based on Replacement Cost



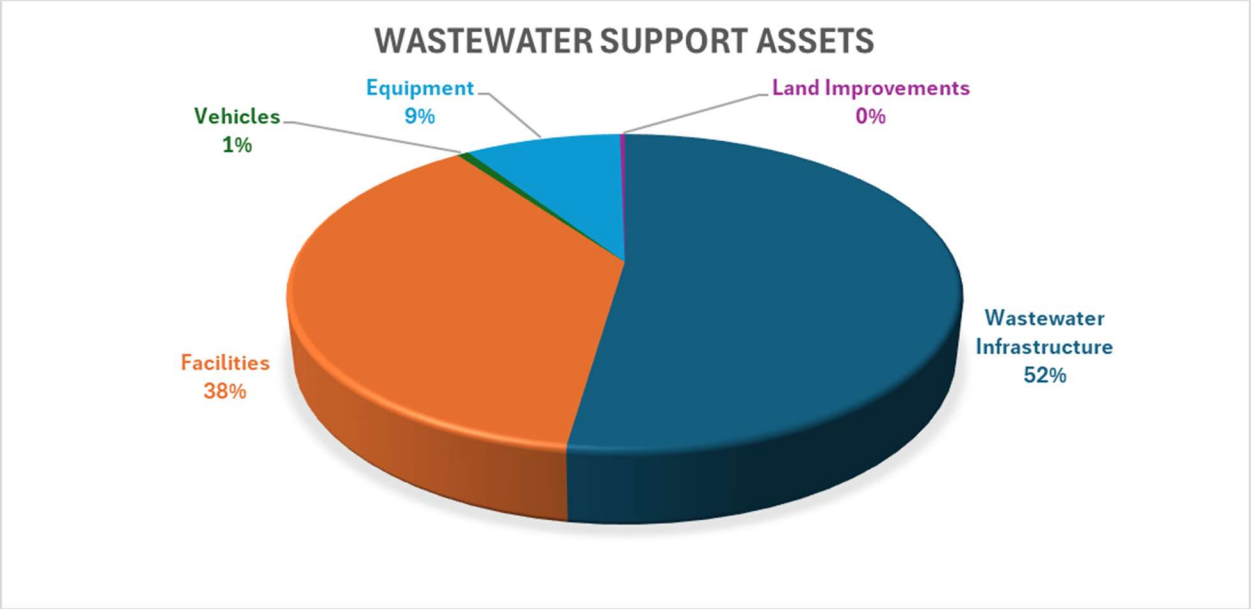
The Township presently owns and manages wastewater capital assets with a 2024 replacement value of approximately $175 million.

Table 2-3
Wastewater Supported Assets (2024$)

Asset Type	Replacement Cost (2024$)
Wastewater Infrastructure	91,513,981
Facilities	66,077,412
Vehicles	1,175,000
Equipment	15,712,745
Land Improvements	484,109
Total Tangible Capital Assets (Wastewater Supported)	**174,963,246**

The majority of wastewater capital asset value resides in underground linear infrastructure and facilities.

Figure 2-3
2024 Wastewater Assets Distribution
Based on Replacement Cost



In total, the Township owns and manages assets with a combined 2024 replacement value of approximately $1.2 billion.

As evidenced in the in the above tables and graphs, the Township owns and operates a variety of assets to provide services to residents of Centre Wellington. The Township is responsible for keeping and maintaining records on each of the in-service assets in its inventory and control.

The Township is in the process of implementing asset management related software and developing internal processes to assist in the ongoing maintenance of owned assets, enhancing the data contained in

the consolidated asset register, collecting data in support of maintenance activities, and leveraging decision support analytics.

The remainder of this chapter will focus on key asset information in each of the following categories:

1. Roads Related Assets
2. Bridges and Culvert Assets
3. Facility Assets
4. Vehicles
5. Equipment
6. Land Improvements
7. Water Network Assets
8. Wastewater Network Assets
9. Stormwater Network Assets

Roads Related Assets

The Roads Related Asset category includes the Township's paved roads, gravel roads, and road bases. Included within applicable road base assets are curbs, gutters, streetlights, crossroad culverts, stairways, and sidewalks. This network of transportation infrastructure is critical to ensuring the safe and efficient movement of people and goods within and through the Township via the roads and related network. The Township regularly inspects these transportation assets and maintains a detailed condition inventory, which is used to inform the scope and timing of capital works needed to keep assets in a state-of-good-repair and deliver on the Township's desired Level of Service.

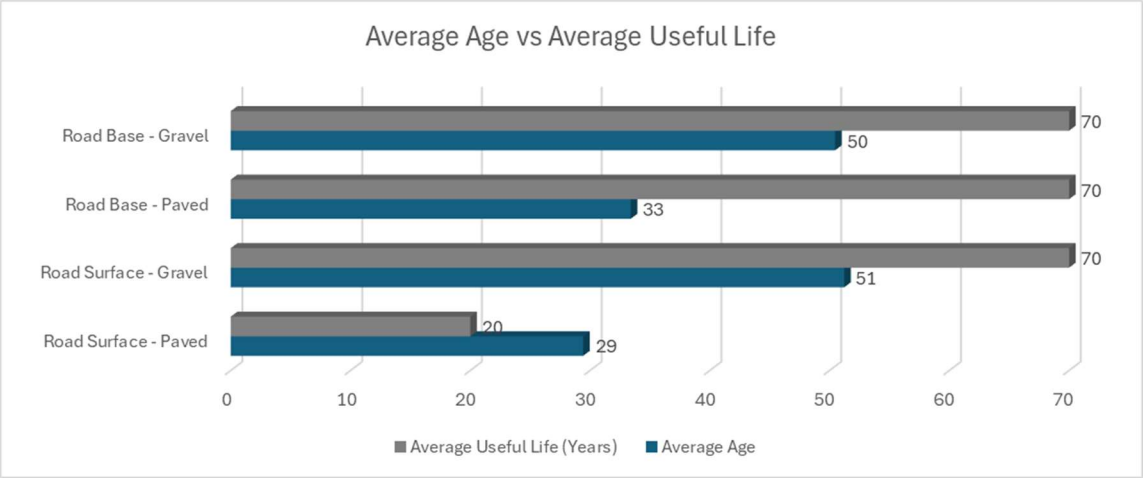
Road related assets are made up of the following:

Table 2-4
2024 Road Assets Components

Asset Type	Replacement Cost (2024$)	Segment Count	Length (m)
Paved Road Base	165,175,013	860	263,506
Gravel Road Base	197,425,071	177	208,112
Paved Road Surface	146,237,852	900	270,662
Gravel Road Surface	1,839,318	157	202,234
Sidewalk	14,007,788	1,153	117,414
Street Light	7,546,404	2,434	
Crossroad Culverts	12,709,264	543	7,815
Stairways	-	22	95
Total Road Assets	**544,940,710**		

Table 2-5 below illustrates the average age of road surface and road base assets in comparison to the average useful life. This is a useful indicator; however, it does not consider the condition of each asset.

Figure 2-4
Average Age vs Average Useful Life for Road Assets
By Road Type



CONDITION

The condition of road base assets is not as immediately evident as the road surface given the below grade nature of the asset. Therefore, the condition of road base assets is dependant on the age of the road base, and also takes the average daily traffic (ADT) into account. The pictures below are provided to illustrate examples of roads that fit into each of the condition categories – from "Very Good" to "Very Poor".

The following figures detail the current condition of road base assets; however, it should be noted the these are strictly a proxy of condition based on assumptions, and may not be indicative of actual condition.

Figure 2-5
Gravel Road Base Condition

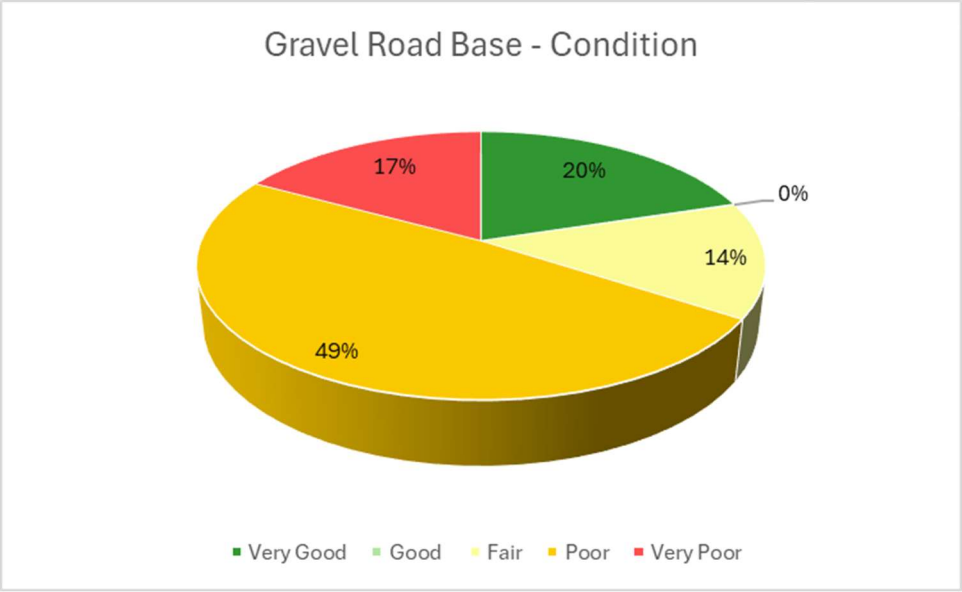


Figure 2-6
Paved Road Base Condition

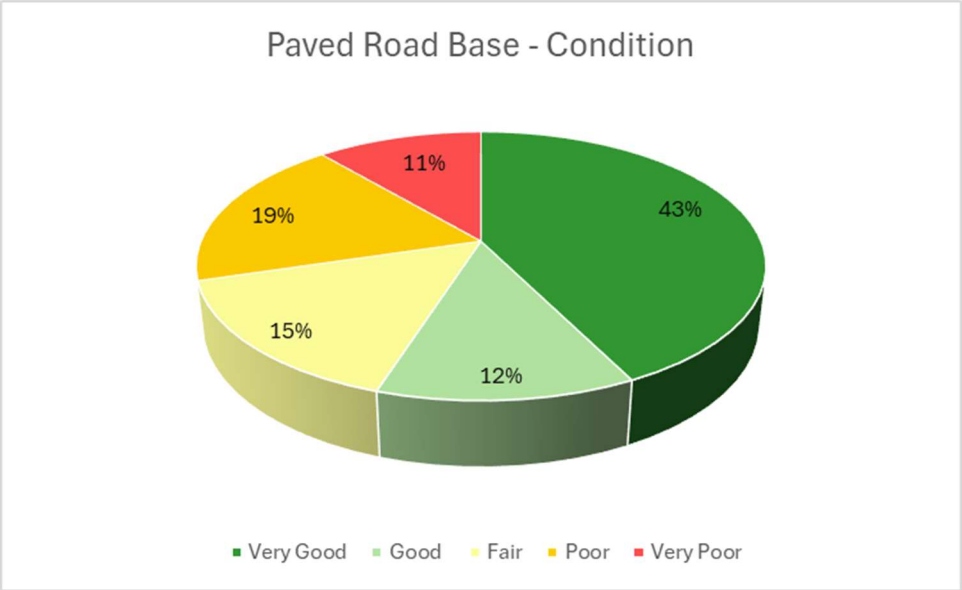
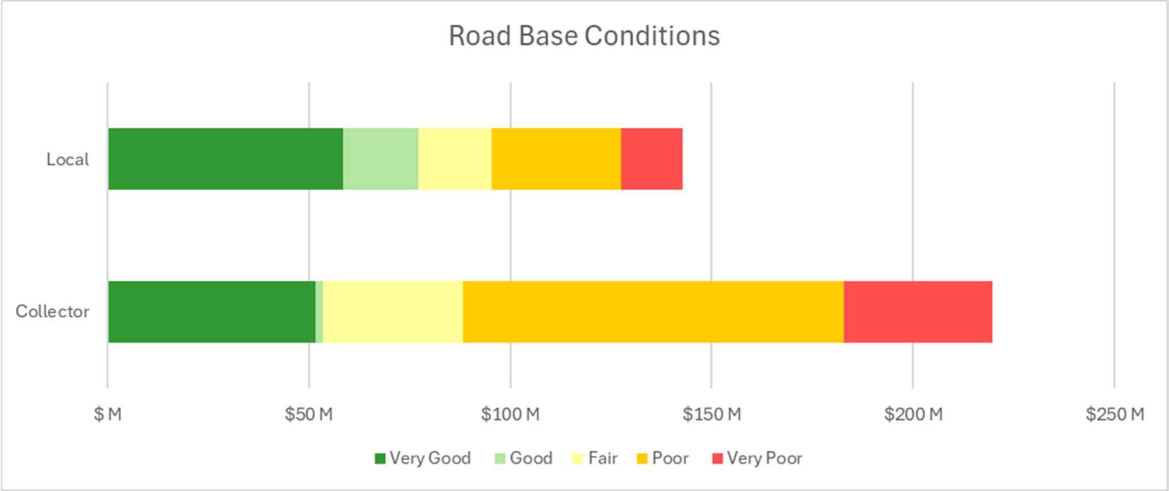


Figure 2-7
Road Base Conditions based on Type and Total Replacement Cost



The condition of road surface assets is more readily available / assessable thus better metrics are available to more accurately report on condition. Condition and Probability of Failure of road surfaces are based on the Overall Condition Index (OCI) of the road. The OCI is determined using a number of factors relating to specific assets, for roads, the factors involved in calculating a OCI typcially include: Average Daily Traffic Counts (ADT), Pavement Roughness Index (PRI), and Surface Distress Index (SDI). The following tables detail the current condition of Township road surface assets.

Figure 2-8
Gravel Road Surface Condition

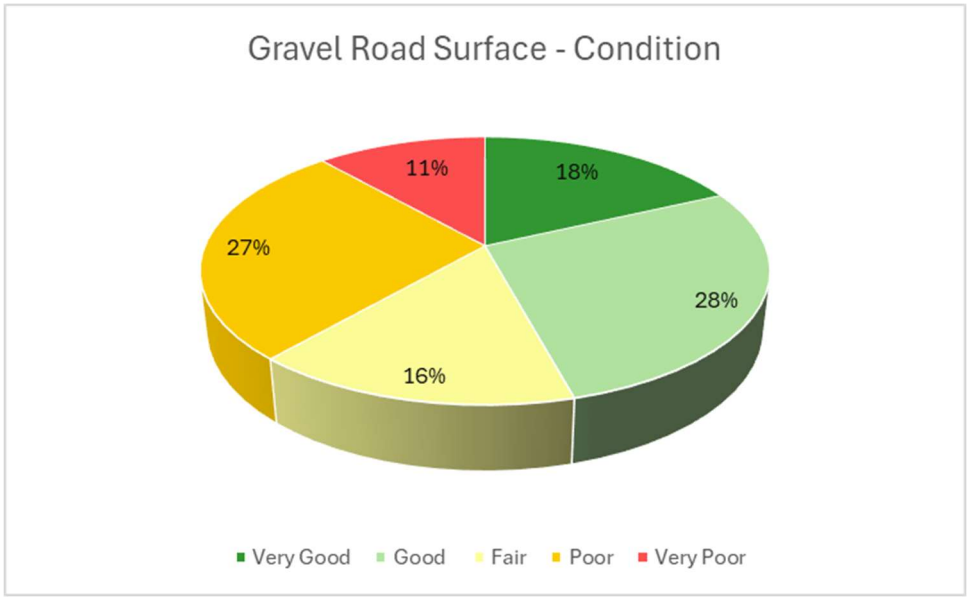


Figure 2-9
Paved Road Surface Condition

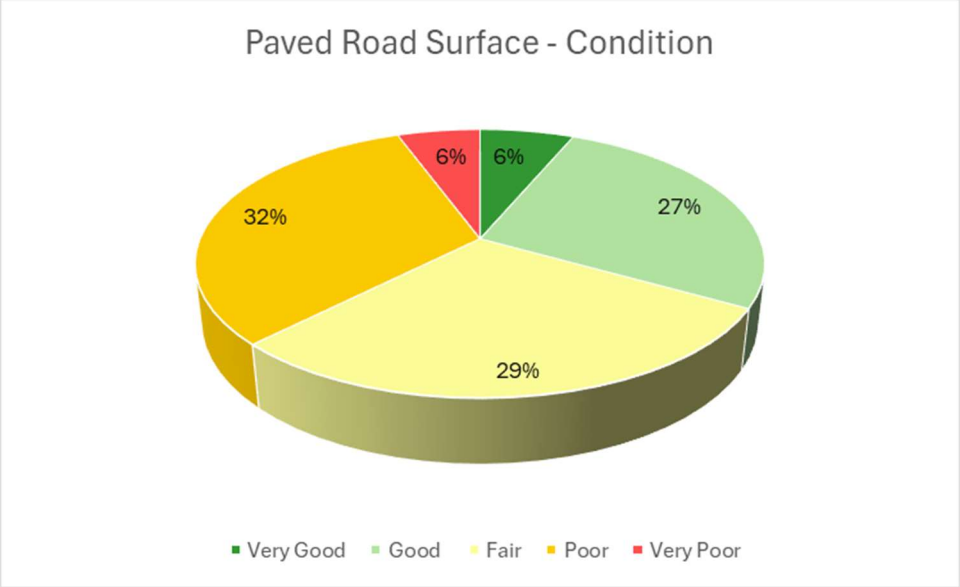
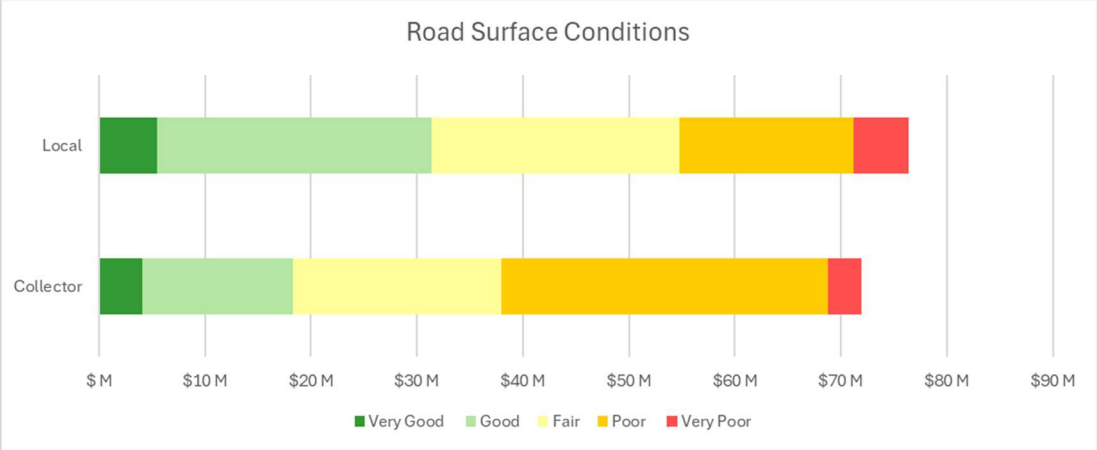


Figure 2-10
Road Surface Conditions based on Type and Total Replacement Cost



ASSET RISK

Risk of failure of road base and road surface assets has been determined using the probability of failure (PoF) and consequence of failure (CoF) of each asset. The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

The probability of failure of a road base is based on a scored calculation including the age of the asset and the average daily traffic (ADT) flows on the asset. The consequence of failure is calculated based on road classifications, speed and average daily traffic counts of each asset.

Table 2-5
Risk Matrix for Road Assets

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Figure 2-11
Average Risk of Road Base – Gravel

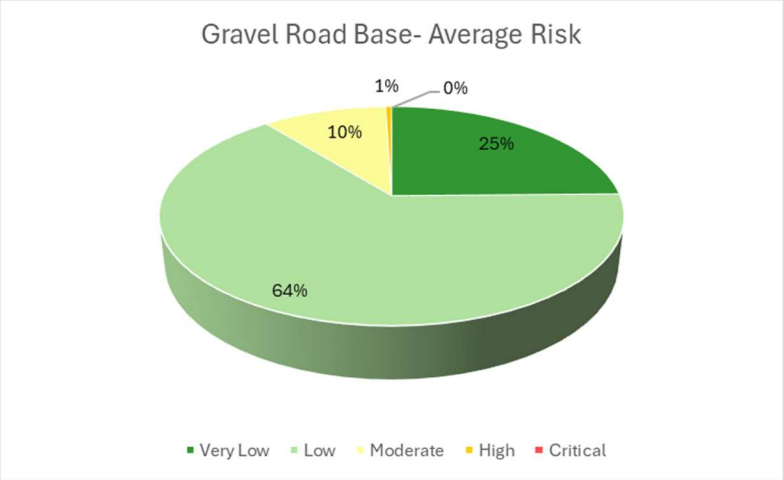
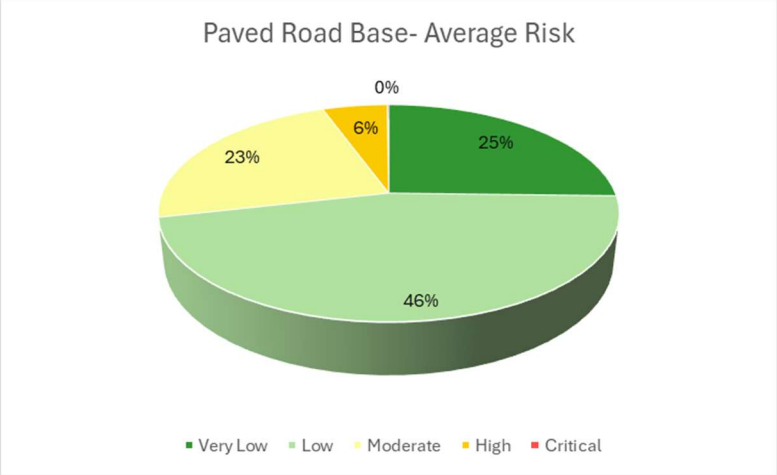


Figure 2-12
Average Risk of Road Base - Paved



The probability of failure of a road surface, and thus the risk involved in the failure of that road surface is based on the Pavement Condition Index (PCI) and Overall Condition Index (OCI) score of that surface. It has been determined that as the Township can assess the condition of each road surface easily, this value is critical in the decision of the risk of the asset. Average daily traffic and speed were used to calculate the consequence of failure of a road surface. Roads that see higer volumes of traffic have a higher consequence should they fail, causing distruptions to traffic flow. See Figures B-7, B-8, B-9 and B-10 in Appendix B for mapping of road risk within the Township.

Figure 2-13
Average Risk of Road Surface (Gravel)

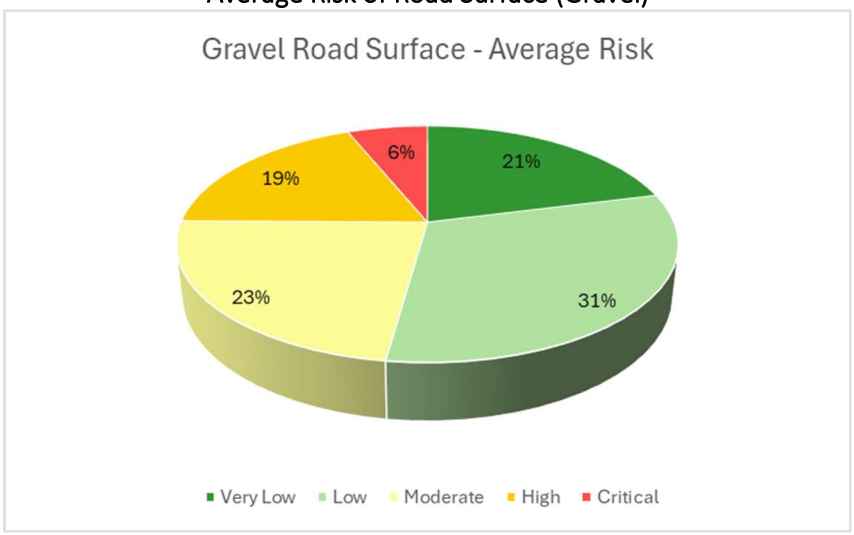
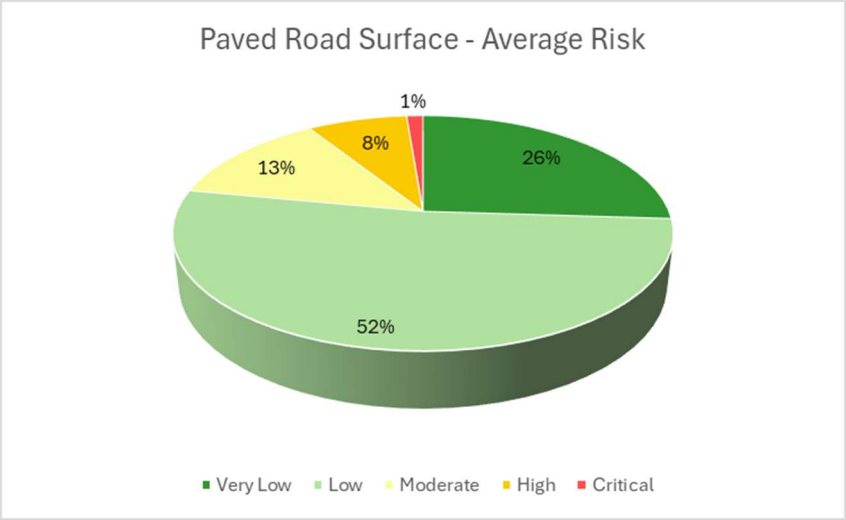


Figure 2-14
Average Risk of Road Surface (Paved)



FINANCIAL

The Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's road assets, the annual investment required to maintain the Township's road system (assuming current level of service is maintained) is depicted in the below tables, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

Table 2-6
2024 Annual Investment in Road Assets

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Road Base - Paved	$ 2,359,643	$ 8,487,060	$ -	**$ 2,122,500**
Road Surface - Paved	$ 7,311,893	$ 5,396,005	$ 98,733,635	**$ 5,400,000**
	$ 9,671,536	**$ 13,883,065**	**$ 98,733,635**	**$ 7,522,500**

Table 2-7
2024 Annual Investment in Gravel Roads

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Road Base - Gravel	$ 2,820,358	$ 15,257,868	$ -	**$ 2,000,000**
Road Surface - Gravel	$ 26,276	$ 142,003	$ -	
	$ 2,846,634	**$ 15,399,871**	**$ -**	**$ 2,000,000**

* Recommended annual investment amount for Gravel Roads is based on the 4 Roads Management Services state of the local infrastructure and AMP study, dated September 29, 2021.

Bridges and Culvert Assets

In accordance with the Canadian Highway Bridge Design Code, a bridge is defined as "a structure that provides a roadway or walkway for the passage of vehicles, pedestrians, or cyclists across an obstruction, gap, or facility and is greater than 3 metres in span."

Culverts are defined as "a structure that forms an opening through soil", as per the Canadian Highway Bridge Design Code. Culverts included in the OSIM inspection have a span greater than or equal to 3 meters, and more than 600 mm of cover. Smaller culverts are not assessed based on OSIM methodology, but are included as part of the Stormwater network.

The Township maintains 112 bridges/culverts with a total replacement value of over $128 million. Township bridges and culverts are maintained by the Engineering division, and provide critical services throughout the Township. Substantial future capital investments are required for bridge and culvert assets which are nearing the end of their service life.

Figure 2-15
Average Age VS Average Useful Life of Bridge Assets

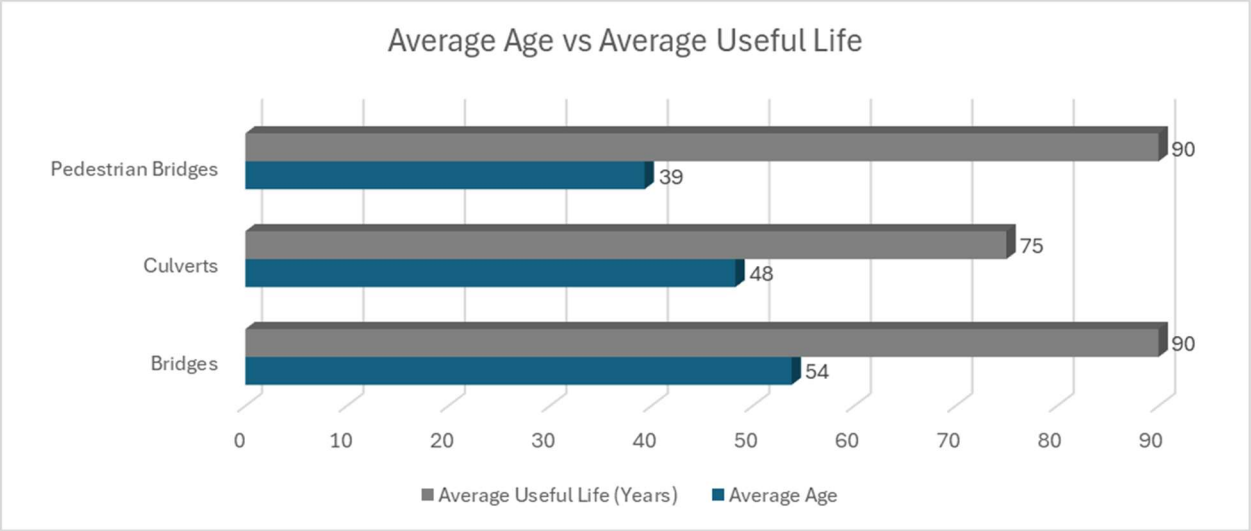


Table 2-8
2024 Bridge Assets

Asset Type	Count
Bridges	52
Culverts	54
Pedestrian Bridges	6
Total Bridge and Culvert Assets	112

CONDITION

The condition of Township bridges and large culverts is assessed every two years, in accordance with the Ontario Structure Inspection Manual (OSIM), by external consultants. The inspection reports produce a list of priority investments through a recommended Time of Need (TON) assessment.

Bridges are made up of various components, each of which deteriorate at different rates. The OSIM inspections visually evaluate each component of the structure and classify it by condition. These individual component condition scores are compiled into a summary metric, the Bridge Condition Index (BCI). In addition to a visual inspection, the need for further detailed inspection of structures is defined within the OSIM report, which would provide more information on the rehabilitation requirements of the structure.

Each structure is assigned a condition rating based on the Bridge Condition Index (BCI). The BCI ranges from 0, indicating that a bridge is in poor condition and requires replacement, to 100, indicating that a bridge is in excellent condition. The BCI takes into consideration a weighted average condition of the components in each structure, and is classified into one of three categories[1]:

Condition	BCI	Maintenance Schedule
Good	70 – 100	Maintenance is not usually required within the next five years.
Fair	60 – 70	Maintenance work is usually scheduled within the next five years. This is the ideal time to schedule major bridge repairs to get the most out of bridge spending.
Poor	Less than 60 BCI	Maintenance work is usually scheduled within one year.

The following is the standardized five-point scale:

Scale	BCI	Associated Work
Very Good	>80	Deck cleaning, drainage outlets cleanout
Good	60 – 79	Deck cleaning, drainage outlets cleanout
Fair	40 – 59	Deck cleaning, drainage outlets cleanout, new asphalt deck surface, waterproofing, rehabilitation
Poor	20 – 39	Rehabilitation, Reconstruction
Very Poor	<20	Reconstruction

[1] http://www.mto.gov.on.ca/english/highway-bridges/ontario-bridges.shtml

The table to the right provides a visual depiction of bridges and culverts with varying BCIs:

Summary of condition ratings for this asset class are detailed below.

Figure 2-16
Bridge Condition

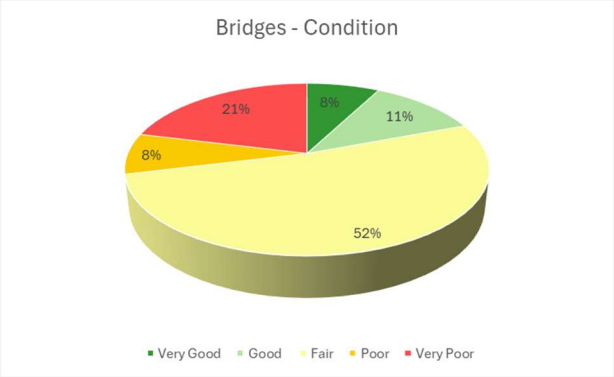


Figure 2-17
Culvert Condition

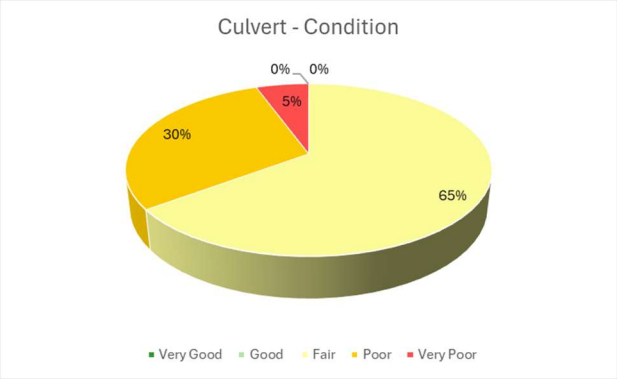
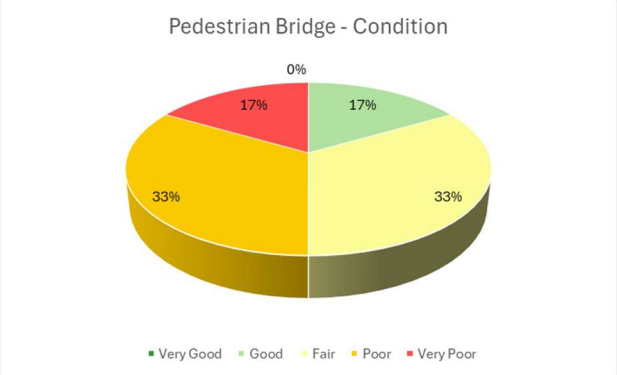
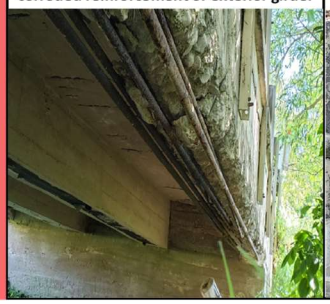


Figure 2-18
Pedestrian Bridge Condition



Condition	Bridges	Culverts
Very Good (80-100)	9-WG (BCI 95) Prestressed concrete girder bridge 	6-E (BCI 83) Precast quickspan culvert 
Good (BCI 70 - 80)	18-WG (BCI 75) Acrow panel bridge 	14-WG (BCI 75) Structural plate corrugated steel arch 
Fair (BCI 60 - 70)	4-E (BCI 66) Spalls with exposed corroded rebar at soffit 	9-P (BCI 66) Moderate raveling with some erosion at waterline on outlet component 
Poor (BCI 50 - 60)	16-WG (BCI 56) Concrete spall and disintegration of spandrel wall 	22-N (BCI 56) Severe corrosion and perforations beginning to form 
Very Poor (BCI 0 - 50)	32-P (BCI 37) Large spall with exposed corroded reinforcement of exterior girder 	7-WG (BCI 25) Wide cracks with efflorescence on wingwall, fascia, and curb 

ASSET RISK

Risk of maintaining bridge assets has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) of the asset. Each PoF and CoF are comprised of several factors in determining the score associated with each asset.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure. The matrix used for the risk assessment of Bridge & Culvert assets for the Township of Centre Wellington is detailed below:

Table 2-9
Risk Matrix for Core Infrastructure
Bridges and Culvert Assets

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the bridge inventory maintained by the Township, we can determine the average risk by asset type within this class. Average risk by asset type within this class is detailed in the following figures:

Figure 2-19
Bridge – Average Risk

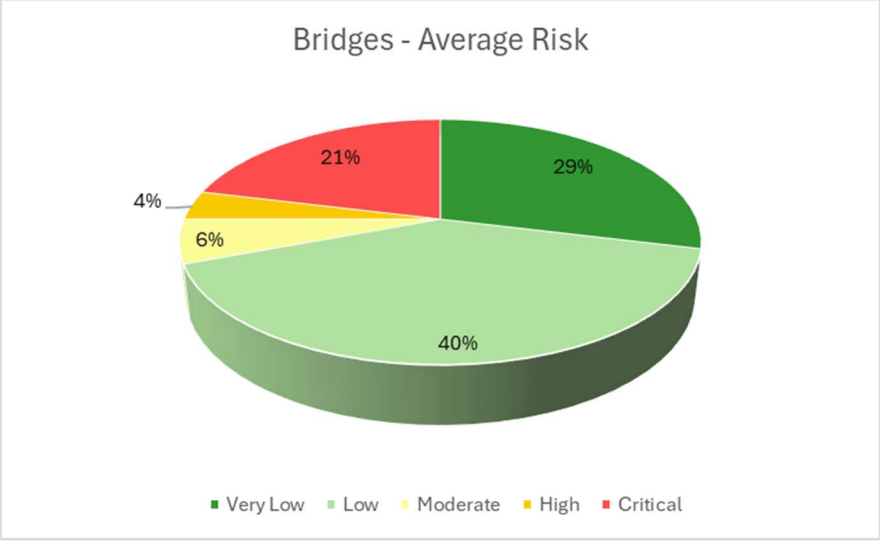


Figure 2-20
Culvert – Average Risk

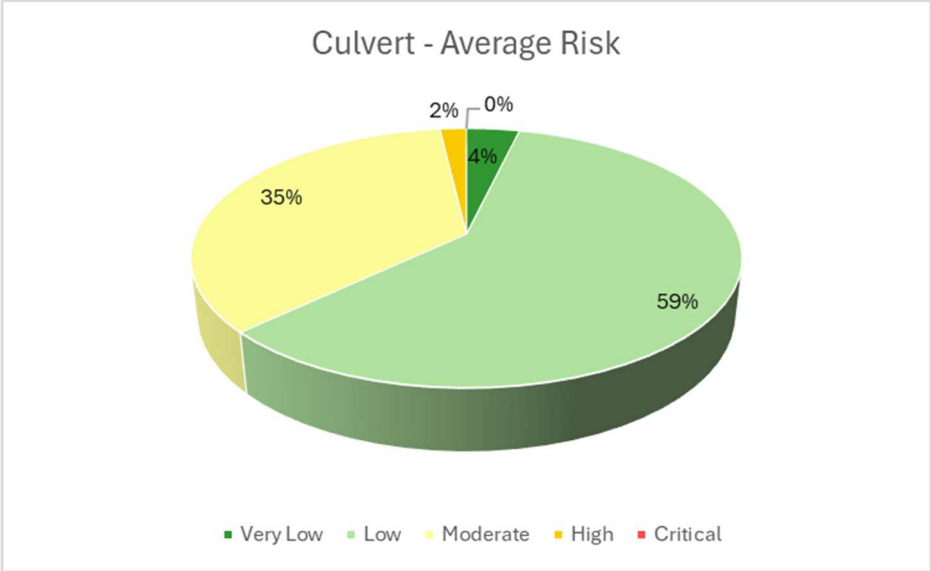
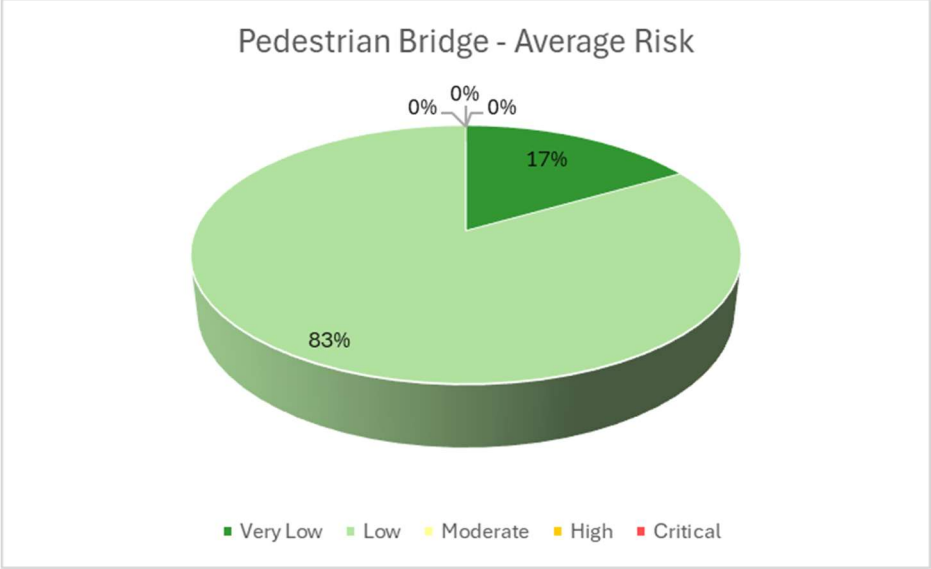


Figure 2-21
Pedestrian Bridge – Average Risk



See figure B-12 in Appendix B for mapping of bridge & culvert risk conditions throughout the Township.

FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's bridge and culvert assets, the annual investment required to maintain the Township's transportation system (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

Table 2-10
Annual Investment in Bridges and Culverts

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Bridge	$ 928,949	$ 2,647,040	$ 17,576,554	**$ 2,650,000**
Culvert	$ 555,785	$ 1,940,828	$ 2,463,300	**$ 1,941,000**
Pedestrian Bridge	$ 68,602	$ 68,146	$ 1,173,000	**$ 70,000**
	$ 1,553,336	**$ 4,656,014**	**$ 21,212,854**	**$ 4,661,000**

Facility Assets

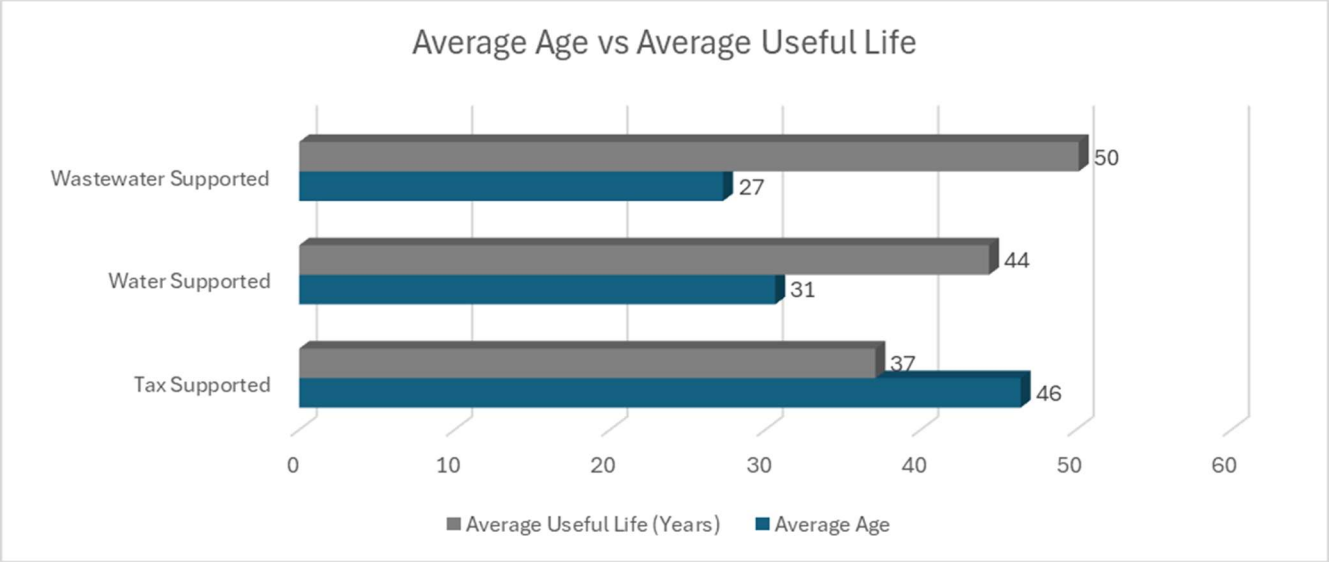
The Township, like all organizations, requires faciltiies from which staff can work to manage the Township services and operations. In addition, the Township offers administration, recreational, cultural and tourism activities and requires buildings to provide these services to residents, taxpayers and visitors.

The buildings and facilities that the Township owns and maintains range in size and age. The management of these facilities fall under multiple service areas.

In 2021 a Building Condition Audit was completed for most Township owned buildings. This audit broke out the Township's facilities by components as in relation to asset management, buildings are not considered a single asset. Each building contains many components that vary by age, condition, risk and treatment in regards to type of lifecycle intervention.

See Figure B-13 in Appendix B for a map of Township owned facilties.

Figure 2-22
Average Age vs Average Useful Life of Facilties by Funding Source



CONDITION

The condition of Township owned facilities are based on the intervention year of the components of each building. An average was taken of all the components of each building to formulate an average condition score for Township owned facilities. These facilities and conditions are detailed below by funding source.

Figure 2-23
Tax Supported Buildings
Average Condition Rating

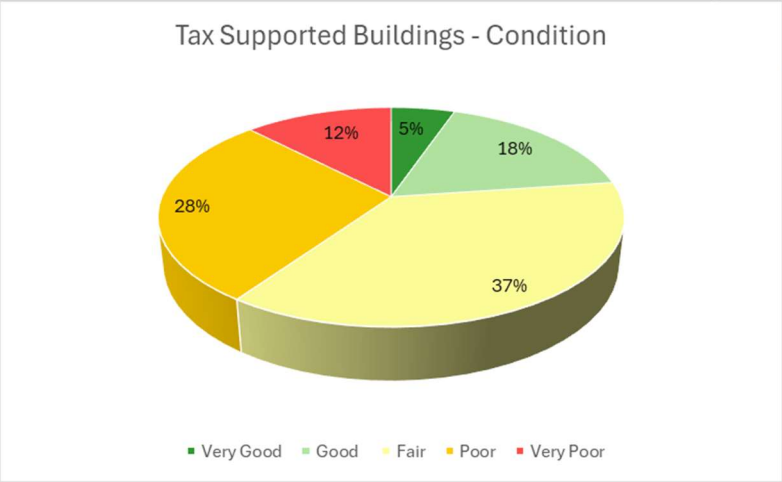


Figure 2-24
Water Supported Buildings
Average Condition Rating

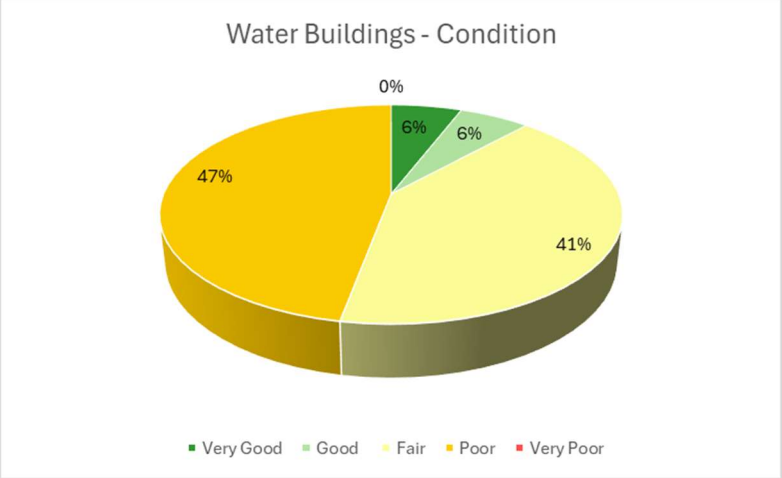


Figure 2-25
Wastewater Supported Buildings
Average Condition Rating

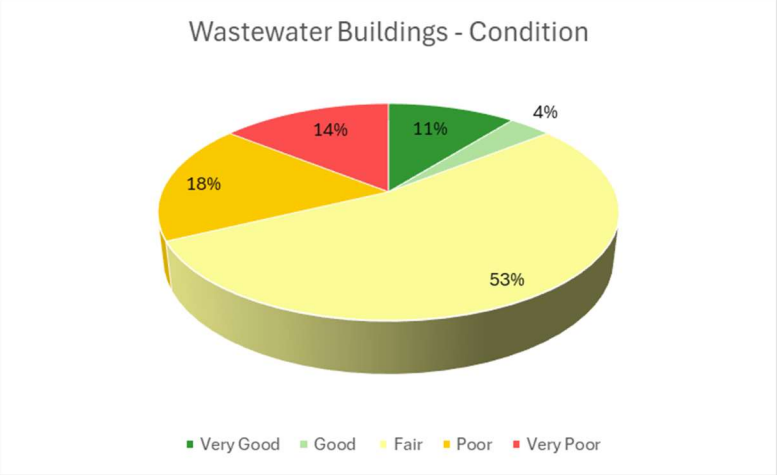
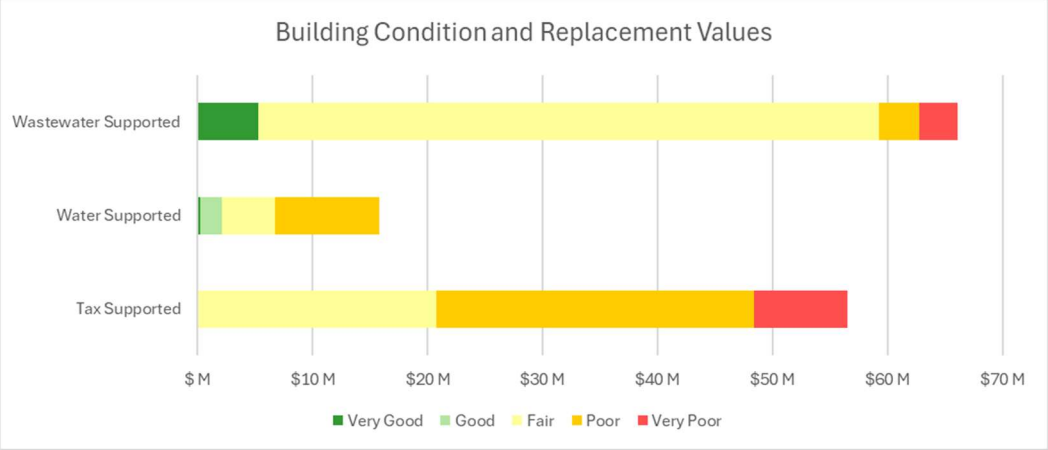


Figure 2-26
Replacement Values of Building by Condition



ASSET RISK

Risk of owning / operating Township facilities has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) of each building component. Each PoF and CoF are comprised of several factors in determining the score associated with each asset.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

Average risk, for Township owned facilities was calculated based on all components of each building. The below figures provide an overview of the average risk for all Township facilities, and are segmented by funding source.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

Figure 2-27
Tax Supported Buildings
Average Risk Rating

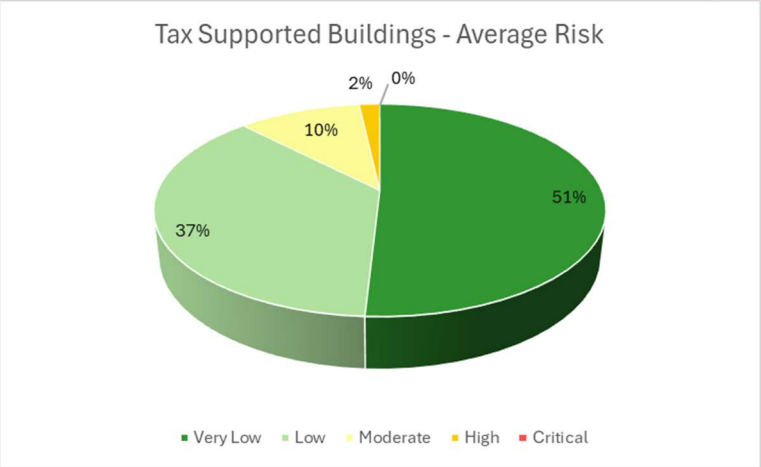


Figure 2-28
Water Supported Buildings
Average Risk Rating

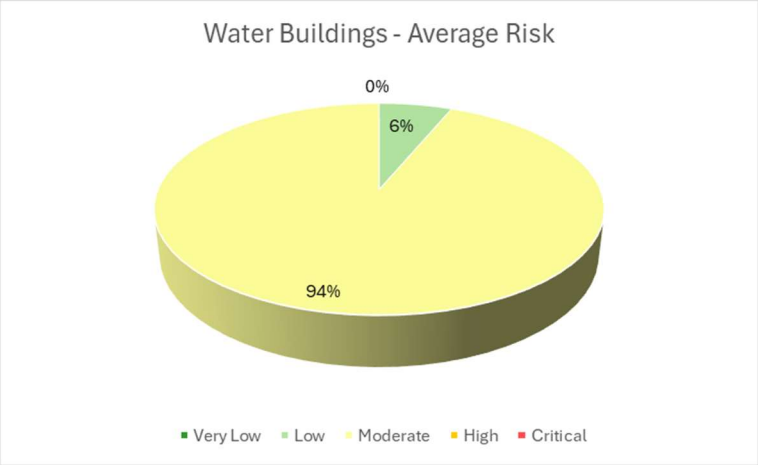
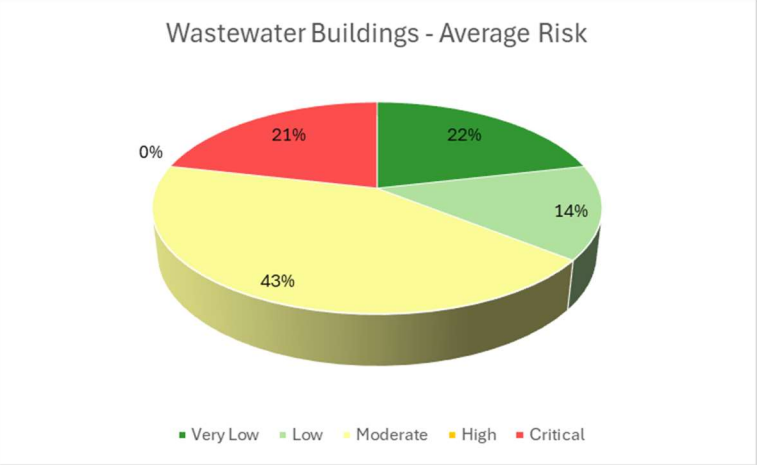


Figure 2-29
Wastewater Supported Buildings
Average Risk Rating



FINANCIAL

It was determined during our Building Condition Audit that there are several components in Township buildings that ideally would be replaced or repaired in 2021. As this amount of work would not be feasible, 2021 costs have been shown as a backlog in the annual investment chart. The remaining annual investment is based on the average cost needed per year over a 20-year horizon.

Based on the replacement values contained within this dataset, and specific to the Township's facilities assets, the annual investment required to maintain the Township's assets (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

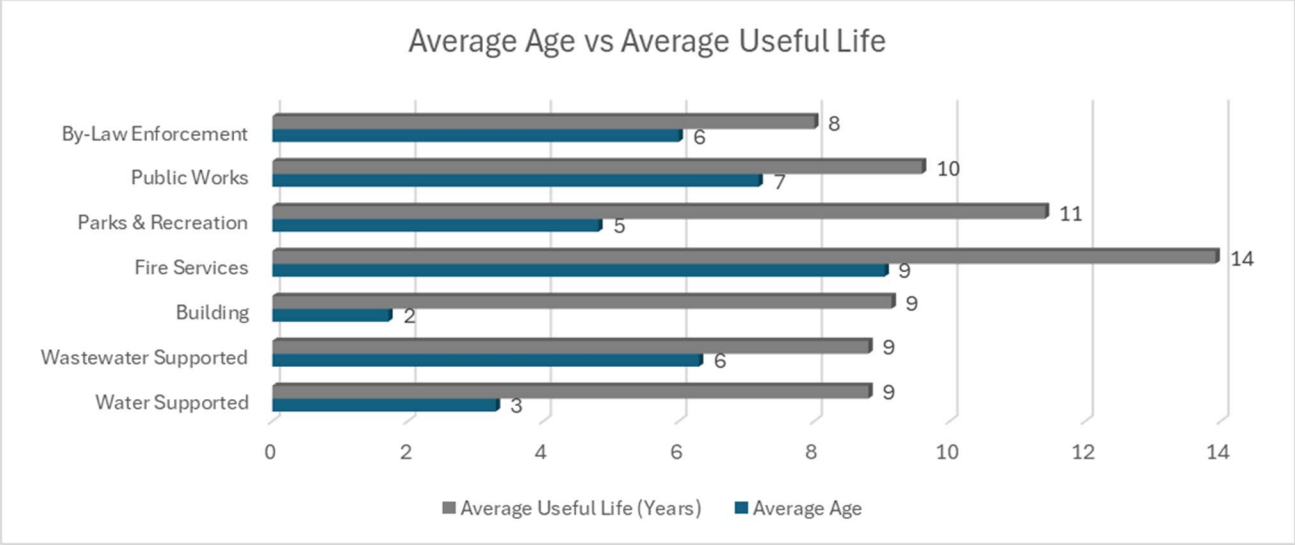
Table 2-11
Annual Investment in Facilties

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Buildings - Tax Supported	$ 1,433,736	$ 1,254,727	$ 40,247,630	**$ 1,250,000**
Buildings - Water Supported	$ 396,664	$ 313,126	$ 2,778,425	**$ 313,100**
Buildings - Wastewater Supported	$ 1,283,778	$ 883,796	$ 42,995,620	**$ 880,000**
	$ 3,114,177	**$ 2,451,649**	**$ 86,021,675**	**$ 2,443,100**

Vehicles

Many Township departments require vehicles in order to perform their duties and provide various services. The types of vehicles that the Township owns and maintains range from small passenger vehicles to heavy equipment for construction operations and snow removal. There is also specialized equipment such as fire trucks, lawn mowers and ice resurfacers. These vehicles carry useful lives that vary by department, and use. The following figure depicts the useful lives of the vehicles in servce across the Township's business segments.

Figure 2-30
Average Age vs Average Useful Life of Vehicles



CONDITION

The Township of Centre Wellington does not have a formal mechanism for tracking vehicle condition. Therefore the Township uses age as a proxy for condition. Age-based condition can only be used as a proxy to guide replacement decisions and knowledge of vehicles usage, mileage and maintenance expenditures is utilized when making the decision to replace a vehicle.

Figure 2-31
Average Condition of Vehicles
Tax Supported

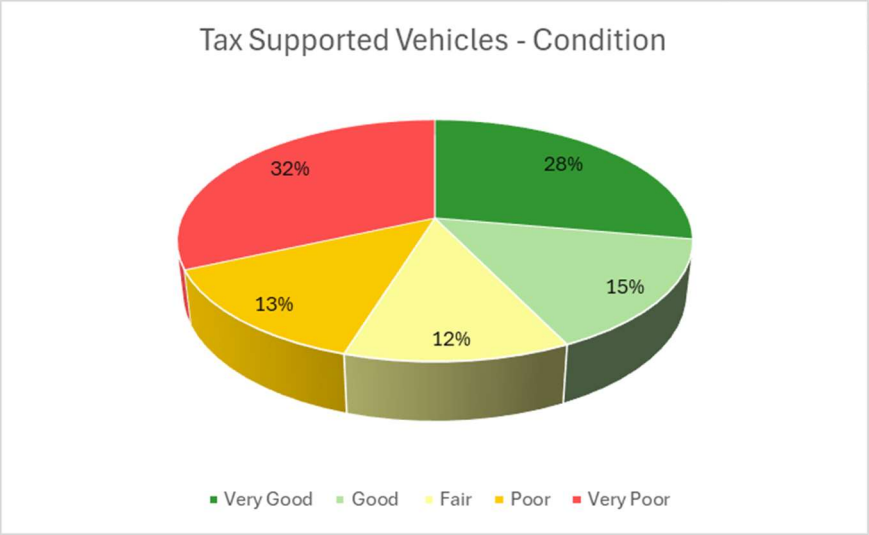
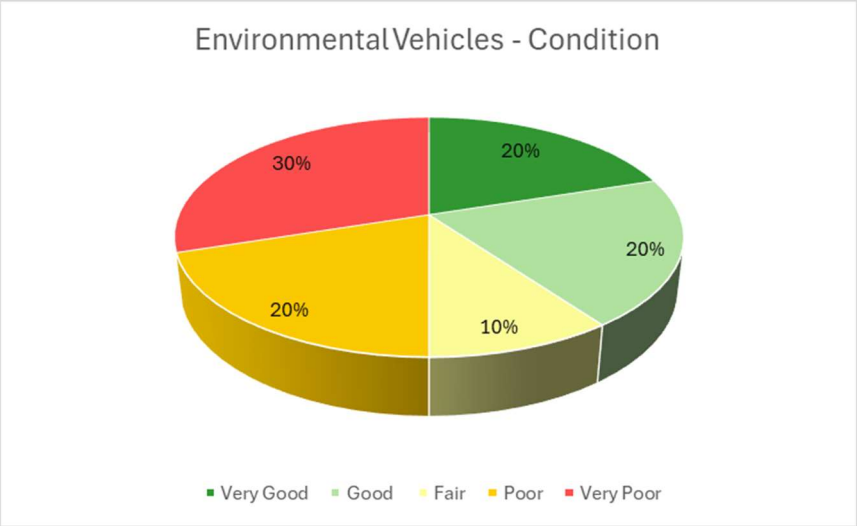


Figure 2-32
Average Condition of Vehicles
Environmental Supported



ASSET RISK

Risk of owning / operating Township vehicles has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) for each service department. Each PoF and CoF are comprised of several factors in determining the score associated with each asset. Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

The matrix used for the risk assessment of vehicle assets for the Township of Centre Wellington is detailed below:

Table 2-12
Risk Matrix for Vehicles

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the vehicle inventory maintained by the Township, we can determine the average risk of vehicle ownership in both the tax and rate supported assets in this class. Average risk by funding source within this class is detailed in the following figures:

Figure 2-33
Average Risk of Vehicles
Tax Supported

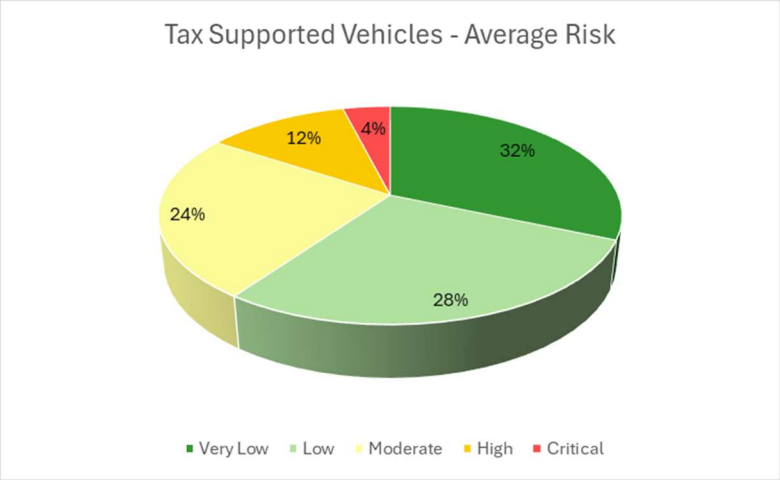
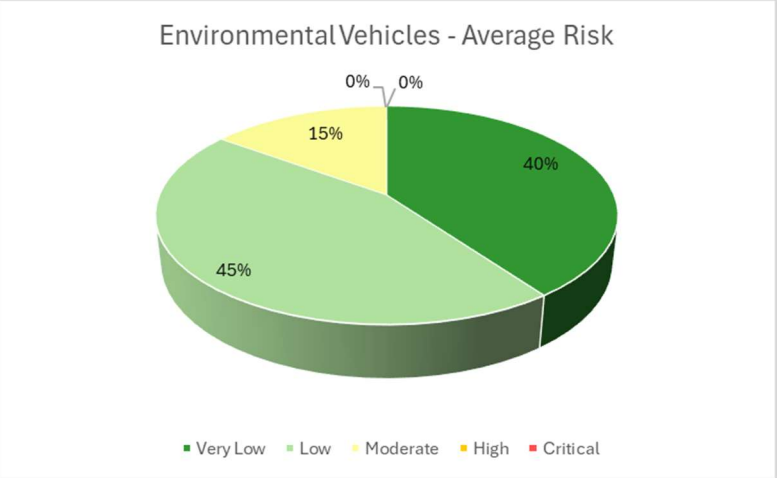


Figure 2-34
Average Risk of Vehicles
Environmental



FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's vehicle assets, the annual investment required to maintain the Township's vehicle inventory (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Estimated annual investment in vehicles is $1,867,071 for tax supported assets, $258,375 for environmental supported assets, and $34,250 for building supported assets, for a total of $2,159,696 per year.

Table 2-13
Annual Investment in Vehicles

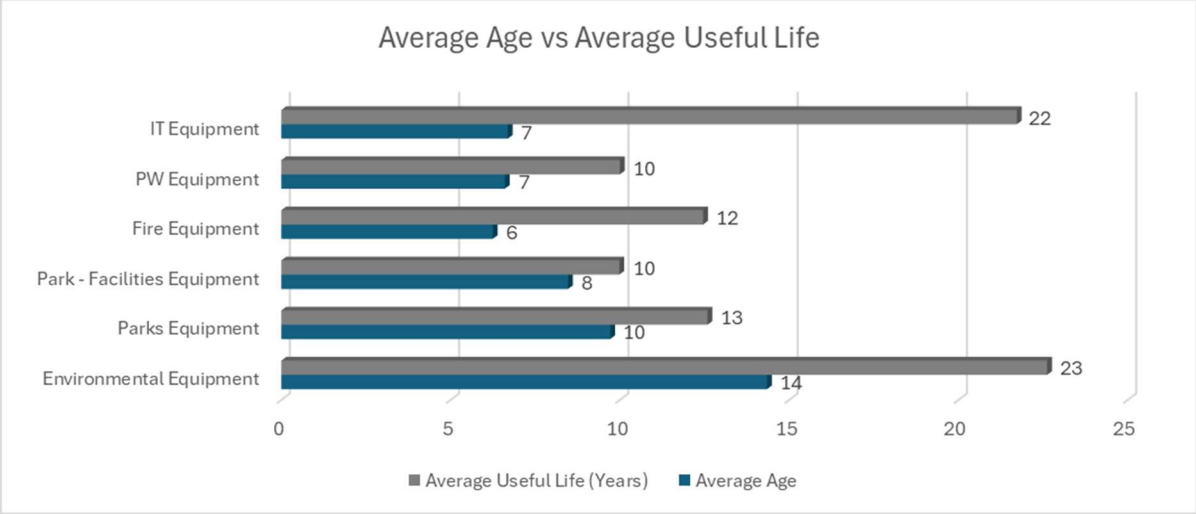
Department	Based on Useful Life
Public Works	$ 1,203,657
Parks & Recreation	$ 168,417
Fire	$ 489,372
Building	$ 34,250
By-Law	$ 5,625
Environmental	$ 258,375
	$ 2,159,696

ASSET SUMMARY

Equipment

The Township owns and maintains a large amount of equipment. Equipment varies in useful life and value depending on the type of equipment and what it is used for. Examples of Township equipment include computers, servers, weed eaters, snow blowers, fire equipment, tables and chairs; and playgrounds.

Figure 2-35
Average Age vs Average Useful Life of Equipment



CONDITION

Average condition for Township equipment is based on age in relation to useful life. Condition ratings are not typically maintained on smaller equipment, but annual replacments are included as part of the budget process. Condition has been based on how imminent the replacement of these items are. . In 2024, the Township completed a full assessment of all water and wastewater processing equipment, greatly increasing the accuracy of the reported condition.

Figure 2-36
Average Condition of Equipment – Tax Supported

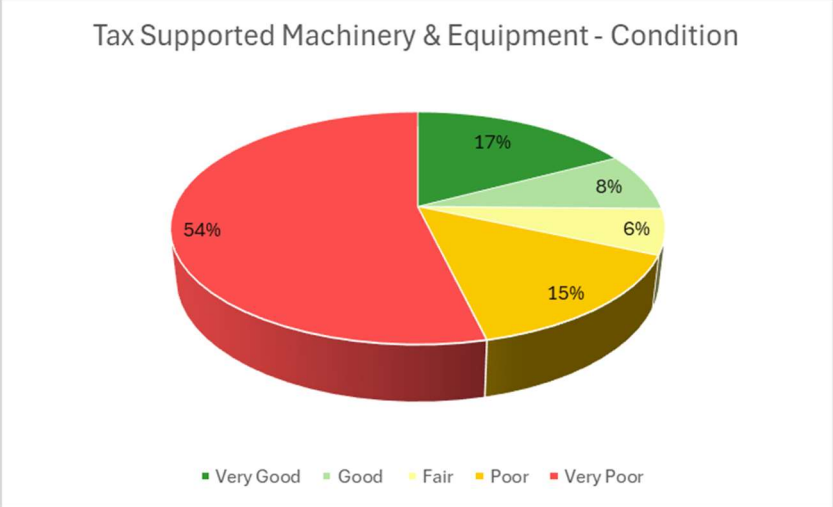
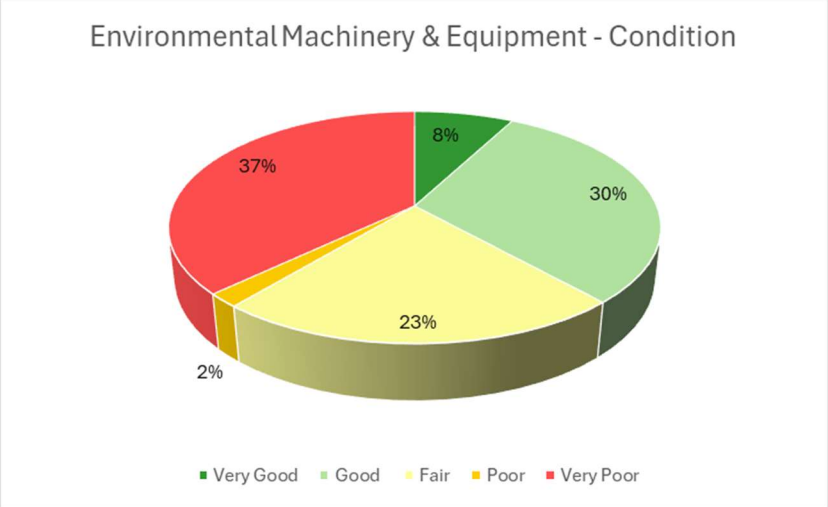


Figure 2-37
Average Condition of Equipment – Environmental



ASSET RISK

Risk of owning / operating Township equipment has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) for each service department. Each PoF and CoF are comprised of several factors in determining the score associated with each asset.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan. The matrix used for the risk assessment of equipment assets for the Township of Centre Wellington is detailed below:

Table 2-14
Risk Matrix - Equipment

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the equipment inventory maintained by the Township, we can determine the average risk of equipment ownership in both the tax and rate supported assets in this class. Average risk by funding source within this class is detailed in the following figures:

Figure 2-38
Average Risk of Equipment – Tax Supported

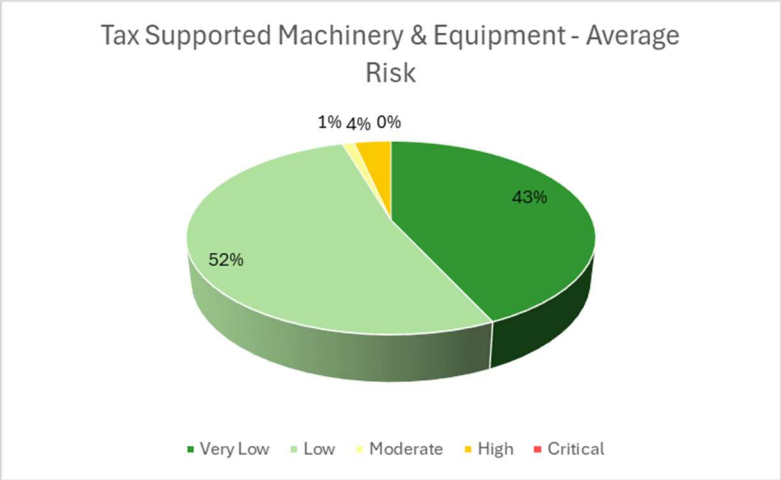
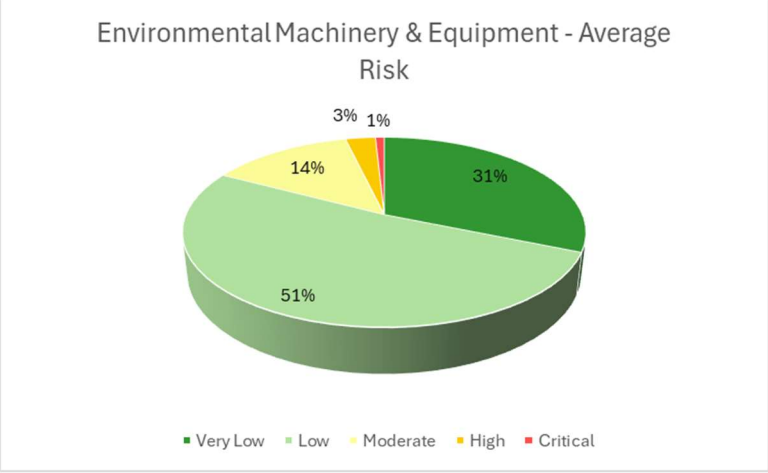


Figure 2-39
Average Risk of Equipment – Environmental



FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's equipment assets, the annual investment required to maintain the Township's equipment inventory (assuming current level of service is maintained) is depicted in the table below, and interpreted as follows:

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Estimated annual investment in equipment for tax supported assets is $851,972 and for environmental supported assets is $996,695, for a total of $1,848,668 per year.

Table 2-15
Annual Investment in Equipment

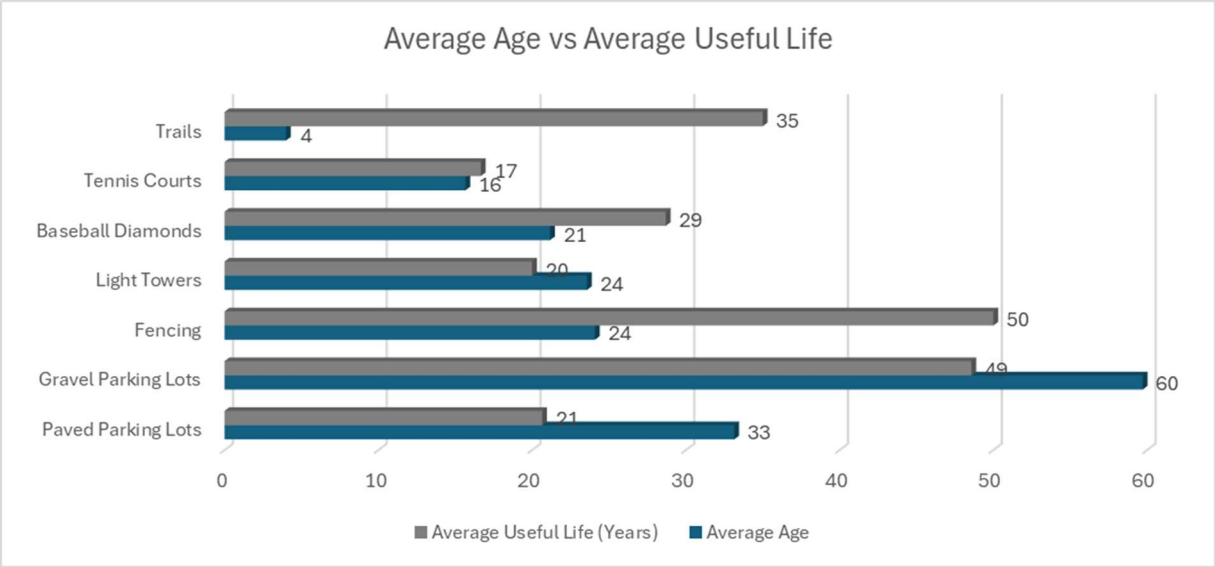
Department	Based on Useful Life
Information Technology	$ 166,843
Public Works	$ 43,100
Fire	$ 151,782
Parks & Recreation	$ 490,248
Environmental	$ 996,695
	$ 1,848,668

ASSET SUMMARY

Land Improvements

The Township tracks various types of land improvements. Land improvements in this section include: fencing, parking lots, light towers, sports fields, and trails. These assets vary in useful life and are limited in ability to analyse their conditions.

Figure 2-40
Average Age vs Average Useful Life for Land Improvements



CONDITION

Condition of land improvements is based on remaining useful life of these assets. The useful life varies by asset type.

Table 2-16
Average Condition of Land Improvement Assets

Average Condition of Land Improvements	
Baseball Diamonds	Very Poor
Fencing	Good
Light Towers	Very Poor
Paved Parking Lots	Poor
Gravel Parking Lots	Poor
Portable/Permanent Uprights (Soccer/Rugby/Basketball)	Fair
Retaining Walls	Poor
Tennis Courts	Poor
Trails	Very Good

ASSET RISK

Risk of owning / operating Township land improvements has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) for each service department. Each PoF and CoF are comprised of several factors in determining the score associated with each asset.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

The matrix used for the risk assessment of land improvement assets for the Township of Centre Wellington is detailed below:

Table 2-17
Risk Matrix for Land Improvements

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the Land Improvements inventory maintained by the Township, we can determine the average risk of Land Improvements. Average risk within this class is detailed in the following table:

Table 2-18
Average Risk of Land Improvement Assets

Average Risk of Land Improvements	
Baseball Diamonds	Moderate
Fencing	Very Low
Light Towers	Low
Paved Parking Lots	Moderate
Gravel Parking Lots	High
Portable/Permanent Uprights (Soccer/Rugby/Basketball)	Very Low
Retaining Walls	Low
Tennis Courts	Very Low
Trails	Very Low

FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's land improvement assets, the annual investment required to maintain the Township's land improvement inventory (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Table 2-19
Annual Investment in Land Improvement Assets

Asset Type	Based on Useful Life
Administration	$ 29,548
Public Works	$ 115,583
Fire	$ 18,273
Parks & Recreation	$ 212,039
Environmental	$ 32,224
	$ 407,666

Estimated annual investment for land improvements is $375,442 for tax supported assets and $32,224 for environmental supported assets for a total of $407,666 per year.

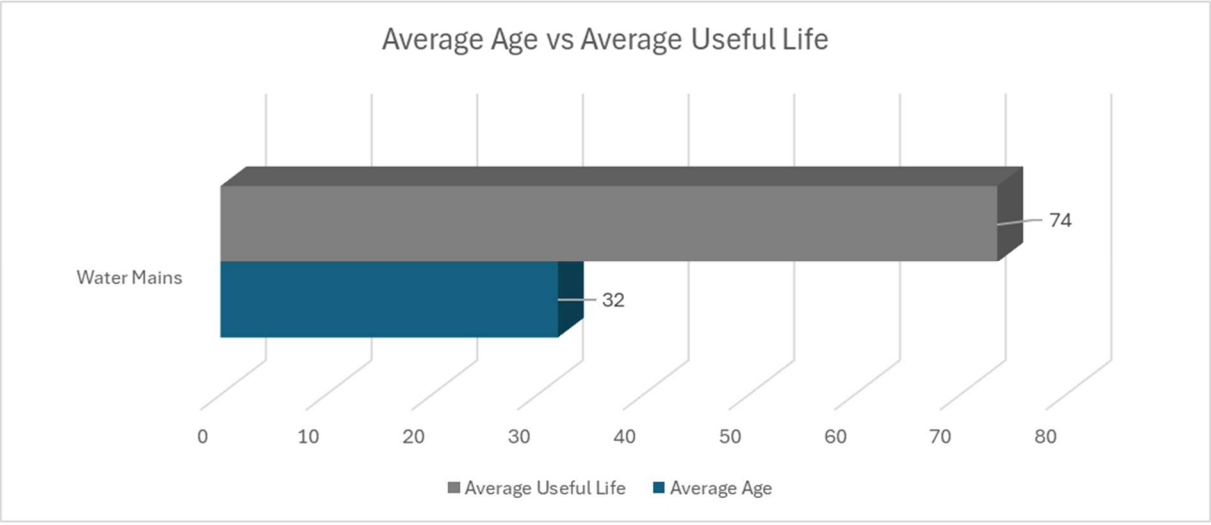
Water Network Assets

The Township's potable water supply and distribution network consists of municipal groundwater wells, water treatment stations, pumping stations, reservoirs, and watermains. The Township supplies residents with safe, high-quality drinking water 24-hrs a day, 365 days a year, and plans for future water supply to ensure that this high level of service will carry-on into the future. The excellent quality of water supplied to the residents of Centre Wellington is attributed to the high-quality bedrock aquifer relied on for supply, and to investments in pumping, treatment, storage, and distribution infrastructure. The Township relies mainly on asset age and watermain break history to prioritize investments in water infrastructure. Further details and specifics regarding the inventory are outlined in following sections.

Table 2-20
Summary of Waterworks Assets

Asset Type	Segment Count	Length (m)
Watermain	1,149	120,970
Water Valve	1,212	
Hydrant	735	
Air Release Valve	6	
Pressure Reducing Chamber	2	
Municipal Well	9	
Water Tower	4	
Booster Station	1	

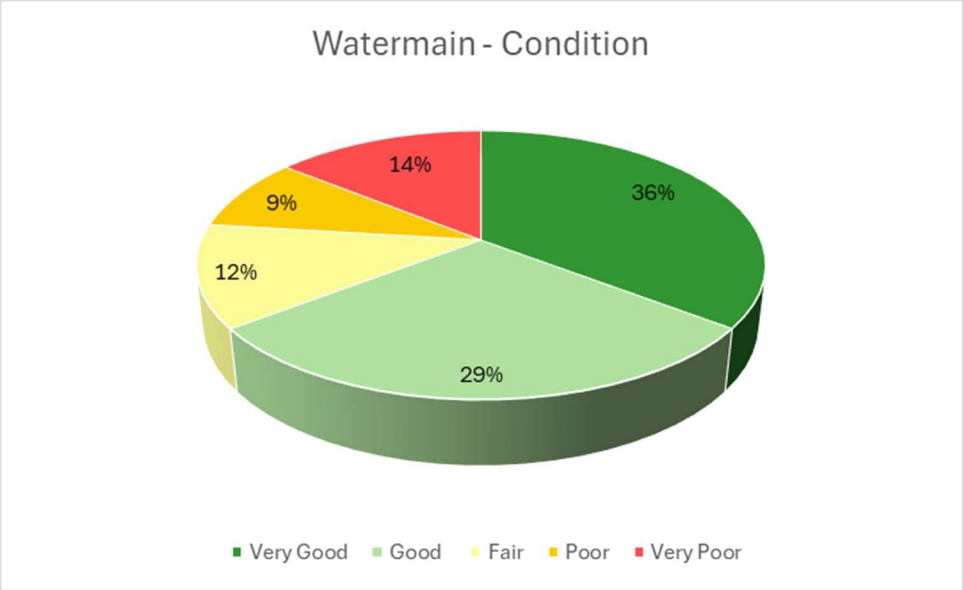
Figure 2-41
Average Age vs Average Useful Life for Water Mains



CONDITION

Condition of water main assets is based on the age of the water main. See Figure B-16 in Appendix B for mapping of the condition of watermains within the Township.

Figure 2-42
Condition of Water Mains



ASSET RISK

Risk of owning / operating Township water distribution assets has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) for these assets. Each PoF and CoF are comprised of several factors in determining the score associated with each asset. These factors include system redundancy, number of breaks, service areas, size and material.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

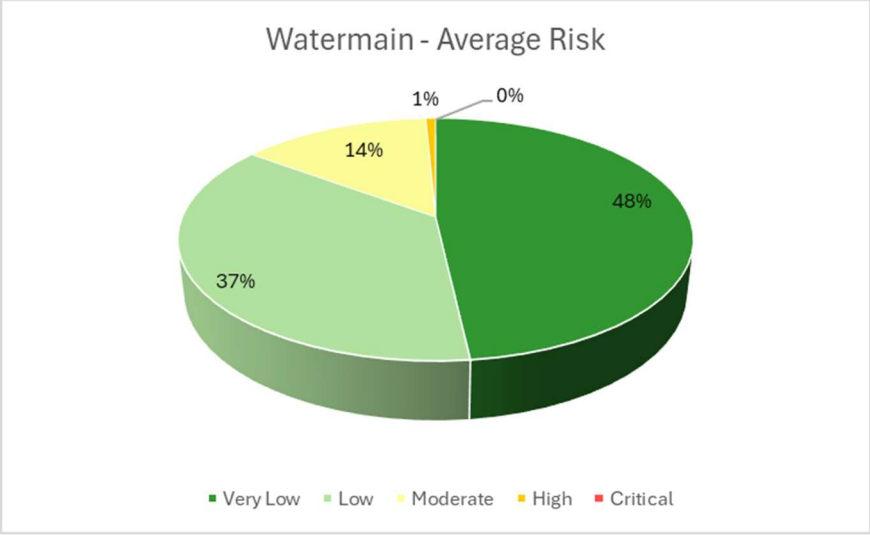
The matrix used for the risk assessment of water network assets for the Township of Centre Wellington is detailed below:

Table 2-21
Risk Matrix for Water Mains

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the water network inventory maintained by the Township, we can determine the average risk of water main failure. Average risk within this class is detailed in the following figure.

Figure 2-43
Average Risk of Water Mains



See Figure B-17 in Appendix B for mapping of the risk of watermains within the Township.

FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's Water Network assets, the annual investment required to maintain the Township's water network inventory (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) – This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

Table 2-22
Annual Investment in Water Mains

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Water Main	$ 1,320,838	$ 2,696,302	$ 13,578,307	**$ 2,700,000**

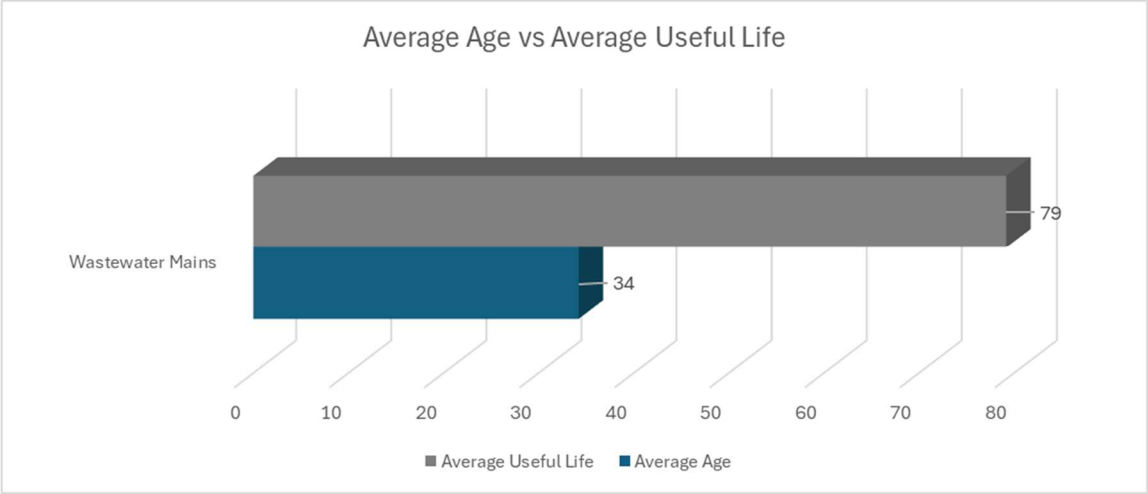
Wastewater Network Assets

The Township collects and treats sanitary wastewater through a system of sanitary sewers, pumping stations, and Wastewater Treatment Plants (WWTP). The Fergus WWTP and Elora WWTP use rigorous processes to treat wastewater and discharge it safely to the Grand River. The Township's wastewater collection systems consist of a series of sewer pipes, some of which were installed almost 100 years ago. Although older pipes can still function very well, they may be more prone to stormwater and groundwater infiltration during wet weather events, which increases flows to WWTPs and puts pressure on the treatment infrastructure. It is therefore advantageous to repair or replace these older pipes to optimize the function of the entire wastewater collection and treatment system. Similar to potable water infrastructure, the Township relies mainly on asset age data to prioritize investments in the sanitary sewer system; however, the Township is improving this dataset through a pipe video inspection program which began in 2022. Since this program began, the Township has inspected 34% of the sanitary sewer system. Further details and specifics regarding the inventory are outlined below.

Table 2-23
Summary of Wastewater Assets

Asset Type	Segment Count	Length (m)
Wastewater Gravity Main	1,640	102,095
Wasterwater Force Main	20	2,310
Wastewater Low Pressure Main	54	5,329
Maintenance Hole	1,513	
LPS Air Release Valve	6	
LPS Cleanout Valve	55	
LPS Shutoff Valve	238	
Pumping Station	8	
Treatment Plant	2	

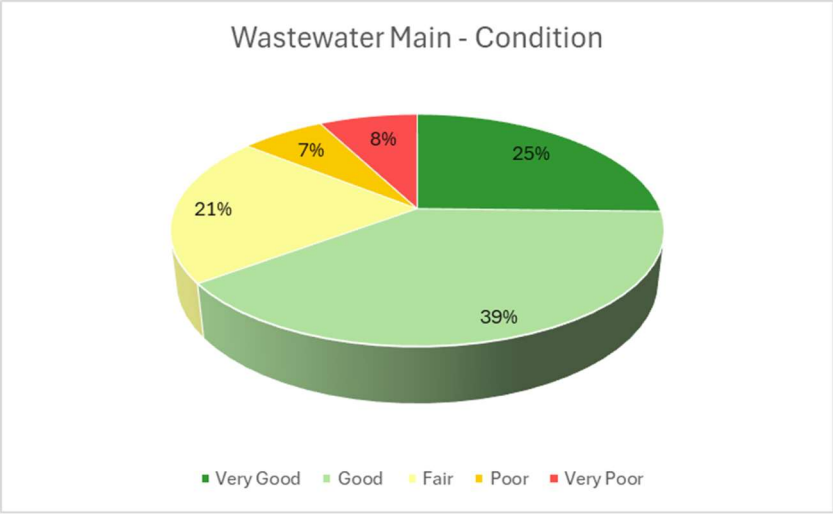
Figure 2-44
Average Age vs Average Useful Life for Wastewater Mains



CONDITION

Condition of wastewater assets is based on the inspection results and age of the sanitary sewer. See Figure B-20 in Appendix B for mapping of the condition of wastewater mains within the Township.

Figure 2-45
Condition of Wastewater Mains



ASSET RISK

Risk of owning / operating Township wastewater distribution assets has been determined using a matrix framework taking into consideration both the Probability of Failure (PoF) and Consequence of Failure (CoF) for these assets. Each PoF and CoF are comprised of several factors in determining the score associated with each asset. These include age, material, pipe size, accessibility and proximity to pumping and treatment facilities.

Improvements to asset and system capacity, function and condition are often limited by available funding and resources. It thus becomes necessary to prioritize asset investments and improvements based on risk exposure.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

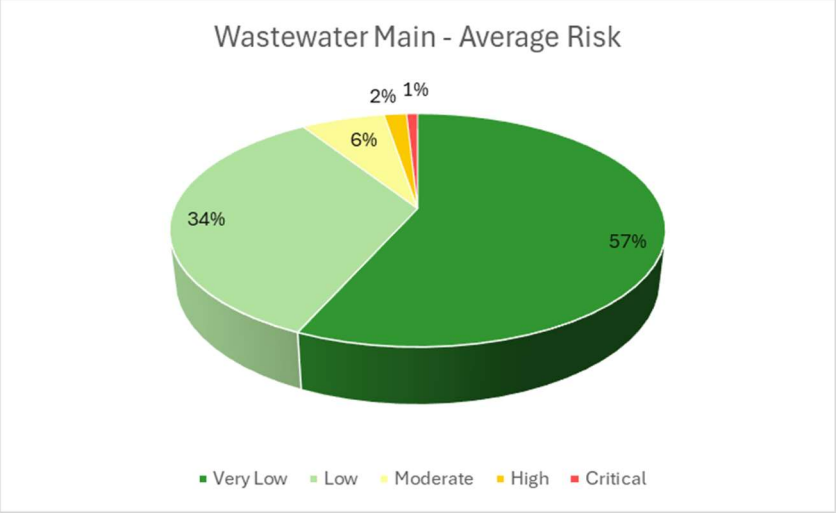
The matrix used for the risk assessment of wastewater network assets for the Township of Centre Wellington is detailed below:

Table 2-24
Risk Matrix for Wastewater Mains

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the wastewater network inventory maintained by the Township, we can determine the average risk of wastewater main failure. Average risk within this class is detailed in the following figure:

Figure 2-46
Average Risk of Wastewater Mains



See Figure B-21 in Appendix B for mapping of the risk of wastewater mains within the Township.

FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's wastewater network assets, the annual investment required to maintain the Township's wastewater inventory (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

Table 2-25
Annual Investment in Wastewater Mains

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Wastewater Main	$ 997,778	$ 2,064,459	$ 6,077,806	**$ 2,060,000**

Stormwater Network Assets

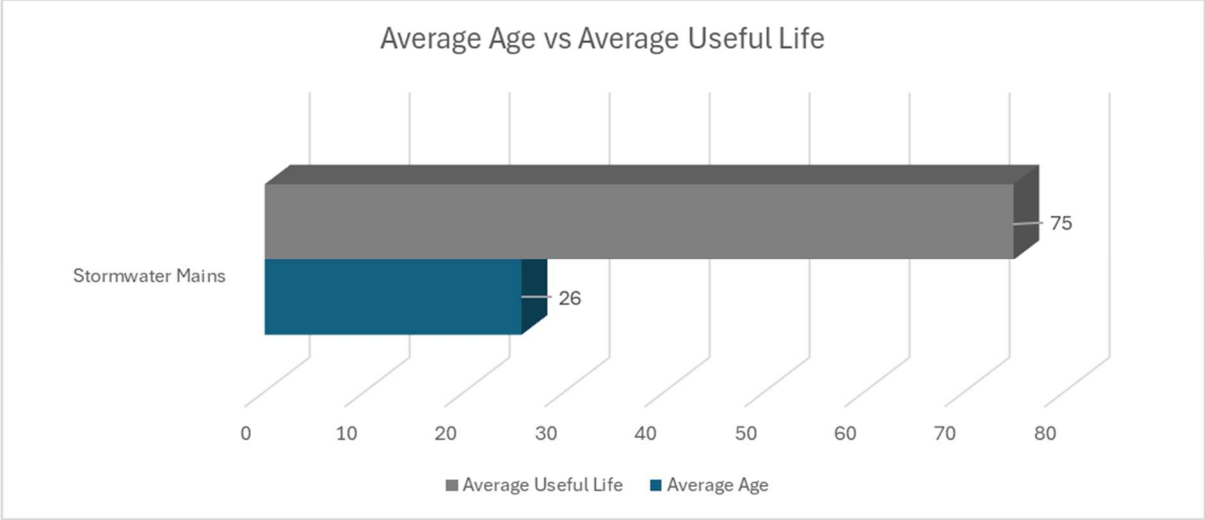
The stormwater management system protects public and private property from flooding by conveying runoff from rainstorms. The stormwater system includes storm sewers, catch basins, maintenance holes and storm ponds. Worth noting here is that the rural ditching system(s) are included in road assets.

The Township maintains 117 km of storm sewer pipes, 4,628 related point assets, such as catch basins and maintenance holes and 21 stormwater areas. The inventory of stormwater network assets have an estimated replacement value of $101.5 million dollars.

Table 2-26
Summary of Stormwater Assets

Asset Type	Segment Count	Length (m)
Stormwater Main	4,290	116,812
Catch Basin	3,952	
Maintenance hole	676	
Oil/Grit Separator	21	
Inlet/Outlet	228	
Outfall	88	
Retention Pond	39	
Stormwater Management Area	21	

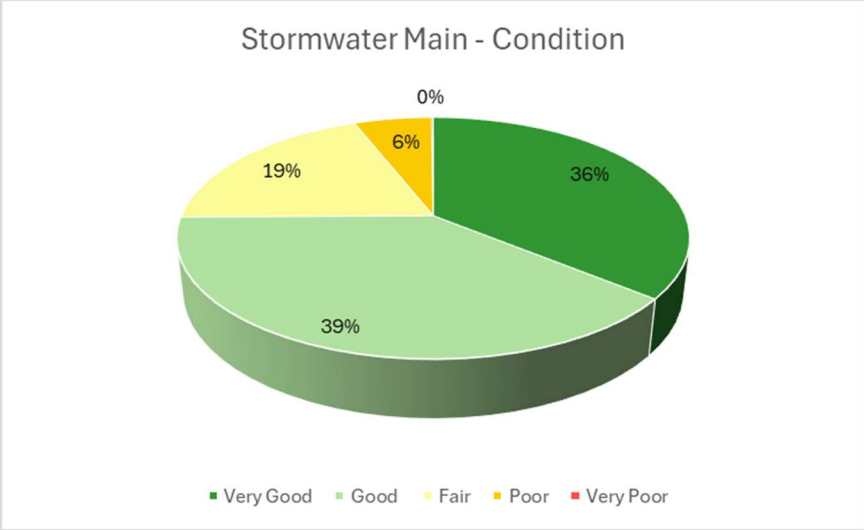
Figure 2-47
Average Age vs Average Useful Life for Stormwater Mains



CONDITION

The condition of stormwater mains is based on their primarliy on age. However, the Township is improving this dataset through a pipe video inspection program which began in 2022. Since the start of this program, the Township has completed inspections on 5% of the pipe segments making up the storm sewer system.

Figure 2-48
Condition of Stormwater Mains



ASSET RISK

Risk for stormwater mains is based on the below risk matrix which considers Probability of Failure (PoF) and Consequence of Failure (CoF). The probability of failure is a function of condition, which is based on age or assessment values, and material. The consequence of failure is a function of modelling results, average daily traffic counts, and size.

The concept of risk is further elaborated in Chapter 4 of this Asset Management Plan.

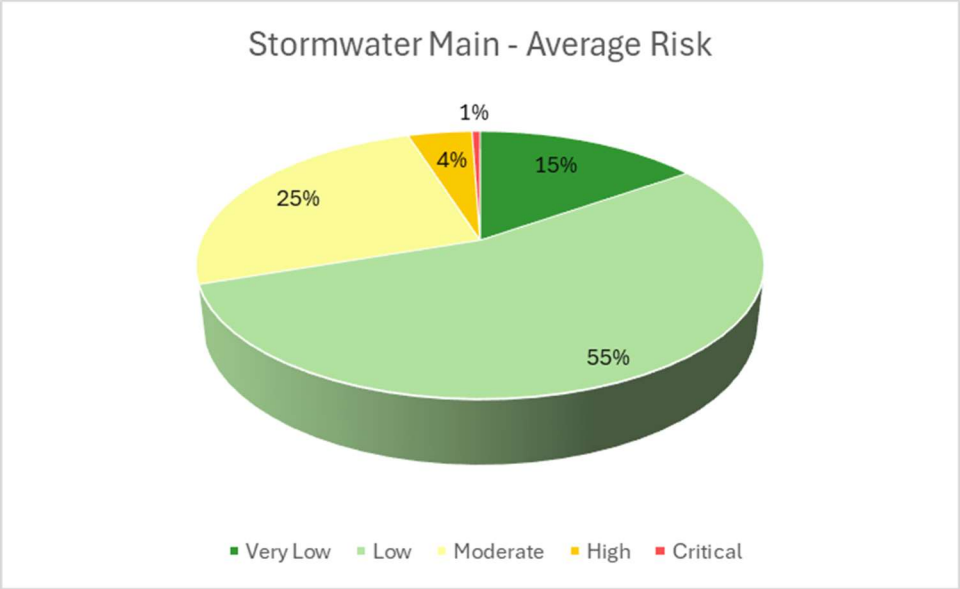
The consequence of failure for all stormwater ponds has been set at low.

Table 2-27
Risk Matrix for Stormwater Mains

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Using the risk matrix above and applying it to the stormwater pond inventory maintained by the Township, we can determine the average risk of failure. Average risk within this class is detailed in the following figure:

Figure 2-49
Average Risk of Stormwater Mains



FINANCIAL

As mentioned in other sections within the Asset Management Plan, the Township of Centre Wellington maintains a robust dataset as it pertains to its asset inventory including replacement costs indicative of current market conditions.

Based on the replacement values contained within this dataset, and specific to the Township's stormwater network assets, the annual investment required to maintain the Township's stormwater inventory (assuming current level of service is maintained) is depicted in the below table, and interpreted as follows:

Asset Type – description of the assets being categorized.

Annual Investment (Based on Useful Life) – This value indicates the annual investment that should be directed to the asset type to ensure future funding is available to conduct rehabilitation or replacement if investment had begun on the original in-service date of the asset.

Annual Investment (Based on Remaining Life) - This value indicates the annual investment that should be directed to the asset type to ensure appropriate funds are available to conduct lifecycle interventions, inclusive of replacement, with investment beginning now, and maintained over the remaining useful life of the assets.

Backlog – This is the underserviced spending need for assets that are beyond their expected useful lives but have not been rehabilitated or replaced, nor have funds been established for the maintenance or rehabilitation of same. This value represents the investment required today to replace these assets.

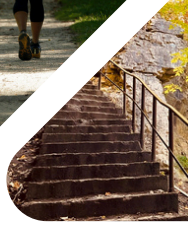
Recommended Annual Investment – This value indicates the recommended annual investment over the remaining lives of the assets within each of the classes and is calculated as the replacement cost divided by the expected remaining useful life but does not take into consideration Backlog. By investing this amount, the Township is ensuring that sufficient dollars will be available in the future to address lifecycle intervention needs.

Table 2-28
Annual Investment in Stormwater Mains

	Annual Investment			
Asset Type	Based on Useful Life	Based on Remaining Life	Backlog	Recommended Annual Investment (2024$)
Stormwater Main	$ 810,929	$ 1,579,707	$ 77,903	**$ 1,580,000**

CHAPTER THREE

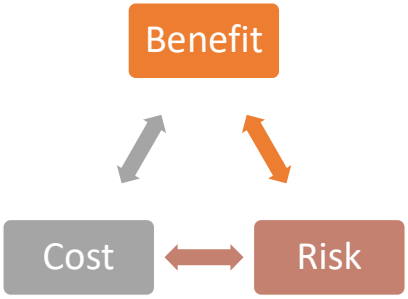
LEVELS OF SERVICE



CHAPTER 3: LEVELS OF SERVICE

OVERVIEW

The most important outcomes of the Township's asset management planning practices are an understanding of the services and service levels to be provided, and balancing these service levels with risk, and the cost associated with providing these services to residents and businesses. Assets are used by municipalities to provide services.



Asset investment decisions are based on the types of services that residents and businesses are (and will be) receiving, as well as the quality (or "level") of those services. The Township strives to strike a balance between providing a breadth of services, at the appropriate levels, while keeping costs and associated risks as low as possible. This balancing of service benefit, risk, and cost is considered the ultimate goal of asset management planning.

This asset management plan reflects the current services and levels of service delivered as well as the proposed future services and levels of service, including assessments of how the Township will fund changes in services and service levels, in moving from "current levels" to "proposed levels". These changes may include enhancing levels of existing services, reduced service levels, or the provision of new services.

There are many factors that play a role in determining what services the Township provides and at what levels. These include various legislative requirements, community expectations, financial constraints, available resources, as well as strategic planning goals and objectives.

STRATEGIC PLANNING

The primary source of direction for Township services comes from the approved Strategic Plan. Centre Wellington's Strategic Plan is the foundation for decision making across the Township, providing direction for not only the asset management planning process, but also for master plan development, staff reports brought forward to Council, and the annual Township Budget process.

The 2023 to 2026 Strategic Plan outlines the following five overarching goals:

Create the conditions for economic prosperity.

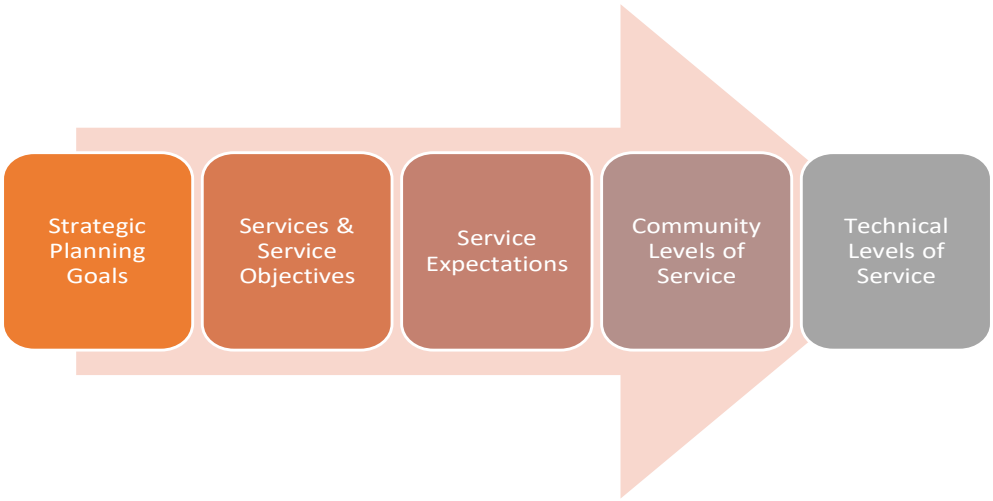
Improve the activity, health and wellness of our community.

Managing growth while enhancing the community's unique character.

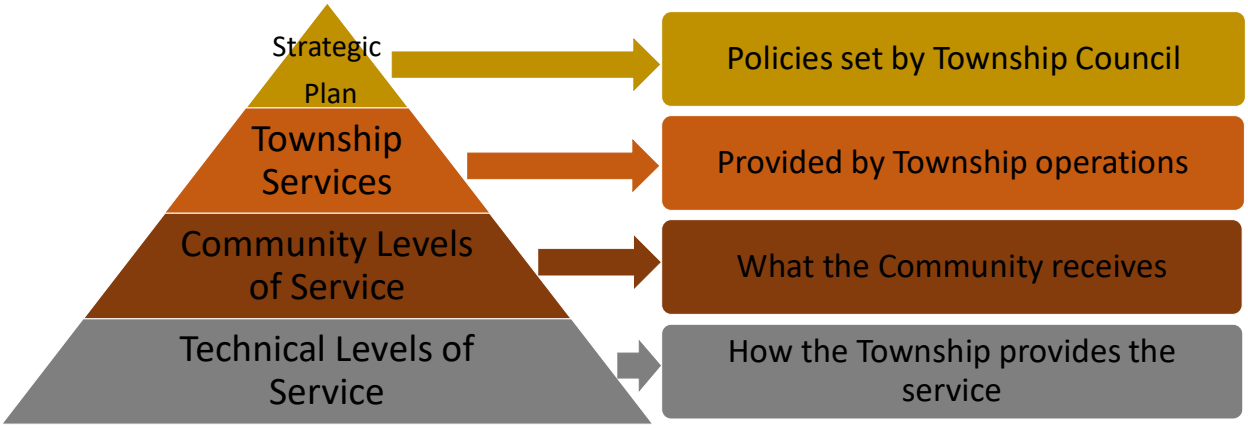
Championing environmental stewardship.

Provide innovative and sustainable governance.

Each one of these strategic goals are represented within this asset management plan. What's more, this chapter will outline the "line of sight" from strategic planning goals to the technical measures or metrics that Township staff utilize in performing their day-to-day responsibilities in providing services.



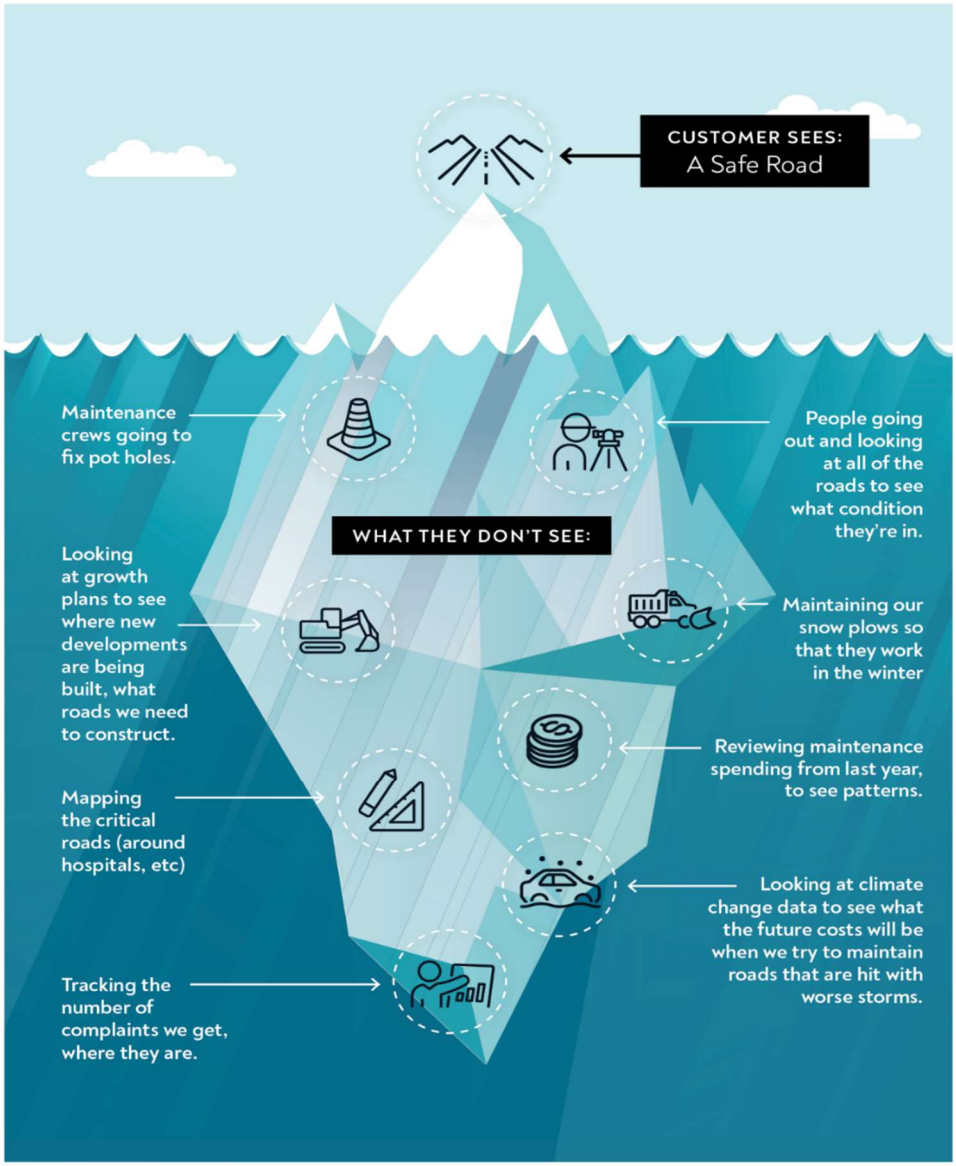
"Line of sight" from a service perspective refers to the alignment of strategic planning goals with the services that are provided, both in terms of what the community is receiving (community levels of service) and what the Township is providing (technical levels of service). Through this exercise, Township staff can see the impacts of their efforts in achieving strategic planning initiatives.



COMMUNITY vs. TECHNICAL LEVELS OF SERVICE

This chapter provides a link between higher-level strategic goals at the Township and the more technical, day-to-day activities completed at the departmental or divisional level. The Township measures progress toward delivering services through performance measurement programs across the organization. Performance is measured from both the community perspective, as well as a technical perspective.

Community levels of service measures reflect services provided from the resident perspective and give us (Township Staff and Council) an idea of service quality, reliability, and sustainability. Technical levels of service are used to evaluate how effectively the Township is delivering services, using metrics and performance measures. A good visualization of this is comparing services to an iceberg. The community levels of service (what the customer sees) is only the tip of the iceberg, with the technical levels of service (what the Township does to provide that service) representing everything that happens below the water, out of view from the customer.



Customer Research and Expectations

This asset management plan has been developed to facilitate consultation prior to endorsement by the Township of Centre Wellington and incorporates community consultation on service levels and costs of providing the service. This consultation was conducted to ensure that Township and its stakeholders are aligned when considering the level of service required, service risks and consequences, and the community's ability and willingness to pay for the service.

The community engagement strategy employed in developing this asset management plan was comprised of 4 major engagement methods as detailed below.

Table 3-1
2025 Community Engagement Strategy

No.	Engagement Method	Stakeholder Group	Purpose
1	Stakeholder Awareness	Internal	To assess the Township staff understanding of LOS and educate staff so that they have a common understanding of LOS principles and how LOS are managed at the Township (i.e., tradeoff between LOS, risk and cost).
2	Community Survey	External	To gather which services are the most important to the public, their experiences with current services, and their willingness to pay more, less or the same for those services.
3	Informant Workshops	Internal	To gather Council's understanding of their constituent's experience with Township services and their willingness to pay more, less or the same for those services.
4	Community Events	External	To gather the public's experience with current Township services and to provide the results from the public engagement and explain how Township staff will take the public feedback and balance with other constraints and corporate priorities as they finalize the 2025 AM Plan.

Each of the methodologies yielded key insights that were used to support the development of the proposed Level of Service framework for the 2025 AM Plan. Specific insights from each engagement method that was used to inform the proposed Levels of Service are summarized below.

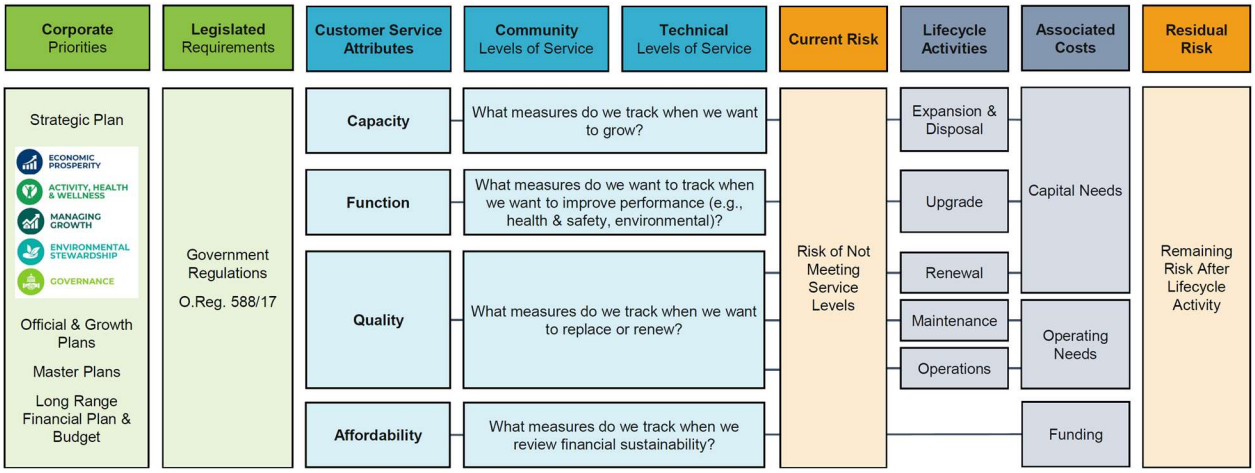
Table 3-2
2025 Community Engagement – Specific Insights

1. Stakeholder Awareness	2. Community Survey	3. Informant Workshops	4. Community Event
• Participants described a challenge with using the current LOS to inform decision making and suggested that better metrics would be helpful along with more frequent reporting of metrics to track historical performance. • Data management was highlighted as a challenge and improvements with this should support more frequent updates to the LOS metrics.	• Participants were mostly satisfied with current service levels. • Participants were mainly willing to pay to same for similar service or more for better quality service. • Participants were mainly not interested in paying more to use non-disruptive technologies for water and wastewater construction.	• Council expressed general satisfaction from residents regarding Township services. • Council noted that residents are willing to pay for Township services but are not looking for significant increases. • Council viewed the LOS framework as a great tool to help them explain investment decisions to residents and to make more informed budget decisions.	• Attendees seemed to understand and be able to provide more feedback on the assets and services they could see (above ground assets) • Attendees had less understanding of assets that are not visible (underground). • Satisfaction results were similar to the community survey findings.

Based on the community survey, informant workshops, and community event results and as can be gleaned by reviewing Table 3-2 above, in most instances customer expectations and service satisfaction is consistent with maintaining budget with marginal opportunity to pay more to obtain an increased level of service.

LEVELS OF SERVICE FRAMEWORK

For the purposes of the 2025 Asset Management Plan, the Township has employed a revised comprehensive Levels of Service Framework that is compliant with Ontario Regulation 588/17. This revised framework effectively integrates all levels of service components previously discussed into a consistent and repeatable format that is used across asset types. This revised framework is detailed below.



TRENDING OF AVERAGE CONDITION OF ASSETS

The tables below detail the weighted average condition of in-service assets by service segment and are broken-out between both tax supported and rate supported services. These condition tables provide indication of past performance and level of service delivered by the Township utilizing condition as a proxy, and help identify trends which indicate areas of stable, increasing or decreasing service delivery.

Table 3-2
Weighted Average Condition of Tax Supported Assets

Asset Type	Weighted Average Condition (/5)					Trend
	2013	2014	2016	2022	2024	
Bridges	3.0	3.0	3.4	2.6	3.2	↑
Culverts	3.9	3.9	3.6	2.1	3.4	↑
Pedestrian Bridges	1.3	2.5	3.0	1.9	3.5	↑
Roads - Bases	1.8	1.7	1.7	2.5	2.6	↑
Roads - Surfaces (Paved)	3.2	3.2	3.3	3.7	2.7	↓
Vehicles	n/a	n/a	3.0	3.0	3.0	↔
Facilities	3.9	3.8	2.3	3.2	3.2	↔
Equipment & Machinery	n/a	n/a	3.1	3.0	4.0	↑
Land Improvements	n/a	n/a	2.7	2.4	4.0	↑

Table 3-3
Weighted Average Condition of Water Assets

Asset Type	Weighted Average Condition (/5)					Trend
	2013	2014	2016	2022	2024	
Water Infrastructure	2.9	3.0	3.3	2.3	2.8	↑
Facilities	3.7	3.8	3.4	3.4	3.3	↔
Vehicles	n/a	n/a	3.7	1.0	2.7	↑
Equipment & Machinery	n/a	n/a	3.0	2.0	3.0	↑

Table 3-4
Weighted Average Condition of Wastewater Assets

Asset Type	Weighted Average Condition (/5)					Trend
	2013	2014	2016	2022	2024	
Sewer Infrastructure	3.0	2.8	3.2	2.3	2.0	↓
Facilities	3.0	3.0	3.2	3.0	3.2	↑
Vehicles	n/a	n/a	3.7	2.0	3.7	↑
Equipment & Machinery	n/a	n/a	2.8	3.0	3.0	↔

LEVELS OF SERVICE (LOS) ANALYSIS

The analysis below provides a representation of services and service levels for the following areas:

- Roads Related
- Bridges & Culverts
- Parking
- Stormwater
- Water Network
- Wastewater Network
- Outdoor Recreation
- Indoor Recreation
- Cemetery
- Fire Services
- By-Law Enforcement

Each service area will be outlined below, indicating the “line of sight” of the service to the Township Strategic Plan as well as the Community Levels of Service and Technical Levels of Service provided. Where asset management legislation requires a specific reference or metric, reference to Ontario Regulation 588/17 has been provided.

Leveraging external consultation and community engagement, levels of service defined in this plan reflect those appropriate to the municipality to ensure legislative compliance, risk associated with delivering

services at target levels, and financial sustainability. Options for the proposed levels of service and associated risks have been contemplated and consider lifecycle interventions aimed at increasing asset longevity and reducing overall costs.

When considering levels of service, by service segment, Township staff have detailed Service Objectives, Service Attributes & Expectations, Community Levels of Service, Technical Levels of Service, Performance Measure Descriptions, Historical Measures for the years 2019-2024, where available, and the Target for each measure. These items are defined as follows:

Service Objective – the service objectives are the macro level of service objective within each service segment which detail the goal of the service being provided, which include outputs and objectives the Township intends to deliver to its citizens, businesses, and other stakeholders.

Service Attributes & Expectations – are the corporate levels of service commitments defined by Township staff and endorsed by Council – these are further defined as follows:

> Capacity & Utilization: Assessing whether services have enough capacity and are accessible to the customers
>
> Scope & Function: Assessing whether services meet customer needs while limiting health, safety, security, natural and heritage impacts
>
> Quality: Assessing whether services are reliable and responsive to customers
>
> Affordability: Assessing whether services are affordable and provided at the lowest cost for both current and future customers

Community Levels of Service – build on the service attributes and expectations mentioned above.

Technical Levels of Service – once the community levels of service have been established, they are then translated into Technical LOS, where Capacity & Use LOS drive assessment of the Expansion needs; Function LOS drive assessment of Upgrade needs; Quality LOS drive assessment of renewal, operations and maintenance needs; and Affordability LOS drive assessment of Financial Sustainability needs. The risks of failing to achieve the defined Community and Technical LOS are assessed, and life cycle activities are prioritized to address those risks.

Historical Measures (2019-2024) – these columns identify the Township's past performance against the defined technical levels of service performance measures and provides levels of service trends.

Target – this column depicts the target level of service for each metric to be in place by 2034.

Roads and Related Services

Table 3-5
Roads Levels of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Roads Related Assets
Service Objective	Roads& Sidewalks that take people and goods where they need to go in a safe and efficient manner
Service Expectations	SCOPE & FUNCTION: Roads that are open and provide efficient transportation
	QUALITY: Roads that provide a comfortable ride, Sidewalks are kept in a state of good repair
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-6
Roads Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Roads that take people and goods where they need to go in a safe and efficient manner.	**SCOPE & FUNCTION: Roads that are open and provide efficient transportation.**	Description, which may include maps, of the road network in the municipality and its level of connectivity. **Ont. Reg 588/17- See Figure B-1 and B-2**	Arterial Roads: Number of lane-kilometres as a proportion of square kilometres of land area. **Ont. Reg 588/17**	N/A	N/A	N/A	N/A	N/A	N/A	In the future could include HWY6 bypass road
			Collector Roads: Number of lane-kilometres as a proportion of square kilometres of land area. **Ont. Reg 588/17**	1.44	1.44	1.44	1.39	1.34	1.29	Gradually Increasing with Growth
			Local Roads: Number of lane-kilometres as a proportion of square kilometres of land area. **Ont. Reg 588/17**	0.77	0.78	0.78	0.84	0.89	0.96	Gradually Increasing with Growth
	QUALITY: Roads that provide a comfortable ride	Description or images that illustrate the different levels of road class pavement condition. **Ont. Reg 588/17- See Figures B-3, B-4, B-5, and B-6**	For paved roads: the average pavement condition index value. **Ont. Reg 588/17 Arterial Roads**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			For paved roads: the average pavement condition index value. **Ont. Reg 588/17 Collector Roads**	*6.90 (from 2017 Cond Assessment)	No New Data	No New Data	7.31	No New Data	No New Data	7.5
			For paved roads: the average pavement condition index value. **Ont. Reg 588/17 Local Roads**	*7.09 (from 2017 Cond Assessment)	No New Data	No New Data	7.83	No new data	No new data	7.25
			For unpaved roads: the average surface condition (e.g. excellent, good, fair or poor). **Ont. Reg 588/17**	No Data	No Data	5.83 (Fair)	No new data	No new data	No new data	7 (Good)
			Collectors: Number of paved road segments with a PCI less than 6.0							
			Local: Number of paved road segments with a PCI less than 5.0	No Data	No Data	No Data	9	No new data	No new data	0
			Number of gravel road segments with an OCI less than 5.0	No Data	No Data	56	No new data	No new data	No new data	0
Sidewalks that take people where they need to go in a safe and efficient manner.	**QUALITY: Sidewalks**	Assets are kept in a state of good repair.	% of sidewalks in Fair or better condition	New Metric - not previously calculated					88.4%	100%

Table 3-7
Traffic and Roadside Levels of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Traffic and Roadside Related Assets
Service Objective	Traffic and roadside assets support safe use of public works assets
Service Expectations	QUALITY: Assets are kept in a state of good repair
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-8
Traffic & Roadside Level of Service Metrics

Traffic and Roadside

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Traffic and roadside assets support safe use of public works assets.	**QUALITY**	Assets are kept in a state of good repair.	% of Public Works facilities in Fair or better condition	New Metric - not previously calculated						100%

Table 3-9
Parking Levels of Service Line of Sight

Line of Sight

Strategic Goal	Create the Conditions for Economic Prosperity
Assets	Parking Related Assets
Service Objective	Residents and visitors have a space to park
Service Expectations	CAPACITY & UTILIZATION : Residents and visitors have a space to park
	SCOPE & FUNCTION: Parking services meet the diverse needs of the users
	QUALITY: Assets are kept in a state of good repair
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

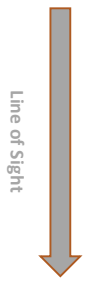
Table 3-10
Parking Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Residents and visitors have a space to park.	CAPACITY & UTILIZATION: Parking Availability	Residents and visitors have a space to park.	Number of parking spaces in Downtown Elora	New Metric - not previously calculated					400	633
			Number of parking spaces in Downtown Fergus	New Metric - not previously calculated					586	843
	SCOPE & FUNCTION: Parking Needs	Parking services meet the diverse needs of the users.	# of Parking Lot Spaces dedicated to EV Charging Stations	New Metric - not previously calculated					Elora - 8 Fergus - 6	Elora - 16 Fergus - 12
			# of Parking Spaces dedicated to Accessible Parking in Downtown Elora	New Metric - not previously calculated					10	15
			# of Parking Spaces dedicated to Accessible Parking in Downtown Fergus	New Metric - not previously calculated					11	20
	QUALITY	Assets are kept in a state of good repair.	% of parking lots in Fair or better condition	New Metric - not previously calculated					N/A	100%

The Township's Road network is maintained to provide a safe and well-maintained means of transportation, as outlined in the Township's Strategic Plan. The road network is inspected in accordance with Minimum Maintenance Standards (MMS) for Municipal Highways, wherein the Provincial government mandates the frequency of the inspection of roads based on traffic volume and posted speed limits. Roads with higher volumes and higher speed limits are required to be inspected more frequently. The inspection evaluates the existence of shoulder drop offs, cracks, and pavement surface discontinuities that would compromise the ability to drive on the road section at the posted speed limit. Once a defect has been identified, the MMS prescribes the maximum allowable time between identification and time for repair based on the traffic volume and posted speed limit.

Bridges & Culvert Related Services

Table 3-11
Bridges & Culverts Level of Service Line of Sight



Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Bridge & Culvert Related Assets
Service Objective	Bridges & culverts that take people and goods where they need to go in a safe and efficient manner
Service Expectations	SCOPE & FUNCTION: Bridges and culverts that are open and provide efficient transportation
	QUALITY: Bridges and culverts that provide a comfortable ride
	CAPACITY & UTILIZATION: Bridges and culverts with minimized traffic congestion
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-12
Bridges & Culverts Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service Indicator	Community Level of Service Performance	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Bridges and culverts that take people and goods where they need to go in a safe and efficient manner.	**SCOPE & FUNCTION: Bridges and culverts that are open and provide efficient transportation.**	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists). **Ont. Reg 588/17**	The Township's 112 bridges and culverts support vehicular traffic, including heavy and emergency vehicles, with exception of those noted in Figure B-11 as being closed. In terms of pedestrian bridges, all structures are passable by pedestrians and cyclists.	Percentage of open bridges with loading or dimensional restrictions. (excludes closed structures) **Ont. Reg 588/17**	10%	10%	7%	7%	6%	5%	0%
				Number of bridges and structural culverts with loading or dimensional restrictions.	10	10	7	7	6	5	0
	QUALITY: Bridges and culverts that provide a comfortable ride	Description or images of the condition of bridges and how this would affect use of the bridges. **Ont. Reg 588/17**	Please refer to Chapter 2 for and Figure B-11 for additional information relative to condition approximations.	Bridges: Average bridge condition index value. **Ont. Reg 588/17**	67.08	65.74	No new data	63.88	No New Data	67.48	70.0
				Number of bridges with BCI less than 60.0	New Metric - not previously calculated					17	0
		Description or images of the condition of culverts and how this would affect use of the culverts. **Ont. Reg 588/17**	Please refer to Chapter 2 for and Figure B-11 for additional information relative to condition approximations.	Structural Culverts: Average bridge condition index value. **Ont. Reg 588/17**	72.16	70.87	No new data	69.44	No new data	68.88	70.0
				Number of structural culverts with BCI less than 60.0	New Metric - not previously calculated					4	0
	CAPACITY & UTILIZATION: Bridges and culverts with minimized traffic congestion.	Map of the bridge network outlining bridges with increased traffic.	**See Figure B-11**	Number of closed bridges/culverts.	11	10	12	13	13	11	0

The Township's bridge and major culverts are inspected, at a minimum, every 2 years based on Ontario Structure Inspection Manual (OSIM) legislated requirements. Bridges and culverts that are considered a higher risk are inspected more frequently.

Stormwater Services

Table 3-13
Stormwater Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Storm Related Assets
Service Objective	Protect the community and the environment from storm water runoff, created by rain and snow melt events, by controlling storm water functionality, quality, and capacity
Service Expectations	SCOPE & FUNCTION: Storm Systems that minimizes incidents of flooding
	QUALITY: Storm System assets are kept in a state of good repair
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-14
Stormwater Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Protect the community and the environment from storm water runoff, created by rain and snow melt events, by controlling storm water functionality, quality, and capacity.	**SCOPE & FUNCTION**	Storm Systems that minimizes incidents of flooding. Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system. **Ont. Reg 588/17- See Figures B-22 and B25.**	Percentage of properties in municipality resilient to a 100-year storm. **Ont. Reg 588/17**	No Data	No Data	No Data	No Data	No Data	99.1%	100.0%
			Percentage of the municipal stormwater management system resilient to a 5-year storm. **Ont. Reg 588/17**	No Data	No Data	No Data	No Data	No Data	73.4%	83.4%
	QUALITY	Stormwater assets are kept in a state of good repair.	% of Stormwater System inspected with CCTV	0.0%	0.0%	0.0%	0.9%	0.9%	7.1%	100% over 10 years

O.Reg. 588/17 requires municipalities to report the percentage of properties in municipality resilient to both 5 and 100-year storms – these are detailed above. Maps providing an overview of the Township's Storm Water System are detailed in Appendix B, Figures B-22, B-23, B-24, and B-25.

Water Network Related Services

Table 3-15
Water Network Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Water Network Related Assets
Service Objective	Providing safe and reliable drinking water that meets or exceeds the needs of the community and conforms to all applicable regulatory requirements
Service Expectations	SCOPE & FUNCTION: Providing water services in an efficient manner
	QUALITY: Water systems that are safe and reliable
	CAPACITY & UTILIZATION: Water systems that support community fire protection, provide adequate water services to the community with minimal interruptions
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-16
Water Network Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Community Level of Service Performance	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Providing safe and reliable drinking water that meets or exceeds the needs of the community and conforms to all applicable regulatory requirements	CAPACITY & UTILIZATION	Water systems that support community fire protection, provide adequate water services to the community with minimal interruptions Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system and have fire flow **O. Reg 588/17**	**See Figure B-15**	% of properties connected to the municipal water system **O. Reg 588/17**	No Data	No Data	No Data	No Data	No Data	97.7%	100% (25 New Connections / Year)
			See Figure B-18	% of properties where fire flow is available **O. Reg 588/17**	No Data	No Data	No Data	No Data	No Data	94.0%	99%
	SCOPE & FUNCTION	Providing water services in an efficient manner.		Sufficient back up power in system - ability to supply average day usage during emergency or power outage	No Data	No Data	No Data	No Data	No Data	50%	100%
	QUALITY	Water systems that are safe and reliable. Description of boil water advisories and service interruptions **O. Reg 588/17**	Boil water advisories are issued when there is a potential for contamination of drinking water. Boil water advisories are typically managed via direct contact with residents & businesses, media releases, and coordination with Wellington-Dufferin-Guelph Public Heath. Service interruptions are described as any break in continuous service for a period extending beyond 12 hours in duration.	Number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system **O. Reg 588/17**	0	0	0	0	0	0	0
				Number of connection days per year due to water main breaks compared to the total number of properties connected to the municipal water system **O. Reg 588/17**	12 connection days / 8,300 properties = 0.14%	9 connection days / 8,500 properties = 0.11%	11 connection days / 8,700 properties = 0.13%	14 connection days / 8,300 properties = 0.16 %	2 connection days / 8,300 properties = 0.02%	7 breaks / 8362 properties = 0.08%	0.1 %
				# of watermain breaks	12	9	11	14	1	7	6
				# of watermain breaks/100 km	10.28	7.55	9.04	11.02	0.76	5.18	4.44 (6 breaks per 100km)
				Average condition of component assets at water pumping facilities	No Data	No Data	No Data	No Data	No Data	2.39	2.00
				% of unaccounted for water	23%	21%	21%	20%	20%	17%	10%
				Water metres connected to automatic meter reading	0%	0%	0%	0%	0%	60%	100%

The Township's water network is operated to ensure safe drinking water, the Township's drinking water system operates under the Safe Drinking Water Act, 2002 and its' associated Regulations.

The Township's drinking water is continually tested, monitored and analyzed to ensure water quality, which is summarized in the Township's Annual Drinking Water Reports, and are readily available on the Township's Website.

The Township has developed and implemented a Quality Management System for the drinking water system in accordance with the Ministry of the Environment mandated Drinking Water Quality Management Standard.

The Quality Management System Policy for Centre Wellington's Drinking Water System states the Township is committed to:

- Comply with all applicable legislation and regulations for the supply of drinking water in the Province of Ontario
- Maintain and continually improve the Quality Management System and Drinking Water System
- Provide safe drinking water to the consumer

A copy of the QMS Operational Plan is available for review at the Infrastructure Services Office.

Wastewater Network Related Services

Table 3-17
Wastewater Network Level of Service Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Wastewater Network Related Assets
Service Objective	Providing wastewater collection and treatment services that meets or exceeds the needs of the community and conforms to all applicable regulatory requirements
	QUALITY: Wastewater collection and treatment systems that are safe and reliable
	CAPACITY & UTILIZATION: Wastewater collection and treatment systems provide adequate water services to the community with minimal interruptions
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-18
Wastewater Network Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Community Level of Service Performance	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target
Providing wastewater collection and treatment services that meets or exceeds the needs of the community and conforms to all applicable regulatory requirements	**CAPACITY & UTILIZATION**	Wastewater collection and treatment systems provide adequate wastewater services to the community with minimal interruptions. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system **O. Reg 588/17**	**See Figure B-19**	% of properties connected to the municipal wastewater system **O. Reg 588/17**	No Data	No Data	No Data	No Data	No Data	98.08%	100% (25 New Connections / Year)
				% of Wastewater Treatment Plant flows which are attributed to inflow & infiltration in the wastewater network during high flow events	Fergus - 62% Elora - 58%	Fergus - 74% Elora - 71%	Fergus - 68% Elora - 42%	Fergus - 67% Elora - 60%	Fergus - 62% Elora - 55%	Fergus - 50% Elora - 41%	50%
	SCOPE & FUNCTION	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches **O. Reg 588/17**	**Not Applicable**	# of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system **O. Reg 588/17**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes **O. Reg 588/17**	Inflow (e.g. Maintenance Hole covers), and infiltration (e.g. sanitary pipe joints and cracks permitting groundwater in)	No combined sewer	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described above **O. Reg 588/17**	New sanitary sewer services are designed/engineered according to the Municipal Servicing Standard.	No combined sewer	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		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 **O. Reg 588/17**	**Not Applicable**	# of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system **O. Reg 588/17**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	QUALITY	Wastewater collection and treatment systems that are safe and reliable. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system **O. Reg 588/17**		# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system **O. Reg 588/17**	4 violations / 8,300* properties = 0.048%	1 violation / 8,300* properties = 0.012%	0 violations / 8,300* properties = 0.000%	3 violations / 8,300* properties = 0.036%	1 violations / 8,300 properties = 0.012%	4 violations / 8487 properties = 0.047%	0 violations 0.000%
				# of effluent limit exceedances due to equipment malfunction or failure	No Data	No Data	No Data	No Data	0	1	0
				# of effluent limit exceedances due to insufficient hydraulic capacity	No Data	No Data	No Data	No Data	0	0	0
				# of effluent limit exceedances due to process upsets	No Data	No Data	No Data	No Data	1	3	0
				% BOD-5 removal **Fergus**	97.3%	99.1%	98.6%	98.6%	99.0%	99.1%	99.9%
				% ammonia removal **Fergus**	90.7%	98.1%	98.4%	97.0%	98.8%	92.9%	99.9%
				% TSS removal **Fergus**	97.6%	98.1%	97.5%	97.0%	98.1%	99.3%	99.9%
				% of phosphorous removal Fergus	97.2%	97.6%	96.7%	95.1%	97.0%	98.5%	99.9%
				% BOD-5 removal **Elora**	99.1%	99.2%	99.2%	99.2%	99.0%	99.2%	99.9%
				% ammonia removal **Elora**	99.3%	99.2%	99.5%	99.7%	99.7%	99.6%	99.9%
				% TSS removal **Elora**	98.3%	98.8%	98.9%	98.6%	99.0%	99.1%	99.9%
				% of phosphorous removal Elora	97.6%	97.7%	98.3%	97.9%	97.7%	97.4%	99.9%
				Average condition of component assets at pumping stations	No Data	No Data	No Data	No Data	No Data	1.88	2.00
				Average condition of component assets at Elora WWTP	No Data	No Data	No Data	No Data	No Data	2.33	2.00
				Average condition of component assets at Fergus WWTP	No Data	No Data	No Data	No Data	No Data	2.62	2.00

The Township's wastewater network is operated to ensure the safe and effective treatment of wastewater in the Township to help protect public health and the environment. The Township's wastewater treatment process operates under strict regulations and meets or exceeds the standards set by the provincial and federal governments.

Wastewater is collected and treated 24 hours a day, 7 days a week. The Township collects the municipal sanitary sewage (wastewater) in Fergus and Elora as well as from the Low-Pressure Sewage System located in Salem. Wastewater is the mixture of liquid and solid materials flushed down toilets, sinks and drains. It flows through the Township's sanitary sewer system to the wastewater treatment plants.

Wastewater is then treated at one of the two treatment plants located in Centre Wellington. Treatment of wastewater is an essential process that protects both the environment and natural water resources.

The effluent is then discharged into the Grand River.

Outdoor Recreation Services

Table 3-19
Parks Level of Service Line of Sight

Strategic Goal	Improve the Activity, Health and Wellness of our Community
Assets	Parks Related Assets
Service Objective	Residents and visitors are inspired by the beauty of our natural surroundings and cultural vibrancy, motivating them to lead active, healthy and engaged lifestyles
Service Expectations	CAPACITY & UTILIZATION: Outdoor Recreation spaces, programs, and amenities are provided for the whole community and accessible for varying public uses
	QUALITY: Outdoor recreation spaces are safe and comfortable to use
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-20
Parks Level of Service Metrics

Parks

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Residents and visitors are inspired by the beauty of our natural surroundings and cultural vibrancy, motivating them to lead active, healthy and engaged lifestyles	CAPACITY & UTILIZATION	Outdoor Recreation spaces, programs, and amenities are provided for the whole community and accessible for varying public uses.	Neighbourhood park hectares per 1,000 population	0.88	0.88	0.87	0.8	0.73	0.66	1
			Community park hectares per 1,000 population	0.59	0.59	0.62	0.68	0.72	0.74	1
			Township-wide park hectares per 1,000 population	No Data					0.99	1.25
	QUALITY	Outdoor recreation spaces are safe and comfortable to use.	% of outdoor recreation facilities in Poor or better condition (within its service life)	New Metric - not previously calculated					85%	100%
			% of outdoor recreation equipment in Poor or better condition (within its service life)	New Metric - not previously calculated					76%	100%
			% of outdoor recreation fleet in Poor or better condition (within its service life)	New Metric - not previously calculated					77%	100%

The Township's Park assets are diverse, and include soccer and other sports fields, tennis & basketball courts, skate parks, playgrounds, splashpads, and a network of trails.

Indoor Recreation Related Services

Table 3-21
Indoor Recreation Level of Service Line of Sight

Line of Sight

Strategic Goal	Improve the Activity, Health and Wellness of our Community
Assets	Indoor Recreation Related Assets
Service Objective	Residents and visitors are inspired by the beauty of our natural surroundings and cultural vibrancy, motivating them to lead active, healthy and engaged lifestyles
Service Expectations	QUALITY: Indoor recreation spaces are safe and comfortable to use
	CAPACITY & UTILIZATION: Indoor recreation facilities meet population needs, and plan for growth
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-22
Indoor Recreation Level of Service Metrics

Indoor Recreation

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	Data Source	2019	2020	2021	2022	2023	2024	Target (2034)
Residents and visitors are inspired by the beauty of our natural surroundings and cultural vibrancy, motivating them to lead active, healthy and engaged lifestyles	CAPACITY & UTILIZATION	Indoor recreation facilities meet population needs, and plan for growth.	# of Ice Pads/450 minor sports registered participants	Needs Assessment	N/A	N/A	N/A	N/A	N/A	0.8	1
			# of Indoor Aquatic Centres / 30,000 residents	Needs Assessment	1	1	1	0.95	0.85	0.8	1
			# of Indoor Multi-Use Facility / 50,000 residents	Needs Assessment	New Metric - not previously calculated					0.99	1
	QUALITY	Indoor recreation spaces are safe and comfortable to use.	% of indoor recreation facilities in Poor or better condition (within its service life)	Future	New Metric - not previously calculated					100%	100%
			% of indoor recreation equipment in Poor or better condition (within its service life)	Future	New Metric - not previously calculated					55%	100%
			% of indoor recreation fleet in Poor or better condition (within its service life)	Future	New Metric - not previously calculated					66%	100%

The Township's indoor recreation assets are comprised of the CW Community Sportsplex, the Elora Community Centre, Belwood Hall, and Victoria Park Seniors Centre, each providing a diverse range of programming and other opportunities for the public to engage and enjoy.

Cemetery Related Services

Table 3-23
Cemetery Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Cemetery Related Assets
Service Objective	Township cemeteries are a comforting place to visit and lay loved ones to rest
Service Expectations	QUALITY: Cemetery assets are safe to use
	CAPACITY & UTILIZATION: Cemetery space is available for applicants
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-24
Cemetery Level of Service Metrics

Cemetery

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Township cemeteries are a comforting place to visit and lay loved ones to rest.	CAPACITY & UTILIZATION	Cemetery space is available for applicants.	Belsyde: Available Columbarium capacity	New Metric - not previously calculated					99	Maintain capacity with growth according to master plan
			Belsyde: Available Inground Cremation capacity	New Metric - not previously calculated					169	
			Belsyde: Available Graves	New Metric - not previously calculated					21	
			Elora: Available Columbarium capacity	New Metric - not previously calculated					28	Maintain capacity
			Elora: Available Inground Cremation capacity	New Metric - not previously calculated					67	
			Elora: Available Graves	New Metric - not previously calculated					155	
	QUALITY	Cemetery assets are safe to use.	% of cemetery assets in Poor or better condition (within its service life)	No Data	No Data	No Data	No Data	No Data	100%	100%

Fire Related Services

Table 3-25
Fire Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Fire Related Assets
Service Objective	Educate, prevent and protect the inhabitants and visitors to the Township from the adverse effects of fires, sudden medical emergencies or exposure to dangerous conditions created by man or nature in an efficient and cost effective manner
Service Expectations	CAPACITY & UTILIZATION: Fire Services have sufficient facilities, equipment, and personnel to meet the needs of the Township
	QUALITY: Fire services assets are safe and reliable
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-26
Fire Level of Service Metrics

Fire

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Educate, prevent and protect the inhabitants and visitors to the Township from the adverse effects of fires, sudden medical emergencies or exposure to dangerous conditions created by man or nature in an efficient and cost effective manner.	CAPACITY & UTILIZATION	Fire Services have sufficient facilities, equipment, and personnel to meet the needs of the Township.	NFPA 1720 - Emergency Response (Rural): 6 Firefighters in 14 Minutes, 80% of time	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance
			NFPA 1720 - Emergency Response (Suburban - Elora, Salem, Fergus): 10 Firefighters in 10 Minutes, 80% of time	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance	In Compliance
	QUALITY	Fire services assets are safe and reliable.	% of fire facilities in Poor or better condition (within its service life)	100%	100%	100%	100%	100%	100%	100%
			% of fire equipment in Poor or better condition (within its service life)	100%	100%	100%	100%	100%	100%	100%
			% of fire fleet in Poor or better condition (within its service life)	100%	100%	100%	100%	100%	100%	100%

The Township's Fire Services division provides fire and rescue services for all of Centre Wellington. Police services are provided by the OPP and Guelph Wellington EMS provides ambulance services for Centre Wellington

By-Law Related Services

Table 3-27
By-Law Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	By-Law Related Assets
Service Objective	Protect Township residents and visitors from unlawful activities
Service Expectations	CAPACITY & UTILIZATION: By-Law officers are sufficiently equipped to respond to resident needs
	QUALITY: By-Law services assets are safe and reliable
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-28
By-Law Level of Service Metrics

By-Law

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Protect Township residents and visitors from unlawful activities.	CAPACITY & UTILIZATION	By-Law officers are sufficiently equipped to respond to resident needs.	Call volume	No Data	No Data	231	246	356	328*	350
	QUALITY	By-Law services assets are safe and reliable.	% of By-Law vehicles in Fair or better condition	No Data	No Data	100%	100%	100%	100%	100%

The Township of Centre Wellington shares a common goal with our residents to ensure our community is safe, healthy and enjoyable for everyone. By-laws encourage residents and businesses to be responsible

and respectful of their neighbours. The Township's enforcement philosophy and practice includes a balanced approach focused on obtaining compliance through education and working collaboratively with owners or occupants of property.

The Municipal Law Enforcement Officer responds to complaints received from the public regarding possible violations and non-compliance with various by-laws.

Fleet Vehicles

Table 3-29
Fleet Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Fleet Related Assets
Service Objective	Township fleet is sufficient and in a state of good repair to allow staff to complete their jobs effectively
Service Expectations	SCOPE & FUNCTION: Fleet assets meet user needs while limiting natural impacts
	QUALITY: Fleet assets are safe and reliable
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-30
Fleet Level of Service Metrics

Fleet

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Township fleet is sufficient and in a state of good repair to allow staff to complete their jobs effectively.	SCOPE & FUNCTION	Fleet assets meet user needs while limiting natural impacts.	% of vehicles with Geotab installed and operational	No Data	No Data	51%	48%	61%	72%	100%
			Fleet emissions (km)	No Data	No Data	482,032	546,465	564,140	653,412	Maintain
	QUALITY	Fleet assets are safe and reliable.	Tax Supported: % of vehicles in fair or better condition	No Data	No Data	69%	61%	55%	57%	Maintain
			Environmental: % of vehicles in fair or better condition	No Data	No Data	18%	33%	30%	49%	Maintain

Information Technology

Table 3-31
IT Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	IT Related Assets
Service Objective	Township IT assets are sufficient and in a state of good repair to allow staff to complete their jobs effectively
Service Expectations	CAPACITY & UTILIZATION: Staff have sufficient IT assets to completed their work effectively
	QUALITY: Staff have sufficient IT assets to completed their work effectively
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-32
IT Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Township IT assets are sufficient and in a state of good repair to allow staff to complete their jobs effectively.	CAPACITY & UTILIZATION	Staff have sufficient IT assets to complete their work effectively.	Number of new Township staff equipped with IT assets	No Data	No Data	10 New staff, $4,000 in costs for hardware and software	10 New staff, $4,000 in costs for hardware and software	10 New staff, $4,000 in costs for hardware and software	10 New staff, $4,000 in costs for hardware and software	10 new staff / year for the next 10 years.
	QUALITY	IT assets are safe and operate effectively.	% of assets within expected service life	No Data	No Data	100%	100%	100%	100%	100%*

Corporate Facilities

Table 3-33
Corporate Facilities Level of Service Line of Sight

Line of Sight

Strategic Goal	Provide Innovative & Sustainable Governance
Assets	Corporate Facilities Related Assets
Service Objective	Township facilities are sufficient and in a state of good repair to allow staff to complete their jobs effectively
Service Expectations	CAPACITY & UTILIZATION: Corporate facilities are accessible for all users and support environmental sustainability
	QUALITY: Corporate facilities are safe and well maintained
Community Levels of Service	What is the Community receiving?
Technical Levels of Service	What is the Township providing?

Table 3-34
Corporate Facilities Level of Service Metrics

Service Objective	Service Attributes & Expectations	Community Levels of Service	Technical Levels of Service - Performance Measures	2019	2020	2021	2022	2023	2024	Target (2034)
Township facilities are sufficient and in a state of good repair to allow staff to complete their jobs effectively.	SCOPE & FUNCTION	Corporate facilities are accessible for all users.	% of open to the public facilities that meet AODA requirements	No Data	No Data	N/A	N/A	N/A	(55%) 6/11	100%
		Corporate facilities support environmental sustainability	Annual electrical consumption (kWh)	No Data	No Data	7,718,628	7,955,886	7,719,242	8,287,147	Decrease by 2% by 2029**
			Annual gas consumption (m^3)	No Data	276,735	340,672	386,486	408,051	337,043	Decrease by 2% by 2029**
	QUALITY	Corporate facilities are safe and well maintained	Tax Supported: % of facilities in fair or better condition	No Data	No Data	59%	60%	39%	37%	Maintain
			Water: % of facilities in fair or better condition	No Data	No Data	72%	72%	72%	55%	Maintain
			Wastewater: % of facilities in fair or better condition	No Data	No Data	67%	67%	67%	65%	Maintain

LEVELS OF SERVICE FINANCIAL IMPLICATIONS

Refer to Appendix C – detailed technical spreadsheets for each service area.

Table 3-35
Increase in Cost to Maintain Existing Levels of Service

Total Cost to Maintain Existing LOS	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Tax Supported:										
Roads, Storm, Bridges, Culverts	**19,472,289**	**20,056,458**	**20,658,151**	**21,277,896**	**21,916,233**	**22,573,720**	**23,250,931**	**23,948,459**	**24,666,913**	**25,406,921**
Operations and Maintenance	6,786,088	6,989,671	7,199,361	7,415,342	7,637,802	7,866,936	8,102,944	8,346,032	8,596,413	8,854,306
Rehabilitation and Replacement	12,686,201	13,066,787	13,458,791	13,862,554	14,278,431	14,706,784	15,147,987	15,602,427	16,070,500	16,552,615
Parks, Recreation	**9,149,128**	**9,423,602**	**9,706,310**	**9,997,500**	**10,297,425**	**10,606,347**	**10,924,538**	**11,252,274**	**11,589,842**	**11,937,537**
Operations and Maintenance	7,543,255	7,769,553	8,002,640	8,242,719	8,490,000	8,744,701	9,007,042	9,277,253	9,555,570	9,842,237
Rehabilitation and Replacement	1,605,873	1,654,049	1,703,671	1,754,781	1,807,424	1,861,647	1,917,496	1,975,021	2,034,272	2,095,300
Fire Services	**2,549,892**	**2,626,388**	**2,705,180**	**2,786,335**	**2,869,926**	**2,956,023**	**3,044,704**	**3,136,045**	**3,230,127**	**3,327,030**
Operations and Maintenance	2,258,463	2,326,217	2,396,004	2,467,884	2,541,921	2,618,178	2,696,724	2,777,625	2,860,954	2,946,783
Rehabilitation and Replacement	291,428	300,171	309,176	318,451	328,005	337,845	347,981	358,420	369,173	380,248
Total	**31,171,309**	**32,106,448**	**33,069,642**	**34,061,731**	**35,083,583**	**36,136,091**	**37,220,173**	**38,336,779**	**39,486,882**	**40,671,488**

Total Cost to Maintain Existing LOS	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water Network	**7,816,602**	**8,051,100**	**8,292,633**	**8,541,412**	**8,797,654**	**9,061,584**	**9,333,432**	**9,613,435**	**9,901,838**	**10,198,893**
Operations and Maintenance	3,600,812	3,708,836	3,820,101	3,934,705	4,052,746	4,174,328	4,299,558	4,428,545	4,561,401	4,698,243
Rehabilitation and Replacement	4,215,790	4,342,264	4,472,532	4,606,708	4,744,909	4,887,256	5,033,874	5,184,890	5,340,437	5,500,650
Wastewater Network	**7,385,998**	**7,607,578**	**7,835,805**	**8,070,880**	**8,313,006**	**8,562,396**	**8,819,268**	**9,083,846**	**9,356,361**	**9,637,052**
Operations and Maintenance	4,614,320	4,752,749	4,895,332	5,042,192	5,193,457	5,349,261	5,509,739	5,675,031	5,845,282	6,020,641
Rehabilitation and Replacement	2,771,679	2,854,829	2,940,474	3,028,688	3,119,549	3,213,135	3,309,529	3,408,815	3,511,079	3,616,412
Total	**15,202,600**	**15,658,678**	**16,128,439**	**16,612,292**	**17,110,660**	**17,623,980**	**18,152,700**	**18,697,281**	**19,258,199**	**19,835,945**

Table 3-36
Increase in Cost to Transition to Target Levels of Service

Total Cost to Transition to Target LOS	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Tax Supported:										
Roads, Storm, Bridges, Culverts	**20,829,623**	**22,852,565**	**24,978,137**	**27,210,676**	**29,554,687**	**30,441,328**	**31,354,568**	**32,295,205**	**33,264,061**	**34,261,983**
Operations and Maintenance	6,996,426	7,422,967	7,868,804	8,334,710	8,821,488	9,086,133	9,358,717	9,639,478	9,928,663	10,226,523
Rehabilitation and Replacement	13,833,197	15,429,598	17,109,334	18,875,967	20,733,199	21,355,195	21,995,851	22,655,727	23,335,398	24,035,460
Parks, Recreation	**9,330,625**	**9,797,486**	**10,283,961**	**10,790,806**	**11,318,807**	**11,658,371**	**12,008,122**	**12,368,366**	**12,739,417**	**13,121,599**
Operations and Maintenance	7,580,878	7,847,057	8,122,383	8,407,166	8,701,726	8,962,777	9,231,661	9,508,611	9,793,869	10,087,685
Rehabilitation and Replacement	1,749,747	1,950,430	2,161,578	2,383,641	2,617,081	2,695,594	2,776,461	2,859,755	2,945,548	3,033,914
Fire Services	**2,619,265**	**2,769,298**	**2,925,976**	**3,089,562**	**3,260,330**	**3,358,140**	**3,458,884**	**3,562,650**	**3,669,530**	**3,779,616**
Operations and Maintenance	2,258,978	2,327,278	2,397,643	2,470,135	2,544,819	2,621,163	2,699,798	2,780,792	2,864,216	2,950,142
Rehabilitation and Replacement	360,287	442,020	528,333	619,427	715,511	736,976	759,086	781,858	805,314	829,473
Total	**32,779,514**	**35,419,349**	**38,188,074**	**41,091,044**	**44,133,824**	**45,457,839**	**46,821,574**	**48,226,221**	**49,673,008**	**51,163,198**

Total Cost to Transition to Target LOS	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water Network	**7,873,219**	**8,167,732**	**8,472,829**	**8,788,881**	**9,116,270**	**9,389,758**	**9,671,451**	**9,961,595**	**10,260,443**	**10,568,256**
Operations and Maintenance	3,631,029	3,771,084	3,916,274	4,066,782	4,222,795	4,349,479	4,479,963	4,614,362	4,752,793	4,895,377
Rehabilitation and Replacement	4,242,190	4,396,648	4,556,555	4,722,099	4,893,476	5,040,280	5,191,488	5,347,233	5,507,650	5,672,879
Wastewater Network	**7,525,174**	**7,894,280**	**8,278,760**	**8,679,204**	**9,096,223**	**9,369,110**	**9,650,183**	**9,939,689**	**10,237,879**	**10,545,016**
Operations and Maintenance	4,688,029	4,904,590	5,129,925	5,364,366	5,608,257	5,776,505	5,949,800	6,128,294	6,312,143	6,501,507
Rehabilitation and Replacement	2,837,145	2,989,690	3,148,835	3,314,837	3,487,966	3,592,605	3,700,383	3,811,394	3,925,736	4,043,508
Total	**15,398,393**	**16,062,012**	**16,751,589**	**17,468,085**	**18,212,494**	**18,758,869**	**19,321,635**	**19,901,284**	**20,498,322**	**21,113,272**

CHAPTER FOUR

ASSET MANAGEMENT STRATEGY

CHAPTER 4: ASSET MANAGEMENT STRATEGY

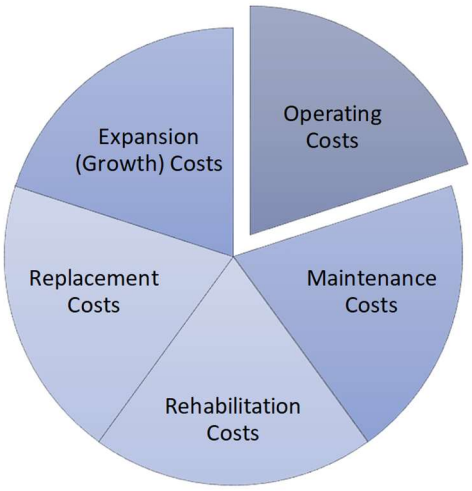
OVERVIEW

The asset management strategy reviews and quantifies the many costs involved in the management of assets through the asset management planning process. This includes asset specific lifecycle costs as well as more indirect "non-infrastructure solutions", such as studies and master plans that assist in the management of assets. This chapter includes the following sections:

- What is an Asset Management Strategy?
- Demand Management
- Risk Management
- Critical Assets
- Priority Assets
- Historical Lifecycle Costs
- Asset Management Strategy
    - Non-Infrastructure Solutions
    - Operations & Maintenance Costs
    - Rehabilitation Costs
    - Replacement Costs
    - Expansion & Growth Costs

WHAT IS AN ASSET MANAGEMENT STRATEGY?

An asset management strategy brings together key information from Chapter 2 (State of Township Assets) and Chapter 3 (Levels of Service) in order to assess the costs to be incurred from an asset perspective in order to provide services. Other factors are also considered, such as the demand for services, corporate risk, and asset specific risk. The result is a long-term view of these asset specific costs.

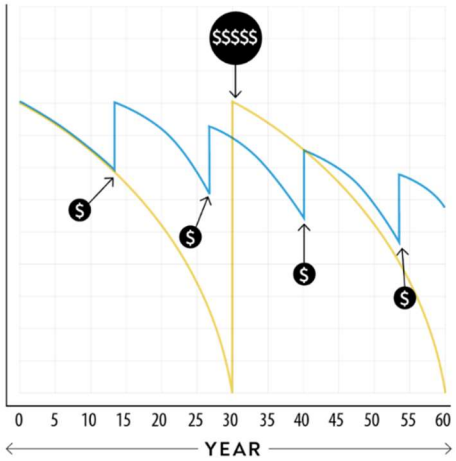


The direct costs associated with asset ownership can be broken down into various lifecycle costing categories, such as operating costs, maintenance costs, rehabilitation costs, replacement costs, and expansion (or growth) related costs. Once in operation, assets are maintained and rehabilitated at regular intervals to extend their useful life as much as possible. Once an asset has reached the end of its useful life, it is disposed of appropriately. Assets are generally replaced once the costs of maintenance exceeds the benefits received.

A decision-making process, such as a needs identification or planning/budgeting process, initiates the need to incur or initiate lifecycle costs, either through an initial (new) asset investment, the replacement of an existing assets, or the expansion (or upgrade) of existing assets. Expansion (or growth) occurs when either a new

service is to be provided, or if an existing service requires additional functionality or capacity. For example, a roads network may require additional roads or bridges to address capacity needs, or a municipality may decide to start providing transit services that have not been provided in the past.

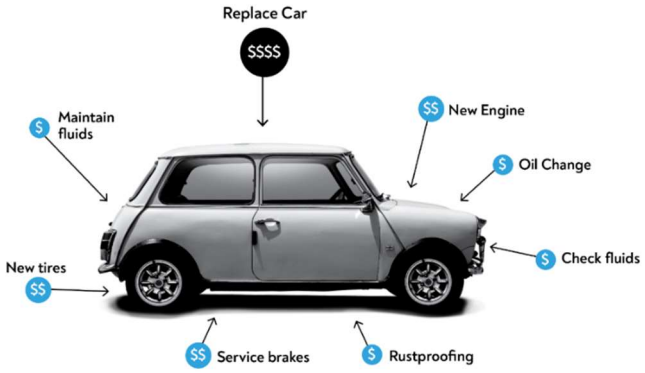
While initial investment costs may be significant, the ongoing maintenance costs over the life of the asset make up the bulk of the cost of asset ownership. As an asset ages, typically the costs of ownership from an operational and maintenance perspective increases. At a point in time, rehabilitation options can be considered to gain additional life from the asset as well as provide for a reduction on operations and maintenance costs. However, eventually rehabilitation is no longer an option and replacement is required.



Lifecycle costing strategies are built into asset management planning practices to reduce the costs associated with the ownership and maintenance of assets.

Example: Vehicle Ownership

When purchasing a vehicle, the initial up-front cost represents only a fraction of the cost of ownership. Vehicles require regular maintenance, as well as occasional retrofitting and replacement of components. Investing in regular maintenance, such as oil changes, extends the life of the vehicle and delays the costs of replacing components that can break down.



Vehicle owners add regular maintenance activities into their annual budgets and may even make regular contributions to savings accounts when planning for these costs. For vehicle owners and municipalities, lifecycle costing strategies are built into asset management planning practices to reduce the costs associated with asset ownership.

Budgets based on annual operating and maintenance costs account for the short-term needs of Township assets, but do not consider the rehabilitation and replacement costs of assets approaching the end of their useful lives, or costs associated with the construction and acquisition of assets to accommodate demand (expansion or growth), climate change, and changes in the types of services or levels of service that are provided.

Forecasting future asset lifecycle costs is critical to asset management planning. To accomplish this, the Township has acquired asset management software with the capacity of mapping future asset lifecycle costs over a long-term forecast period. With this approach:

- Lifecycle models can be developed, with scenarios of increased maintenance and rehabilitation in comparison to asset replacement to find a strategy that results in the lowest cost with manageable risk.
- Periods of high asset investment needs can be identified, and financing strategies can be created to plan for these needs.
- Investment decisions made with annual budget approvals can be evaluated in relation to the impact on service levels and risk.

Township specific lifecycle costs will be discussed later in this chapter.

DEMAND MANAGEMENT

One of the factors influencing the longevity of Township assets is the demand for the services provided by those assets. Demand will change over time, both in terms of service quantity and the types of services required.

Demand can be driven by several factors, including population growth, demographic shifts, changes in the types of services provided, the ways in which the Township is expected to provide those services, land-use changes, economic development trends, and environmental changes. Anticipated changes in demand should be considered and accounted for within an asset management plan.

Table 4-1 below provides a high-level assessment of significant drivers of demand for Centre Wellington, as well as the associated impact on services.

Table 4-1
Significant Demand Drivers in Centre Wellington

Demand Drivers	Present Position	Projection	Impact on Services
Population Growth	Population of approximately **34,100 residents**	Anticipated population of **58,200 by 2051**	Increase in asset usage and demand requires increases in capacity for various asset classes and services.
Non-Residential Growth	Employment of approximately **12,200 jobs**	Anticipated employment of **25,100 by 2051**	
Tourism	Centre Wellington is a tourism attraction within the province.	Tourism will continue to thrive in Centre Wellington.	
Housing Affordability	Demand is driving the price of housing upward.	Housing affordability is a concern of all levels of government and mitigation factors are underway.	Specific services need to be tailored to encourage attainable housing options.
Resident Preferences	Automobile use with focus on alternate forms of transportation. Demand for particular sports activities.	Increased use of bicycles and demand for transit and parking facilities. Demand for sports activities tends to shift	Relieves some stress on some assets, however introduces an increased demand for alternate assets/services, and potentially results in

		(i.e., increase demand for pickleball, soccer vs. baseball).	requirement to provide new services or increasing capacity of existing services.
Farm & Gravel Pit Usage	Farm and gravel pit industries rely on Township road networks.	It is expected that this usage will continue in the future.	Overall reduction in road useful life and increased deterioration of road condition, requiring accelerated rehabilitation or replacement.
Seasonal Factors & Climate Change	Extreme weather is affecting the type and frequency of asset rehabilitation and replacement.	Extreme weather is expected to increase in frequency and intensity in the future.	Asset lifecycle costs, including evolving asset technologies will require the Township to adapt to account for climate change.

These demand drivers impact decisions made with respect to asset lifecycle costs and therefore, also impact the ability to provide sustainable services over time. To assist with managing the impacts of these drivers, demand management strategies including education, legislation, demand substitution, asset expansion, asset (service) efficiency, and asset sustainability can assist in addressing this demand (see Table 4-2 below).

Table 4-2
Demand Management

Demand Drivers	Impact on Services	Demand Management Strategies
Population Growth	Increase in asset usage and demand requires increases in capacity for various asset classes and services.	Plan for the projected change in lifecycle costs associated with Township assets. a. **Education** – educate residents, businesses, and tourists on the effective use of assets (i.e., road bypass, parking, transit options). b. **Legislation** – restrict asset use using legislation (i.e., enforcement related by-laws). c. **Demand Substitution** – provide alternate services in substitution for demanded services (i.e., bicycle lanes, transit).
Non-Residential Growth		
Tourism		
Housing Affordability	Specific Services need to be tailored to encourage attainable housing options.	
Resident Preferences	Relieves some stress on some assets, however introduces an increased demand for alternate assets/services, and potentially results in requirement to provide new	

	services or increasing capacity of existing services.	d. **Asset Expansion** – expand assets, asset capacities, and services offered in alignment with Township master plans. e. **Asset (Service) Efficiency** – promote the efficient use of assets/services (i.e., traffic flow, higher density housing). f. **Asset Sustainability** – ensure funding is available to provide sustainable services, given the projected increase in demands.
Farm & Gravel Pit Usage	Overall reduction in road useful life and increased deterioration of road condition, requiring accelerated rehabilitation or replacement.	
Seasonal Factors & Climate Change	Asset lifecycle costs, including evolving asset technologies will require the Township to adapt to account for climate change.	

Increases or decreases in demand can significantly affect types and quantities of assets that will be required to meet the needs of our community. The Township analyzes asset demand trends to predict impacts on asset management planning, financial strategies, and future budgets.

Population and Employment Forecasts

The population of the Township of Centre Wellington is projected to grow to approximately 58,200 residents by 2051 (See Table 4-3 and Figure 4-1 below).

Employment (jobs) are expected to grow from approximately 12,280 in 2021 to approximately 25,080 by 2051. See Table 4-3 and Figure 4-2 below.

Anticipated growth is not evenly distributed across the County, with a significant amount of the growth concentrated in Centre Wellington. This reflects proximity to the Golden Horseshoe, which is experiencing rapid growth, as well as the ability to expand geographically as a result of relatively low population density and the greenbelt.

Table 4-3
Growth Projections

	2021	County Official Plan	
		2041	2051
Population	34,100	52,300	58,200
Households	12,810	19,360	22,130
Employment	12,280	21,280	25,080

Source: Wellington County Phase 1 MCR Report: Urban Structure and Growth Allocations

Figure 4-1
Population Growth

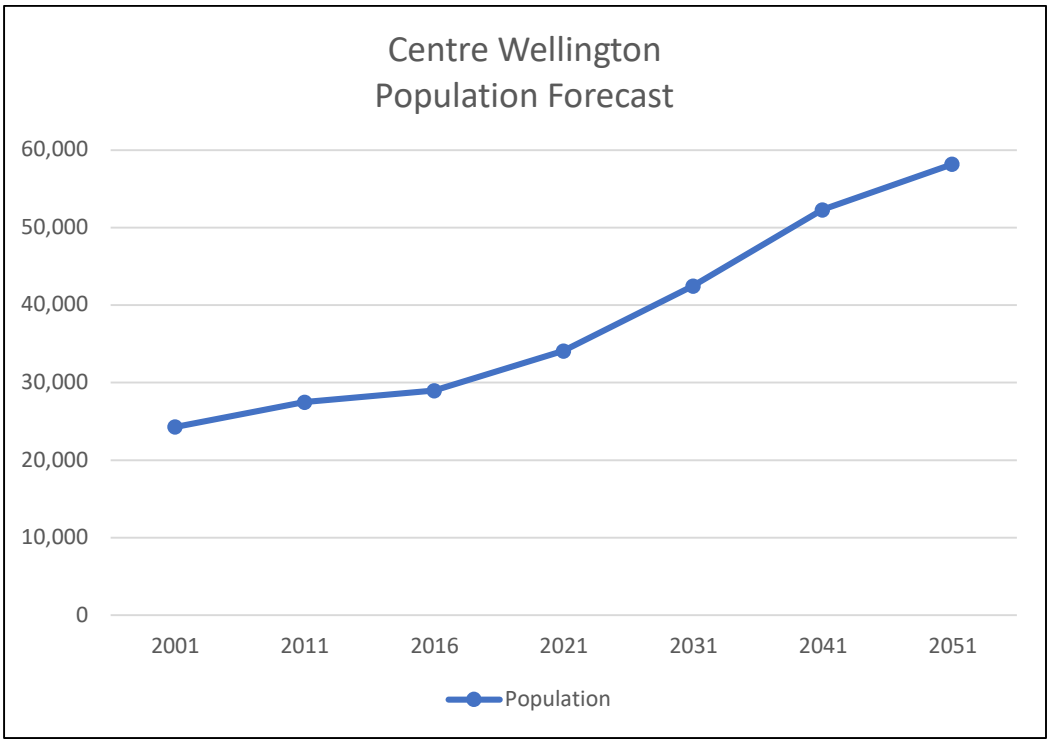
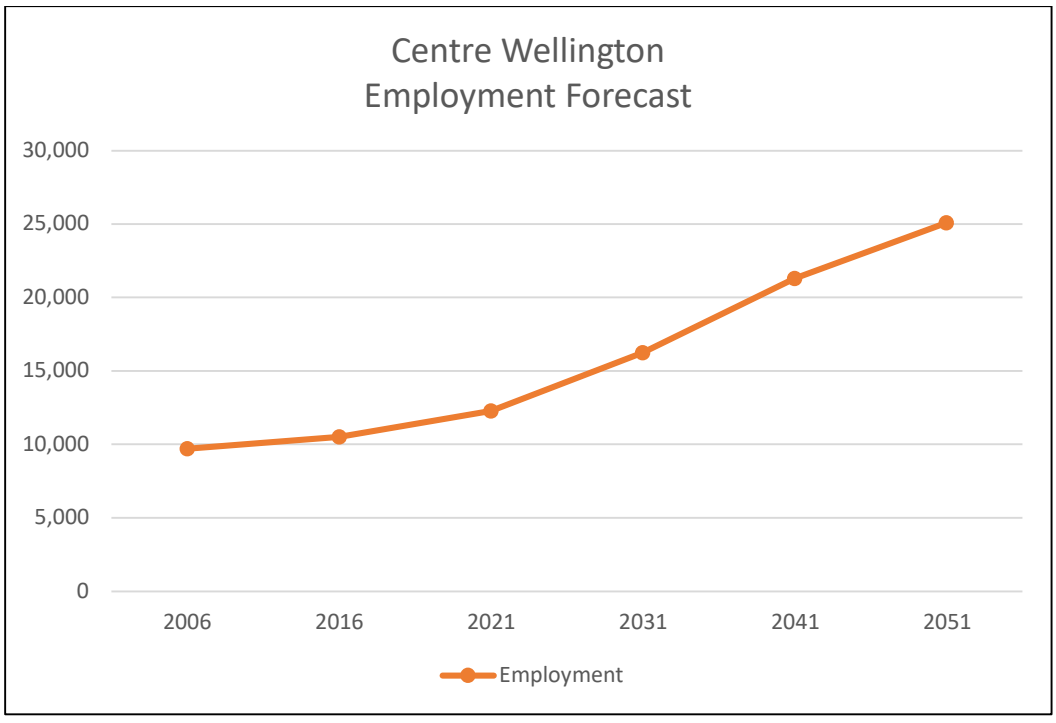


Figure 4-2
Employment Growth



Climate Change

Climate change significantly impacts the management and maintenance of Township assets. Climate change can reduce the lifespan and performance of assets, resulting in rising costs of maintenance and replacement. More frequent and severe weather events can cause increased damage to assets, and changes in the intensity of precipitation will impact levels of service across the Township.

For example, water, wastewater, and stormwater infrastructure in Ontario faces three major pressure points[1]: population growth, climate change, and deterioration due to aging.

- Centre Wellington's growing population will put greater stress on assets;
- Aging infrastructure may become inadequate to perform its defined function;
- Climate change will cause more severe weather events and push assets beyond capacity.

When infrastructure is unable to cope, disruptions can be significant. A July 2013 storm that resulted in flash flooding across the GTA became the most expensive natural disaster in Ontario history. Four years later, Windsor saw over 1,000 basements flooded, resulting in over $124 million of damage. In February of 2018, a state of emergency was declared across southwestern Ontario due to heavy rain and melting snow.

These previously rare "100-year" storm events are becoming much more common, and existing stormwater infrastructure is unable to cope. Stormwater infrastructure is not unique in this regard. Most infrastructure is not constructed to cope with conditions that are becoming increasingly more common.

[1] Ontario Sewer & Watermain Construction Association (OSWCA). (2018). The State of Ontario's Water and Wastewater Infrastructure.

Climate change adaptation is an inevitable, major investment that is made up of an array of asset investment decisions that help the community withstand the consequences of a changing climate. For example, Township roads maintenance practices have already adjusted to changing weather patterns that necessitate more frequent and intensive intervention to ensure roads are safe. Future adaptation strategies may include re-considering the way assets are constructed to take into account flood risks, severe storms, and other consequences of the changing climate.

As part of the Township's Strategic Asset Management Policy endorsed by Council in 2014, Centre Wellington has established guiding principles that ensure environmentally conscious decision making to ensure that it minimizes the impact of infrastructure on the environment by:

a) Respecting and helping maintain ecological and biological diversity;

b) Augmenting resilience to the effects of climate change; and

c) Endeavoring to make use of acceptable recycled materials, energy efficient technologies, and environmentally sustainable practices.

Additionally, the Township has begun to consider climate change as part of our risk management approach embedded in local asset management planning methods. This approach will balance the potential cost of vulnerabilities to climate change impacts and other risks with the cost of reducing these vulnerabilities. Balance will be struck in the levels of service delivered through operations, maintenance schedules, emergency response plans, contingency funding, and capital investments. The first step toward achieving these goals is through development of a Corporate Climate Action Plan (CCAP) with primary objectives targeted toward:

- Establishing a baseline for current GHG emissions.
- Setting ambitious, achievable, and measurable emissions reduction targets.
- Identifying and set timelines for implementing effective mitigation and adaptation strategies.
- Integrating climate considerations into municipal operations.
- Determining a governance structure for implementing and accounting for climate action.
- Identifying and secure climate budget allocation and funding sources.

A draft term of reference for the CCAP has been created, and details 11 specific tasks to address the primary objectives. A summary of tasks, associated goals, and anticipated outcomes is detailed below:

Task 1: Emissions Inventory

Goal: Compile a GHG emissions inventory and energy consumption baseline data using the Impact Network (Impact Tool) energy tracking and accountability software. Standardize and collect data on other municipal assets and operations (including fleet data and other identified areas)

Description	Data/ Resources	Format
Join Sustainable Waterloo Region Impact Network and acquire the Impact Tool (IT) Energy Tracking Software	Raw data from Finance and other departments as needed	Impact Tool (IT) – Spreadsheet entry
Gather baseline fleet emissions data (entire fleet)	Geotab and total mileage 2024 from finance and other departments as needed	Geotab, vehicle replacement forms, and total mileage spreadsheet
Total buildings' energy use per fuel type	Energy Star EPT / ECDM(*) report and raw data to Impact Tool (IT)	Set up format/ system for energy data entry. Data integration. Impact Tool and Excel
Water use and conservation	Water and wastewater quantities volumes to be entered in Impact Tool	Excel Files

* EPT / ECDM = Energy Planning Tool / Energy Conservation & Demand Management

Task 2: Target and Goals

Goal: Set emissions reduction targets and timelines.

Description	Data/ Resources	Format
Set targets for each sector based on the emissions inventory and suggested climate reduction targets. Establish tracking, reporting, and reconciliation processes	ASHRAE(*) energy audits and GHG reduction pathway scenarios. Consult with the Senior Management Team (SMT), Energy Team/ Asset Management, Impact Network, and Finance.	Appendices to the ECDM plan and visuals in the CCAP. Council Update

* American Society of Heating, Refrigerating and Air-Conditioning Engineers

Task 3: Mitigation Strategies

Goal: Identify detailed actions to reduce GHG emissions, such as energy efficiency improvements informed by ECDM, water and solid waste reduction, renewable energy adoption, and other low-carbon transitional opportunities (including fleet EV transition)

Description	Data/ Resources	Format
GHG reduction pathway plan, timelines, and budget/ funding considerations	Consolidated report on findings and recommendations from the Energy team, Operations Team, and SMT, Council	Appendices to the ECDM plan and visuals in the CCAP. Council update on GHG reduction pathway plans

Task 4: Climate lens integration

Goal: Identify measures that align with existing processes for integrating a climate lens into municipal decision-making, plans, policies, and staff reports presented to Council.

Description	Data/ Resources	Format
Identify data needed for annual reporting and emission reduction tracking.	Utility billing, fleet fuel/ energy consumption, water and wastewater metering. Asset reconciliation of projects.	Excel
Develop a climate lens tool for projects	Consultation with the Clean Air Partnership	Decision tree tool/ questionnaire
Establish a governance/ decision-making structure	Department heads/ SMT, Council Direction	Policy/ procedural documents
Plan ongoing learning and development sessions	Township Learning and Development program	Lunch and learns, broader education sessions

Task 5: Adaptation Measures

Goal: Identify climate risks and vulnerabilities and enhance the organization's ability to cope with extreme weather events. Integrate with asset management plans, including natural assets.

Description	Data/ Resources	Format
Form a climate resiliency advisory team	Managing Directors, identify members	Meetings, workshops, reports to SMT
Identify climate impacts, risks, and vulnerabilities in the Township	Assess flood risk, water use, stormwater management. Studies, Township staff, HCAC(*)	Report to SMT, HCACA, Council
Conduct a natural asset inventory	Coordinate with the Natural Asset Initiative. Asset Management, Community Services	Entry assets into Citywide.
Establish priority areas	SMT, Asset management, Conservation Authority, Source Water, Planning	Integrate into Strategic Plan Council update and direction
Develop metrics and assessment tools and climate lens integration	Staff consultations	Impact Tool
Emergency Preparedness	SMT and County consultation.	Updating emergency response plans & education

* HCAC = Healthy Communities Advisory Committee

Task 6: Implementation Plan

Goal: Outline the steps, resources, and timelines required to execute the strategies and measures.

Description	Data/ Resources	Format
Roadmap for climate action in line with 2030, 2040, 2050 targets	SMT, HCAC, Council	Climate Action Plan – CW Business plan integration. Council update

Task 7: Monitoring and Reporting

Goal: Establish a system to track progress, report on outcomes, and adjust the plan. Create a climate action dashboard.

Description	Data/ Resources	Format
Implement consistent data entry and formats for the Impact Tool	Departmental representatives as needed	Impact tool, Excel

Future and Concurrent Tasks related to the Community Climate Action Plan (2026)

The development of the, the following tasks and goals will be in coordination and concurrent with ongoing tasks and goals related to the Corporate Climate Action Plan.

Task 8: Stakeholder Engagement (ongoing)

Goal: Meet with community members, stakeholders, and technical advisors to help inform corporate plan and early framework for community climate action. Climate Action page on the Township website, and updates through ConnectCW.

Description	Data/ Resources	Format
Identify stakeholders and scope of engagement	Community stakeholders, HCAC, Office of the CAO	Meetings and CW Connect survey

Task 9: Governance and Collaboration

Goal: Define roles and responsibilities within the organization, with external partners, and with the HCAC to ensure coordinated action and accountability.

Description	Data/ Resources	Format
Township roles and responsibilities	SMT, HCAC, Department heads, Council Update	Policy and procedural documents. Council Direction

Task 10: Funding and Resources

Goal: Identify financial resources, capital and end-of-life timelines, and funding mechanisms to support the plan's initiatives through Grant application.

Description	Data/ Resources	Format
Identify a climate budget	Finance, Department and Division Heads, SMT Funding opportunities	10-year Climate budget, Climate budgeting Bylaw, Council resolution

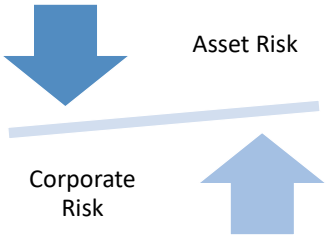
Task 11: Public Communication

Goal: Keep the public informed and engaged through transparent communication about goals, progress, and benefits. Include plans to engage the community in the development of a Community Climate Action Plan.

Description	Data/ Resources	Format
Climate page and dashboard on CW website	Climate action stories, programs, and actionable steps. Climate Coordinator, Office of the CAO	Webpage and resource links. Climate action dashboard and reporting
Community engagement opportunities	SMT, Office of the CAO, Events Calendar	Community events
Climate Action volunteer recognition	Recommendations from the community, HCAC, Office of the CAO	Social media

RISK MANAGEMENT

Risk assessments are incorporated into the asset management planning process in order to identify critical (or higher risk) areas to prioritize asset investments. In many cases, the demand for asset investment exceeds the actual asset investment available, requiring the need to allocate funds based on a risk management approach. The Township's asset management planning process looks at risk both from a corporate and asset perspective. This approach ensures asset investments are made in a manner that mitigates risk, rather than using a "fix the worst conditioned asset first" approach that does not consider risk.



By definition, risk management is the process of finding, assessing, and controlling threats to the Township. Corporate risk management approaches this process from a high level, while asset risk management assesses risk on an asset-by-asset basis.

Corporate Risk Management

Corporate risk management reviews Township risks at the asset category level, taking into account:

- Strategic/corporate risk;
- Environmental risk;
- Health & safety;
- Operational risk; and
- Financial risk.

Table 4-4 below provides this high-level review of corporate risk across the major asset categories of the Township providing various corporate risk ratings from 1 (Low) to 5 (High). In this assessment, roads related, bridges and culverts, water and wastewater network assets represent the asset areas with "high" corporate risk, with facility assets and stormwater network assets representing asset areas with "medium" risk.

Table 4-4
Township Corporate Risk Assessment

Asset Type	Strategic/Corporate	Environmental	Health & Safety	Operational	Financial	Total (25)	Corporate Risk Rating
Roads Related	5	4	5	4	5	23	HIGH
Bridges & Culverts	5	3	5	4	5	22	HIGH
Facility Assets	3	3	5	3	4	18	MEDIUM
Vehicles	2	2	4	2	2	12	LOW
Equipment	2	2	4	2	2	12	LOW
Land Improvements	2	2	3	2	2	11	LOW
Water Network Assets	5	5	5	5	5	25	HIGH
Wastewater Network Assets	5	5	4	5	5	24	HIGH
Stormwater Network Assets	4	4	4	4	4	20	MED-HIGH

This corporate risk assessment is helpful when prioritizing asset investments as part of the annual budget process. When competing assets have similar asset specific risks (see discussion below), corporate risk can be used to determine the investment priority.

Asset Risk Management

With the asset specific risk management approach, a risk assessment is conducted for every Township asset, to evaluate how likely that asset is to fail, and what the impact of that failure would be on our community.

Chapter 2 (State of Township Assets) introduced the risk assessments that have been performed on the various Township assets, using the "probability of failure" (PoF) multiplied by "consequence of failure"

(CoF) formula (in most instances).

PoF represents the likelihood (or probability) that an asset will not achieve the desired level of service or will not be able to fulfill a particular need. If the condition of an asset deteriorates, the risk of this happening will increase. However, even assets with a high condition score can be at risk of failing to meet community needs, if they no longer meet regulatory requirements or are inadequate to meet changing demand from a functionality or capacity point of view. The factors used to estimate the probability of failure vary by asset class:

Table 4-5
Probability of Failure (PoF) Variables

Asset Class	Probability of Failure
Road Base	Age and Average Daily traffic (ADT)
Road Surface	Condition Index (PCI and OCI)
Bridges and Culverts	Bridge Condition Index (BCI) and Load Limits/Status
Pedestrian Bridges	Bridge Condition Index (BCI) and Load Limits/Status
Facilities	Building Condition Audit (BCA) and Age
Vehicles	Age Based and Usage (km,hours)
Equipment	Age Based and Audited Condition (where available)
Land Improvements	Age Based
Stormwater Network Assets	CCTV Condition Index (where available), Age and Material
Water Network Assets	Age, Number of Watermain Breaks and Pipe Material
Wastewater Network Assets	CCTV Condition Index (where available), Age and Material

CoF represents the consequences if an asset does not achieve the desired level of service or is not able to fulfill a particular need. The factors used to estimate the consequence of failure vary by asset class:

Table 4-6
Consequence of Failure (CoF) Variables

Asset Class	Consequence of Failure
Road Base	Average Daily Traffic (ADT), Speed and Classification
Road Surface	Average Daily Traffic (ADT) and Speed
Bridges and Culverts	Average Daily Traffic (ADT), Change in Response Time, Detour Length, Access/Isolation and Heritage Status
Pedestrian Bridges	Detour Length, Access/Isolation, and Heritage Status
Facilities	Building Condition Audit (BCA)
Vehicles	Department and Replacement Cost
Equipment	Audited Value (where available) or Determined by Staff/Department
Land Improvements	Determined by Staff/Department
Stormwater Network Assets	Stormwater Master Plan Results, Average Daily Traffic (ADT) and Pipe Diameter
Water Network Assets	Redundancy, Average Daily Traffic (ADT), Service Area and Pipe Diameter
Wastewater Network Assets	Proximity to SPS/WWTP, Average Daily Traffic (ADT), Pipe Diameter, and Pipe Accessibility

The probability of failure is multiplied by the overall consequence of failure to arrive at a risk score, which is plotted on a risk matrix (sample provided in Figure 4-3) and provides a summary of priority assets. As outlined in Chapter 2, this risk matrix can change from asset category to asset category.

Figure 4-3
Risk Matrix Example

		CoF				
		Very Low	Low	Moderate	High	Critical
PoF	Very Low	Very Low	Low	Low	Moderate	Moderate
	Low	Low	Low	Moderate	Moderate	Moderate
	Moderate	Low	Moderate	Moderate	High	High
	High	Moderate	Moderate	High	High	Critical
	Critical	Moderate	Moderate	High	Critical	Critical

Chapter 2 provides asset risk summary information by asset category, which is based on using a risk matrix approach on all Township assets. Information on specific critical (priority) assets is discussed below.

CRITICAL ASSETS

Critical assets are defined as those that would have significant impacts on our communities if they were unable to provide services as intended. These assets need to be monitored to ensure that the Township is proactively managing any risks of failure. From an asset risk perspective, these assets have been given a very high CoF rating.

PRIORITY ASSETS

The prioritization exercise is based on a combination of asset specific risk and corporate risk ratings. By layering asset specific information on PoF, CoF, and Corporate Risk, short term priorities can be identified. This is critical, as the Township does not have sufficient funds to address the rehabilitation and replacement needs of all assets. Available funding must be allocated in the most cost-effective way possible.

Please refer to Appendix D for a listing of Priority Assets and Projects identified by the Township.

HISTORICAL LIFECYCLE COSTS

In the past three years, the Township has made significant investments in asset lifecycle costs (see table 4-7 below):

Table 4-7
Historical Lifecycle Costs

Asset Category	2022 Budget				2023 Budget				2024 Budget			
	Operations & Maintenance	Rehabilitation & Replacement	Expansion	Total	Operations & Maintenance	Rehabilitation & Replacement	Expansion	Total	Operations & Maintenance	Rehabilitation & Replacement	Expansion	Total
Tax Supported:												
Roads, Storm, Bridges, Culverts	6,195,459	11,610,300	1,021,600	18,827,359	5,751,436	14,060,390	6,157,710	25,969,536	6,588,435	12,316,700	3,508,300	22,413,435
Parks, Recreation	6,163,453	997,300	177,000	7,337,753	6,654,598	1,439,400	165,000	8,258,998	7,317,549	1,559,100	227,500	9,104,149
Fire Services	1,925,857	304,100	-	2,229,957	2,035,163	1,149,260	-	3,184,423	2,192,683	282,940	-	2,475,623
Water Network	2,816,015	2,616,200	441,000	5,873,215	3,142,284	4,499,500	3,273,000	10,914,784	3,545,899	4,093,000	1,110,500	8,749,399
Wastewater Network	3,720,649	1,108,500	35,600	4,864,749	4,022,034	1,697,350	468,000	6,187,384	4,479,922	2,690,950	55,500	7,226,372
Total	**20,821,433**	**16,636,400**	**1,675,200**	**39,133,033**	**21,605,515**	**22,845,900**	**10,063,710**	**54,515,125**	**24,124,488**	**20,942,690**	**4,901,800**	**49,968,978**

This historical investment becomes the “starting point” for recommendations with respect to future funding needs. The Financing Strategy chapter will outline approaches to increasing historical asset investments in order to effectively and efficiently manage Township assets in order to provide needed services to residents, businesses, and visitors at target levels of service.

ASSET MANAGEMENT STRATEGY

NON-INFRASTRUCTURE SOLUTIONS

Non-Infrastructure solutions represent costs incurred that are not directly related to asset lifecycle costs, however they are indirectly related and critical to the success of asset management and/or the provision of services. These costs are incurred to:

- Plan for future demand and growth on assets/services (such as master plans);
- Gain much needed information on assets (such as condition assessments); and
- Assist in the provision of services.

With the goal of providing asset management planning in an efficient and effective manner, these non-infrastructure solutions become critical.

The following table provides a summary of non-infrastructure solutions anticipated.

Table 4-8
Non-Infrastructure Solutions

	Description	Service Area	Cost (2025 $)	Next Study Timing	Frequency (Years)	Duration (Years)	Funding Allocation				
							% DC Funded	% Tax Funded	% Water Funded	% Wastewater Funded	% Other Funded
Master Plans:											
1	Transit Service Study	Infrastructure Services	120,000	2025	1	1	0%	59%	0%	0%	41%
2	Transportation Plan	Infrastructure Services	240,000	2027	10	Ongoing	100%	0%	0%	0%	0%
3	Stormwater Master Plan	Infrastructure Services	150,000	2031	10	Ongoing	80%	20%	0%	0%	0%
4	Water Supply Mater Plan	Infrastructure Services	160,000	2029	10	Ongoing	100%	0%	0%	0%	0%
5	Water & Wastewater Servicing Master Plan	Infrastructure Services	150,000	2032	10	Ongoing	100%	0%	0%	0%	0%
6	Parks, Recreation Plan	Community Services	100,000	2034	10	Ongoing	80%	20%	0%	0%	0%
7	Fire Master Plan	CAO	60,000	2035	10	Ongoing	100%	0%	0%	0%	0%
8	Active Transportation and Mobility Master Plan	Infrastructure Services	300,000	2034	10	Ongoing	75%	25%	0%	0%	0%
	Subtotal		$ 1,160,000								
Condition Assessments											
9	Bridge & Culvert Inspections	Infrastructure Services	100,000	2026	2	Ongoing	0%	100%	0%	0%	0%
10	Roads Condition Assessment	Infrastructure Services	120,000	2027	5	Ongoing	0%	100%	0%	0%	0%
11	Wastewater / Storm Inspections (CCTV)	Infrastructure Services	250,000	2026	1	Ongoing	0%	50%	0%	50%	0%
12	Building Condition Studies	All Areas	150,000	2027	5	Ongoing	0%	60%	20%	20%	0%
	Subtotal		$ 620,000								
Other Studies:											
13	Corporate Strategic Plan	All Areas	10,000	2026	4	Ongoing	0%	100%	0%	0%	0%
14	Development Charge Study	All Areas	40,000	2030	5	Ongoing	100%	0%	0%	0%	0%
15	Compensation Market Review	All Areas	50,000	2027	4	Ongoing	0%	100%	0%	0%	0%
16	Records Management	All Areas	75,000	2027	1	3	0%	60%	20%	20%	0%
17	Energy, Conservation and Demand Mgmt.	All Areas	10,000	2029	5	Ongoing	0%	60%	20%	20%	0%
18	Water, Wastewater, and Stormwater Rate Study	Infrastructure Services	90,000	2030	5	Ongoing	0%	0%	50%	50%	0%
19	Parks & Recreation Fee Study	Community Services	40,000	2026	10	Ongoing	0%	100%	0%	0%	0%
20	Termite Survey	Planning & Development	100,000	2027	5	Ongoing	0%	100%	0%	0%	0%
21	Building, Planning, Engineering Fee Study	Planning & Development	50,000	2027	5	Ongoing	0%	40%	0%	0%	60%
22	Cultural Heritage Landscape (CHL) Study	Planning & Development	100,000	2030	10	Ongoing	0%	100%	0%	0%	0%
23	Heritage Conservation Districts Studies	Planning & Development	45,000	2028	1	7	0%	100%	0%	0%	0%
24	Community Improvement Plan Update	Planning & Development	50,000	2032	10	Ongoing	0%	100%	0%	0%	0%
	Subtotal		$ 660,000								
Grand Total			**$ 2,440,000**								

OPERATIONS & MAINTENANCE COSTS

Operations and maintenance costs, planned for through the Township's Operating Budget, ensure assets are in good working order, and can extend asset useful life. The amount of operations and maintenance costs incurred is impacted by the volume of assets owned, as well as the level of service provided. The higher the level of service, typically the higher the costs incurred to maintain that level of service.

Chapter 3 (Level of Service) provided an analysis of operations and maintenance costs incurred in major service areas. The following is a high-level summary.

Table 4-9
Operations & Maintenance Costs

	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Services	Cost to Provide Expected Levels of Service	Implementation Years
Roads Related*	6,195,459	5,751,436	6,588,435	6,588,435	7,609,493	5
Water Network	2,816,015	3,142,284	3,545,899	3,495,934	3,642,620	5
Wastewater Network	3,720,649	4,022,034	4,479,922	4,479,922	4,826,502	5
Parks & Recreation	6,163,453	6,654,598	7,317,549	7,323,549	7,500,185	5
Fire Services	1,925,857	2,035,163	2,192,683	2,192,683	2,183,883	5

* Roads Related costs include bridges, culverts, and stormwater operating costs.

REHABILITATION COSTS

Over the life of many assets, different rehabilitation treatments can be applied in order to extend useful life. While minor rehabilitation costs are included in the operations and maintenance costs described above, the Township has other major rehabilitation programs in place that are funded annually through the budget process.

Table 4-10
Rehabilitation Costs

Description	Service Area	Asset Category	Description of Work	Annual Cost (2025 Budget)	Optimal Annual Investment	Phase-in (Years)
Pre-Engineering - Roads	Infrastructure Services	Roads Related	Road EA and Detailed Design	75,000	112,500	5
Rural Road Rebuild	Infrastructure Services	Roads Related	Rebuild of Roads in Rural Areas	Included in Replacement Needs		
Gravel Road Maintenance	Infrastructure Services	Roads Related	Resurfacing of Gravel Roads	Included in Operating Budget		
Sidewalk Repairs	Infrastructure Services	Roads Related	Repair and Replacement of Sidewalks	150,000	150,000	5
Active Transportation	Infrastructure Services	Trails / Roads Related	Development of Trail Network	295,000	295,000	1
Pavement Management	Infrastructure Services	Roads Related	Pavement Intervention Program	100,000	250,000	2
Total Roads Related				**620,000**	**807,500**	
Pre-Engineering - Bridges	Infrastructure Services	Bridges & Culverts	Bridge and Culvert EA and Detailed Design	100,000	150,000	5
Bridge Repairs & Remediation	Infrastructure Services	Bridges & Culverts	Minor Rehabilitation of Bridges and Culverts	100,000	220,000	1
Total Bridges & Culverts				**200,000**	**370,000**	
Pre-Engineering - Water	Infrastructure Services	Water	Water EA and Detailed Design	12,500	18,750	5
Total Water				**12,500**	**18,750**	
Pre-Engineering - Wastewater	Infrastructure Services	Wastewater	Wastewater EA and Detailed Design	12,500	18,750	5
LPS Grinder Pumps	Infrastructure Services	Wastewater	Grinder Pump Replacements	Included in Replacement Needs		
Wastewater Re-lining	Infrastructure Services	Wastewater	Re-lining Program for Wastewater Mains	-	100,000	2
Total Wastewater				**12,500**	**118,750**	
Park Identification	Community Services	Parks	Purchase and Installation of Park Signage	5,000	5,000	1
Forestry (Urban & Rural)	Community Services	Forestry	Ongoing Forestry Program	200,000	300,000	5
Total Community Services				**205,000**	**305,000**	
Grand Total				**$ 1,050,000**	**$ 1,620,000**	

REPLACEMENT COSTS

The baseline method of estimating asset replacement needs is to use replacement cost and useful life estimates to plan for replacement timing. Estimating replacement costs can vary in complexity, from simply inflating prior known costs to reflect the value of assets in the future, to developing more complex equations that consider variability in material and labour costs.

This baseline model does not take into consideration:

- The impact of maintenance and rehabilitation costs incurred on the estimated useful life of each asset.
- The condition of each asset. Linking asset replacement needs to asset condition is a more accurate approach to replacement planning.
- The risk associated with each asset. A higher asset risk can result in replacement timing being accelerated while a lower asset risk can result in a delayed replacement timing.

Figure 4-4
Replacement Planning – Baseline (Tax Supported)

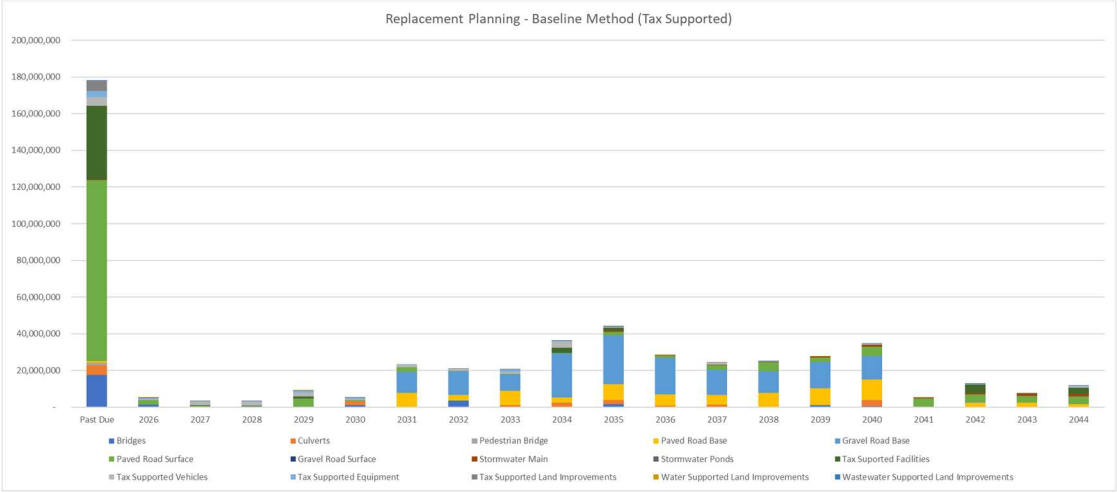


Figure 4-5
Replacement Planning – Baseline (Water Supported)

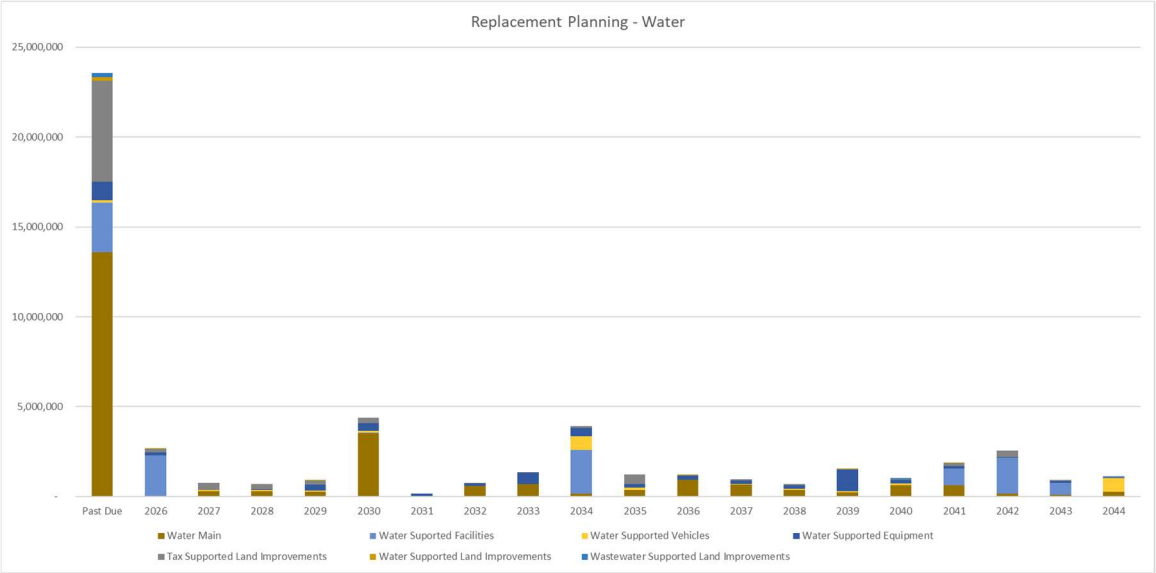
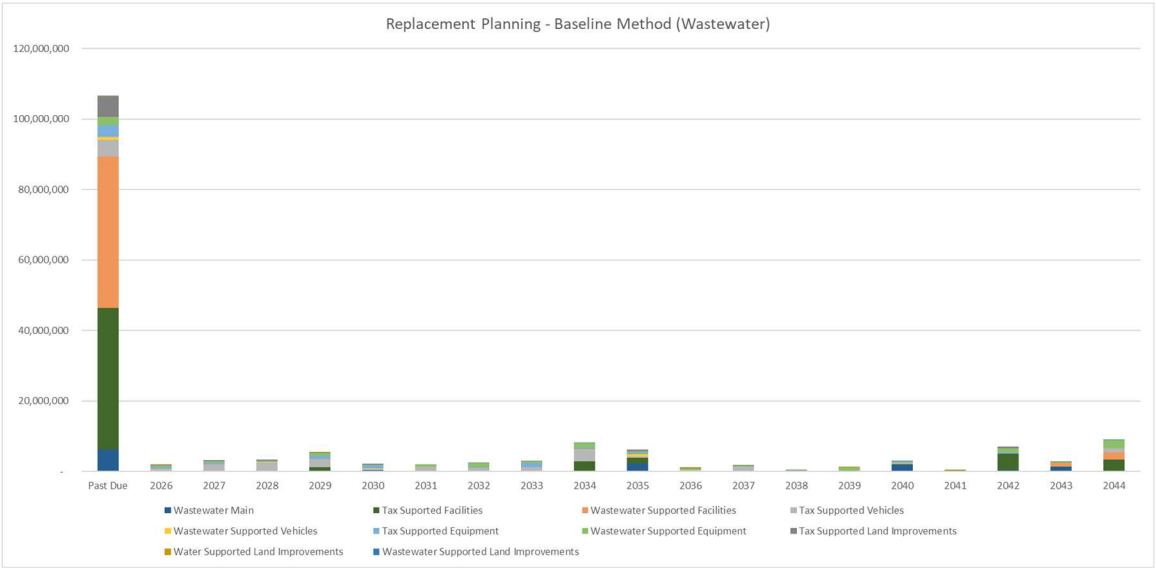


Figure 4-6
Replacement Planning – Baseline (Wastewater Supported)



A strategy of simply using assets until the end of their planned useful life, without any intervention to slow or reverse deterioration, ultimately results in higher asset investment to accommodate the more frequent replacement of assets. This approach is applied to some assets, such as vehicles, equipment, and land improvements, which are replaced on a more regular basis, however even with these assets, condition and usage plays a role in their replacement timing.

The baseline forecast provided in Figure 4-4 above is used annually in the budget process, along with asset condition, risk and other lifecycle costs incurred in order to determine immediate needs.

EXPANSION & GROWTH COSTS

The primary planning tool for expansion related lifecycle costs is the Township's Development Charges Background Study (DC Study). The DC Study incorporates the Township's various master plans into one planning tool. With the Council strategic direction of "growth paying for growth", it is important to have the DC Study kept up-to-date and effectively recommending DC charges that will ensure growth pays for growth.

The DC Study provides approximately $268 million in projects that are either fully or partially growth related, required between 2022 and 2041. $198 million of this (or 74%) is to be funded by DCs, either directly or through growth related debt. $28 million (or 10%) is to be funded by various developers as a local service. That leaves $42 million (or 16%) that must be funded by Township sources, such as taxation, grants, water rates, or wastewater rates.

Table 4-11
Expansion Costs

Source	Cost (2020 $)	%
DCs	198,049,975	74%
Developer	27,984,000	10%
Tax	26,129,641	10%
DCL / OCIF	5,538,693	2%
Water	2,034,357	1%
Wastewater	8,298,934	3%
Total	268,035,600	100%

Source: Township 2020 DC Study

Figure 4-7
Expansion Planning - Baseline

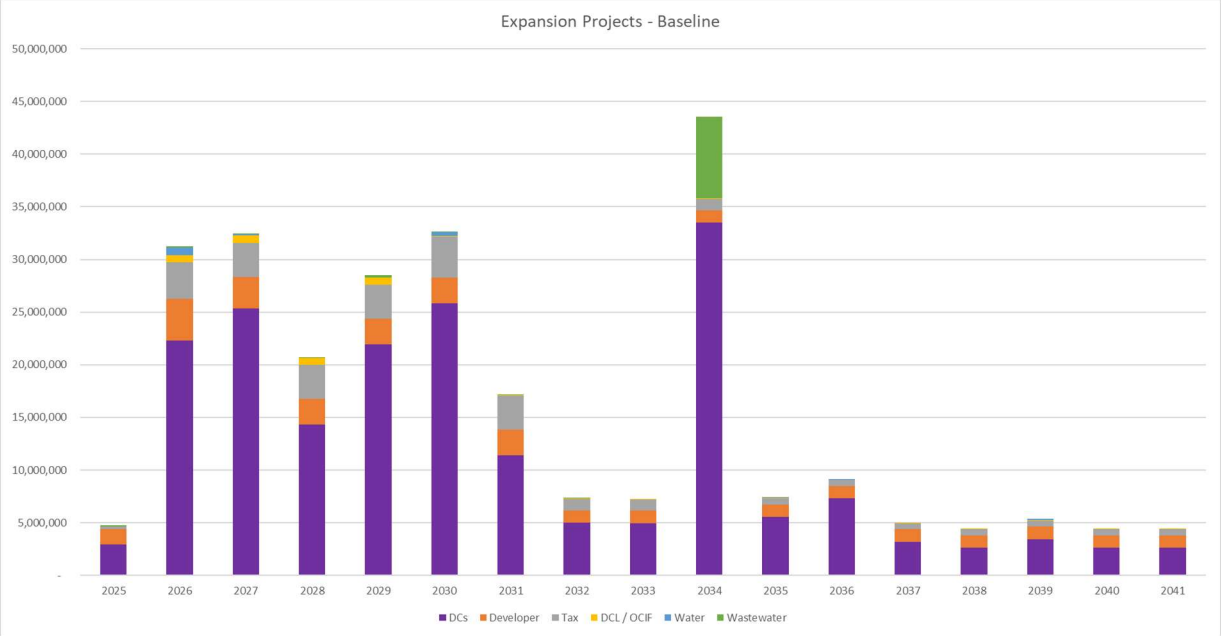


Figure 4-5 above provides a high-level projection on project timing as outlined in the DC Study. Timing of these projects is constantly changing due to evolving demand, priorities, DC cash flow, and affordability. Significant growth-related projects in the 2025 to 2034 forecast years include:

- Fergus Wastewater Treatment Plan expansion;
- New Fire Station (with vehicles/equipment);
- Significant road expansions as per the Transportation Master Plan;
- New indoor turf facility; and
- New water capacity (wells), including connection to the water system.

CHAPTER FIVE

FINANCING STRATEGY

CHAPTER 5: FINANCING STRATEGY

OVERVIEW

The financing strategy for an asset management plan outlines the key funding sources used to finance asset management related costs, including methodologies and strategies proposed for each funding source. The main objective is to fund the recommended asset management strategy costs outlined in Chapter 4 while providing services at appropriate levels. However, funding availability is a legitimate barrier to meeting levels of service expectations.

A financing strategy has been developed for tax supported, water supported, and wastewater supported assets, representing the three more significant asset funding sources present at the Township. As such, this chapter is broken down as follows:

- Tax Supported Financing Strategy:
    - Sources of Funding
    - Historical Funding
    - Grant Funding Assumptions
    - Ontario Lottery and Gaming (OLG) Funding Assumptions
    - Development Charges Funding Assumptions
    - Partner Contributions Assumptions
    - Debt Funding Assumptions
    - Use of Assessment Growth
    - Impact on Taxation
- Water and Wastewater Supported Funding Strategy:
    - Water and Wastewater Rate Study
    - Sources of Funding
    - Historical Funding
    - Grant Funding Assumptions
    - Development Charges Funding Assumptions
    - Partner Contributions Assumptions
    - Debt Funding Assumptions
    - Impact on Rates

TAX SUPPORTED FINANCING STRATEGY

Sources of Funding

To fund the tax supported needs identified through the asset management planning process, the Township has a number of funding sources, representing both internal and external:

Table 5-1
Sources of Funding – Tax Supported

Internal Resources	External Sources
• Operating Budgets (operating & maintenance costs) • Contributions to Capital • Dedicated Capital Levy • Vehicle Replacement • Equipment Replacement • Facility Replacement	• Canada Community-Building Fund (Federal Gas Tax) • Ontario Community Infrastructure Fund (OCIF) • OLG Funding • One-time Capital Grants • Development Charges (growth) • Partner Contributions • Debt

There is a level of risk associated with relying on external sources of funding over a long-term forecast. While internal sources are more controllable, external sources are uncontrollable and subject to change. This makes long-term planning more difficult.

Table 5-2
Known Risks Associated with External Funding Sources

External Funding Source	Risk
OLG Funding	Potential reduction due to iGaming.
Canada Community-Building Fund (Gas Tax)	Reduction due to transition to reduce CO_2 emissions.
Ontario Community Infrastructure Fund (OCIF)	Funding formula has been redeveloped, and the Township has been subject to consecutive years of maximum reductions.
One-time Capital Grants	Application based grants, not guaranteed.
Development Charges (growth)	Restricted cash flow (capital precedes growth).

Through the annual budget processes and required updates to this Asset Management Plan, updates to available funding from all funding sources can be incorporated into this financing strategy.

Historical Funding

An analysis of historical funding sources from 2010 to 2025 is provided below. This analysis has been broken down between internal funding sources versus external funding sources.

Figure 5-1 provides the historical internal sources of funding for tax supported assets. This funding increased from approximately $975,000 in 2010 to $5.4 million in 2025.

- A significant contributing factor to this increase is the dedicated capital levy, used to fund bridge and culvert capital needs.
- The Township has vehicle, equipment, and facility replacement schedules that have funding increases from $625,000 in 2010 to $2.4 million in 2025.

- The contribution to capital, which funds non-growth related capital in the areas for roads, fire, parks, recreation, planning, and corporate/studies has increased from $350,000 in 2010 to approximately $1.2M in 2025.

Future increases in internal sources of funding become critical as they are controllable and certain.

Figure 5-1
Internal Sources of Tax Supported Capital Funding

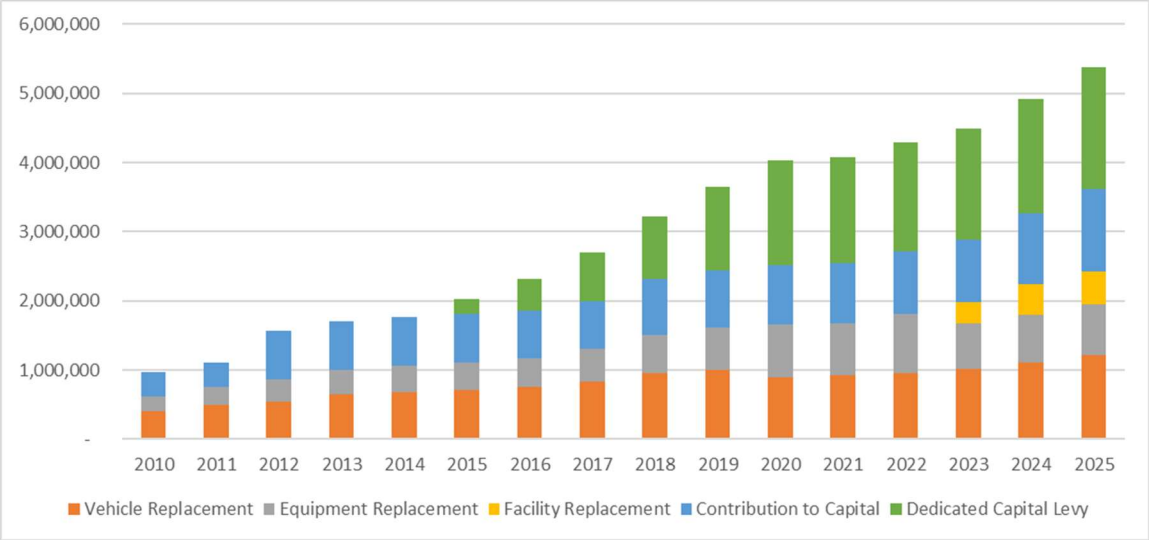


Figure 5-2 provides the historical external funding for tax supported assets. As shown, these sources of funding are more variable and uncertain, especially in years when COVID-19 impacted the Township.

- The Canada Community-Building Fund (CCBF), formerly known as Federal Gas Tax Funding, has increased from approximately $800,000 in 2010 to $1M in 2025. There were a few years (2019 and 2022) where "top-ups" to this funding were also provided. Typically, a minor inflationary increase is provided every two years on this funding.
- Ontario Community Infrastructure Funding (OCIF) has increased from $0 in 2010 (it was established in 2015) to approximately $2.2M in 2025. The province has modified the funding formulas associated with municipal OCIF allocations which are now tied to asset replacement values. As a result of this change, the township has seen consecutive years of funding decline.
- Ontario Lottery and Gaming (OLG) funding has seen significant fluctuation from the periods between 2010 and 2025. The Township's policy is to include OLG funding in the year following receipt, which assists in mitigating annual fluctuations. Also, Council approves an allocation policy annually that directs OLG funding. For the 2025 budget, the allocation to capital represented approximately $2.6 million (92%), with the remainder of OLG funding being allocated to Termite Management, Community Impact Grants, and Heritage.

Figure 5-2
External Sources of Tax Supported Capital Funding

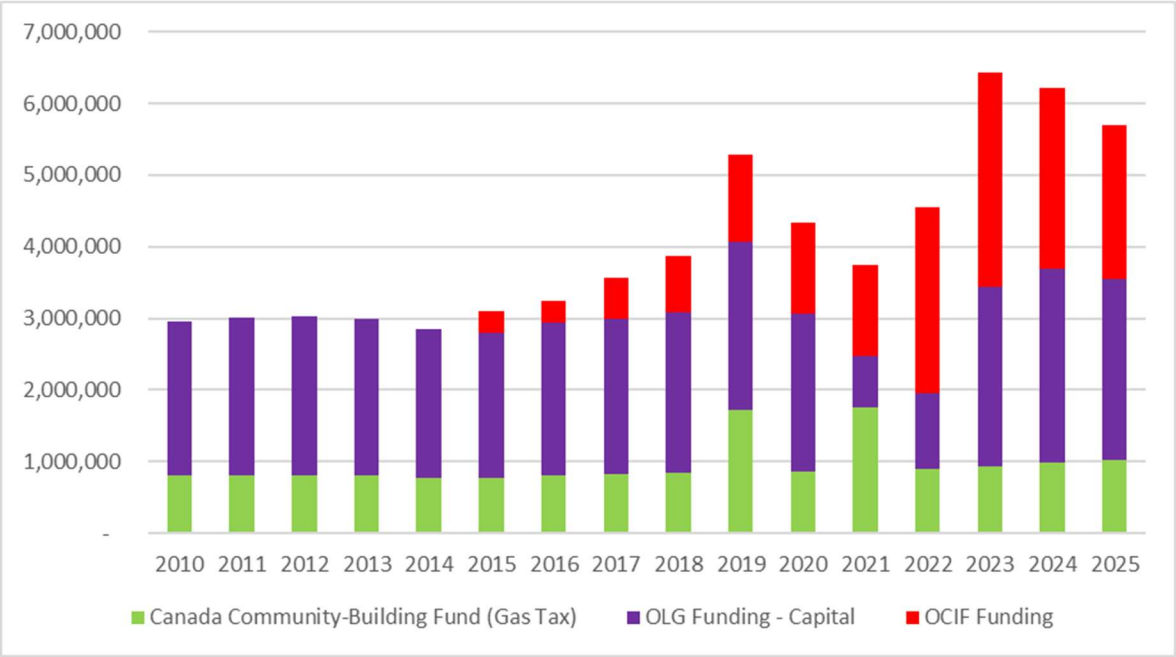
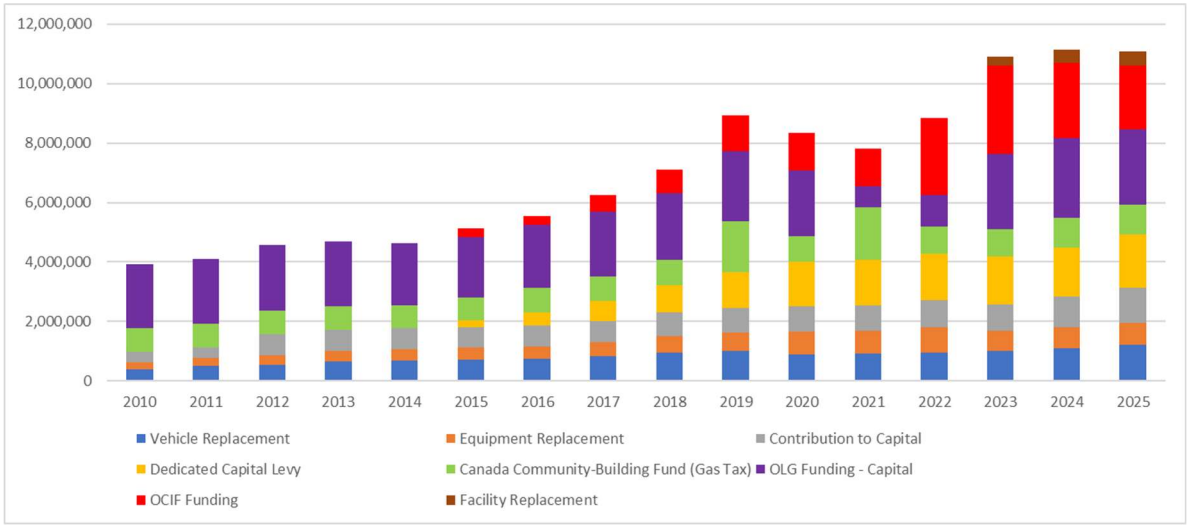


Figure 5-3 below combines internal and external funding sources into a combined tax supported capital funding graph. Total funding in 2025 is approximately $11.1 million having recovered from the impacts of COVID-19 since 2019.

Figure 5-3
Combined Internal and External Sources of Tax Supported Capital Funding



The 2025 available funding becomes the starting point in planning for funding needs and impacts over the forecast period. The following sections will outline the assumptions used for each funding source.

Grant Funding Assumptions

CCBF/Gas Tax — It has been assumed that minor inflationary increases every 2 years will continue over the forecast period. This is in alignment with historical increases in the CCBF.

OCIF — 2025 Provincial OCIF allocation totaled $2,157,013; however, the township continues to be subject to the maximum annual reduction of 15% with 2025 representing the second consecutive year for the reduction. It has been assumed that this maximum annual reduction will continue once again in 2026 before normalizing around the $1.8M annual allocation mark over the forecast period. For the purposes of the funding strategy, staff have assumed that annual allocations in excess of the annual $1,271,559 amount directed toward bridges and culverts will be allocated to road-related projects.

Ontario Lottery and Gaming (OLG) Funding Assumptions

Future projected OLG funding is uncertain, given the constantly changing economic climate, and the potential impacts due to iGaming. The Township's current OLG Allocation Policy limits the amount of OLG funds that can be allocated to Township capital to 92% of OLG funds. It is recommended that this policy continues to be reviewed annually in order to maximize the funding available for asset management purposes.

It has been assumed that $2.4 million in OLG funds will be available to fund Township capital annually over the forecast period. The following sensitivity analysis is provided:

- Just before the COVID-19 pandemic, approximately $2.7 million in annual OLG funds was received, of which $2.2 million was dedicated to Township capital.
- With the current allocation formula, $2.6 million in OLG funding would be required annually in order to allocate $2.4 million to Township capital.
- If OLG funds are reduced by up to 30% due to economic factors, and/or internet gaming, Township OLG proceeds could be reduced by up to approximately $800,000 to $1.8 million.

Revisions to these assumptions can be made in future asset management plans.

Development Charges Funding Assumptions

Development charges represent fees paid by builders and developers that are paid when development is occurring in order to assist in funding the impacts on the Township due to growth. In many cases, growth related infrastructure (such as roads, water, and wastewater mains) is required to be constructed before growth can occur, which creates a cash flow issue when funding these projects. In an attempt to offset this, the Township can:

- Issue growth related debt, with future principal and interest payments funded from future development charges.
- Enter into agreements with builders and developers, requiring the payment of development charges at an earlier date.
- Defer growth related capital.

The Township's Development Charges Background Study was created in 2020 and includes over $208 million in growth related costs required to accommodate growth from 2020 to 2041. Over 22 years, that

represents an average annual investment in growth related needs of $9.5 million. There are also growth related needs mentioned that are scheduled to occur beyond 2041 that will be included in future study calculations.

Looking at growth related needs forecasted between 2022 and 2041, the Table below outlines the suggested sources of funding. As there are benefits of some projects to the existing population, not all costs identified can be funded from development charges. Also, "developer funded" costs are considered local service costs, which are required to be funded by specific developers as the projects are specifically required for their development.

Table 5-3
Breakdown of Growth Related Needs by Funding Type

Source	Cost (2020 $)	%
Development Charges	198,049,975	74%
Developer Funded	27,984,000	10%
Taxation	26,129,641	10%
Dedicated Capital (Bridges)	5,538,693	2%
Water Rates	2,034,357	1%
Wastewater Rates	8,298,934	3%
Total	268,035,600	100%

Source: Township 2020 DC Study

The Development Charges Act requires linkages to asset management planning to ensure that proposed assets are financially sustainable over their useful life. This includes assessing the Township's ability to operate and maintain these assets, in addition to funding their eventual replacement. The Table below outlines the additional annual asset investments that will be required once all growth related projects identified within the Development Charges Background Study are completed.

Table 5-4
Future Annual Investment Needs for Growth Related Assets

Source	Annual Investment (2020 $)	%
Taxation	4,488,000	76%
Dedicated Capital (Bridges)	186,000	3%
Water Rates	709,000	12%
Wastewater Rates	501,000	9%
Total	5,884,000	100%

These annual investment needs will be added into future asset management plans as projects are completed.

Through the annual budget process, Township staff assess the availability of development charges from a cash flow perspective to fund growth related needs. In addition, development charges are allocated annually to fund growth related debt payments. Debt will be discussed in a later section.

Partner Contributions Assumptions

Partner contributions typically relate to:

- Projects that have a component of work that relates to partner/developer owned infrastructure.
- Growth related infrastructure that is considered a "local service", of which the costs are a partner/developer's responsibility, and the infrastructure is usually assumed by the Township at a later date.

During the annual budget process, portions of projects that are to be funded by partner contributions are identified and third-party funding is applied to these projects. Once infrastructure is assumed by the Township, the Township is responsible for ongoing lifecycle costs, unless ownership is not transferred, or an agreement is put in place that gives another party this responsibility.

Debt Funding Assumptions

Debt funding is a tool that can be used to finance capital needs where other funding is not available. It also spreads out the impact of a project over a longer period, as debt payments are made.

The province establishes limits on the amount of debt a municipality can incur. This limit (or debt capacity) is recalculated annually and is based on twenty-five percent of a municipalities' (own source) revenue. Therefore, annual debt payments for the Township, regardless of how they are funded, cannot exceed 25% of all revenue generated in a year.

The Township primarily incurs debt for projects that are considered growth related. With this approach, future development can fund the debt payments. Also, the Township plans for debt levels that are well below the province's debt limits. Planned Township debt does not exceed fifteen percent of annual revenues, which allows sufficient room for any unexpected debt needs that could occur.

Through the annual budget process, the Township maintains a ten-year forecast of anticipated future debt needs. Table 5-5 below provides a forecast of anticipated future debt from 2025 to 2035. Table 5-6 provides a summary of combined current and future debt over this period, and Figure 5-4 provides a comparison of debt levels in relation to the limit imposed by the province. Of the $92 million in planned future debt, 79% is growth related with annual payments being funded from future development charges.

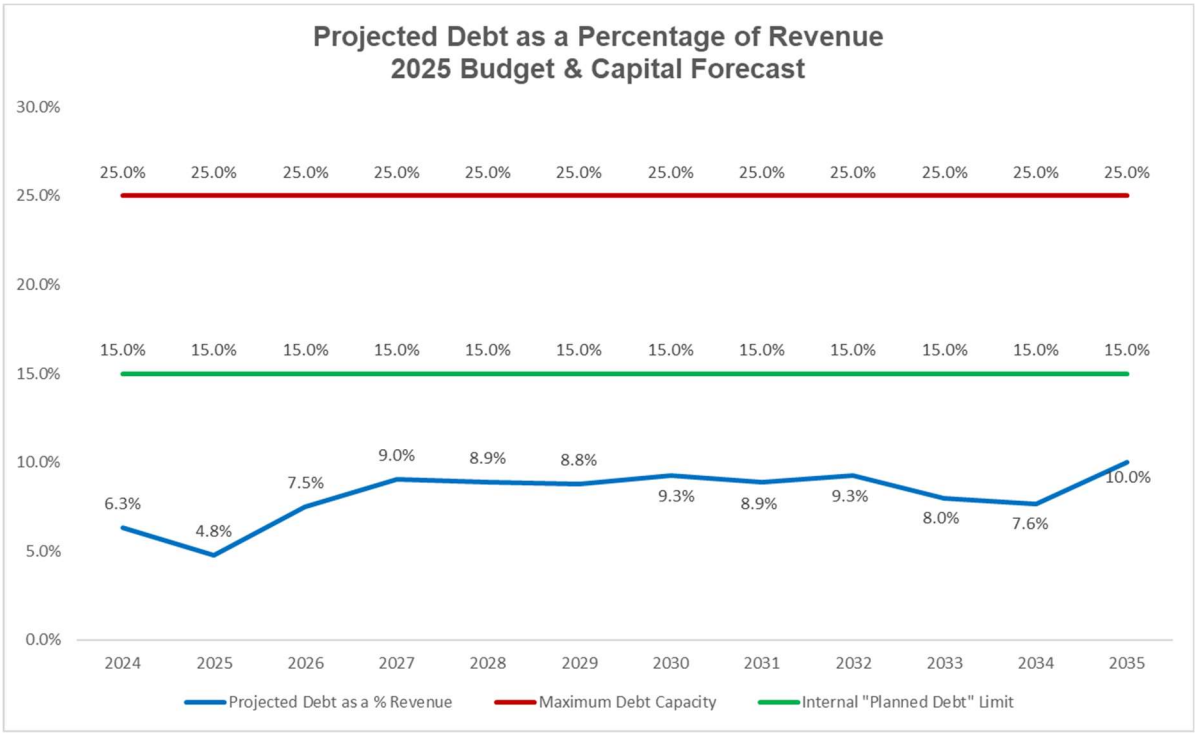
Table 5-5
Forecast of Anticipated Debt

Project Description	Prior Years Approved & Unissued	Annual Debt Requirements											
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	TOTAL
330-0805 - Water Supply Strategy - Phase 2 Groundwater Investigation Study	2,420,000	-	-	-	-	-	-	-	-	-	-	-	2,420,000
330-0998 - New Well - Area #3	1,800,000	-	-	-	-	-	313,000	3,425,000	-	-	-	-	5,538,000
2020-009 - New Well - Area #5	-	-	-	-	-	-	-	-	-	-	1,800,000	-	1,800,000
2025-030 - Well F5R Treatment Facility Replacement and Upgrades	-	-	-	-	2,125,000	-	-	-	-	-	-	-	2,125,000
330-0999 - New Well - Area #7	1,800,000	-	210,000	1,920,000	-	-	-	-	-	-	-	-	3,930,000
303-0299 - Corporate Operations Facilities	2,854,663	12,946,300	12,946,300	-	-	-	-	-	-	-	-	-	28,747,263
F0171 - Future Expansion of Fergus WWTP	-	-	-	-	-	-	-	-	-	-	29,700,000	-	29,700,000
2022-042 - Woolwich St Watermain Extension - WR 7 to Urban Boundary	-	-	-	-	-	-	-	1,244,600	-	-	-	-	1,244,600
2022-044 - WR 18 Watermain Extension - Urban Boundary to 3rd Line	-	-	-	-	-	-	-	2,258,900	-	-	-	-	2,258,900
2010-080 - New Fire Hall	-	-	-	200,000	200,000	5,000,000	-	-	-	-	-	-	5,400,000
2010-078 - Tanker	-	-	-	-	-	610,000	-	-	-	-	-	-	610,000
2010-079 - Pumper	-	-	-	-	-	950,000	-	-	-	-	-	-	950,000
2018-017 - Additional Equipment for New Fire Hall	-	-	-	-	-	420,000	-	-	-	-	-	-	420,000
2010-177 - Future Parkland Development (16 hectares)	-	-	-	-	-	-	-	-	-	-	2,912,000	-	2,912,000
Land Acquired for Fergus Sportsplex Property Expansion	4,000,000	-	-	-	-	-	-	-	-	-	-	-	4,000,000
Total Projected New Debt	**12,874,663**	**12,946,300**	**13,156,300**	**2,120,000**	**2,325,000**	**6,980,000**	**313,000**	**6,928,500**	**-**	**-**	**34,412,000**	**-**	**92,055,763**

Table 5-6
Summary of Current and Future Debt Payments

	2022 Actual Payments	2023 Actual Payments	2024 Actual Payments	Projected Annual Debt Payments (Principal & Interest)											
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Tax Supported	**970,381**	**877,123**	**870,508**	**466,420**	**1,398,129**	**2,088,815**	**2,104,061**	**2,119,304**	**2,651,304**	**2,651,304**	**2,651,304**	**2,651,304**	**2,651,304**	**2,873,232**
Ec. Dev. Supported	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**	**149,573**
Waterworks Supported	**601,434**	**467,788**	**467,788**	**287,934**	**639,433**	**803,443**	**949,797**	**1,111,754**	**1,111,754**	**1,135,654**	**1,663,654**	**1,663,654**	**1,663,654**	**1,800,835**
Wastewater Supported	**1,260,471**	**1,408,590**	**1,390,890**	**1,371,690**	**1,532,229**	**1,659,683**	**1,638,683**	**1,617,083**	**1,594,883**	**1,572,233**	**1,549,283**	**937,733**	**937,733**	**2,592,133**
Total Projected Debt Payments (Existing & New)	**2,981,859**	**2,903,074**	**2,878,759**	**2,275,617**	**3,719,364**	**4,701,514**	**4,842,114**	**4,997,714**	**5,507,514**	**5,508,764**	**6,013,814**	**5,402,264**	**5,402,264**	**7,415,774**

Figure 5-4
Projected Debt Payments as a Percentage of Revenue



The Township's planned debt reached a maximum of 10% of revenues in 2035, leaving sufficient debt capacity for any unforeseen debt needs.

Use of Assessment Growth

A potential approach to mitigating the impact of asset investment on taxation rate is through the use of assessment growth funding each year. Assessment growth is intended to fund the growth related pressures imposed on the Township each year, ensuring where possible, growth pays for growth. The two primary areas that are impacted by growth within the Township include:

1. Operational Impacts of providing services to more residents and businesses (including additional Township staffing).
2. Asset impacts, including the need for more assets and in some cases, increased capacity and/or functionality of assets to accommodate growth.

The Table below outlines a strategy for allocating assessment growth between operational impacts and asset related impacts. With assessment growth under 1%, it would be allocated equally (i.e. 50% each) between operations and asset investment. Growth above 1% would be split 75% to operations and 25% to asset investment. Given expected growth as well as historical growth over the last 10 years, annual assessment growth is expected to be in the 2% to 3% range, which would result in a 0.50% to 0.75% relative impact on taxation dedicated to asset investment each year that could be funded from assessment growth using this strategy.

Table 5-7
Use of Assessment Growth to Fund Asset Investment

Assessment Growth		Allocation of Growth to:		Equivalent Reduction in Taxation Impact			
				Operations		Asset Investment	
Min	Max	Operations (including New Staff Positions)	Asset Investment	Min	Max	Min	Max
0.00%	1.00%	50%	50%	0.00%	0.50%	0.00%	0.50%
1.01%	2.00%	75%	25%	0.76%	1.50%	0.25%	0.50%
2.01%	3.00%	75%	25%	1.51%	2.25%	0.50%	0.75%
3.01%	4.00%	75%	25%	2.26%	3.00%	0.75%	1.00%
4.01%	5.00%	75%	25%	3.01%	3.75%	1.00%	1.25%
Over 5%		75%	25%	3.76%	n/a	1.25%	n/a

Impact on Taxation

Making progress on asset management planning related investment strategies requires a long-term approach to reach optimal funding levels. All other funding sources discussed in the chapter contribute to this funding strategy, however clear and defined increases in contributions to capital are also required.

As initially outlined in Chapter 2 and Chapter 4, optimal tax supported asset investment levels are as shown below in Table 5-8 and Table 5-9.

Table 5-8
Optimal vs. Actual Funding – Tax Supported (excl. Bridges/Culverts)

Tax Supported (excl. Bridges/Culverts)			
Asset Type	**Optimal Annual Investment (2025 $)**	**Existing (2025) Funding**	**% of Optimal**
Road Base - Paved	**2,122,500**		
Road Surface - Paved	**5,400,000**		
Road - Gravel	**2,000,000**	**6,092,362**	
Stormwater	**1,580,000**		
Buildings	**1,250,000**		**52%**
Vehicles	**1,867,071**	**1,211,000**	
Equipment	**851,973**	**743,000**	
Land Improvements	**375,443**		
Total	**$ 15,446,987**	**$ 8,046,362**	

Table 5-9
Optimal vs. Actual Funding – Bridges and Culverts

Bridges and Culverts			
Asset Type	**Optimal Annual Investment (2025 $)**	**Existing (2025) Funding**	**% of Optimal**
Bridges	**2,650,000**		
Culverts	**1,941,000**	**3,042,322**	**65%**
Pedestrian Bridges	**70,000**		
Total	**$ 4,661,000**	**$ 3,042,322**	

While the Township has made significant progress in funding bridges and culverts (reaching 65% of optimal annual investments), only 52% (albeit an improvement from the 2022 AMP) of the optimal annual investment has been achieved for other tax supported assets. Given that the Township has extensive vehicle and equipment replacement schedules, a significant portion of the shortage lies in roads, buildings, and land improvements.

Table 5-10 provides a scenario analysis that outlines various strategies that could be achieved over the long-term to progress towards optimal annual investments for all tax supported assets. This includes:

- Scenario 1: Reaching and maintaining optimal funding in 20 years.
- Scenario 2: Reaching and maintaining optimal funding in 30 years.
- Scenario 3: Reaching and maintaining optimal funding in 40 years.
- Scenario 4: Providing an equivalent to a 2.0% taxation increase to asset investments annually.
- Scenario 5: Providing an equivalent to a 1.5% taxation increase to asset investments annually.
- Scenario 6: Providing an equivalent to a 1.0% taxation increase to asset investments annually.

Table 5-10
Financing Strategy Scenario – Sensitivity Analysis

Sensitivity Analysis - Financing Strategy	Funding Investment by Year 10	Funding Investment by Year 20	Funding Investment by Year 30	Funding Investment by Year 40	Equivalent Annual Increase in Taxation
Scenario 1: Optimal Funding in 20 Years	76%	100%	100%	100%	**3.41%**
Scenario 2: Optimal Funding in 30 Years	67%	82%	100%	100%	**2.51%**
Scenario 3: Optimal Funding in 40 Years	61%	72%	84%	100%	**1.98%**
Scenario 4: 2% Capital Investment	62%	72%	85%	100%	**2.00%**
Scenario 5: 1.5% Capital Investment	56%	62%	70%	81%	**1.50%**
Scenario 6: 1% Capital Investment	51%	52%	55%	61%	**1.00%**
Optimal Capital Investment	**$ 27,024,000**	**$ 36,317,000**	**$ 48,807,000**	**$ 65,593,000**	

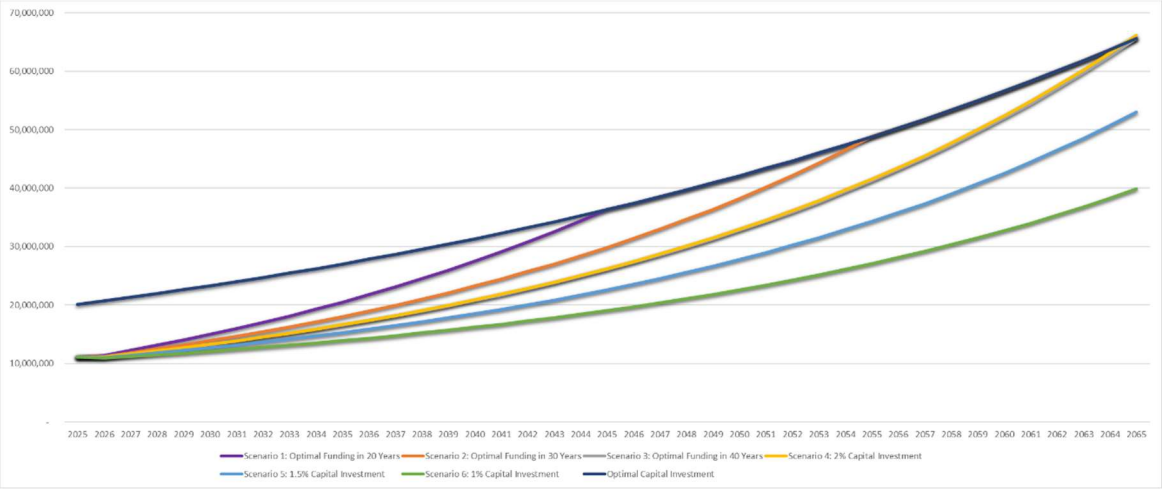
The following observations can be made from this scenario analysis:

1. Only scenarios 1, 2, 3 and 4 reach optimal investment levels in the next 40 years.
2. Scenario 5 provides a more gradual increase in investment, reaching 81% in 40 years.
3. Scenario 6 shows a marginal increase in percentage of optimal investment over time, reaching 61% in 40 years.

Also, please note that the proposed funding in the scenarios above is labelled as "equivalent annual increase in taxation", meaning that alternate sources of funding can reduce the overall impact on taxation annually, such as increases in external sources of funding, or funding provided by assessment growth. Also, as the Township's Asset Management Plan is refined and improved over time, lifecycle optimization strategies can result in a reduction in the optimal asset investment amount.

The Figure below provides an illustration of each financing scenario in comparison to the annual optimal investment.

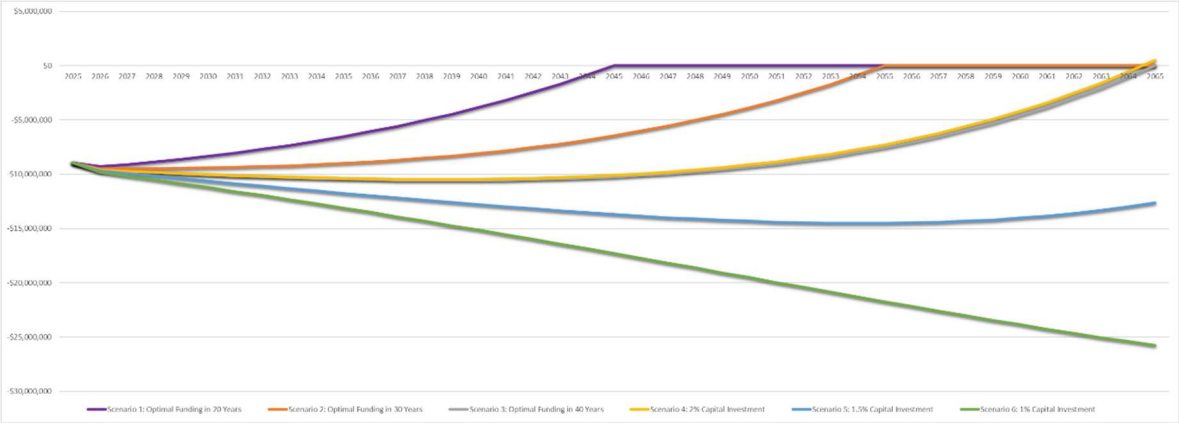
Figure 5-5
Financing Scenario Comparison to Optimal Investment



The following Figure provides analysis of how each scenario impacts the tax supported funding gap. The current tax supported funding gap is estimated at $11.2 million, meaning that in optimal conditions, the

Township would be investing an additional $11.2 million each year in tax supported assets. Scenarios 1 to 4 result in the elimination of the gap over the next 40 years. Scenarios 5 and 6 result in an increasing funding gap (to $12.6 million and $25.8 million respectively).

Figure 5-6
Financing Scenario Comparison of Funding Gap



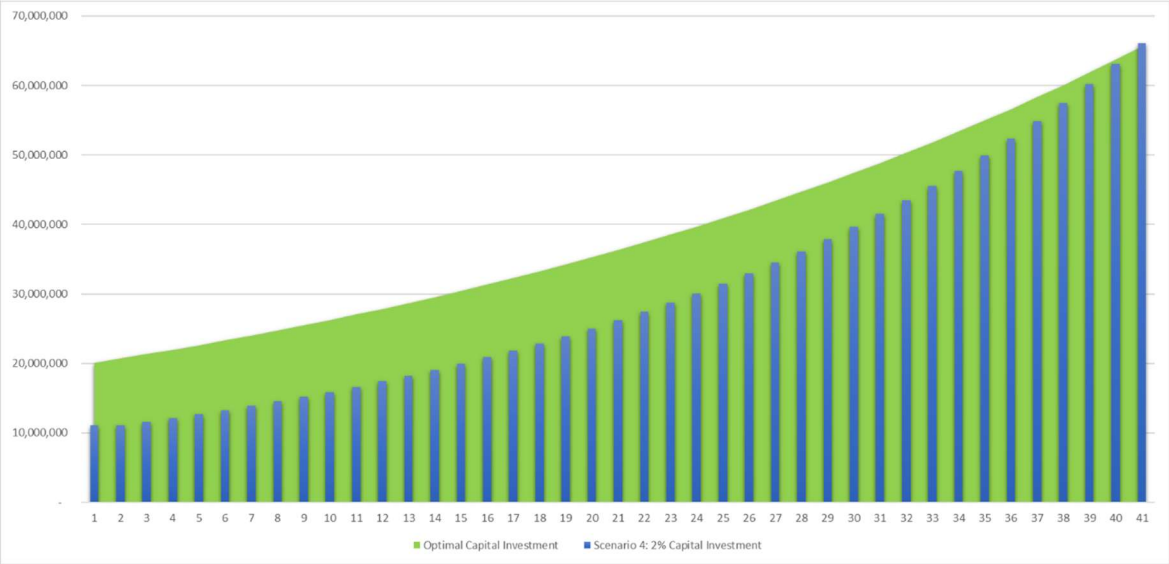
An equivalent increase in taxation of at least 2.0% (representing Scenario 4) is needed annually to invest in tax supported assets in order to make meaningful progress towards optimal annual asset investment levels. If assessment growth each year falls between 2% and 3%, then the net impact on taxation would be between 1.25% and 1.50% annually (see Table below). As assessment growth changes annually, so does the net impact on taxation. This can be reduced further if other external funding sources (such as grants) become available and is subject to annual adoption through the budget process.

Table 5-11
Impact of a 2.0% Taxation Equivalent Asset Investment (with Assessment Growth)

Assessment Growth		Taxation Impact before Assessment Growth	Impact of Assessment Growth	Net Impact on Taxation
Min	Max			
0%	1%	2.00%	0.00% to -0.50%	2.00% to 1.50%
1.01%	2%	2.00%	-0.25% to -0.50%	1.75% to 1.50%
2.01%	3%	2.00%	-0.50% to -0.75%	1.50% to 1.25%
3.01%	4%	2.00%	-0.75% to -1.00%	1.25% to 1.00%
4.01%	5%	2.00%	-1.00% to -1.25%	1.00% to 0.75%
Over 5%		2.00%	-1.25% to n/a	0.75% to n/a

The Figure below provides another perspective of how Scenario 4 provides an increasing asset investment over 40 years, approaching optimal levels.

Figure 5-7
Impact of Scenario 4 on the Funding Gap



WATER AND WASTEWATER SUPPORTED FINANCING STRATEGY

Water and Wastewater Rate Study

The Township has been completing Water and Wastewater Rate Studies for many years. More importantly, Councils both past and present have been very proactive in following the recommendations within these studies when passing annual budgets. The result of this is evident in the Historical Funding section below. Planned increases to capital contributions over time have resulted in much needed annual capital investments that fund water and wastewater related asset management costs each year.

Sources of Funding

To fund the water and wastewater supported needs identified through the asset management planning process, the Township has a number of funding sources:

Table 5-12
Sources of Funding – Water & Wastewater Supported

Internal Resources	External Sources
• Operating Budgets (operating & maintenance costs) • Contributions to Capital • Vehicle Replacement • Equipment Replacement • Facility Replacement	• One-time Capital Grants • Development Charges (growth) • Partner Contributions • Debt

There is a level of risk associated with relying on external sources of funding over a long-term forecast. While internal sources are more controllable, external sources are uncontrollable and subject to change. This makes long-term planning more difficult.

Table 5-13
Known Risks Associated with External Funding Sources

External Funding Source	Risk
One-time Capital Grants	Application based grants, not guaranteed.
Development Charges (growth)	Restricted cash flow (capital typically precedes growth).

Through annual budget processes and required updates to this Asset Management Plan, updates to available funding from external funding sources can be incorporated into this financing strategy.

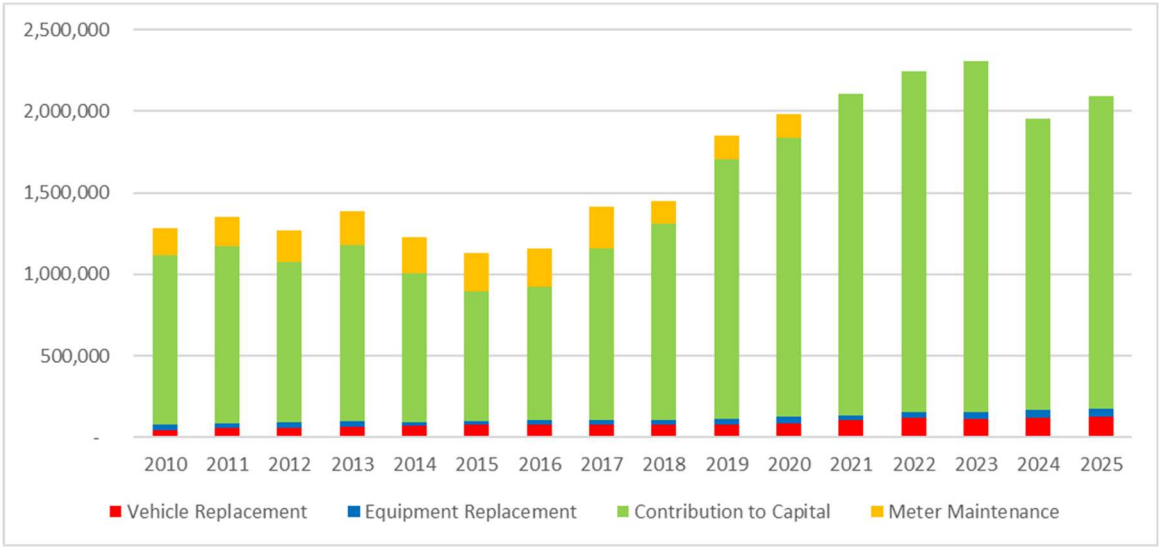
Historical Funding

An analysis of funding sources from 2010 to 2025 is provided below. Figure 5-8 provides the historical sources of funding for water supported assets while Figure 5-9 provides the historical sources of funding for wastewater supported assets.

Water Historical Funding:

- Each year, the contribution to capital is impacted by the water rate increase for the year, plus the allocation of any year-end surplus. This is the primary capital funding source, which has, from 2016 – 2023, successfully increased over time by following recommendations in prior and current Water and Wastewater Rate Studies; however, has been subject to decline in recent years as operational pressures have exceeded rate increases.
- The Township has vehicle and equipment replacement schedules that have funding increases as required annually.
- In 2021, the meter maintenance (replacement) program was combined with general capital.

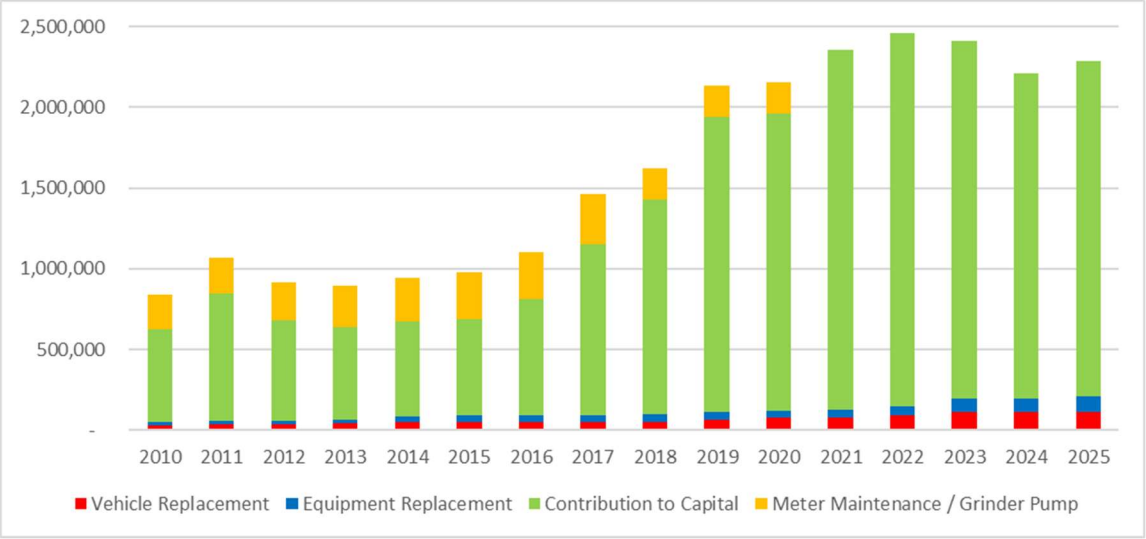
Figure 5-8
Water Supported Capital Funding



Wastewater Historical Funding:

- Each year, the contribution to capital is impacted by the wastewater rate increase for the year, plus the allocation of any year-end surplus. This is the primary capital funding source, which has, from 2016 – 2022, successfully increased over time by following recommendations in prior and current Water and Wastewater Rate Studies; however, has been subject to decline in recent years as operational pressures have exceeded rate increases.
- The Township has vehicle and equipment replacement schedules that have funding increases as required annually.
- In 2021, the meter maintenance (replacement) and grinder pump programs were combined with general capital.

Figure 5-9
Wastewater Supported Capital Funding



Grant Funding Assumptions

Given the discussion above regarding the proactive historical funding increases provided in this area, any available infrastructure grants are typically applied for in tax supported asset categories, such as roads and stormwater. In situations where specific grants are tied only to water and/or wastewater infrastructure, submissions for funding are made by the Township in this area. Canada Community-Building Funding (Gas Tax) and OCIF funding could be used for water and wastewater projects, however the Township's practice is to allocate this funding to roads related and bridge/culvert projects.

For the forecasted financing strategy, there are no known water and wastewater specific grants therefore it has been assumed that grant funding will not assist in this area. In the event that grant funding becomes available, adjustments can be made through the budget process and future asset management plan updates.

Development Charges Funding Assumptions

Please refer to the comprehensive development charges discussion in the tax supported financing strategy above.

Partner Contributions Assumptions

Please refer to the comprehensive partner contribution discussion in the tax supported financing strategy above.

Debt Funding Assumptions

Please refer to the comprehensive debt funding discussion in the tax supported financing strategy above.

Impact on Rates

Making progress on asset management planning related investment strategies requires a long-term approach to reach optimal funding levels. All other funding sources discussed in the chapter contribute to this funding strategy, however clear and defined increases in contributions to capital are also required.

As initially outlined in Chapter 2 and Chapter 4, optimal asset investment levels are as shown below in Table 5-14 and Table 5-15.

Table 5-14
Optimal vs. Actual Funding – Water Supported

Water Assets			
Asset Type	**Optimal Annual Investment (2025 $)**	**Existing (2025) Funding**	**% of Optimal**
Water Mains	2,700,000	1,919,210	60%
Buildings	313,100		
Vehicles	129,625	129,600	
Equipment	334,109	43,710	
Land Improvements	16,112		
Total	$ 3,492,946	$ 2,092,520	

Table 5-15
Optimal vs. Actual Funding – Wastewater Supported

Wastewater Assets			
Asset Type	**Optimal Annual Investment (2025 $)**	**Existing (2025) Funding**	**% of Optimal**
Wastewater Mains	2,060,000	2,081,692	61%
Buildings	880,000		
Vehicles	128,750	110,400	
Equipment	662,585	97,290	
Land Improvements	16,112		
Total	$ 3,747,447	$ 2,289,382	

The Township has made progress in funding water and wastewater supported assets, reaching 60% and 61% respectively of optimal annual investments for each.

Table 5-16 below shows the planned water and wastewater rate increases based on the current Council approved Water and Wastewater Rate Study. Table 5-17 provides a comparison analysis to other municipalities.

Table 5-16
Proposed Water and Wastewater Rate Increases

Proposed Rate Increases	2025	2026	2027	2028	2029	2030	2031	2032
Water	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	TBD	TBD
Wastewater	3.30%	3.30%	3.30%	3.30%	3.40%	3.40%	TBD	TBD
Combined Increase	**2.30%**	**2.40%**	**2.40%**	**2.40%**	**2.40%**	**2.50%**	**TBD**	**TBD**

These rate increases support the ongoing operations of the water and wastewater systems as well as planned increases to asset investment over the forecast period, with the goal of reaching system financial sustainability, including realizing optimal annual asset investments. Water and Wastewater Rate Studies are updated every five years and will be completed in conjunction with the Township's Asset Management Plan updates.

Table 5-17
Customer Cost of Service Comparison 2020

Volume Meter Size	Population	Land Area sq. km	Population Density per sq. km	Location	Residential 200 m^3 5/8"
New Tecumseth	42,167	274	154	Simcoe	$ 852
Halton Hills	65,466	276	237	Halton	$ 902
Orillia	33,113	29	1,159	Simcoe	$ 941
Bradford West Gwillimbury	36,759	201	183	Simcoe	$ 996
Orangeville	30,859	16	1,977	Dufferin	$ 1,035
Georgina	48,772	288	169	York	$ 1,145
Innisfil	41,548	263	158	Simcoe	$ 1,208
Woolwich	27,589	326	85	Waterloo	$ 1,246
Wellington North	12,585	526	24	Wellington	$ 1,246
Mapleton	11,432	535	21	Wellington	$ 1,430
King	27,496	333	83	York	$ 1,433
Guelph-Eramosa	14,432	292	49	Wellington	$ 1,444
East Gwillimbury	32,850	245	134	York	$ 1,454
Minto	9,359	301	31	Wellington	$ 1,608
Average					**$ 1,210**
Median					**$ 1,227**
Centre Wellington	31,148	408	76	Wellington	$ 1,298
$ Difference to Median					$ 72
% Difference to Median					5.8%

*Source is the November 2020 BMA Water and Wastewater Rate Study & Financial Plans - 2020 cost of service for a residential customer in relation to neighbouring municipalities as well as municipalities with similar, population, land area and density. The table above compares the cost of service assuming a 5/8" meter which is typical for a residential customer and an annual consumption of 200 m^3 annually.

CHAPTER SIX

MONITORING & CONTINUOUS IMPROVEMENT

CHAPTER 6: MONITORING AND CONTINUOUS IMPROVEMENT

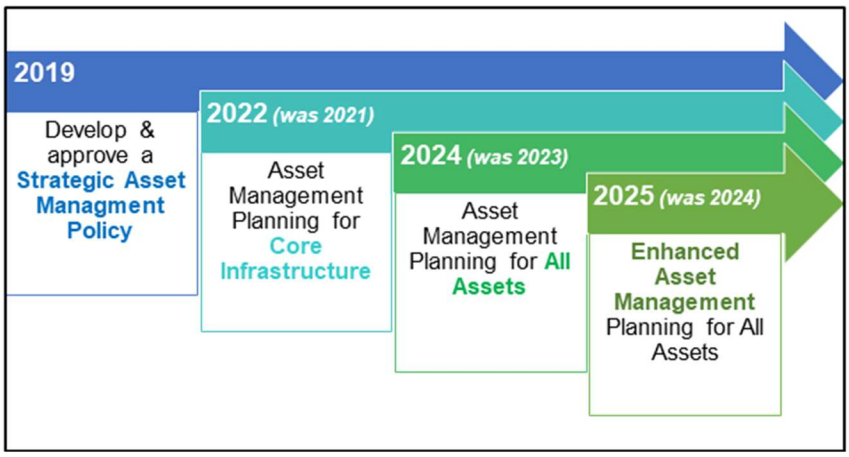
OVERVIEW

The ongoing monitoring and continuous improvement of Township asset management practices ensures that:

- Compliance with asset management legislation is achieved and maintained; and
- Asset management practices are implemented in the best interest of the Township, ensuring efficiencies and integration into day-to-day operations.

As outlined in Chapter 1, Ontario Regulation 588/17 was passed in 2017, requiring municipalities to implement specific asset management practices within four set timelines. These timelines were extended by one year as a result of COVID-19 as follows:

Figure 6-1
Asset Management Planning – Legislated Timelines



To date, the Township has been compliant with all Provincial requirements and best practices. However, with the introduction of Ontario Regulation 588/17, significant time and resourcing will be required to continue to meet the identified compliance deadlines. In 2019, Township Council approved a Strategic Asset Management Policy, the first requirement of Ontario Regulation 588/17.

The more significant challenges around regulation compliance will include the integration of asset management planning into existing Township processes, the ability to continually update and improve the Township's asset management plan, and the requirement of all Township departments to include asset management planning within existing workloads and staff compliments. An internal Township Asset Management Committee has been established and approved through the Strategic Asset Management Policy, with staff representatives from all Township departments.

COLLABORATION WITHIN WELLINGTON COUNTY

Asset management activities at the Township are not conducted in a vacuum. They are integrated with the policies and practices of Wellington County and the other lower-tier municipalities, whose assets overlap with those of the Township. Township roads, storm, and bridge/culvert assets are integrated with County road, storm, and bridge/culvert assets. In addition, road and bridge/culvert assets on boundary roads are shared with other lower-tier municipalities, within Wellington County and Waterloo Region. Asset management planning for Township assets impacts the County and these lower-tier municipalities, and vice versa. As a result, coordinated asset management practices are necessary to optimize asset management practices.

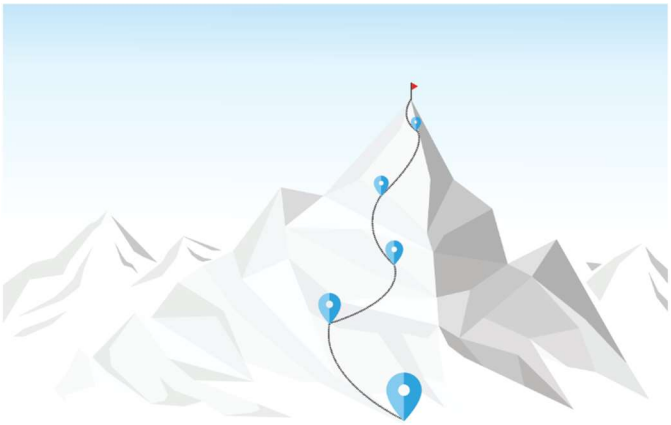
Throughout the process of establishing asset management planning practices, the Township has engaged Wellington County and the Wellington lower-tier municipalities, to share best practices, templates, and resources. All have implemented a common asset management software to aid in tracking asset management activities and enabling predictive analyses relating to infrastructure investment.

Components of lifecycle cost management, including condition assessment scales, risk models, and performance measurement are being reviewed to determine the potential for commonalities in measurement and reporting. Opportunities for further collaboration and efficiency across the County are being evaluated.

MONITORING AND CONTINUOUS IMPROVEMENT

As an organization, the Township's asset management capacity is at an intermediate level, with informal AM practices in each department. While these practices varied in completeness and complexity, the common theme across the organization is the need to improve the degree of consistency in data collection and management practices, formalize risk assessment procedures, and work toward improving data quality.

This asset management plan is a living document, and an output from the overall Township asset management processes. As asset management processes evolve and improve, the completeness and quality of future asset management plans will improve, as will the Townsip's capacity to plan for future asset investment needs. A comprehensive update of the Asset Management Plan will take place, at a minimum, every five years. In addition, an annual update report will be submitted to Township Council in conjunction with the annual budget process. This report will outline asset management progress, including how "aligned" adopted budgets are to the recommendations within the Asset Management Plan.

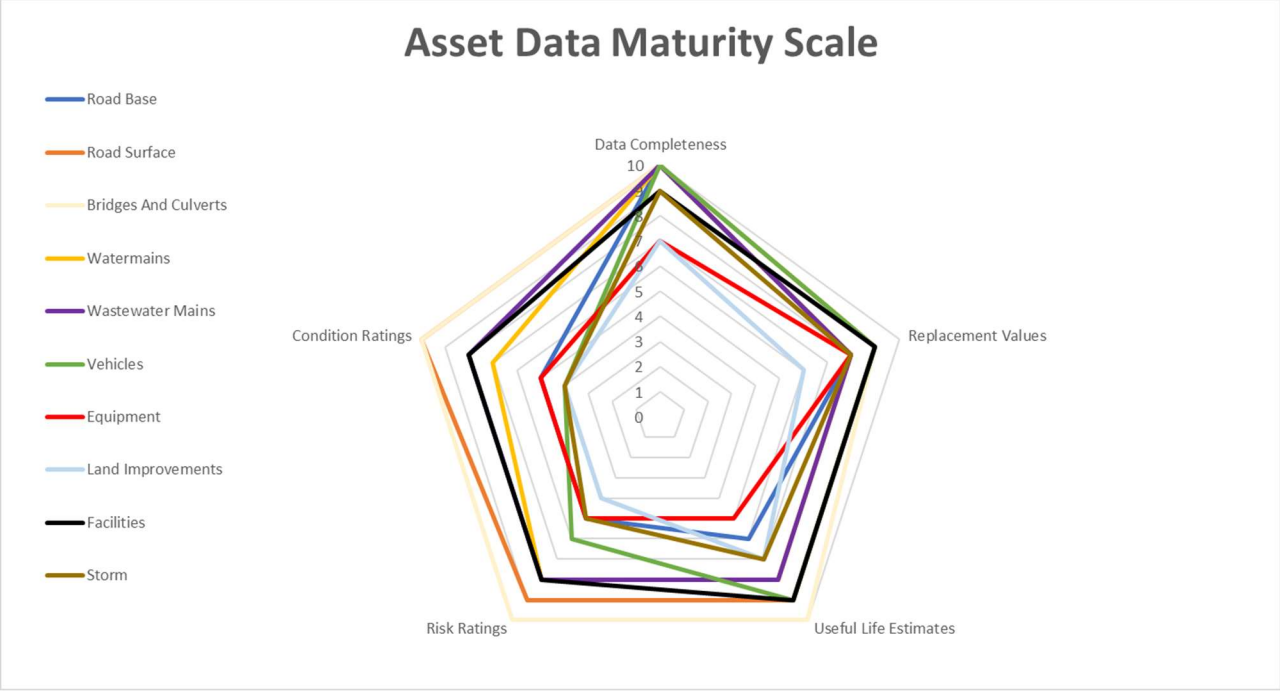


Data quality is critical to asset management. Having an up to date, comprehensive asset data inventory is critical for making informed, timely decisions regarding optimal investments in our infrastructure. In addition to detailed technical data, the data that is collected for each asset includes:

- Valuation data that allows for the valuation of assets, the calculation of replacement costs, and the determination of financial useful lives of all assets;
- Lifecycle costing data that identifies work that needs to be completed on each asset, and the cost and frequency of that work. It gives the ability to predict future operations, maintenance, rehabilitation, replacement and expansion costs;
- Condition data, which is used to determine the current condition of assets and better understand the rate of deterioration of each asset;
- Performance data, which tracks demand and capacity performance, to provide an idea of service levels provided by Township assets;
- Risk data is used to define the probability of an asset failing, as well as the consequences of the failure of that asset, so that asset investments can be prioritized and critical infrastructure can be identified;

The diagram below provides an "Asset Data Maturity Scale", which gives an idea of the confidence staff currently have in each asset area, based on the quality and completeness of the asset data available. It also provides an overview of key data gaps, and the priorities for ongoing asset data improvement. Some assets, like the road surface assets and bridge/culvert assets have had regular condition assessment data for a number of years, and the investment needs of the network are based on reliable data. Other assets do not have complete data. As a result, staff rely on the best available information and estimates of the condition and risk assessments of those assets, including inferring condition from the age of the asset, to build out lifecycle and financial models.

Figure 6-2
Asset Data Maturity Analysis



Each of the asset areas are further elaborated below to provide readers with a more granular or detailed view of current (self-assessed) data maturity, and areas for improvement:

Roads and Transportation Network

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	**Condition data is complete for critical assets.**	Condition data is complete and accurate for all assets.	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	**Current levels of service have been defined and performance metrics are used to measure progress.**	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	Risk is estimated according to remaining service life.	**Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist.**	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented.**	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would greatly benefit from better understanding of the actual condition of both paved and gravel road bases. In its current state, it is evident that the condition, and risk (probability of failure) of the road bases are skewed toward the bottom end of the spectrum which may not be entirely accurate when considering the composition of road bases and expect useful lives. Additionally, continued enhancement of the risk profile in this asset class to include consequence of failure, and climate change implications will enhance the risk makeup of these assets and provide better decision-making support if risk is to be used as a metric by which council and staff will ultimately formulate decisions to ensure Township lifecycle interventions are taking place on the right assets, at the right times.

The roads and transportation network for the Township of Centre Wellington represent the largest singular asset class – with this segment representing approximately 63% of the tax supported assets owned and operated by the Township. Given this weighting, and the current condition assessment of the road bases, this particular asset segment is expected to receive a large portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of road base condition assessment and develop risk strategies that are elaborated to include not only probability of failure, but also consequence of failure to better understand risk associated with this asset segment, but also to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems, reducing data shortfalls, and addressing infrastructure replacement backlogs.

Bridges and Culverts

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	Condition data is complete for critical assets.	Condition data is complete and accurate for all assets.	**Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.**
Levels of Service	Services provided by this asset class are	Current levels of service have been defined and	**Current levels of services are defined, tracked,**	Proposed levels of service have been defined, and

	understood by departmental staff.	performance metrics are used to measure progress.	**and reported on a regular basis.**	funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	Risk is estimated according to remaining service life.	**Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist.**	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented.**	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township has a high degree of confidence relative to its bridge and culvert inventory in its asset database. In its current state, it is evident that the risk associated with operation of its bridge network is skewed toward the top end of the spectrum, which is widely acknowledged, and is being mitigated by the implementation of a dedicated capital levy.

The bridge and culvert network for the Township of Centre Wellington represent the third-largest asset class – with this segment representing approximately 10% of the tax supported assets owned and operated by the Township. Given this weighting, and the current condition and risk assessments of the bridges and culverts, this particular asset segment is expected to receive a disproportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change implications, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of lifecycle maintenance strategies to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems, defining and standardizing lifecycle intervention strategies, and addressing infrastructure replacement backlogs.

Facilities

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	**Inventory data is complete for all assets in this asset class.**	Inventory data is complete, accurate, and in a centralized, accessible format.
Condition	Condition data is incomplete.	Condition data is complete for critical assets.	**Condition data is complete and accurate for all assets.**	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented**.	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from continuous updated to condition data, as well as defining and projecting lifecycle maintenance needs to better inform risk associated with inadequate funding. In its current state, it is evident that the risk associated with operation of township facilities is skewed toward the top end of the spectrum, which is widely acknowledged.

The facilities operated by the Township of Centre Wellington represent the fourth-largest asset class – with this segment representing approximately $139 Million in replacement values across all funding sources. Given this weighting, and the current condition and risk assessments of the facilities owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change implications, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of condition assessment, full lifecycle costs, and development of levels of service, to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems, reducing data shortfalls, and addressing capacity needs.

DATA QUALITY

Vehicles

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	**Condition data is complete for critical assets.**	Condition data is complete and accurate for all assets.	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	**Current levels of service have been defined, and performance metrics are used to measure progress.**	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	Risk is estimated according to remaining service life.	**Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist**.	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	**Lifecycle activities required to maintain current levels of service are understood.**	Lifecycle activities required to maintain current levels of service are understood and documented.	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate

				funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from developing condition assessment, levels of service, and lifecycle management strategy data for the vehicle inventory. In its current state, it is evident that the risk associated with operation of township vehicles is skewed toward the top end of the spectrum, which is widely acknowledged and indicative of the criticality of these assets in support of delivering township services. Future risk modelling for Township vehicles should be developed to address risk mitigation, levels of service, climate change implications, and replacement requirements.

The vehicles owned and operated by the Township of Centre Wellington represent a smaller asset segment in terms of total replacement value; however, with this segment representing approximately $25 Million in replacement values across all funding sources, it is still very much an asset class worthy of application of asset management practices.

Given the current risk assessment of the vehicles owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of full lifecycle costs and maintenance strategies to be better equipped to inform data-driven lifecycle interventions in support of reducing total cost of ownership when delivering services for Township residents.

DATA QUALITY

Equipment

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	**Reliable inventory data exists for critical assets**	Inventory data is complete for all assets in this asset class.	Inventory data is complete, accurate, and in a centralized, accessible format.
Condition	Condition data is incomplete.	**Condition data is complete for critical assets.**	Condition data is complete and accurate for all assets.	Condition data is complete, accurate, and regularly updated. Data

				is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	**Current levels of service have been defined, and performance metrics are used to measure progress.**	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	Risk is estimated according to remaining service life.	**Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist.**	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	**Lifecycle activities required to maintain current levels of service are understood.**	Lifecycle activities required to maintain current levels of service are understood and documented.	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from further developing lifecycle management strategy data for its equipment asset inventory.

The equipment owned and operated by the Township of Centre Wellington represents a smaller asset segment in terms of total replacement value; however, it is still very much an asset class worthy of application of asset management practices. Given the current condition assessment of the equipment owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change implications, and replacement requirements.

This asset segment presents a lesser opportunity for the Township to address data maturation in terms of full lifecycle costs, and development of levels of service, as many of the non-critical assets in this category are run-to-failure type assets with only minimal lifecycle intervention required.

DATA QUALITY

Land Improvements

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	**Reliable inventory data exists for critical assets**	Inventory data is complete for all assets in this asset class.	Inventory data is complete, accurate, and in a centralized, accessible format.
Condition	Condition data is incomplete.	**Condition data is complete for critical assets.**	Condition data is complete and accurate for all assets.	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	**Services provided by this asset class are understood by departmental staff.**	Current levels of service have been defined and performance metrics are used to measure progress.	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	**Risk is estimated according to remaining service life.**	Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist.	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	**Lifecycle activities required to maintain current levels of service are understood.**	Lifecycle activities required to maintain current levels of service are understood and documented.	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from developing comprehensive asset inventories, condition assessment, levels of service, and lifecycle management strategy data for the land improvement inventory. In its current state, it is evident that the risk associated with operation of land improvements in the township reside toward the low end of the spectrum.

The Land Improvements owned and operated by the Township of Centre Wellington represents a smaller asset segment in terms of total replacement value; however, it is still very much an asset class worthy of application of asset management practices. Given the relatively low current risk assessment of the Land Improvements owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, climate change, and replacement requirements.

This asset segment presents a lesser opportunity for the Township to address data maturation in terms of full lifecycle costs, and development of levels of service, as many of the assets in this category are run-to-failure type assets with only minimal lifecycle intervention required.

DATA QUALITY

Water Network

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	Condition data is complete for critical assets.	**Condition data is complete and accurate for all assets.**	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	**Current levels of service have been defined and performance metrics are used to measure progress**.	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are	Risk is estimated according to	**Risk models exist for assets in this**	Risk management strategies are

	understood by department staff.	remaining service life.	**asset class. Critical assets have been identified, and risk management strategies exist.**	documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented.**	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from additional condition assessment data for the remainder of the inventory in its water network inventory. In its current state, it is evident that the risk associated with the operation of township water network is skewed toward the bottom end of the spectrum.

The water network operated by the Township of Centre Wellington represents a significant rate-supported class – with this segment representing approximately $110 Million in replacement values. Given this weighting, and the current risk assessment of the water network owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of full lifecycle costs, and development of levels of service, to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems, reducing data shortfalls, and addressing capacity needs.

DATA QUALITY

Wastewater Network

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	Condition data is complete for critical assets.	**Condition data is complete and accurate for all assets.**	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	Current levels of service have been defined and performance metrics are used to measure progress.	**Current levels of services are defined, tracked, and reported on a regular basis.**	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are understood by department staff.	Risk is estimated according to remaining service life.	**Risk models exist for assets in this asset class. Critical assets have been identified, and risk management strategies exist.**	Risk management strategies are documented for all assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented**.	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast.**	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from additional data related to lifecycle management strategies for the inventory in its wastewater network asset class. In its current state, it is evident that the risk associated with the operation of township's water network is trending toward the low end of the spectrum.

The wastewater network operated by the Township of Centre Wellington represents a significant rate-supported class – with this segment representing approximately $91 Million in replacement values. Given this weighting, and the current risk assessment of the wastewater network owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change implications, and replacement requirements.

This asset segment also presents a significant opportunity for the Township to address data maturation in terms of full lifecycle costs, to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems, and maintenance strategies to be better equipped to inform data-driven lifecycle interventions in support of reducing total cost of ownership when delivering services for Township residents.

DATA QUALITY

Stormwater Network

	Level 1	Level 2	Level 3	Level 4
Inventory	Inventory data is incomplete.	Reliable inventory data exists for critical assets	Inventory data is complete for all assets in this asset class.	**Inventory data is complete, accurate, and in a centralized, accessible format.**
Condition	Condition data is incomplete.	**Condition data is complete for critical assets.**	Condition data is complete and accurate for all assets.	Condition data is complete, accurate, and regularly updated. Data is centralized and accessible.
Levels of Service	Services provided by this asset class are understood by departmental staff.	**Current levels of service have been defined and performance metrics are used to measure progress.**	Current levels of services are defined, tracked, and reported on a regular basis.	Proposed levels of service have been defined, and funding impacts are assessed. Trends in performance are tracked.
Risk	Critical assets and services are	Risk is estimated according to	**Risk models exist for assets in this asset class. Critical**	Risk management strategies are documented for all

	understood by department staff.	remaining service life.	**assets have been identified, and risk management strategies exist.**	assets, including level of resilience and risk tolerance.
Lifecycle Maintenance Strategy	Lifecycle activities required to maintain current levels of service are understood.	**Lifecycle activities required to maintain current levels of service are understood and documented.**	Costs of lifecycle activities and risks associated with deferred maintenance are documented.	Projected lifecycle maintenance needs are defined, funding shortfalls are identified, and risks associated with inadequate funding are documented.
Financial Sustainability Strategy	Budgets are based on prior year spending.	Prior year spending is adjusted to account for inflation and other variables.	**Asset replacement schedules have been built into the long-term capital forecast**.	Full lifecycle costs have been built into long-term forecasts. Demand forecasts inform the budget.

CONTINUOUS IMPROVEMENT

As can be gleaned in this section, the Township would benefit from the development of lifecycle management data, increased condition data, and regular updates for the stormwater asset category. In its current state, it is evident that the risk associated with operation of township stormwater network is relatively low.

The stormwater network operated by the Township of Centre Wellington represents a significant asset class with replacement values of approximately $102M. Given the distribution of these assets, and the current risk assessment of the stormwater network owned and operated by the Township, this particular asset segment is expected to receive a proportionate portion of both capital and operating allocations for the foreseeable future to address risk mitigation, levels of service, climate change, and replacement requirements.

This asset segment also presents an opportunity for the Township to address data maturation in terms of assessment of condition, full lifecycle costs, and further development of levels of service, to be better equipped to perform data-driven lifecycle interventions in support of delivering services for Township residents.

Key goals for this segment would include continuation of implementation of work order management systems and addressing capacity needs.

ASSET MANAGEMENT PLANNING MATURITY

The following diagram provides a maturity scale for the entire Township asset management planning process. This looks at not only asset data maturity, but the maturity of the entire process. The fifteen areas defined provide indications of where monitoring and continuous improvement is needed over time.

Figure 6-3
Asset Management Planning Maturity Analysis

Township staff have committed to a set of short/medium-term and longer-term targets in the ongoing improvement of the Township asset management planning process, to ensure that future asset management plans increase in accuracy and quality.

Table 6-1
Asset Management Planning Short/Medium-Term Targets

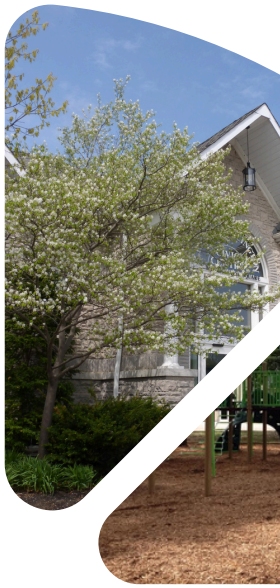
Short/Medium-Term Targets
a) Continued compliance with Ontario Regulation 588/17: - Update the Township's Strategic Asset Management Policy at least every 5 years - Review and update the Township's Asset Management Plan at least every 5 years - Annual review of asset management process with Council before July 1st b) Full implementation of asset management software, including predictive modelling of future lifecycle cost needs. c) Development and refinement of asset management procedures and processes to ensure asset data completeness and accuracy. d) Integrate data from various studies, reports, and systems in a centralized asset registry database. e) Full integration of risk assessments and the levels of service framework into the asset management software, generating outputs for future asset management plans.

Table 6-2
Asset Management Planning Long-Term Targets

Long-Term Targets
a) Data Governance Strategy: Developing a standardized approach to data maintenance and ownership across the organization. b) Integration of asset data used for asset management purposes into the Township's Capital Budget and 10-year Capital Forecast. c) Integration of Township Strategic Planning and Master Planning documents into future asset management planning processes. d) Refine funding assumptions to reflect improved data availability and incorporation of updated lifecycle cost models. e) Development and implementation of a Public Engagement Strategy specific to asset management planning.

CHAPTER SEVEN

CONCLUSIONS & RECOMMENDATIONS



CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The backbone of the Township's asset management planning practices is an understanding of the services and service levels expected and how Township assets assist in providing these services. A balance is required between providing high levels of service and the costs associated with those services. From an asset funding perspective, a balance is needed between financing the cost of implementing asset management recommendations and the risk associated with deferring lifecycle costs.

Asset management planning is a journey that with evolve over time as new data, assumptions and strategies are brought forward. Recommendations are provided that will assist in this evolution and will ensure the Township is constantly moving forward with this initiative.

RECOMMENDATIONS

The table below provides a summary of recommendations that were outlined in each chapter. It is important to note that these recommendations will need to be brought forward into other processes for ultimate approval, such as the annual budget process.

Table 7-1
Summary of Recommendations

Chapter Reference	Description
Overall	Recognize that asset management planning is a journey that requires continuous improvement and updates.
Chapter 3	Consider the costs associated with providing services at expected levels when developing the annual budget.
Chapter 4	Consider the following when developing the annual budget: a) All asset management related costs (non-infrastructure solutions and lifecycle costs) required to provide Township services. b) The risks (both corporate and asset related) of deferring various asset lifecycle costs. c) The impacts of demand on Township assets, including anticipated growth. d) Recognition that "critical assets" play a significant role in providing services and have a high consequence of failure. e) Priority assets represent assets in each category with the highest asset risk, and future short/medium-term lifecycle costs should focus on these assets.
Chapter 5	Consider the following when developing the annual budget: a) Staff to closely monitor external sources of funding trends, given the associated risks of relying on this funding from an asset management perspective. b) OCIF funding received will continue to be dedicated to bridge, culvert, and roads related rehabilitation and replacement needs.

	c) The OLG Allocation Policy is to be reviewed annually to maximize funding available for asset management purposes. d) Planned debt payments over the ten-year capital forecast are not to exceed 15% of Township revenues. e) A proportion of annual taxation assessment growth is to be allocated to asset investment as outlined in chapter 5. f) To provide meaningful increases in tax supported asset investment over time, an annual increase equivalent to a 2.0% increase in taxation is needed. Other available funding increases, such as a proportion of assessment growth would reduce the net impact on taxation. g) To continue to follow Water and Wastewater Rate Study recommended rate increases.
Chapter 6	Continue to monitor and continuously improve Township asset management planning practices. a) Continue to work with the County and associated lower-tier municipalities in the advancement of asset management planning. b) Continuous improvement of asset data quality (i.e. completeness and accuracy) for all asset categories over time. c) Progression of short/medium-term and long-term continuous improvement targets.

2025 ASSET MANAGEMENT PLAN

APPENDICIES

Appendix A

Glossary and Key Concepts

Asset – An asset is an item, thing, or entity that has potential or actual value to the Township. Examples include roads, bridges, buildings, vehicles, and equipment.

Asset Management Committee – The committee of Township staff appointed by an organization to review and monitor Asset Management Planning practices and ensure the development of integrated Asset Management systems, processes, and plans consistent with organizational goals and objectives. The Team consists of representatives from every Township department and reports to the Senior Management Team.

Asset Management Planning – The coordinated activities of an organization to realize value from its assets in providing services to residents and businesses. It is an integrated set of processes and practices that minimize lifecycle costs of owning, operating, and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service. This includes the Strategic Asset Management Policy, Asset Management procedures/processes, and the Asset Management Plan

Asset Management Plan – A document that outlines the long-term approach to asset management planning at a specific point in time. The Asset Management Plan is reviewed every five years. Some information within the plan, such as the condition assessment of some assets, characteristics, and asset values, may be updated more frequently.

Asset Management System – An Asset Management System combines processes, data, software, and hardware in order to provide the necessary outputs for effective Asset Management Planning.

Asset Register – Provides a complete list of assets owned by the Township. Components of the register may reside in a number of locations, depending on whether the assets are tracked at the corporate or departmental level.

Asset Risk – The risk of an asset failing to perform in the provision of Township services. The formula of Probability of Failure (Pof) multiplied by Consequences of Failure (CoF) is used to quantify this.

Climate Change – Climate change is a long-term shift in weather conditions identified by changes in temperature, precipitation, winds, and other indicators. Climate change involves both changes in average conditions, as well as changes in variability, including the frequency of extreme events.

Components – Specific parts of an asset having independent physical or functional identity, and having specific attributes such as different useful life, maintenance plan, and asset risk calculation. Complex assets, such as buildings, are often broken down into components for asset management purposes, to reflect the differing needs of various components.

Condition – The physical state of an asset.

Condition Assessment – The inspection, assessment, measurement, and interpretation of the resultant data, to indicate the condition of a specific asset or component, so as to determine the need for preventative or remedial action.

Consequence of Failure (CoF) – The impact of an asset failing to an organization. This is typically tied to impacts related to the environment, social, or financial.

Critical Assets – Those assets that are likely to result in a more significant financial, environmental, and social impact should they fail. The maintenance of these assets is a priority.

Demand Management – Actions taken to influence demand for services and assets, often undertaken as part of sustainability initiatives and/or to avoid or defer required asset investment. It includes forecasting future demand, and proactively taking action to mitigate the risk of service disruptions by enhancing capacity to meet demand.

Deterioration Curve – The rate at which an asset approaches the end of its useful life, represented by a curve. With no intervention (e.g. repair or rehabilitation), the rate of deterioration increases as assets near the end of their useful life. The deterioration curve differs for each asset class and can differ for assets within the same class, based on usage, construction materials, weather, etc.

Financial Sustainability – The ability to provide and maintain service and infrastructure levels without resorting to unplanned increases in rates or cuts to service. It is the ability to meet present needs without compromising the ability to meet future needs.

Gap Analysis – A method for assessing the gap between an organization's current Asset Management practices and the future desirable Asset Management practices, or best (optimal) practices.

Geographic Information System (GIS) – A computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface. It can show many different kinds of data on one map. This enables people to see, analyze, and understand patterns and relationships.

Historical Cost – The purchase price or construction cost of an asset, in the year it was purchased or constructed.

Infrastructure Deficit (or Gap) – The cumulative shortfall of required asset renewal.

Key Performance Indicator (KPI) – A metric that is used in alignment with a business objective. It is often used as a comparator with a range of thresholds that identify a desirable or undesirable state.

Levels of Service – Describe the outputs or objectives that an organization or activity intends to deliver to customers. This includes commonly measured attributes such as quality, reliability, responsiveness, sustainability, timeliness, accessibility, and cost. Levels of Service can be a measure, metric, or a KPI, depending on the context in which it is used. It is a vale that represents a desired or undesired state of services being provided.

Lifecycle Cost – The total cost of an asset throughout its useful life. This includes costs related to planning, design, construction, acquisition, operation, maintenance, rehabilitation, replacement, and disposal.

Maintenance – Routine operational activities to keep the asset operating effectively. The costs associated with maintenance activities are built into departmental operating budgets. This includes both corrective and preventative maintenance.

Mitigation – Measures taken in advance of negative events, risk, or disasters, to reduce their impacts.

Preventative Maintenance – Activities undertaken on a regular basis to ensure and asset is able to provide the expected service. These activities are typically planned and are intended to reduce the probability of failure or breakdown. Maintenance does not increase the service potential of the asset or keep it in its original condition, however it slows down deterioration and delays when rehabilitation or replacement is necessary.

Probability of Failure (PoF) – The likelihood of an asset failing. This is typically tied to asset attributes such as condition or usage.

Performance Measure – A qualitative or quantitative measure used to measure actual performance against a standard or other target. Performance measures are used to indicate how the organization is doing in relation to delivering levels of service.

Public Engagement – The process by which residents, businesses, and other stakeholders are invited to provide input into asset management planning objectives of the municipality.

Rehabilitation – Work to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its remaining life. Generally, involves repairing the asset to deliver its original levels of service without resorting to significant upgrading or replacement.

Reserve – A reserve is an allocation of accumulated net revenue set aside for a designated purpose. Funds held in a reserve can be utilized at the discretion of Council. Reserves do not earn interest.

Reserve Fund – A reserve fund is established based on a statutory requirement (i.e. obligatory) or a defined future use established by Council (i.e. discretionary). It is prescriptive as to the basis for collection and use of funds in the reserve fund. All earnings derived from reserve fund investments form part of the reserve fund.

Replacement – The complete replacement of an asset that has reached the end of its useful life.

Replacement Cost - The cost that would be incurred to replace the asset with a new modern equivalent asset (not a second hand one) with the same economic benefits (gross service potential). The replacement value can be calculated by a number of methods:

Method	Description
Insurance Values	Replacement costs as identified in the most recent insurance contract
Engineer Condition Assessment	Replacement costs identified by external consultants from condition assessments or from engineering inspections of assets
Historical Cost Inflation	The historical cost of an asset inflated to the current dollar value
Current market cost	Use of recent acquisition or construction costs

Risk Management – The iterative process of identifying and assessing risks, identifying and evaluating actions that can be taken to reduce risk, and implementing the appropriate actions to mitigate risk.

Stakeholder – A person or entity that can affect, be affected by, or perceive themselves to be affected by a decision or activity.

Strategic Plan – A document outlining the overall strategic direction and goals of the Township. Typically updated every 4 years with a new term of Council.

Strategic Asset Management Policy – A strategic policy developed and approved at the Township that outlines the objectives of Asset Management Planning and the processes and procedures that enable the realization of those objectives. This document is required to be reviewed and updated every 5 years.

Useful Life – The period of time over which an asset is expected to provide service.

User Fee – Fee or charge to individuals or groups and/or businesses for the provision of a service, activity or product, or for conferring certain rights and privileges, which grant authorization or special permission to a person, or group of persons to access Township owned resources or areas of activity.

Appendix B

Maps

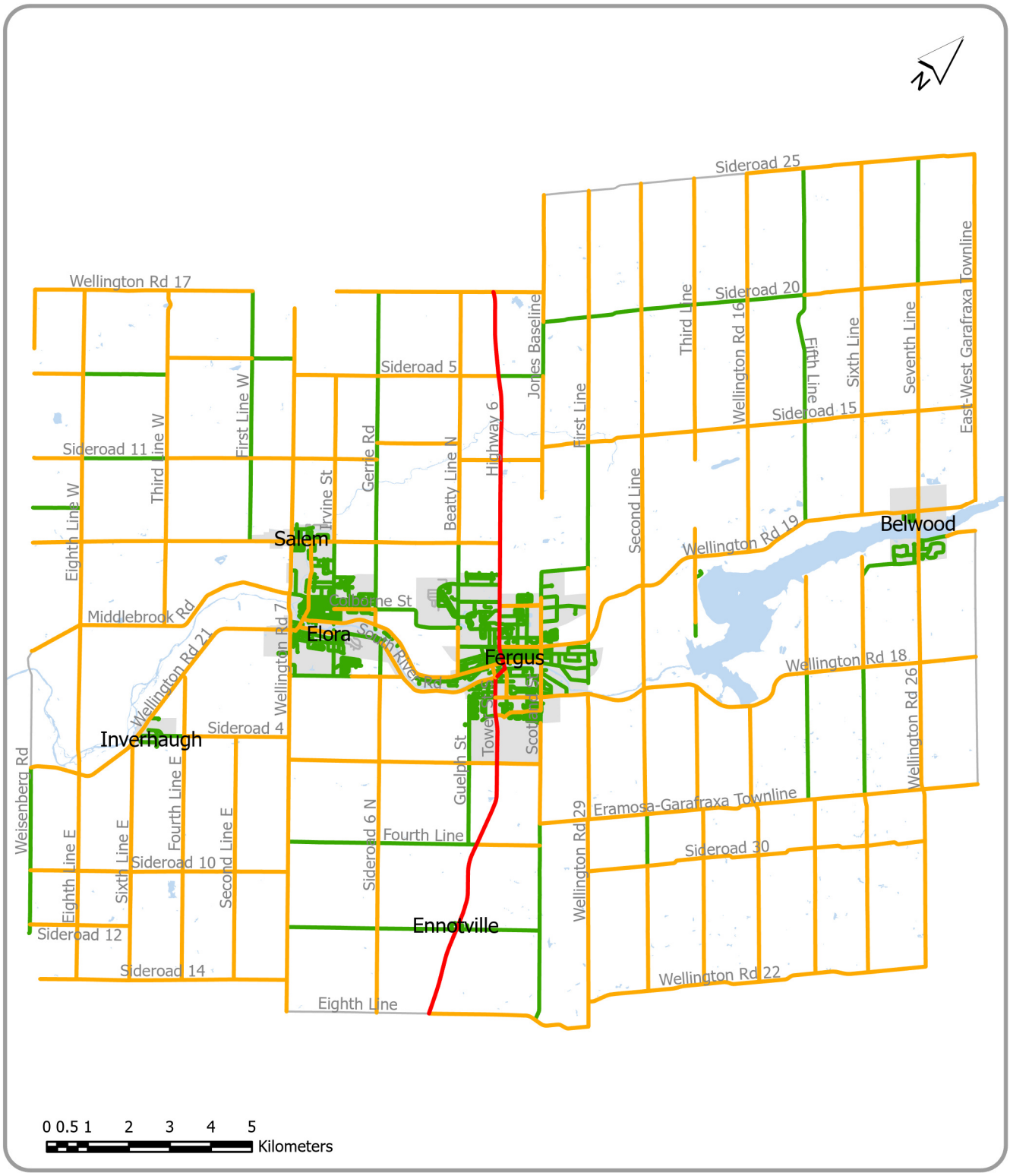


Figure B-1
Road Connectivity

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

Road Connectivity

- Local
- Collector
- Arterial
- No Data
- Urban Areas & Hamlets
- Waterbody

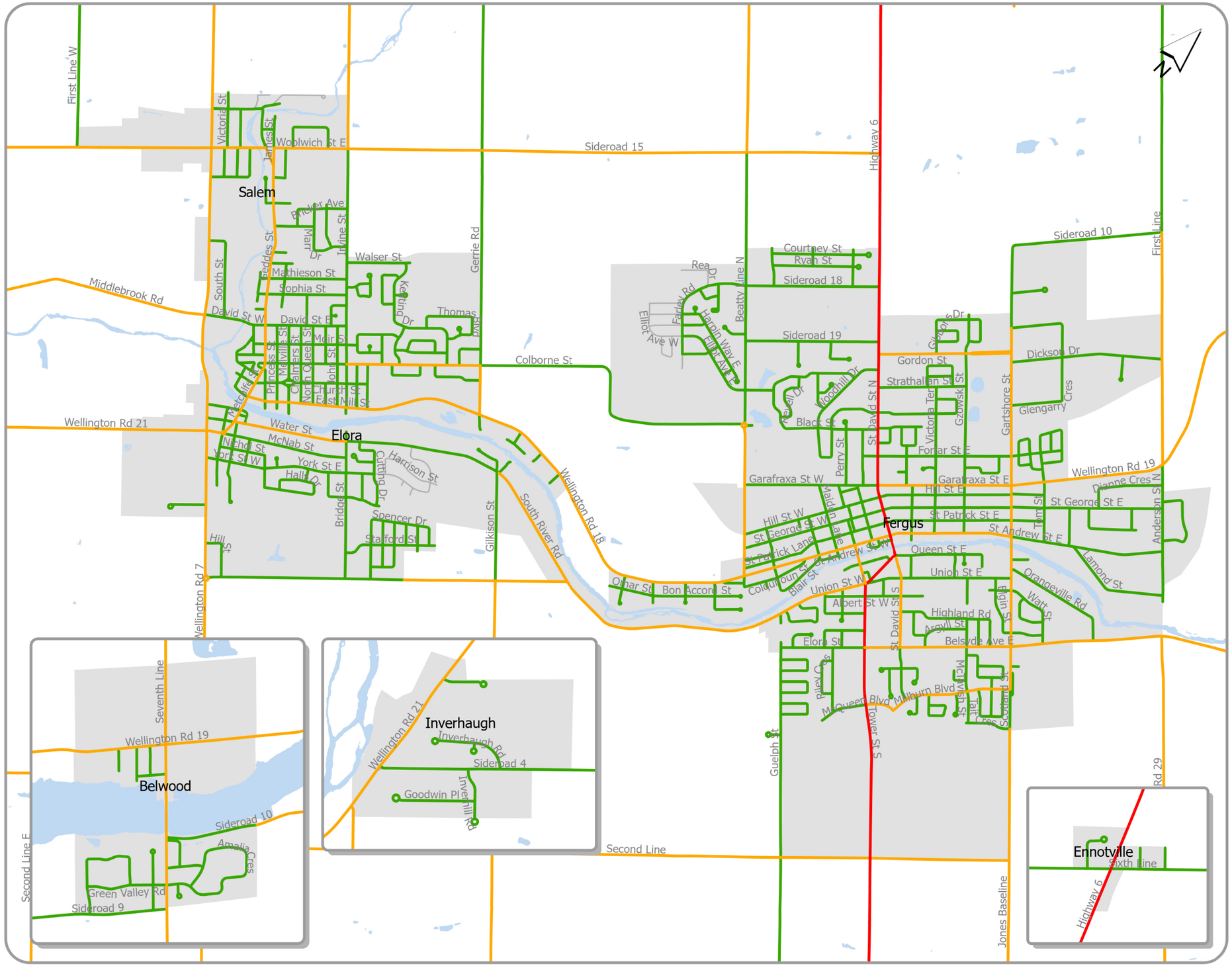


Figure B-2

Road Connectivity

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

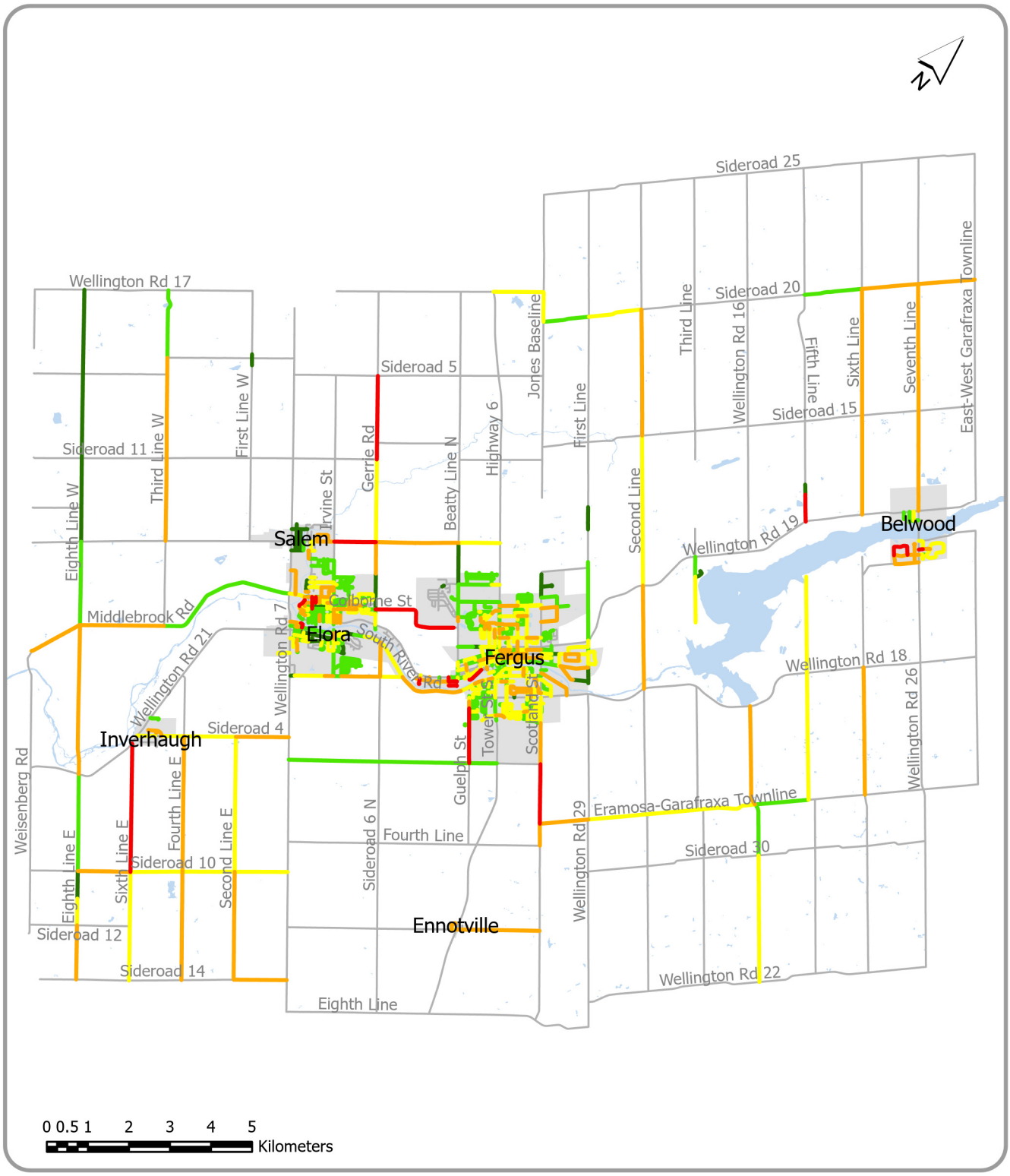


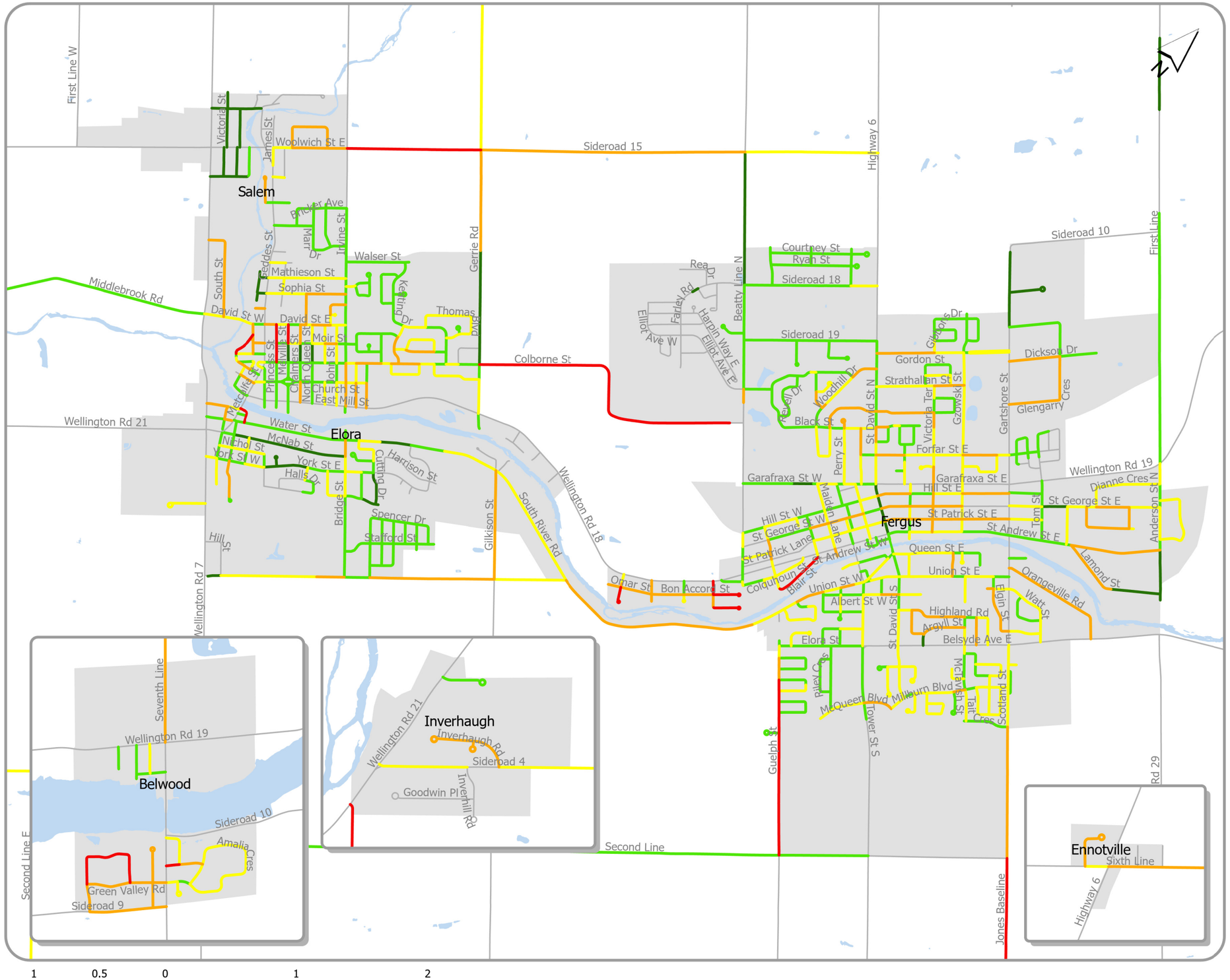
Figure B-3
Paved Road Surface
Asset Management Plan
2025
Township of Centre Wellington

Centre Wellington

Paved Road Surface - Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor
- No Data/Gravel Road/County Road

- Urban Areas & Hamlets
- Waterbody



Paved Road Surface Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor
- No Data/Gravel Road/County Road

- Waterbody
- Urban Areas & Hamlets

Figure B-4

Paved Road Surface Condition

Asset Management Plan 2025

Township of Centre Wellington

Centre Wellington

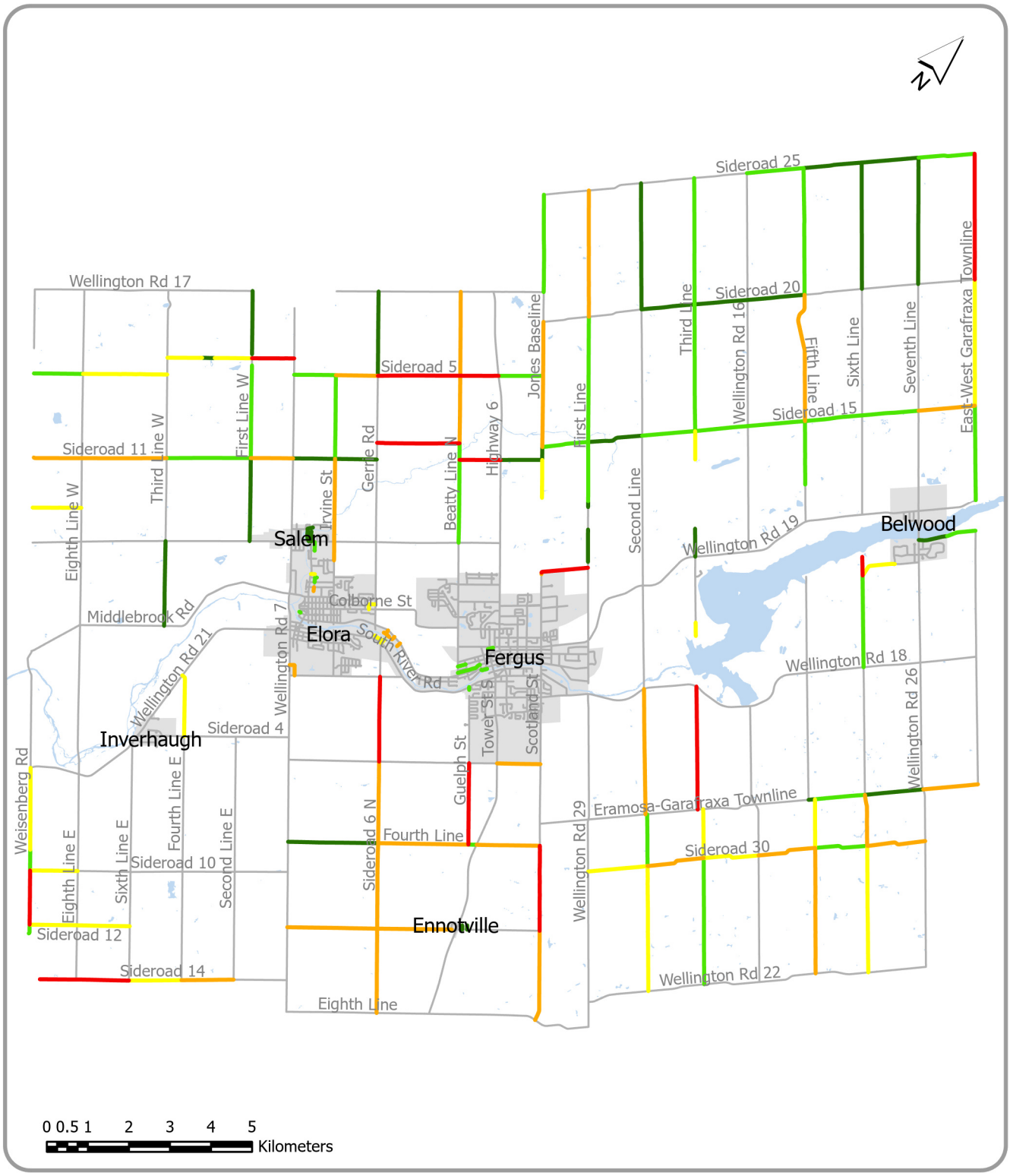


Figure B-5
Gravel Road Surface
Asset Management Plan
2025
Township of Centre Wellington

Centre Wellington

Gravel Road Surface - Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor
- No Data/Paved Road/County Road
- Urban Areas & Hamlets
- Waterbody

Gravel Road Surface Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor
- No Data/Paved Road/County Road

- Waterbody
- Urban Areas & Hamlets

Figure B-6

Gravel Road Surface Condition

Asset Management Plan 2025

Township of Centre Wellington

Centre Wellington

1 0.5 0 1 2 Kilometers

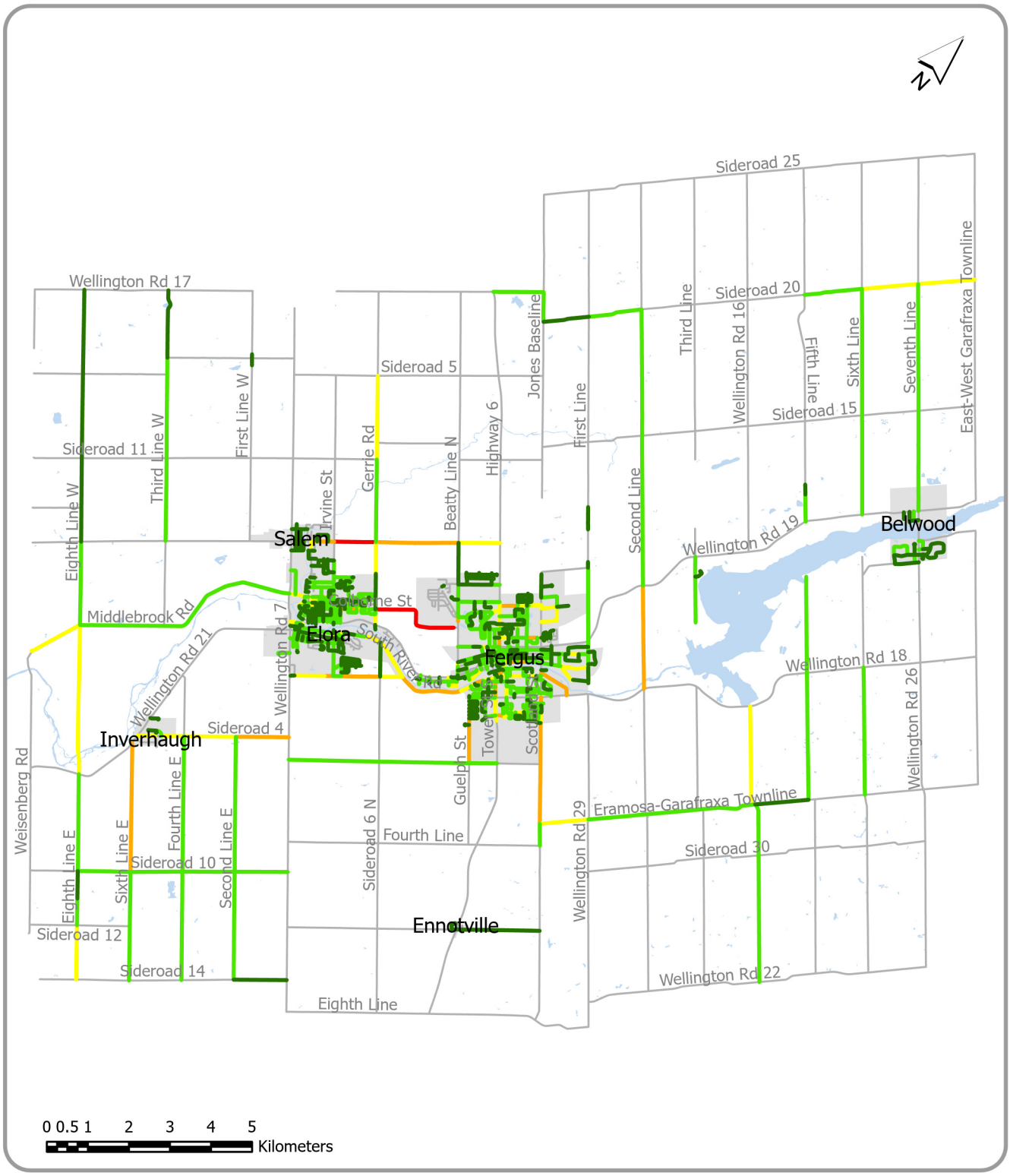


Figure B-7
Paved Road Surface

Asset Management Plan

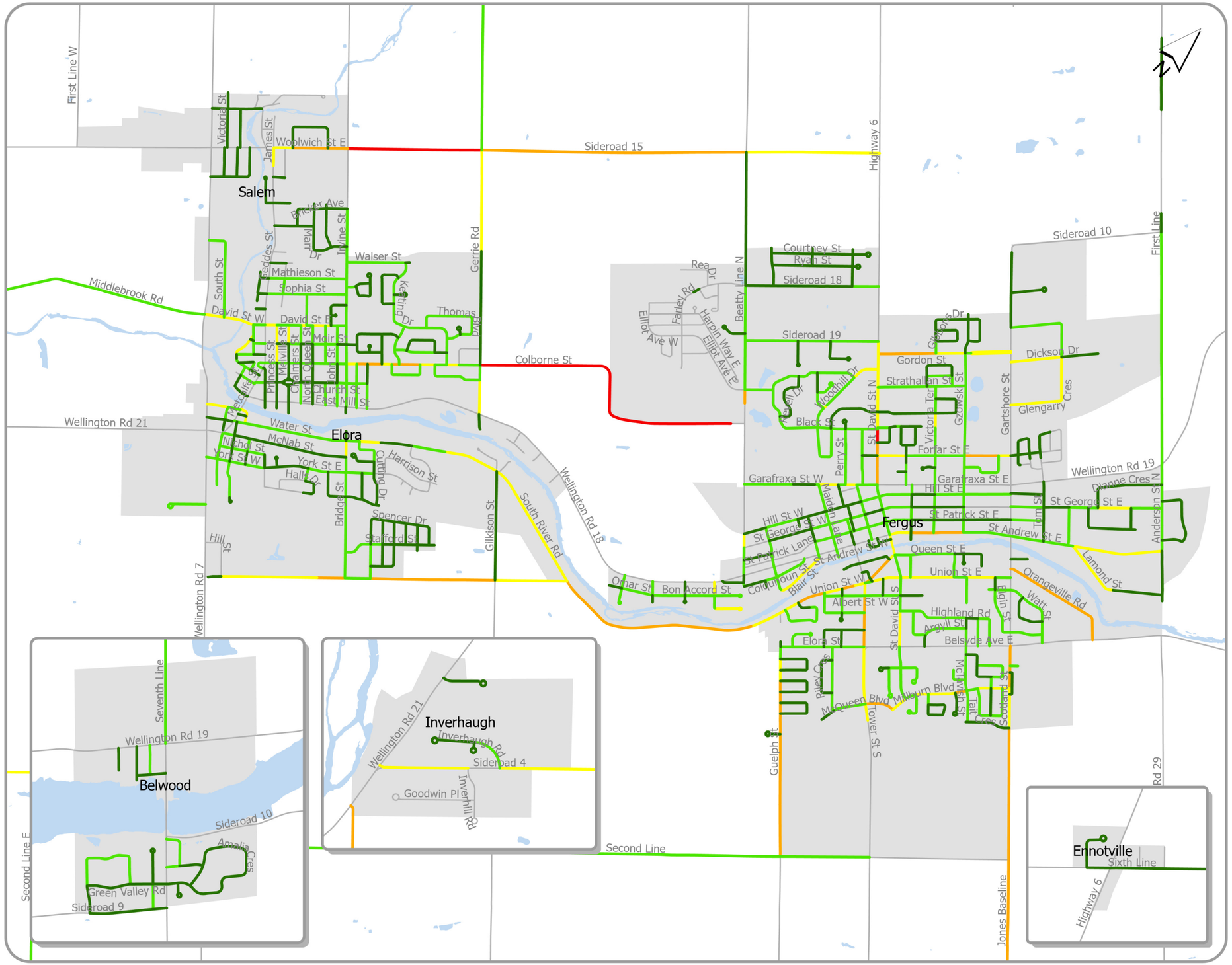
2025

Township of Centre Wellington

Centre Wellington

Paved Road Surface - Risk

- Very Low
- High
- Moderate
- High
- Critical
- No Data/Gravel Road/County Road
- Urban Areas & Hamlets
- Waterbody



Paved Road Surface

Risk

- Very Low
- Low
- Moderate
- High
- Critical
- No Data/Gravel Road/County Road

- Waterbody
- Urban Areas & Hamlets

Figure B-8

Paved Road Surface
Risk

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

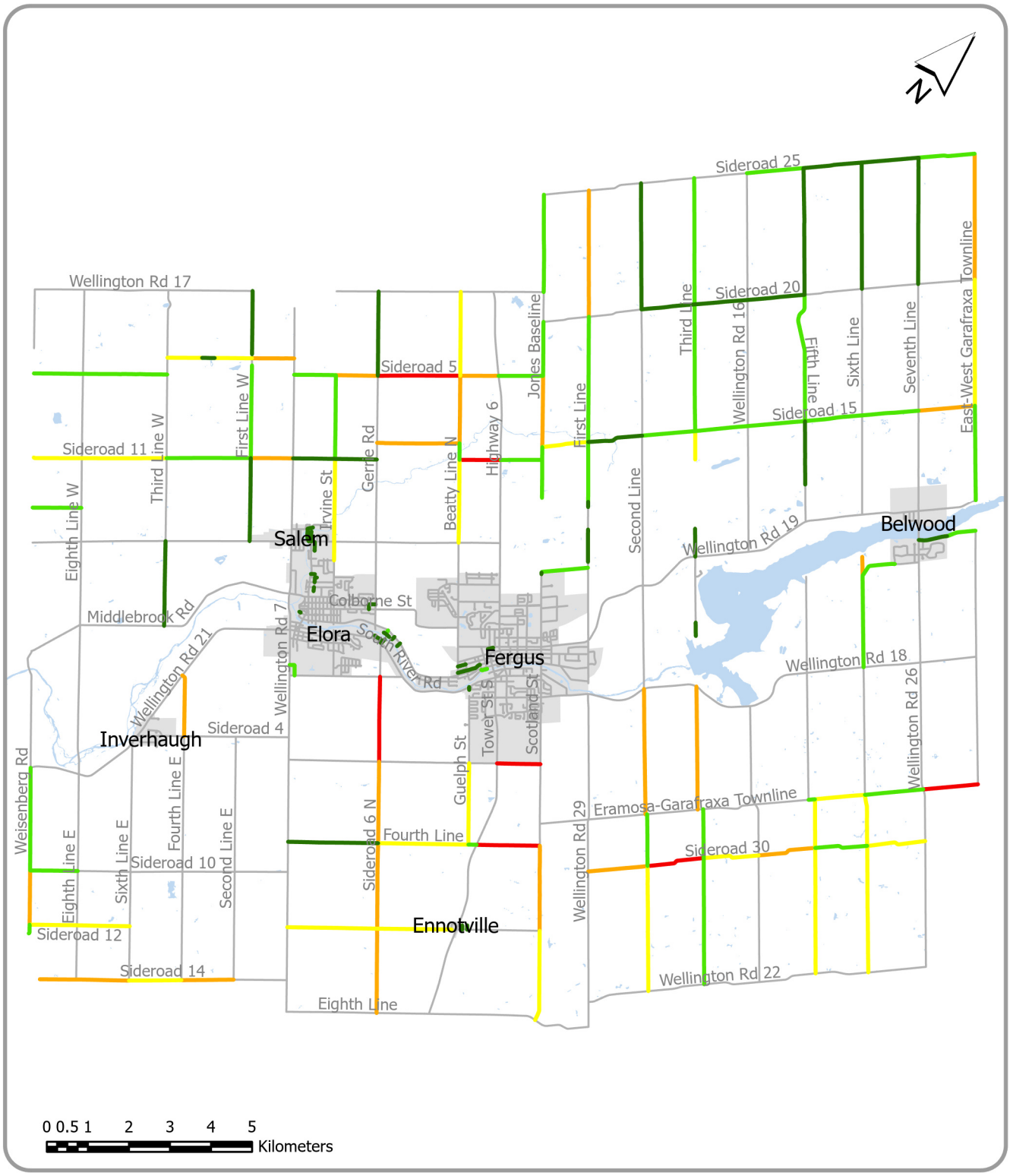
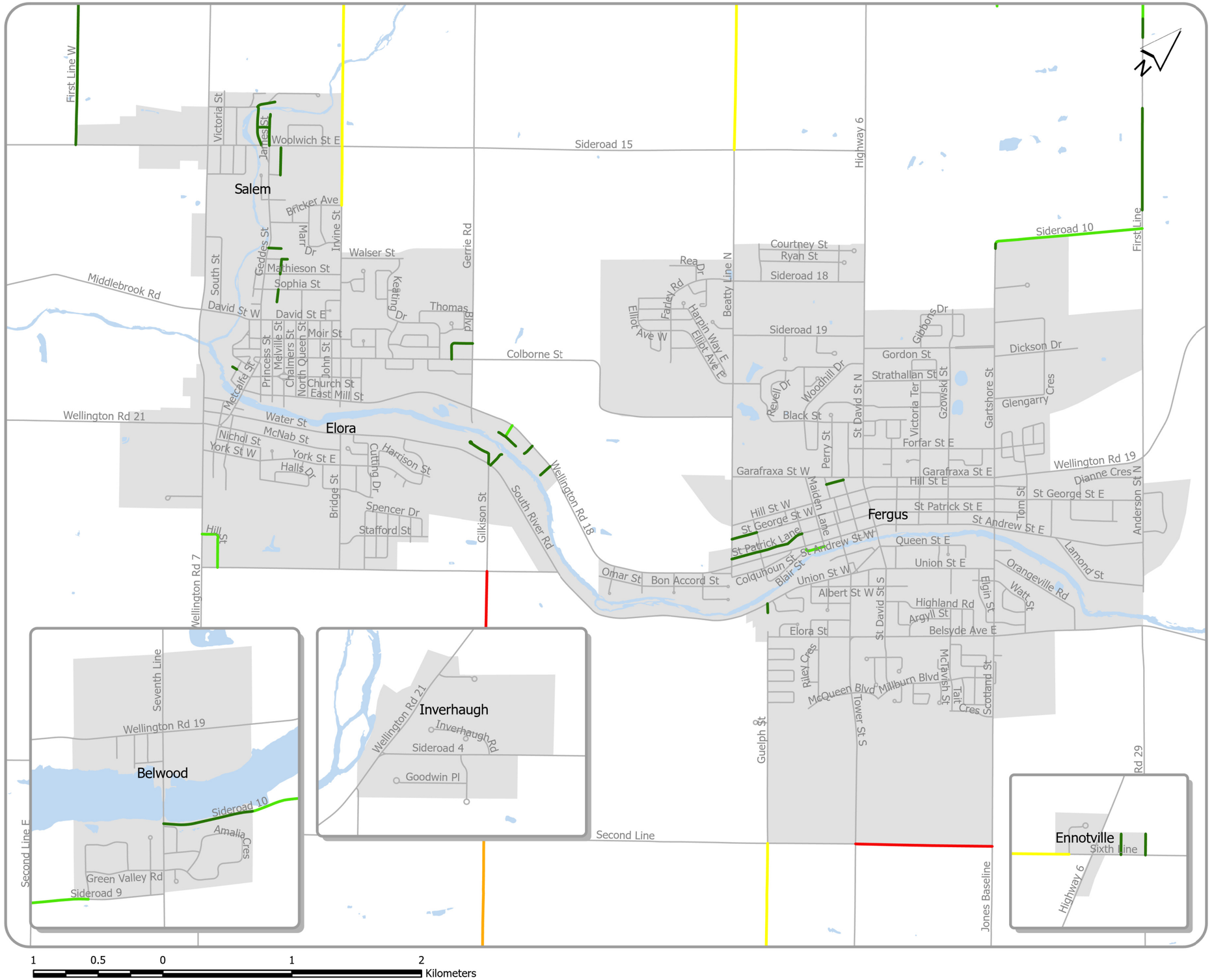


Figure B-9
Gravel Road Surface
Asset Management Plan
2025
Township of Centre Wellington

Centre Wellington

Gravel Road Surface - Risk

- Very Low
- Low
- Moderate
- High
- Critical
- No Data/Paved Road/County Road
- Urban Areas & Hamlets
- Waterbody



Gravel Road Surface Risk

- Very Low
- Low
- Moderate
- High
- Critical
- No Data/Paved Road/County Road

- Waterbody
- Urban Areas & Hamlets

Figure B-10

Gravel Road Surface Risk

Asset Management Plan 2025

Township of Centre Wellington

Centre Wellington

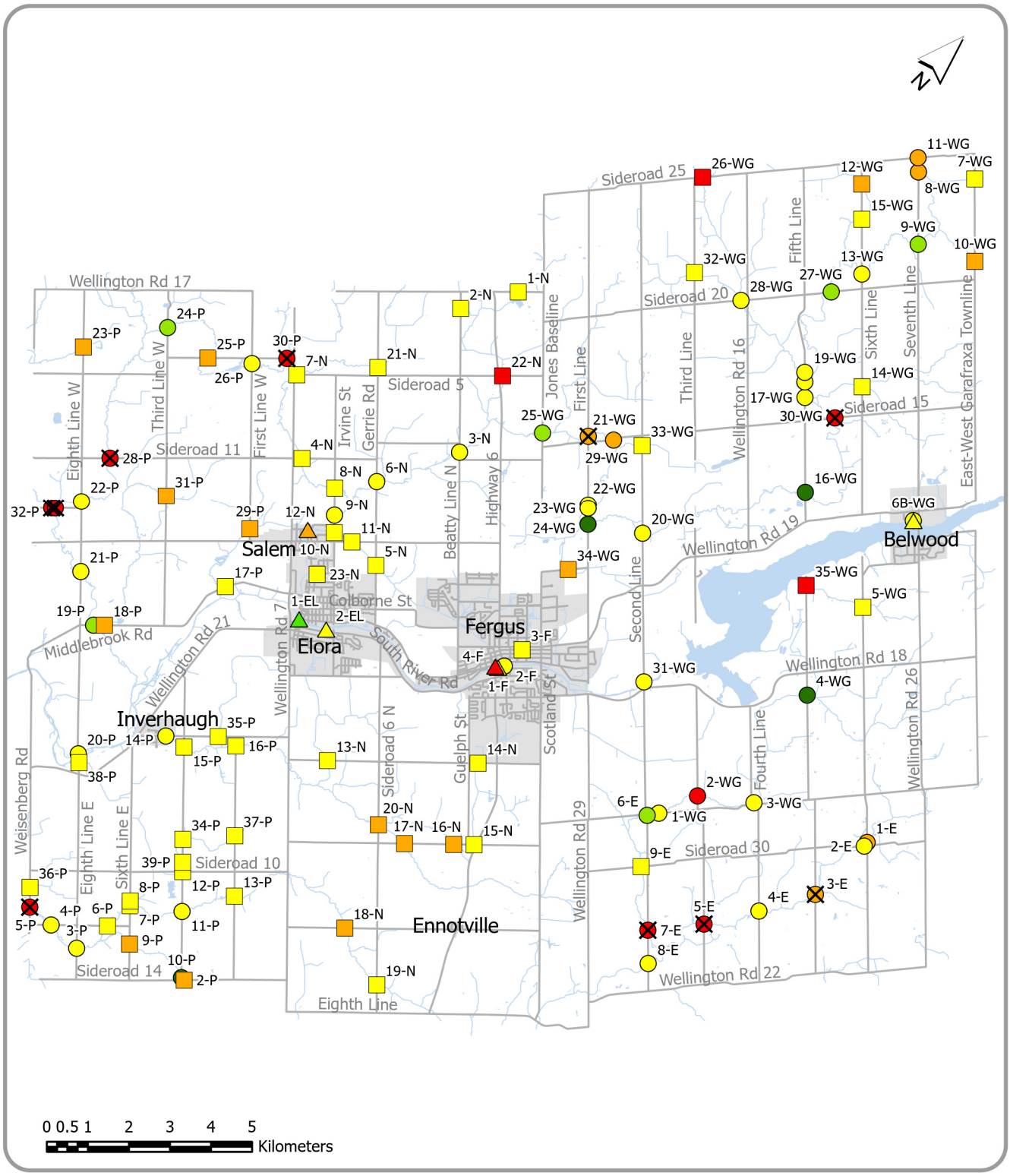


Figure B-11
Bridges & Culverts

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

Bridges & Culverts

Condition

- Very Good
- Good
- Poor
- Very Poor

- Closed Bridge/Culvert
- Bridge
- Culvert
- Pedestrian Bridge
- Urban Areas & Hamlets
- Waterbody
- Watercourse

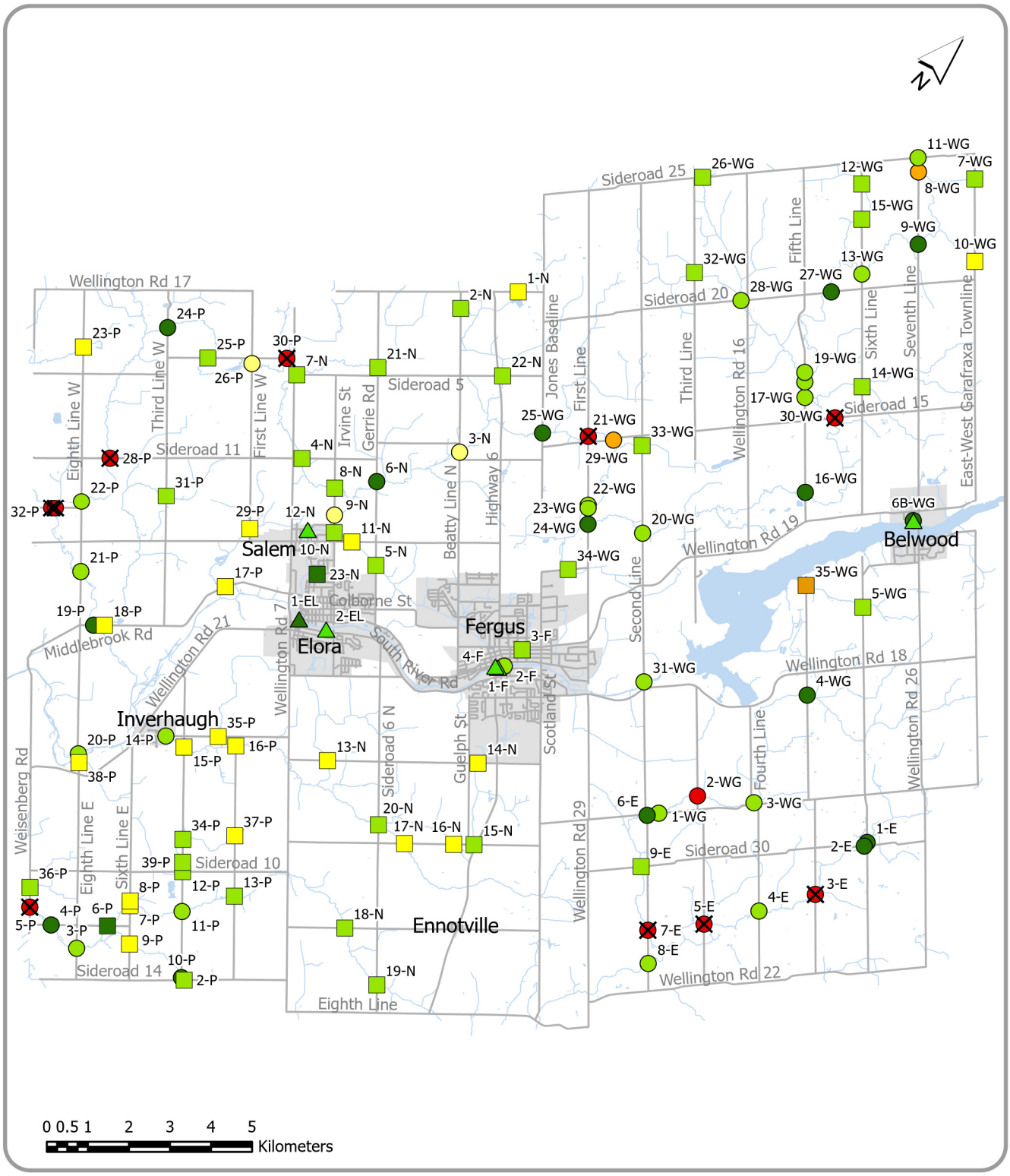


Figure B-12
Bridges & Culverts

Asset Management Plan

2025

Township of Centre Wellington

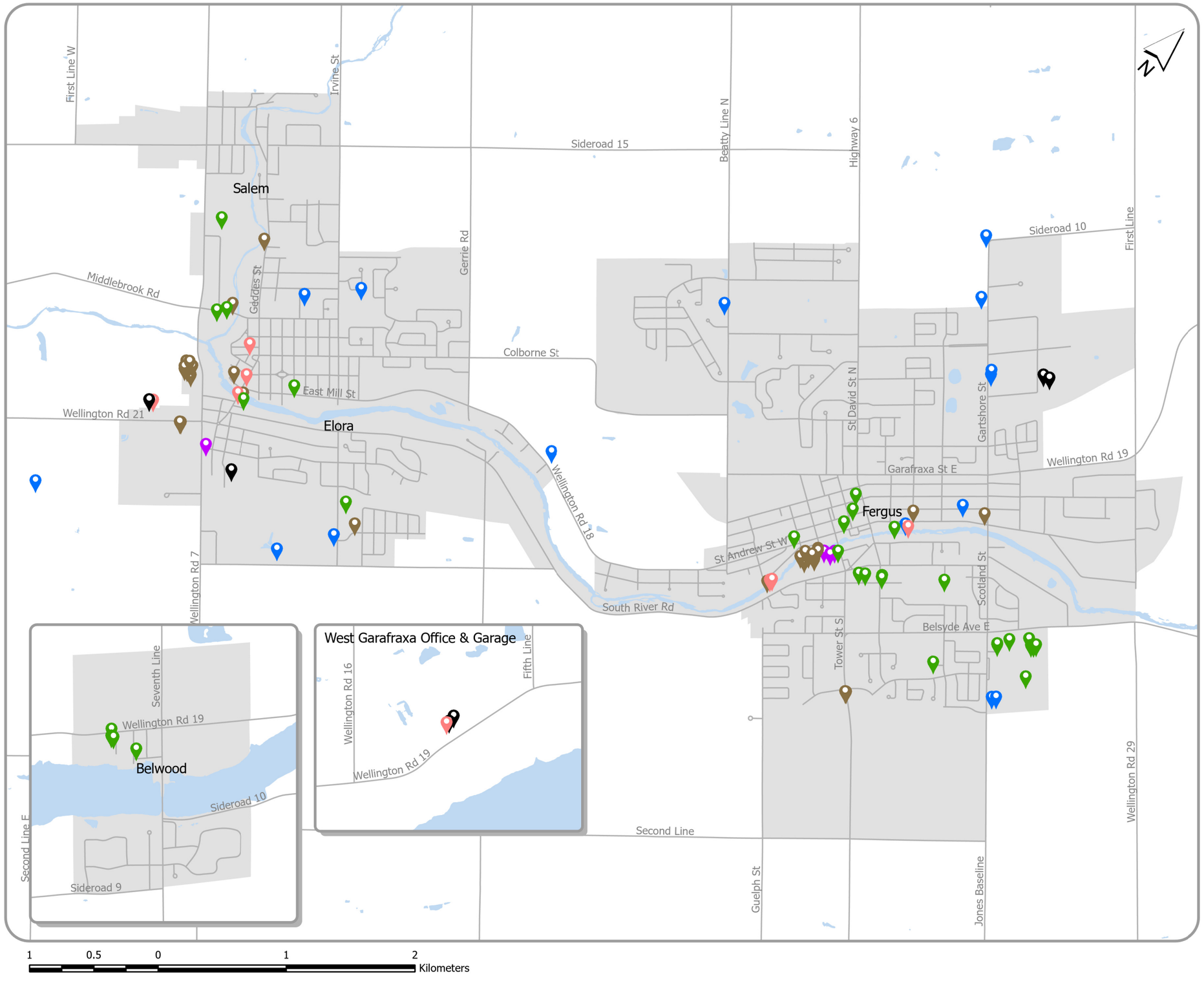
Centre Wellington

Bridges & Culverts

Risk

- Very Low
- Low
- Moderate
- High
- Critical

- Closed Bridge/Culvert
- Bridge
- Culvert
- Pedestrian Bridge
- Urban Areas & Hamlets
- Waterbody
- Watercourse



Structure Type

- General Government
- Public Works Garage
- Sanitary Sewer Structure
- Water System Structure
- Community Services Structure
- Emergency Services Structure

- Waterbody
- Urban Areas & Hamlets

Figure B-13

Facility Locations

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

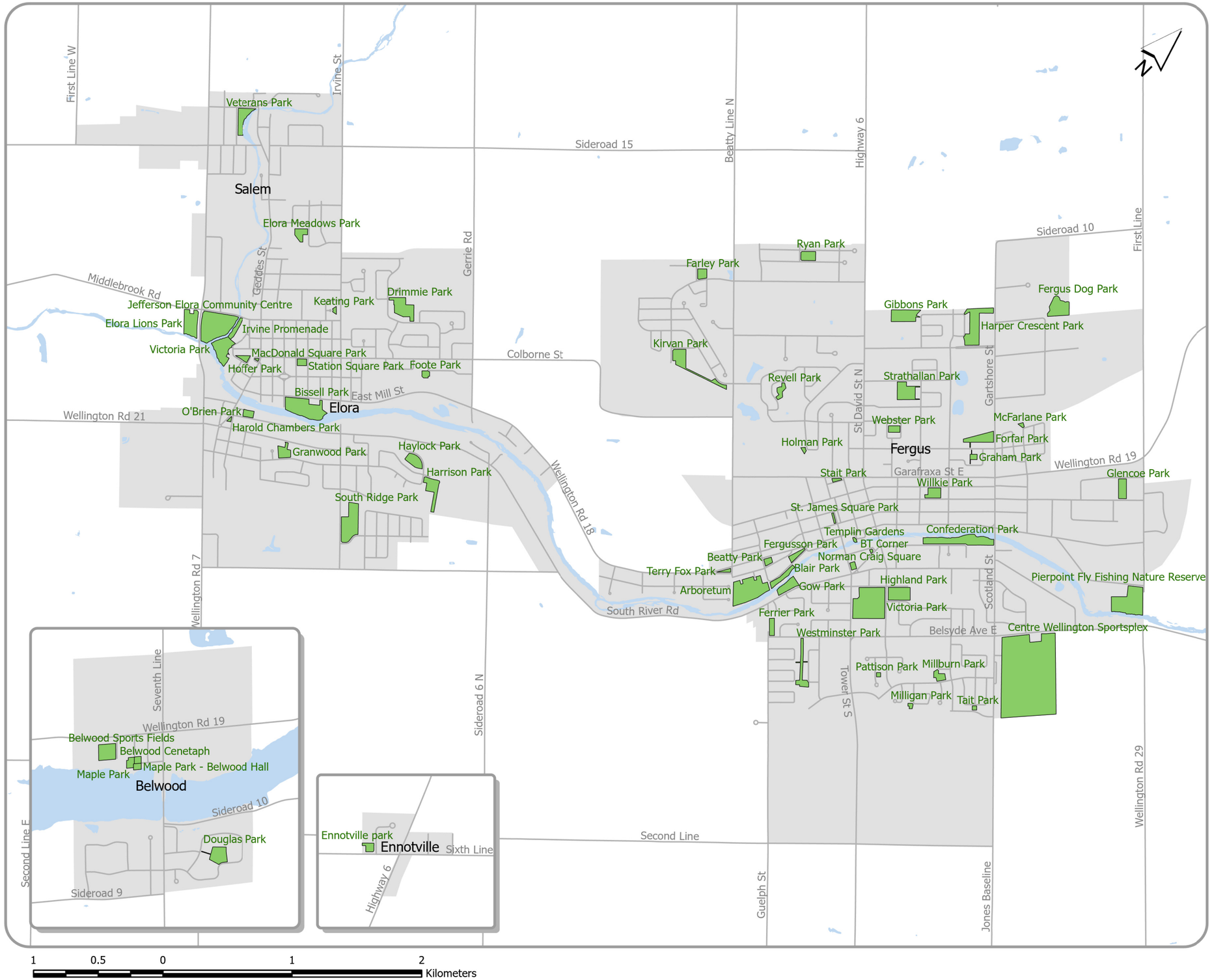


Figure B-14

Park Land

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

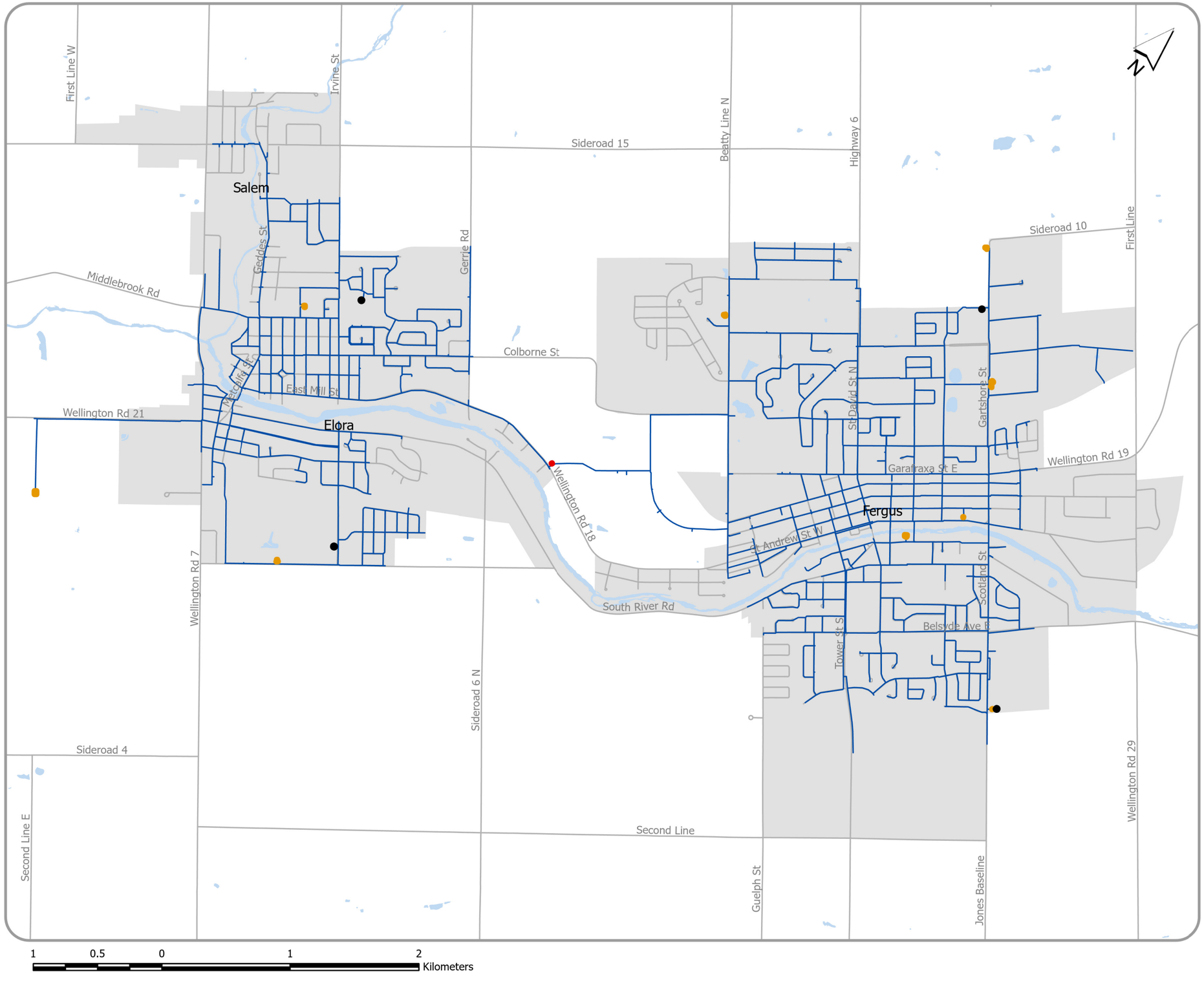


Figure B-15

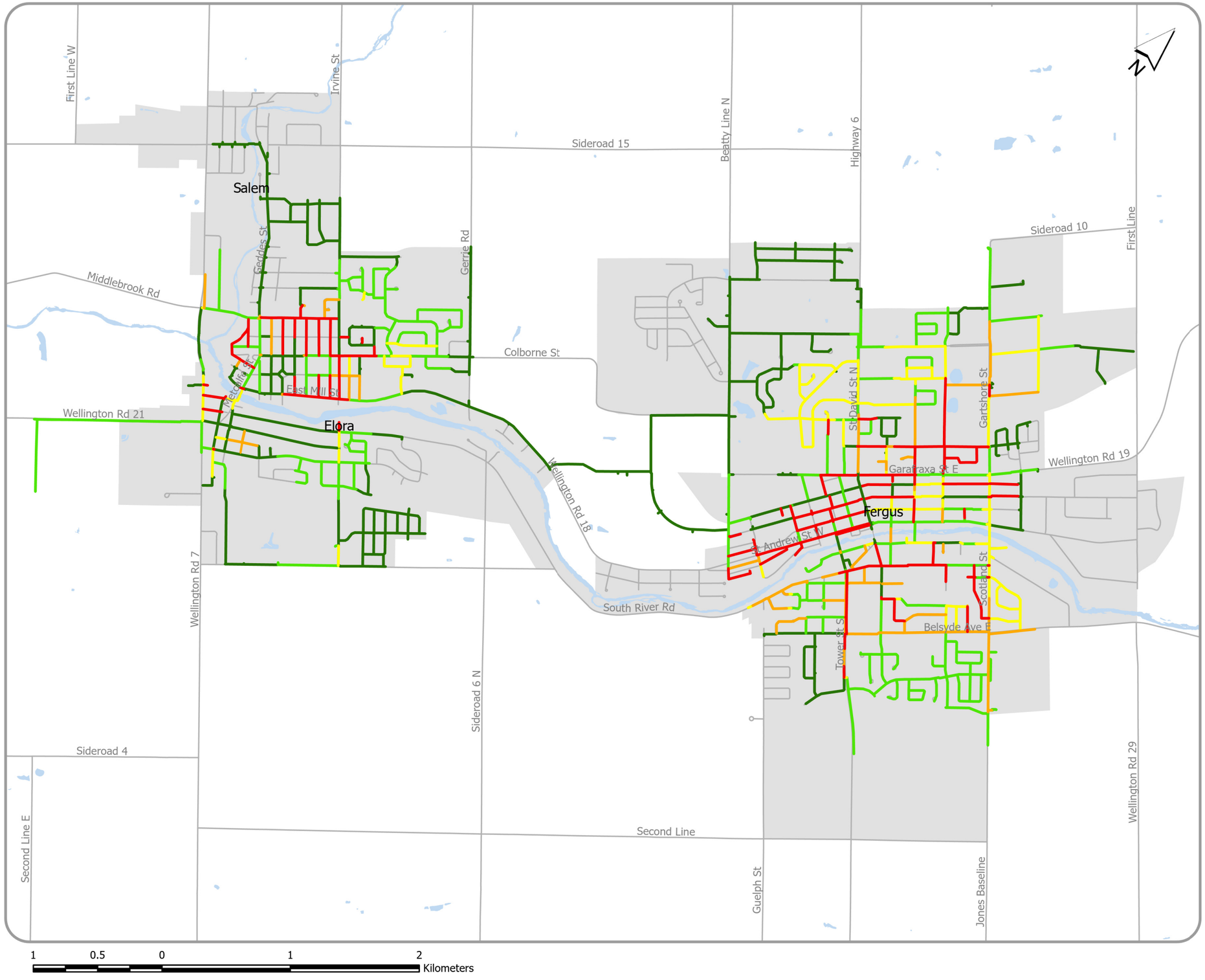
Water System Overview

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Watermains

Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-16

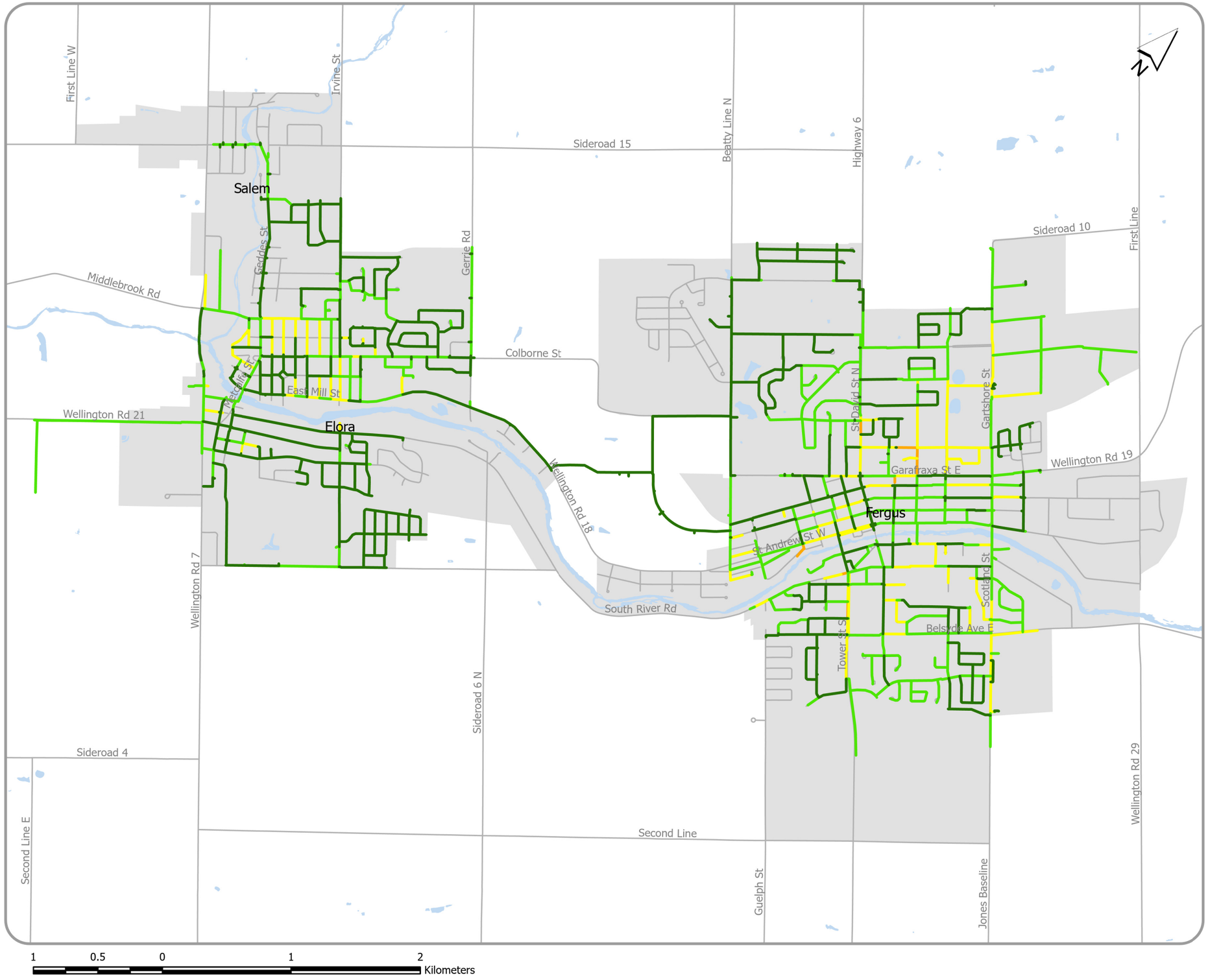
Watermains - Condition

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Watermains

Risk

- Very Low
- Low
- Moderate
- High
- Very High

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-17

Watermains - Risk

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

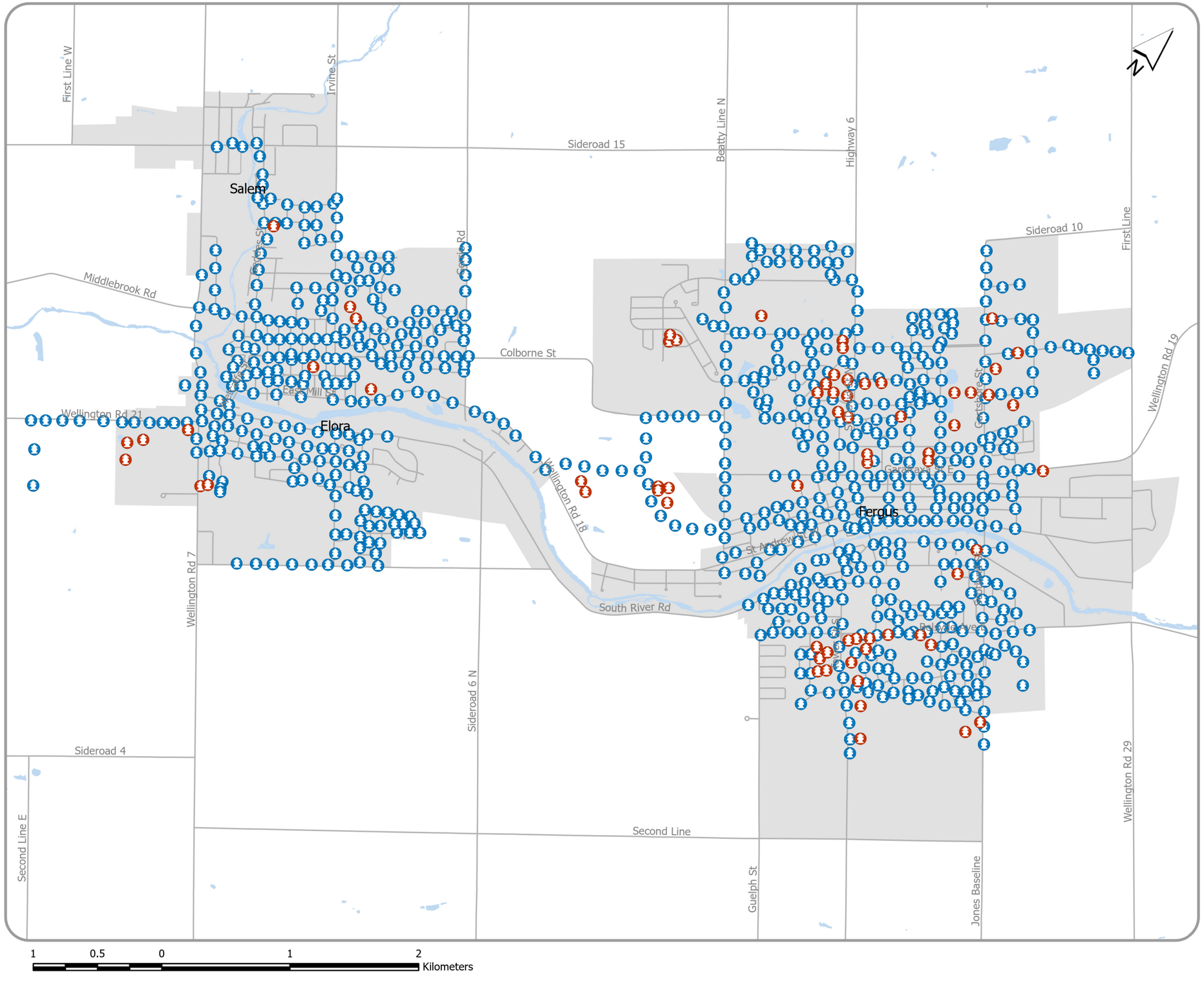


Figure B-18

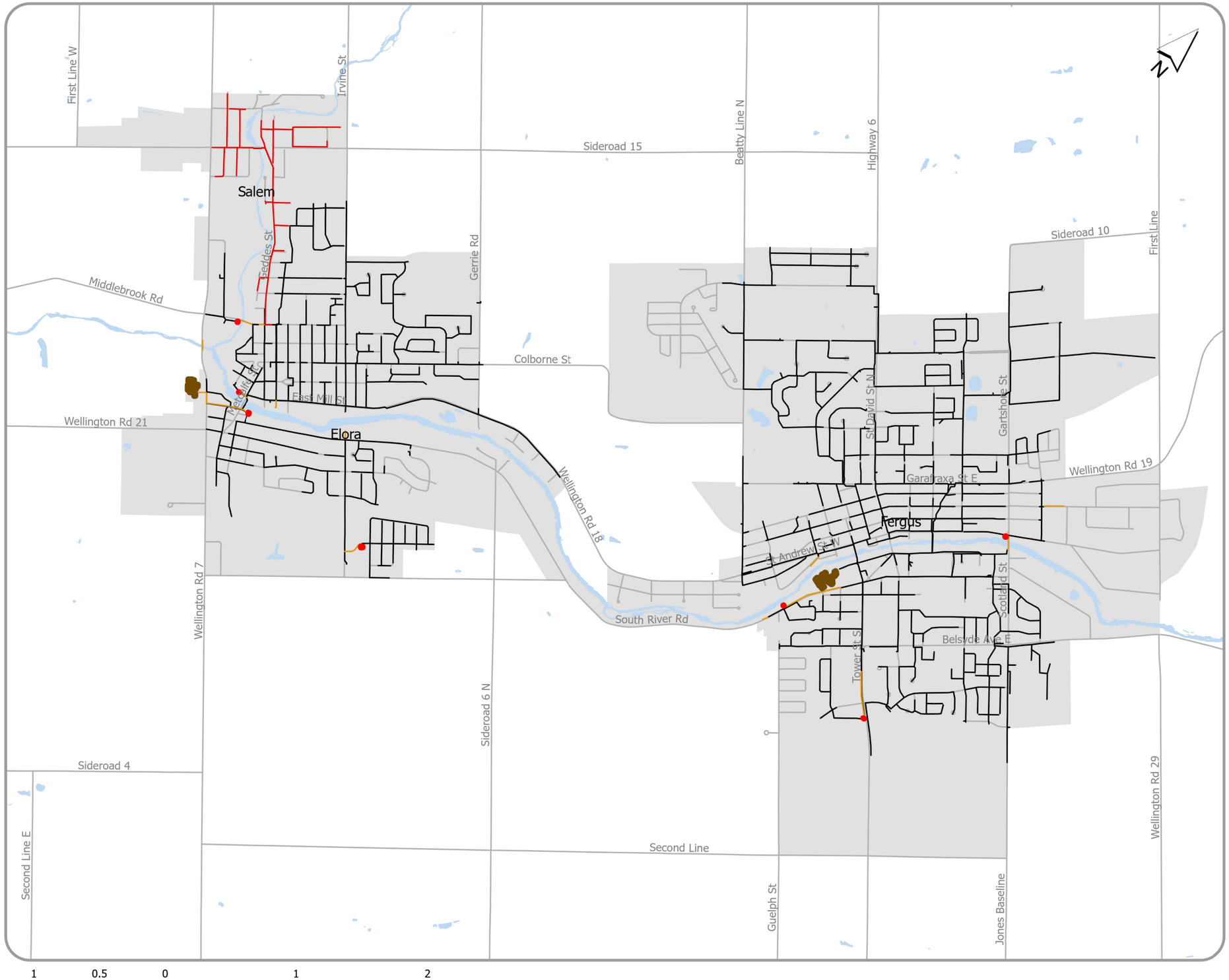
Water System
Hydrant Location

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



- Treatment Plant
- Lift Station
- Gravity Wastewater Main
- Low Pressure Wastewater System
- Forced Wastewater Main

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-19

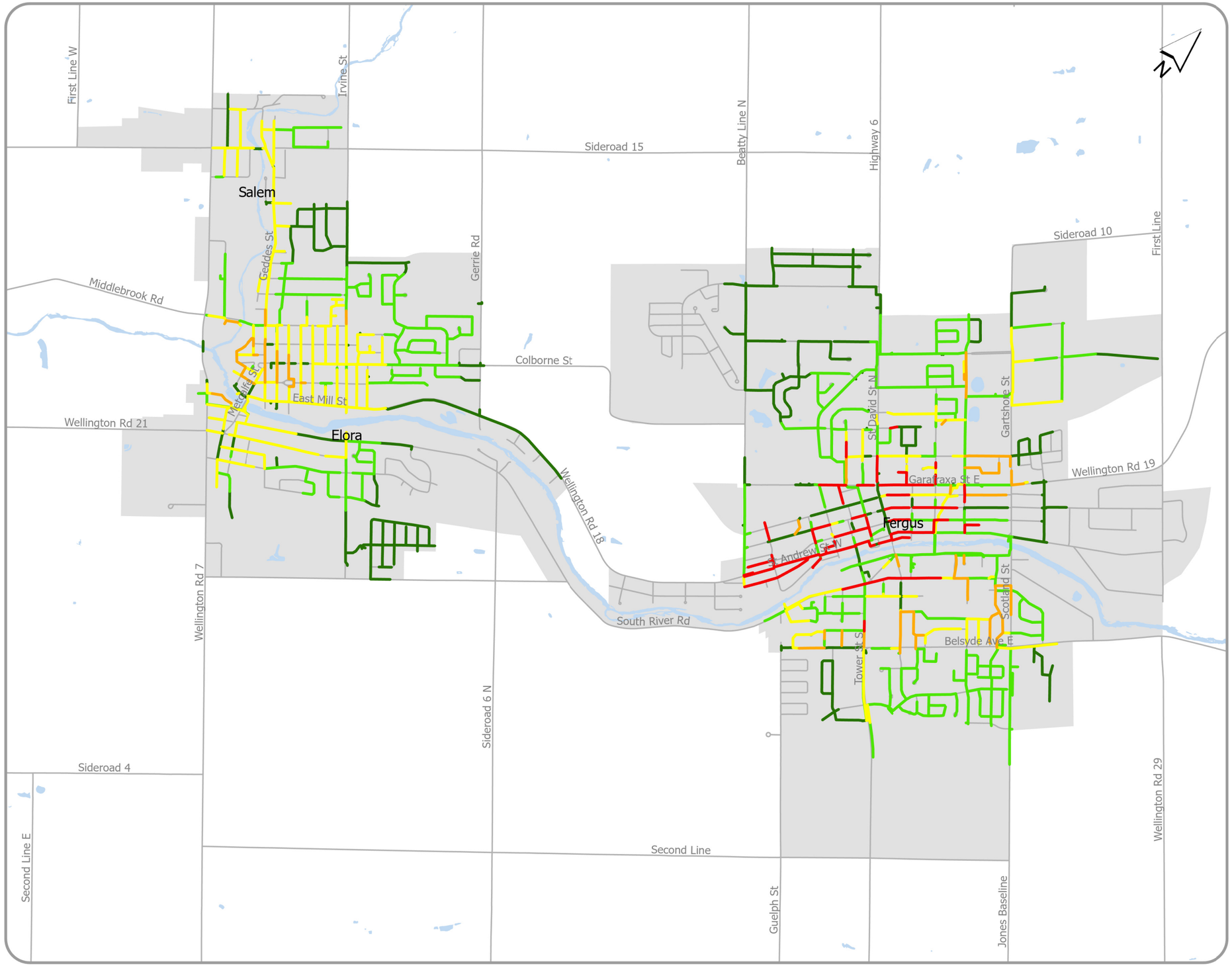
Wastewater Mains - Overview

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Wastewater Mains

Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-20

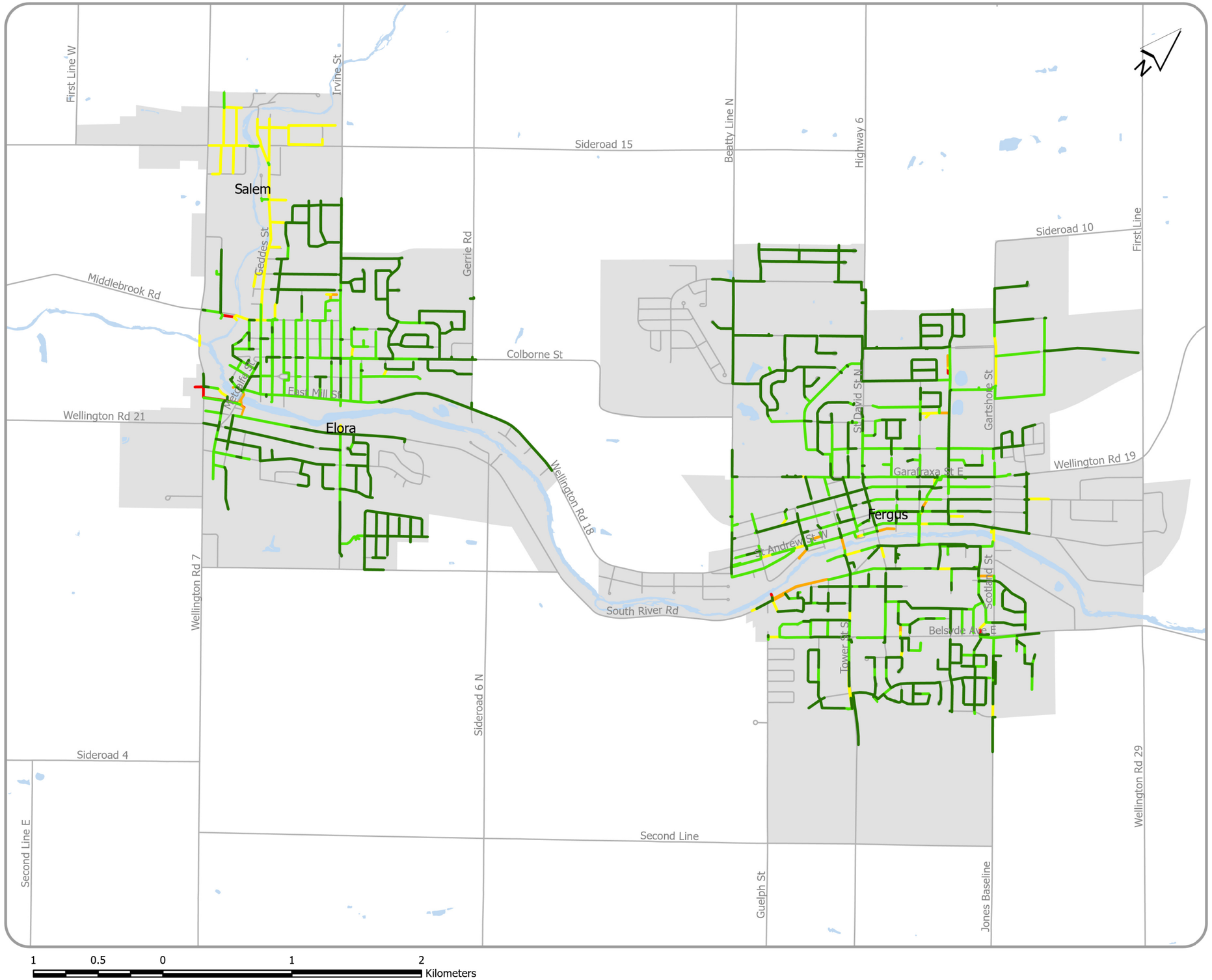
Wastewater Mains - Condition

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Wastewater Mains

Risk

- Very Low
- Low
- Moderate
- High
- Critical

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-21

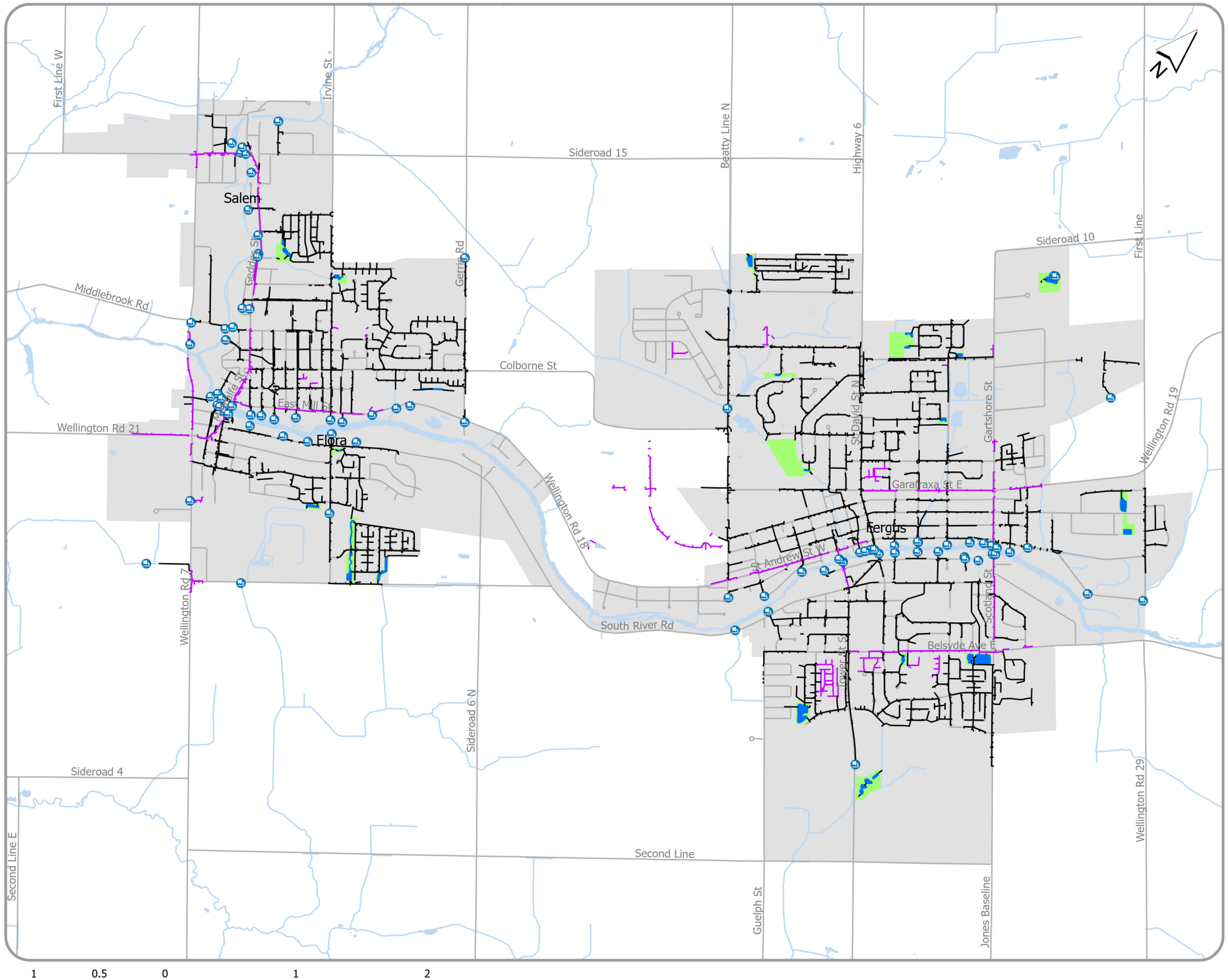
Wastewater Mains - Risk

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Storm Water Outfall

Storm Water Pond

Storm Water Management Area

Storm Water Main

County of Wellington or Private Storm Water Main

Roads

Waterbody

Urban Areas & Hamlets

Figure B-22

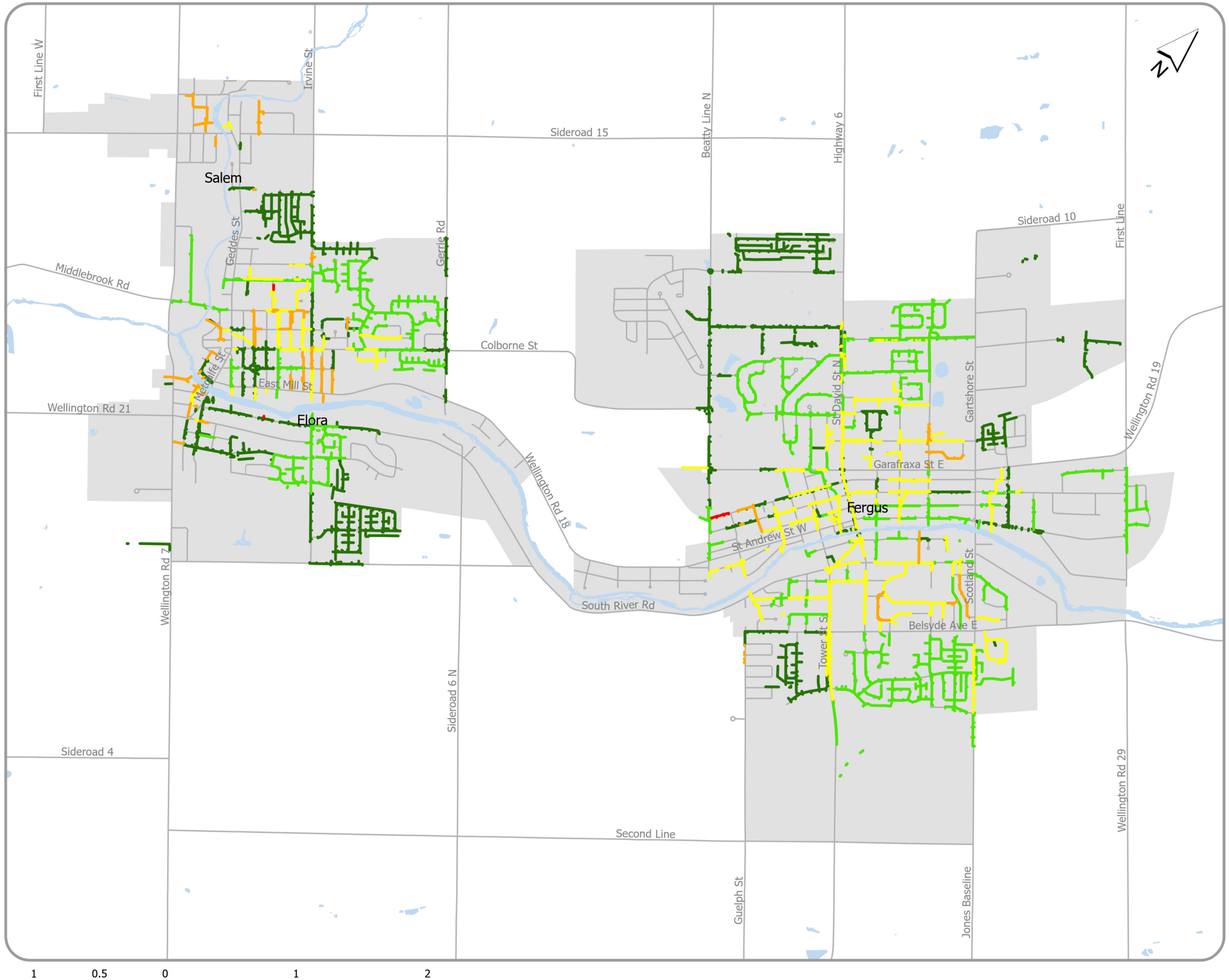
Storm Water System Overview

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Storm Water Mains

Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-23

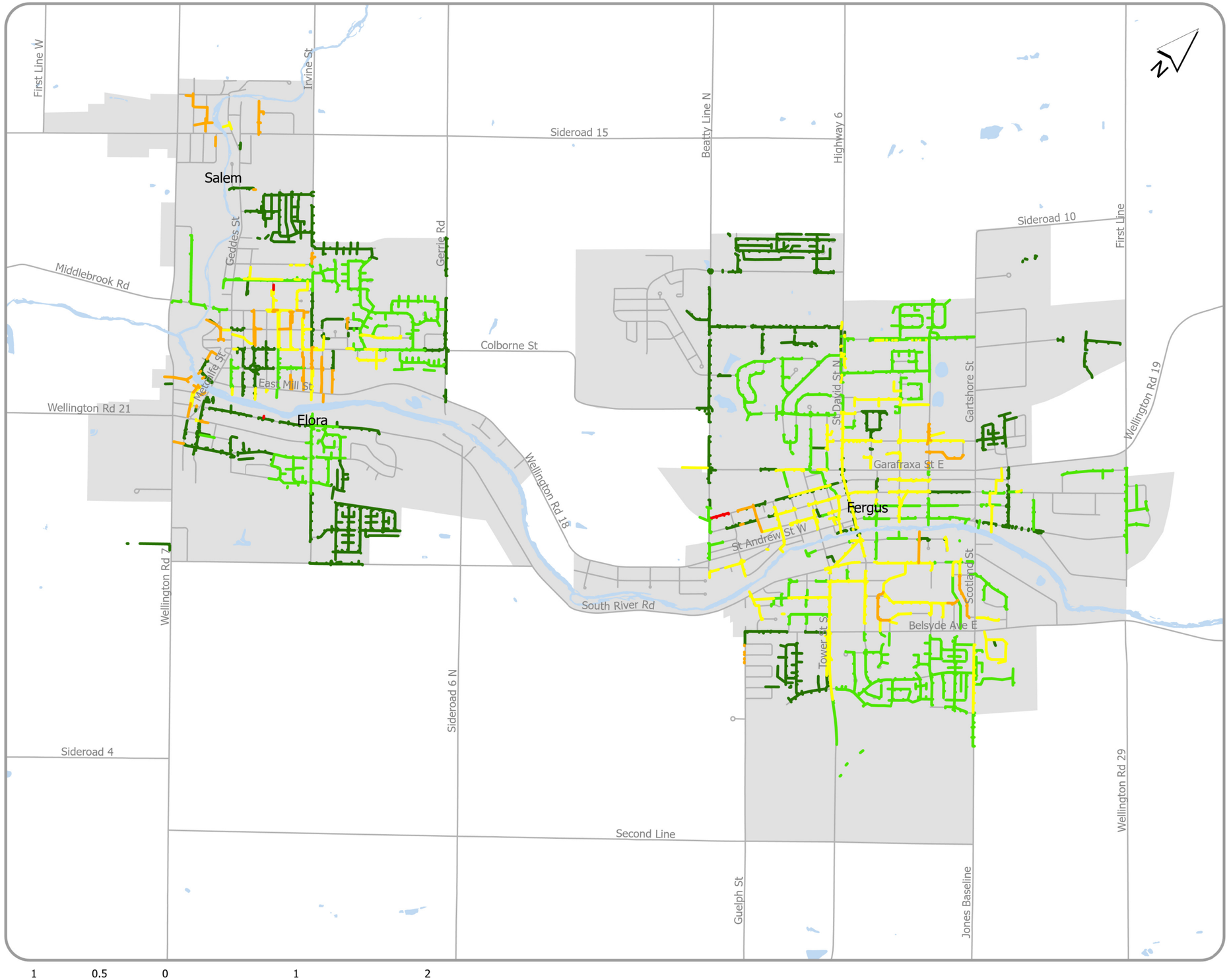
Storm Water Mains - Condition

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Storm Water Mains

Risk

- Very Good
- Good
- Fair
- Poor
- Very Poor

- Roads
- Waterbody
- Urban Areas & Hamlets

Figure B-24

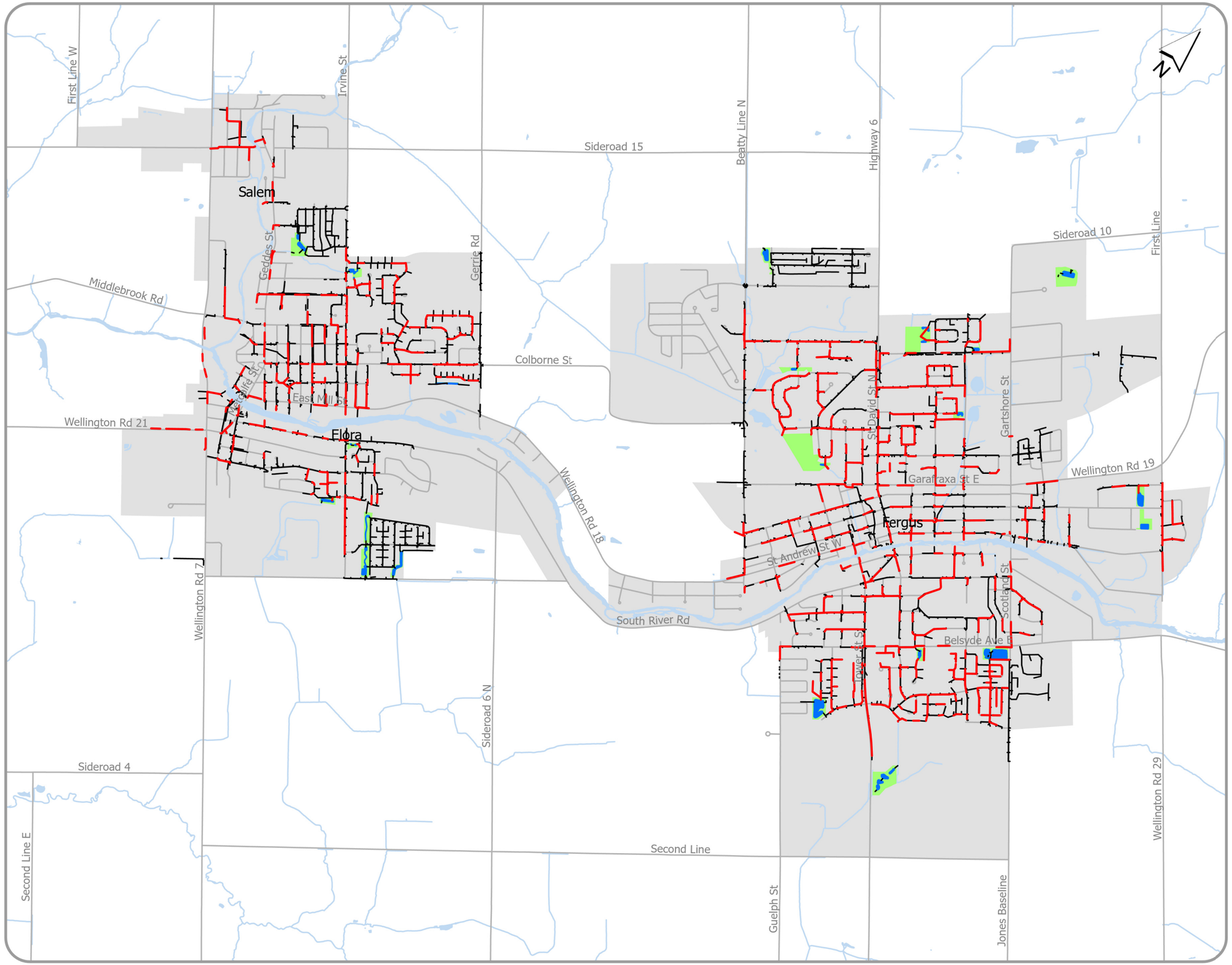
Storm Water Mains - Risk

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington



Storm Water Pond

Storm Water Management Area

Storm Water Main

Storm Water Main where capacity is exceeded in a 5 year storm event

Roads

Waterbody

Urban Areas & Hamlets

Figure B-25

Storm Water Mains
Resilient to 5yr Storm

Asset Management Plan

2025

Township of Centre Wellington

Centre Wellington

Appendix C

Levels of Service Financial Implications Tables

Roads, Storm, Bridges and Culverts Technical Levels of Service

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Operations	Administration, Operations & Maintenance	Provide adequate hours of operation, appropriate staffing, response time in compliance with Minimum Maintenance Standards.	$ 1,251,859	$ 1,363,245	$ 1,749,195	$ 1,749,195	Shortage of operations facility space to accommodate existing and future Township growth	Operating and Capital Implications: Construction of an Operations Facility as outlined in the Township Strategic Plan and Development Charges Background Study.	
	Garages (4)		$ 139,000	$ 150,562	$ 156,469	$ 156,469			
	Fleet Repair & Maintenance (before recoveries)		$ 763,250	$ 1,018,650	$ 1,090,591	$ 1,090,591			
	TOTAL		**$ 2,154,109**	**$ 2,532,457**	**$ 2,996,255**	**$ 2,996,255**			
	Bridges & Culverts	Purchasing of new/ replacement culverts (crossroad and driveway), not OSIM	$ 128,800	$ 95,185	$ 94,702	$ 94,702	Need for additional culverts due to growth and deterioration of current assets, assuming more culverts on a year-over-year basis	$ 118,400	5
	Grass Cutting & Weed Spraying	Municipal boulevards/ facilities, as required in a given year to address weeds (covering 25% of rural area per year, urban area as required)	$ 123,200	$ 115,415	$ 138,157	$ 138,157	No change	$ 138,157	N/A
	Brush/Tree Removal & Planting	Tree removals due to storm damage, general maintenance, coordinated with forestry group, ash program	$ 143,000	$ 140,694	$ 163,919	$ 163,919	Need to ensure 2:1 tree compensation in urban area for Township projects	$ 327,838	10
	Ditching	10kms per year	$ 88,000	$ 59,464	$ 70,970	$ 70,970	20km per year	$ 141,940	10
	Curbs, Gutters & Basins	All CBs repaired/ cleaned within 4 years	$ 52,500	$ 37,596	$ 40,290	$ 40,290	All CBs repaired/ cleaned within 2 years	$ 80,580	5
	Bituminous Pavement Patching	Patching potholes as needed, all potholes repaired per MMS	$ 146,700	$ 119,437	$ 125,672	$ 125,672	Continue meeting MMS, no change	$ 125,672	N/A
	Crack Sealing & Asphalt Repair	15,000 m	$ 25,000	$ 25,000	$ 25,000	$ 25,000	30,000 m	$ 50,000	5
	Street Cleaning	Spring and periodic Downtown, entire road network	$ 143,800	$ 80,185	$ 54,702	$ 54,702	No change	$ 54,702	N/A
	Shoulder Maintenance	Per MMS	$ 91,800	$ 58,230	$ 52,970	$ 52,970	No change	$ 52,970	N/A
	Road Patrol	MMS	$ 82,500	$ 68,928	$ 88,919	$ 88,919	No change	$ 88,919	N/A
	Debris/Leaf Pickup	N/A - County	$ 22,000	$ 16,243	$ 21,685	$ 21,685	No change	$ 21,685	N/A
	Grading	Every gravel road yearly	$ 217,900	$ 96,415	$ 102,425	$ 102,425	No change	$ 102,425	N/A

Roads, Storm, Bridges and Culverts Technical Levels of Service

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Maintenance	Dust laying	Every gravel road yearly	$ 354,500	$ 328,207	$ 454,702	$ 454,702	No change	$ 454,702	N/A
	Gravel Resurfacing	50km, less than 4 inch lift (56800 tonnes for 64 kms)	$ 471,000	$ 471,230	$ 607,948	$ 607,948	50km, but need more quantity (achieve 4 inch lift)	$ 1,000,000	10
	Snow Removal	Parking lots, downtown	$ 64,500	$ 41,230	$ 40,970	$ 40,970	No change	$ 40,970	N/A
	Plowing, Sanding & Scarifying	Meet or exceed MMS	$ 1,146,750	$ 778,158	$ 787,129	$ 787,129	Continue meeting MMS, no change	$ 787,129	N/A
	Snow Fencing & Culvert Thawing	1km	$ 4,400	$ 3,249	$ 3,201	$ 3,201	No change	$ 3,201	N/A
	Safety Devices	Signs/ signals/ cones/ barrels, signal inspections, per MMS and OTM	$ 169,100	$ 168,915	$ 192,425	$ 192,425	Growing network and aging infrastructure	$ 384,850	10
	Street Lighting	LED for entire network, not decorative lights, over 1000 fixtures, repair as calls come in	$ 202,500	$ 209,000	$ 212,000	$ 212,000	100% LED (some decorative lighting still needs to be replaced)	$ 265,000	5
	Municipal Parking Lots	Sweeping, line painting, repairs (Assumed Elora arena and curling club)	$ 59,900	$ 27,487	$ 27,238	$ 27,238	No change	$ 27,238	N/A
	Sidewalk Winter Maintenance, Cleaning & Other Maintenance	Per MMS	$ 160,400	$ 154,145	$ 153,499	$ 153,499	MMS, but yearly budget needs to keep pace with growth (+5% year over year)	$ 161,852	Yearly growth
	Line Painting	Rural and urban roads, per OTM, every two years	$ 96,500	$ 85,721	$ 97,485	$ 97,485	No change	$ 97,485	N/A
	Storm Sewer	Flushing, 20 yr cycle	$ 26,000	$ 19,949	$ 17,117	$ 17,117	Governed under new ECA, entire system flushed every 5 years	$ 68,468	5
	Storm Water Pond Maintenance	Grass cutting, pond maintenance, beaver dams, inspections - all ponds inspected yearly deficiencies corrected	$ 16,100	$ 14,396	$ 14,555	$ 14,555	No change	$ 14,555	N/A

Roads, Storm, Bridges and Culverts Technical Levels of Service

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
	Municipal Drains	Drainage Super, address complaints in same season	$ 4,500	$ 4,500	$ 4,500	$ 4,500	No change	$ 4,500	N/A
	TOTAL		**$ 4,041,350**	**$ 3,218,979**	**$ 3,592,180**	**$ 3,592,180**			
Rehabilitation & Replacement	Urban Roads	Rehabilitation and replacement based on funding constraints	$ 3,931,400	$ 6,472,800	$ 6,126,000	$ 6,126,000	Based on lifecycle costing annual requirements	$ 7,901,803	1
	Rural Roads	Rehabilitation and replacement based on funding constraints	$ 1,342,300	$ 1,285,000	$ 1,725,000	$ 1,725,000	Based on lifecycle costing annual requirements	$ 2,000,000	1
	Bridges & Culverts	Rehabilitation and replacement based on bridge and culvert replacement schedule	$ 4,115,000	$ 4,325,000	$ 2,225,000	$ 2,225,000	Based on lifecycle costing annual requirements	$ 4,579,500	1
	Storm	Rehabilitation and replacement based on funding constraints	$ 40,000	$ 575,000	$ 50,000	$ 50,000	Based on lifecycle costing annual requirements	Included in Road requirements above.	1
	Public Works Other	Rehabilitation and replacement based on funding constraints	$ 1,354,000	$ 432,490	$ 2,028,000	$ 2,028,000	Based on lifecycle costing annual requirements	$ 2,149,680	1
	Vehicle & Equipment Replacement	Replacement based on vehicle & equipment replacement schedules	$ 827,600	$ 970,100	$ 162,700	$ 162,700	Replacement based on vehicle & equipment replacement schedules	$ 1,203,657	N/A
	TOTAL		**$ 11,610,300**	**$ 14,060,390**	**$ 12,316,700**	**$ 12,316,700**			
Upgrade/Expansion	Roads	Based on development charges cash flow constraints	$ 601,600	$ 4,908,200	$ 2,244,000	Based on requirements identified in the Township's development charge study, and Transportation Master Plan.			
	Bridges & Culverts		$ 420,000	$ 10,000	$ 15,000				
	Public Works - Other		$ -	$ 1,239,510	$ 1,249,300				
	TOTAL		**$ 1,021,600**	**$ 6,157,710**	**$ 3,508,300**	**$ -**			
GRAND TOTAL			**$ 18,827,359**	**$ 25,969,536**	**$ 22,413,435**	**$ 18,905,135**			

Water

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Operations	Administration - Cost Recovery		$ 1,203,343	$ 1,511,376	$ 1,772,213	$ 1,772,213	Shortage of operations facility space to accommodate existing and future Township growth	Operating and Capital Implications: Construction of an Operations Facility as outlined in the Township Strategic Plan and Development Charges Background Study.	
	TOTAL		**$ 1,203,343**	**$ 1,511,376**	**$ 1,772,213**	**$ 1,772,213**			
	Pump Plant Repairs & Maintenance	Proactive and reactive repairs and maintenance, routine service orders, labor, daily checks, well maintenance, pumps, contact chamber	$ 612,300	$ 596,688	$ 615,531	$ 615,531	Need to shift to proactive maintenance (vs. reactive), preventative maintenance	$ 735,531	5
	Hydrants & Mains Repairs & Maintenance	Hydrant painting to WM breaks, annual hydrant inspection & maintenance, 50-60 hydrants maintained per year, proactive valve replacements, leak detection	$ 259,100	$ 231,097	$ 232,852	$ 232,852	No change	$ 232,852	N/A
	Scada Repairs & Maintenance	General maintenance to SCADA, programming, trouble shooting	$ 50,900	$ 58,347	$ 74,756	$ 74,756	No change	$ 74,756	N/A

Water

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Maintenance	Purification	Chlorine purchasing, maintenance (chlorine feed system), scale maintenance	$ 188,300	$ 199,314	$ 215,252	$ 215,252	No change	$ 215,252	N/A
	Services	Main to c/s (water services), lowering c/s, replacement of c/s/b, frozen service program	$ 104,100	$ 102,880	$ 155,923	$ 155,923	No change	$ 155,923	N/A
	Backflow Prevention	Operator staff time and equipment for backflow testing	$ 14,500	$ 11,326	$ 11,410	$ 11,410	Upgrade software	$ 22,820	2
	Locates	Ontario OneCall fees, locating equipment, staff time for locates	$ 87,500	$ 77,554	$ 99,185	$ 99,185	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 104,144	Yearly increase
	Development Support	Preliminary checks on valves, staff time for WM connections, inspections	$ 24,700	$ 21,836	$ 22,083	$ 22,083	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 23,187	Yearly increase
	Other	Professional Fees, Cost of Centre Wellington Hydro billing services, Property taxes for water properties	$ 164,200	$ 176,900	$ 184,250	$ 184,250	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 193,463	Yearly increase
	Risk Management Inspector		$ 107,072	$ 109,073	$ 112,479	$ 112,479	No change	$ 112,479	N/A

Water

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
	Source Protection Coordinator		$ -	$ 45,893	$ 49,965	$ 49,965	No change	$ 49,965	N/A
	TOTAL		**$ 1,612,672**	**$ 1,630,908**	**$ 1,773,686**	**$ 1,723,721**			
Rehabilitation & Replacement	Water Capital	Annual Transfer to Capital Reserve: Rehabilitation and replacement funding of $1,786,736 (2024 $)	$ 2,427,000	$ 4,377,000	$ 3,800,500	$ 3,800,500	Based on lifecycle costing annual requirements	$ 4,028,530	5
	Vehicle & Equipment Replacement	Annual Transfer to Vehicle & Equipment Reserves: Replacement funding of $168,750 (2024 $)	$ 189,200	$ 122,500	$ 292,500	$ 292,500	Replacement based on vehicle & equipment replacement schedules	$ 192,625	1
	TOTAL		**$ 2,616,200**	**$ 4,499,500**	**$ 4,093,000**	**$ 4,093,000**			
Upgrade/Expansion	Water Capital	Based on development charges cash flow constraints	$ 441,000	$ 3,273,000	$ 1,110,500	Based on requirements identified in the Township's Development Charges Background Study, and Water Supply Master Plan			
	TOTAL		**$ 441,000**	**$ 3,273,000**	**$ 1,110,500**	**$ -**			
GRAND TOTAL			**$ 5,873,215**	**$ 10,914,784**	**$ 8,749,399**	**$ 7,588,934**			

Wastewater

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Operations	Administration - Cost Recovery		$ 1,774,540	$ 2,087,139	$ 2,447,341	$ 2,447,341	Shortage of operations facility space to accommodate existing and future Township growth	Operating and Capital Implications: Construction of an Operations Facility as outlined in the Township Strategic Plan and Development Charges Background Study.	
	TOTAL		**$ 1,774,540**	**$ 2,087,139**	**$ 2,447,341**	**$ 2,447,341**			
	Wastewater Mains	Flushing, reactive system repairs, blockages, CCTV	$ 134,300	$ 65,847	$ 61,256	$ 61,256	Proactive maintenance, regulatory changes, need to flush and camera on regulated cycle, yearly budget increase needed to keep pace with growth (+5% per year, plus initial increase to cover current funding gap)	$ 122,512	10
	Wastewater Laterals	Service cleanouts, repairs, reactive	$ 71,300	$ 51,469	$ 63,637	$ 63,637	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 66,819	Yearly increase
	Wastewater SCADA	New programming, troubleshooting, program extension	$ 39,350	$ 59,022	$ 71,346	$ 71,346	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 74,913	Yearly increase

Wastewater

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Maintenance	Wastewater Pumping Stations	Repairs and maintenance to PSs, generator gas, electrical work, weekly inspections	$ 95,150	$ 104,932	$ 115,520	$ 115,520	Shift to preventative maintenance, increase needed to keep pace with growth (+5% per year, plus initial increase to cover current funding gap)	$ 165,520	5
	Grand River Agricultural Society Pumping Station	Operate on behalf of GRAS, labor	$ 11,709	$ 10,831	$ 11,230	$ 11,230	Same	NA	
	Fergus Water Pollution Control Plant	Treatment chemicals, labor, lab work, sampling, repairs to equipment, biosolids haulage, electrical	$ 726,575	$ 753,823	$ 763,635	$ 763,635	Shift to preventative maintenance, increase needed to keep pace with growth (+5% per year, plus initial increase to cover current funding gap)	$ 863,635	5
	Elora Water Pollution Control Plant	Treatment chemicals, labor, lab work, sampling, repairs to equipment, biosolids haulage, electrical	$ 579,925	$ 590,908	$ 634,752	$ 634,752	Shift to preventative maintenance, increase needed to keep pace with growth (+5% per year, plus initial increase to cover current funding gap)	$ 734,752	5

Wastewater

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
	Elora Low Pressure Sanitary Sewer	Preventative/ reactive maintenance to LPS, contractor costs, replacement equipment, H2S treatment	$ 116,800	$ 115,063	$ 115,105	$ 115,105	Need to inventory existing assets/ system, increase needed to keep pace with growth (+5% per year, plus initial increase to cover current funding gap)	$ 145,105	5
	Wastewater Other	Cost of Centre Wellington Hydro billing services, property taxes for wastewater properties	$ 171,000	$ 183,000	$ 196,100	$ 196,100	Increase budget on a yearly basis to keep pace with growth (+5% per year)	$ 205,905	Yearly increase
	TOTAL		**$ 1,946,109**	**$ 1,934,895**	**$ 2,032,581**	**$ 2,032,581**			
Rehabilitation & Replacement	Wastewater Capital	Annual Transfer to Capital Reserve: Rehabilitation and replacement funding of $2,013,328 (2024 $)	$ 1,004,400	$ 1,332,000	$ 2,479,500	$ 2,479,500	Based on lifecycle costing annual requirements	$ 2,479,500	5
	Vehicle & Equipment Replacement	Annual Transfer to Vehicle & Equipment Reserves: Replacement funding of $199,250 (2024 $)	$ 104,100	$ 365,350	$ 211,450	$ 211,450	Replacement based on vehicle & equipment replacement schedules	$ 529,250	5
	TOTAL		**$ 1,108,500**	**$ 1,697,350**	**$ 2,690,950**	**$ 2,690,950**			
Upgrade/Expansion	Wastewater Capital	Based on development charges cash flow constraints	$ 35,600	$ 468,000	$ 55,500	Based on requirements identified in the Township's Development Charges Background Study			
	TOTAL		**$ 35,600**	**$ 468,000**	**$ 55,500**	**$ -**			
GRAND TOTAL			**$ 4,864,749**	**$ 6,187,384**	**$ 7,226,372**	**$ 7,170,872**			

Parks & Recreation Services

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Operations	Administration	Provide adequate hours of operation, appropriate staffing, response time in compliance with Legislation.	$ 1,488,941	$ 1,893,591	$ 2,242,024	$ 2,242,024	Improve hours of operation and staffing for customer service	$ 2,322,024	N/A
	TOTAL		**$ 1,488,941**	**$ 1,893,591**	**$ 2,242,024**	**$ 2,242,024**			
Operations & Maintenance	Centre Wellington Community Sportsplex	Operations & Maintenance	$ 1,553,929	$ 1,852,712	$ 1,704,451	$ 1,704,451	Improve support for cleaning facility	$ 1,719,451	N/A
		Aquatic Centre	$ 747,278	$ 708,220	$ 747,755	$ 747,755	No change	$ 747,755	N/A
		Grounds	$ 83,326	$ 20,669	$ 21,600	$ 21,600	No Change	$ 21,600	N/A
		Fitness Program	$ 50,158	$ 43,029	$ 38,999	$ 38,999	No Change	$ 38,999	N/A
		Weight Room	$ 30,177	$ 6,430	$ 6,380	$ 6,380	No change	$ 6,380	N/A
		Programs	$ 49,111	$ 54,087	$ 89,416	$ 89,416	No change	$ 89,416	N/A
		Total	**$ 2,513,979**	**$ 2,685,147**	**$ 2,608,601**	**$ 2,608,601**			
	Elora Community Centre	Operations & Maintenance	$ 410,056	$ 319,811	$ 524,245	$ 524,245	Improve support for cleaning facility	$ 534,245	2
		Grounds	$ 18,136	$ 1,000	$ 1,500	$ 1,500	No Change	$ 18,136	N/A
		Programs	$ -	$ -	$ 49,503	$ 49,503	No change	$ 49,503	N/A
		Total	**$ 428,192**	**$ 320,811**	**$ 525,745**	**$ 525,745**			
	Belwood Hall		$ 24,753	$ 26,480	$ 27,093	$ 27,093	No Change	$ 27,093	N/A

Parks & Recreation Services

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
	Active Parks		$ 189,624	$ 444,053	$ 503,607	$ 503,607	No Change	$ 503,607	N/A
	Passive Parks		$ 295,563	$ 116,400	$ 112,200	$ 112,200	No change	$ 112,200	N/A
	Forestry		$ 50,000	$ 77,053	$ 75,800	$ 75,800	No change	$ 75,800	N/A
	Greenhouses		$ 21,868	$ 17,500	$ 24,200	$ 24,200	No change	$ 24,200	N/A
	Victoria Park Seniors Centre		$ 572,248	$ 497,559	$ 579,813	$ 579,813	No Change	$ 579,813	N/A
	Downtown Beautification		$ 85,294	$ 79,590	$ 89,643	$ 89,643	Improve downtown garbage pickup	$ 119,643	1
	Downtown Washrooms (Weigh Scale/Elora Tourism)		$ 39,158	$ 37,584	$ 23,775	$ 23,775	Elora Tourism Washrooms	$ 48,775	1
	Fergus Grand Theatre		$ 181,178	$ 202,904	$ 233,012	$ 233,012	Improve hours of operation and staffing	$ 233,012	N/A
	Tourism		$ 252,655	$ 238,926	$ 255,036	$ 255,036	No Change	$ 255,036	N/A
	Celebrations		$ 20,000	$ 17,000	$ 17,000	$ 23,000	No Change	$ 23,000	N/A
	TOTAL		**$ 4,674,512**	**$ 4,761,007**	**$ 5,075,525**	**$ 5,081,525**			
Rehabilitation & Replacement	Facilities	Rehabilitation and replacement based on funding constraints	$ 338,800	$ 1,034,500	$ 845,000	$ 845,000	Based on annual intervention cost within Township's Building condition assessment	$ 1,598,873	1
	Vehicle & Equipment Replacement	Replacement based on vehicle & equipment replacement schedules	$ 658,500	$ 404,900	$ 714,100	$ 714,100	Annual budget is based on actual needs per year. Optimal annual budget looks at the total cost divided by the life of each piece of equipment or vehicle	$ 658,644	1

Parks & Recreation Services

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
	TOTAL		**$ 997,300**	**$ 1,439,400**	**$ 1,559,100**	**$ 1,559,100**			
Upgrade/Expansion	Facilities	Based on development charges cash flow constraints	$ -	$ -	$ -	Based on requirements identified in the Township's Development Charge Study.			
	Vehicle & Equipment		$ 177,000	$ 165,000	$ 227,500				
	TOTAL		**$ 177,000**	**$ 165,000**	**$ 227,500**	**$ -**			
GRAND TOTAL			**$ 7,337,753**	**$ 8,258,998**	**$ 9,104,149**	**$ 8,882,649**			

Fire Services

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Operations	Salary, Wages & Administration	Provide adequate hours of operation, appropriate staffing, response time in compliance with Legislation.	$ 1,519,632	$ 1,581,313	$ 1,694,683	$ 1,694,683	Fire Master Plan indicates a need to introduce a 3rd Fire Station and additional Volunteer Firefighters to accommodate Township growth.	Operating and Capital Implications: Construction of a Fire Station and recruitment of firefighters as outlined in the Township's Fire Master Plan and Development Charges Background Study.	
	Operations & Maintenance		$ 96,200	$ 110,625	$ 127,375	$ 127,375			
	Fire Training Officer	Provide adequate training based on Township policies and procedures.	$ 158,100	$ 165,100	$ 172,600	$ 172,600	Fire Master Plan requirements on Training.	$ 172,600	1
	TOTAL		**$ 1,773,932**	**$ 1,857,038**	**$ 1,994,658**	**$ 1,994,658**			
Maintenance	Fleet Repairs & Maintenance	Fleet repairs, maintenance, insurance and gas.	$ 99,375	$ 120,075	$ 126,325	$ 126,325	Addition of new pumper for Fergus station, cost of labour for repairs has increased	$ 128,825	1
	Fergus Fire Station	Regular repair and maintenance activities to maintain station	$ 36,050	$ 40,350	$ 52,200	$ 52,200	No change	$ 52,200	N/A
	Elora Fire Station	Regular repair and maintenance activities to maintain station	$ 16,500	$ 17,700	$ 19,500	$ 19,500	Some repairs are required as per Building condition assessment	$ 19,500	N/A
	TOTAL		**$ 151,925**	**$ 178,125**	**$ 198,025**	**$ 198,025**			

Fire Services

Service Attribute	Service Activity Objective	Current Performance					Target Level of Service		
		Description	2022 Budget	2023 Budget	2024 Budget	Cost to Maintain Current Service (2024 $)	Description	Optimum Annual Budget (2024 $)	Optimum Target (Years)
Rehabilitation & Replacement	Facilities	Rehabilitation and replacement based on funding constraints	$ 20,000	$ -	$ 70,000	$ 70,000	Based on annual intervention cost within Township's Building condition assessment	$ 79,400	1
	Vehicle & Equipment Replacement	Replacement based on vehicle & equipment replacement schedules	$ 284,100	$ 1,149,260	$ 212,940	$ 212,940	Annual budget is based on actual needs per year. Optimal annual budget looks at the total cost divided by the life of each piece of equipment or vehicle	$ 537,806	1
	TOTAL		**$ 304,100**	**$ 1,149,260**	**$ 282,940**	**$ 282,940**			
Upgrade/Expansion	Facilities	Based on development charges cash flow constraints	$ -	$ -	$ -	Based on requirements identified in the Township's Development Charge Study.			
	Vehicle & Equipment Replacement		$ -	$ -	$ -				
	TOTAL		**$ -**	**$ -**	**$ -**	**$ -**			
GRAND TOTAL			**$ 2,229,957**	**$ 3,184,423**	**$ 2,475,623**	**$ 2,475,623**			

Appendix D

Priority Assets & Projects

The content presented in this Appendix provides a point-in-time identification of assets that are deemed to be critical in nature from a condition or risk perspective. It is important to note that these listings are not comprehensive in nature. Please refer to the technical appendix for a more exhaustive listing of township assets given consideration in this plan, and their associated criticality.

Township of Centre Wellington
Critical Assets Summary
Bridges

Asset ID	Structure	Structure Type	Location	Length (m)	In-Service Date	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-BR-00024	30-WG | Sideroad 15	Steel Truss	West Garafraxa	26	1942-01-01	90	8	$1,892,800	Critical	Critical	Critical	2032	Very Poor
TS-BR-00029	5-P | Weisenberg Road - Shared	Half-Through Girders	Pilkington/Waterloo	13.7	1920-01-01	90	0	$795,628	Critical	Critical	Critical	Past Due	Very Poor
TS-BR-00040	28-P | Sideroad 11	T-Beam	Pilkington	11.3	1925-01-01	90	0	$1,299,500	Critical	Critical	Critical	Past Due	Very Poor
TS-BR-00042	32-P | Noah Road	T-beam	Pilkington	10.3	1926-01-01	90	0	$1,267,415	Critical	Critical	Critical	Past Due	Very Poor
TS-BR-00043	33-P | Noah Road	T-beam	Pilkington	11.1	1922-01-01	90	0	$1,327,560	Critical	Critical	Critical	Past Due	Poor
TS-BR-00057	5-E | Fourth Line	Through Girders	Eramosa	13.3	1923-01-01	90	0	$1,544,795	Critical	Critical	Critical	Past Due	Poor
TS-BR-00059	7-E | Third Line	Through Girders	Eramosa	10	1920-01-01	90	0	$1,173,000	Critical	Critical	Critical	Past Due	Poor
180160	180160 | Weisenberg Road - Shared	Through Truss	Pilkington	47.5	1910-01-01	90	0	$1,647,000	Critical	Critical	Critical	Past Due	Very Poor
TS-BR-00016	21-WG | First Line	Bowstring Arch	West Garafraxa	19.2	1929-01-01	90	0	$2,208,000	High	Critical	Critical	Past Due	Poor
TS-BR-00002	2-WG | Third Line	Through Girders	West Garafraxa	11.6	1921-01-01	90	0	$1,347,340	Critical	High	Critical	Past Due	Poor
170160	170160 | Weisenberg Road - Shared	Rigid Frame	Pilkington	3.6	1932-01-01	90	0	$130,816	Critical	High	Critical	Past Due	Poor
TS-BR-00023	29-WG | Sideroad 15	Bowstring Arch	West Garafraxa	22.6	1928-01-01	90	0	$1,469,000	High	High	High	Past Due	Poor
TS-BR-00007	8-WG | Seventh Line	Through Girders	West Garafraxa	14.2	1925-01-01	90	0	$1,649,330	High	High	High	Past Due	Poor
TS-BR-00039	26-P | First Line West	T-Beam	Pilkington	10.2	1940-01-01	90	6	$1,149,540	Moderate	High	Moderate	2030	Good
TS-BR-00044	3-N | Beatty Line North	T-Beam	Nichol	26.3	1942-01-01	90	8	$1,675,310	Moderate	High	Moderate	2032	Good
TS-BR-00046	9-N | Irvine Street	Bowstring Arch	Nichol	25.9	1929-01-01	90	0	$1,717,170	Moderate	High	Moderate	Past Due	Good
TS-BR-00015	20-WG | Second Line	Prestressed I-Girder	West Garafraxa	23.3	1990-01-01	90	56	$1,681,095	Low	High	Low	2080	Good
TS-BR-00025	31-WG | Second Line	Steel Girder	West Garafraxa	52.3	1962-01-01	90	28	$3,336,107	Low	Moderate	Low	2052	Good
TS-BR-00037	22-P | Eighth Line West	Rigid Frame	Pilkington	18	1960-01-01	90	26	$2,152,800	Low	Moderate	Low	2050	Good
TS-BR-00061	20-P | Eighth Line West	Prestressed I-Girder	Pilkington	77.8	2010-01-01	90	76	$4,193,420	Low	Moderate	Low	2100	Good
TS-BR-00017	22-WG | First Line	Steel Girder	West Garafraxa	24.8	1994-01-01	90	60	$1,692,600	Low	Moderate	Low	2084	Good
TS-BR-00018	23-WG | First Line	T-Beam	West Garafraxa	14.5	1945-01-01	90	11	$1,634,150	Low	Moderate	Low	2035	Good
TS-BR-00012	17-WG | Fifth Line	Prestressed I-Girder	West Garafraxa	25.4	1993-01-01	90	59	$1,816,100	Low	Moderate	Low	2083	Good
TS-BR-00050	2-F | Highway 6 (St. David Street)	Prestressed I-Girder	Fergus	34.4	2018-01-01	90	84	$2,589,348	Low	Moderate	Low	2108	Good
TS-BR-00056	4-E | Fifth Line	T-Beam	Eramosa	11.6	1957-01-01	90	23	$1,440,720	Low	Moderate	Low	2047	Good
TS-BR-00010	13-WG | Sixth Line	Rigid Frame	West Garafraxa	13.7	1988-01-01	90	54	$1,764,560	Low	Moderate	Low	2078	Good
TS-BR-00027	3-P | Eighth Line East	Rigid Frame	Pilkington	13.8	1961-01-01	90	27	$1,650,480	Low	Moderate	Low	2051	Good
TS-BR-00009	11-WG | Sideroad 25 - Shared	T-Beam	West Garafraxa/North Wellington	10.3	1991-01-01	90	57	$615,940	Low	Low	Low	2081	Poor
TS-BR-00031	11-P | Fourth Line East	Rigid Frame	Pilkington	8.3	1962-01-01	90	28	$992,680	Low	Moderate	Low	2052	Good
TS-BR-00032	14-P | Sideroad 4	T-Beam	Inverhaugh	10.5	1936-01-01	90	2	$1,243,725	Low	Low	Low	2026	Good
TS-BR-00036	21-P | Eighth Line West	Steel Girder	Pilkington	33.8	1956-01-01	90	22	$1,522,430	Low	Low	Low	2046	Good
TS-BR-00003	3-WG | Fourth Line	T-Beam	West Garafraxa/Eramosa	10.4	1978-01-01	90	44	$1,196,000	Low	Low	Low	2068	Good
TS-BR-00013	18-WG | Fifth Line	Acrow Panel Bridge	West Garafraxa	24.8	1997-01-01	90	63	$1,950,520	Low	Low	Low	2087	Good
TS-BR-00001	1-WG | Eramosa-West Garafraxa Townline	Guardian	West Garafraxa/Eramosa	12	2012-01-01	90	78	$1,407,600	Low	Low	Low	2102	Good
TS-BR-00014	19-WG | Fifth Line	Rigid Frame	West Garafraxa	13.1	1994-01-01	90	60	$1,506,500	Low	Low	Low	2084	Good
TS-BR-00060	8-E | Third Line	Box Beam Girders	Eramosa	19.8	1982-01-01	90	48	$2,527,470	Low	Low	Low	2072	Good
TS-BR-00022	28-WG | Sideroad 20	Rigid Frame	West Garafraxa	9.6	1985-01-01	90	51	$1,148,160	Low	Low	Low	2075	Good
TS-BR-00028	4-P | Sideroad 12	Rigid Frame	Pilkington	13.1	1965-01-01	90	31	$1,762,605	Low	Low	Very Low	2055	Good
TS-BR-00045	6-N | Gerrie Road	Prestressed I-Girder	Nichol	28.3	2007-01-01	90	73	$1,802,710	Low	Low	Very Low	2097	Good
TS-BR-00062	19-P | Middlebrook Road	Prestressed I-Girder	Pilkington	23.2	2010-01-01	90	76	$1,492,920	Very Low	Moderate	Very Low	2100	Very Good
TS-BR-00053	1-E | Seventh Line	T-Beam	Eramosa	10.7	1949-01-01	90	15	$1,205,890	Low	Very Low	Very Low	2039	Poor
TS-BR-00008	9-WG | Seventh Line	Box Beam Girders	West Garafraxa	12.9	2018-01-01	90	84	$1,435,200	Very Low	Moderate	Very Low	2108	Good
TS-BR-00021	27-WG | Sideroad 20	Prestressed I-Girder	West Garafraxa	19	2018-01-01	90	84	$2,127,500	Very Low	Low	Very Low	2108	Very Good
TS-BR-00005	6-WG | George Street, Belwood	Rigid Frame	Belwood	4.2	1950-01-01	90	16	$473,340	Low	Low	Very Low	2040	Good
TS-BR-00054	2-E | Sideroad 30	Rigid Frame	Eramosa	12.6	1994-01-01	90	60	$1,463,490	Low	Very Low	Very Low	2084	Good
TS-BR-00067	24-P | Third Line West	T-Beam	Pilkington	25	2021-01-01	90	87	$1,935,450	Very Low	Low	Very Low	2111	Very Good
TS-BR-00070	24-WG | First Line		West Garafraxa	48	2023-12-07	90	89	$1,732,500	Very Low	Moderate	Very Low	2113	Very Good
TS-BR-00068	4-WG | Fifth Line	Bowstring Arch	West Garafraxa	17.5	2022-01-01	90	88	$1,390,500	Very Low	Moderate	Very Low	2112	Very Good
TS-BR-00064	25-WG | Jones Baseline	Prestressed I-Girder	West Garafraxa/Nichol	33.9	2011-01-01	90	77	$2,035,661	Very Low	Low	Very Low	2101	Very Good
TS-BR-00066	10-P | Fourth Line East	T-Beam	Pilkington	20.2	2020-01-01	90	86	$1,411,740	Very Low	Moderate	Very Low	2110	Very Good
TS-BR-00071	6-E | Third Line	Precast Quickspan Structure	West Garafraxa/Eramosa	11.6	2013-01-01	90	79	$1,307,320	Very Low	Low	Very Low	2103	Good
TS-BR-00069	16-WG | Fifth Line	Concrete Box Girder	West Garafraxa	29.2	2023-11-30	90	89	$1,672,000	Very Low	Low	Very Low	2113	Very Good

Township of Centre Wellington
Critical Assets Summary
Culverts

Asset ID	Structure	Structure Type	Location	Length (m)	In-Service Date	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-CU-00055	35-WG | Fifth Line	Rigid Frame	West Garafraxa	6.88	1950-01-01	60	0	$997,050	High	High	High	Past Due	Very Poor
TS-CU-00035	13-N | Second Line	Rigid Frame	Nichol	4.3	1970-01-01	75	20	$621,690	Moderate	High	Moderate	2044	Good
TS-CU-00038	16-N | Fourth Line	Rigid Frame	Nichol	5.8	1955-01-01	75	5	$797,640	Moderate	Moderate	Moderate	2029	Poor
TS-CU-00019	23-P | Eighth Line West	Rigid Frame	Pilkington	5.5	1950-01-01	75	0	$762,450	High	Moderate	Moderate	Past Due	Good
TS-CU-00017	16-P | Second Line East	SPCPA - 5.05x3.33x27.5	Pilkington	5.4	1971-01-01	75	21	$750,720	Moderate	High	Moderate	2045	Good
TS-CU-00027	38-P | Eighth Line West	Twin Cell	Pilkington	13.7	1995-01-01	75	45	$1,724,310	Moderate	High	Moderate	2069	Good
TS-CU-00024	35-P | Sideroad 4	SPCPA - 3.1x1.98x17.25	Pilkington	3.4	1980-01-01	60	15	$516,120	Moderate	Moderate	Moderate	2039	Good
TS-CU-00018	17-P | Middlebrook Road	Box Culvert - 3.66x17.02	Pilkington	4.3	1988-01-01	75	38	$621,690	Moderate	Moderate	Moderate	2062	Good
TS-CU-00056	18-P | Middlebrook Road	Rigid Frame	Pilkington	3.6	1960-01-01	75	10	$539,580	Moderate	Moderate	Moderate	2034	Good
TS-CU-00013	9-P | Sixth Line East	Rigid Frame	Pilkington	6.8	1946-01-01	75	0	$914,940	Moderate	Moderate	Moderate	Past Due	Good
TS-CU-00003	10-WG | East-West Garafraxa Townline - Shared	SPCPA - 3.4x2.1x21.02	West Garafraxa	3.7	1980-01-01	60	15	$275,655	Moderate	Moderate	Moderate	2039	Good
TS-CU-00016	15-P | Fourth Line East	Twin Cell Box Culvert	Pilkington	11.3	1986-01-01	75	36	$1,442,790	Low	Moderate	Moderate	2060	Good
TS-CU-00034	11-N | Woolwich Street	SPCSA - 4.88x2.03x21.9	Nichol	5.2	1997-01-01	60	32	$727,260	Moderate	Moderate	Moderate	2056	Good
TS-CU-00039	17-N | Fourth Line	Rigid Frame	Nichol	3.6	1950-01-01	75	0	$539,580	Moderate	Moderate	Moderate	Past Due	Good
TS-CU-00011	7-P | Sixth Line East	Twin Cell Box Culvert	Pilkington	12.1	1991-01-01	75	41	$1,472,115	Moderate	Moderate	Moderate	2065	Good
TS-CU-00012	8-P | Sixth Line East	Rigid Frame	Pilkington	6	1991-01-01	75	41	$821,100	Moderate	Moderate	Moderate	2065	Good
TS-CU-00021	29-P | First Line West	Rigid Frame	Pilkington	5.1	1959-01-01	75	9	$609,960	Moderate	Moderate	Moderate	2033	Poor
TS-CU-00026	37-P | Second Line East	Rigid Frame - 15.86 long	Pilkington	5	1965-01-01	75	15	$703,800	Moderate	Moderate	Moderate	2039	Good
TS-CU-00028	1-N | Nichol-Peel Townline - Shared	Bridge-Plate Box Culvert	Nichol	4.4	2004-01-01	60	39	$316,710	Moderate	Moderate	Moderate	2063	Good
TS-CU-00036	14-N | Second Line	Rigid Frame	Nichol	3.5	1990-01-01	75	40	$527,850	Moderate	Low	Moderate	2064	Good
TS-CU-00053	33-WG | Second Line	SPCPA - 3.2x2.3x17.45	West Garafraxa	3.2	1985-01-01	60	20	$527,850	Moderate	Moderate	Low	2044	Good
TS-CU-00022	31-P | Third Line West	SPCSA - 3.05x1.35x6.95	Pilkington	3.4	1975-01-01	60	10	$516,120	Moderate	Moderate	Low	2034	Poor
TS-CU-00047	22-N | Sideroad 5	SPCPA - 4.37x2.87x20.12	Nichol	4.5	1977-01-01	60	12	$645,150	Moderate	Low	Low	2036	Poor
TS-CU-00005	14-WG | Sixth Line	SPCSA - 5.49x2.72x16.5	West Garafraxa	5.8	1977-01-01	60	12	$797,640	Low	Moderate	Low	2036	Good
TS-CU-00004	12-WG | Sixth Line	Rigid Frame	West Garafraxa	5.2	1950-01-01	75	0	$727,260	Moderate	Low	Low	Past Due	Poor
TS-CU-00040	18-N | Sixth Line	Rigid Frame - 11.98 long	Nichol	4.3	1955-01-01	75	5	$621,690	Moderate	Low	Low	2029	Good
TS-CU-00023	34-P | Fourth Line West	Rigid Frame - 16.18 long	Pilkington	5.8	1995-01-01	75	45	$797,640	Low	Low	Low	2069	Good
TS-CU-00048	39-P | Fourth Line West	Rigid Frame - 16.18 long	Pilkington	5.1	1992-01-01	75	42	$715,530	Low	Low	Low	2066	Good
TS-CU-00007	2050 (26-WG) | Sideroad 25 - Shared	SPCPA - 3.89x2.69x19.45	West Garafraxa	4.7	1973-01-01	60	8	$242,179	Moderate	Low	Low	2032	Very Poor
TS-CU-00015	13-P | Second Line East	Rigid Frame	Pilkington	6.9	1959-01-01	75	9	$926,670	Low	Low	Low	2033	Good
TS-CU-00031	5-N | Gerrie Road	Rigid Frame - 10.25 long	Nichol	6.4	1960-01-01	75	10	$785,910	Moderate	Low	Low	2034	Good
TS-CU-00051	10-N | Irvine Street	Rigid Frame	Nichol	4.3	1932-01-01	75	0	$551,310	Low	Moderate	Low	Past Due	Good
TS-CU-00009	2-P | Sideroad 14	Rigid Frame	Pilkington	6.9	1958-01-01	75	8	$926,670	Moderate	Low	Low	2032	Good
TS-CU-00030	4-N | Sideroad 10	Rigid Frame	Nichol	7	1959-01-01	75	9	$938,400	Low	Moderate	Low	2033	Good
TS-CU-00001	5-WG | Sixth Line	Rigid Frame	West Garafraxa	4.3	1950-01-01	75	0	$621,690	Low	Moderate	Low	Past Due	Good
TS-CU-00043	21-N | Gerrie Road	Twin SPCSP - 2x2.74x18.2	Nichol	6.53	1998-01-01	60	33	$879,750	Low	Low	Low	2057	Good
TS-CU-00032	7-N | Sideroad 5	Rigid Frame	Nichol	4.9	1985-01-01	75	35	$692,070	Low	Moderate	Low	2059	Good
TS-CU-00042	20-N | Sideroad 6 North	Twin SPCPA - 2x3.73x2.29x16.68	Nichol	9.3	1980-01-01	60	15	$1,208,190	Moderate	Low	Low	2039	Poor
TS-CU-00014	12-P | Fourth Line East & Sideroad 10	Rigid Frame	Pilkington	5.2	1990-01-01	75	40	$727,260	Low	Low	Low	2064	Good
TS-CU-00045	15-WG | Sixth Line	SPCPA - 3.89x2.69x22.6	West Garafraxa	4	2011-01-01	60	46	$586,500	Low	Low	Low	2070	Good
TS-CU-00037	15-N | Fourth Line	SPCPA - 3.1x1.98X18.46	Nichol	3.4	1997-01-01	60	32	$516,120	Low	Low	Low	2056	Good
0016	0016 | East-West Garafraxa Townline - Shared	Concrete Open Culvert		4.2	1960-01-01	75	10	$354,000	Moderate	Low	Low	2034	Poor
TS-CU-00049	32-WG | Third Line	SPCPA - 3.73x2.29x22.0	West Garafraxa	4	2017-01-01	60	52	$586,500	Low	Low	Low	2076	Good
TS-CU-00002	7-WG | East-West Garafraxa Townline	Rigid Frame	West Garafraxa	4.3	1950-01-01	75	0	$310,845	Low	Low	Low	Past Due	Good
TS-CU-00025	36-P | Weisenberg Road - Shared		Pilkington	3.66	1970-01-01	75	20	$275,655	Low	Low	Low	2044	Good
TS-CU-00020	25-P | Sideroad 5	Twin SPCPA - 2x2.44x1.75x14.25	Pilkington	6.1	1980-01-01	75	30	$832,830	Moderate	Low	Low	2054	Good
TS-CU-00044	9-E | Sideroad 30	SPCHE - 5.89x3.71x17.0	Eramosa	6	2005-01-01	60	40	$821,100	Low	Low	Low	2064	Good
TS-CU-00033	8-N | Irvine Street	SPCPA - 6.25x3.91x20.9	Nichol	6.6	1976-01-01	60	11	$891,480	Low	Low	Low	2035	Good
TS-CU-00046	3-F | Hill St. E.	SPCPA - 3.73x2.28x28.0	Fergus	4	1980-01-01	60	15	$586,500	Low	Low	Low	2039	Good
TS-CU-00041	19-N | Sideroad 6 North	Rigid Frame	Nichol	4.3	1955-01-01	75	5	$621,690	Low	Low	Low	2029	Good
TS-CU-00054	34-WG | Sideroad 10	SPCPA - 3.2x2.0x19.3	West Garafraxa	3.2	1985-01-01	60	20	$469,200	Moderate	Very Low	Low	2044	Poor
TS-CU-00029	2-N | Beatty Line North	Rigid Frame	Nichol	4.9	1980-01-01	75	30	$692,070	Low	Low	Low	2054	Good
TS-CU-00010	6-P | Sideroad 12	Rigid Frame	Pilkington	7.1	1986-01-01	75	36	$950,130	Low	Very Low	Very Low	2060	Good
TS-CU-00052	23-N | Salem St	SPCPA - 3.66x18x1.91	Nichol	3.66	2008-01-01	60	43	$504,390	Low	Very Low	Very Low	2067	Good

Township of Centre Wellington
Critical Assets Summary
Pedestrian Bridges

Asset ID	Structure	Structure Type	Location	Length (m)	In-Service Date	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-BR-00052	2-EL | Arthur Road R.O.W.	Steel Truss Pedestrian Bridge	Elora	60.3	1998-01-01	90	63	$1,170,000	Low	Moderate	Low	2087	Good
TS-BR-00048	12-N | Washington Street	Concrete Arch	Salem	10.3	1925-01-01	90	0	$1,173,000	Moderate	Low	Low	Past Due	Poor
TS-BR-00065	4-F | St. Andrew St. W.	Wooden Deck	Fergus	13.1	1990-01-01	90	55	$99,833	Moderate	Very Low	Low	2079	Poor
TS-BR-00006	6B-WG | George Street, Belwood	Steel Girder Pedestrian Bridge	Belwood	10.5	1985-01-01	90	50	$70,875	Low	Low	Low	2074	Good
TS-BR-00049	1-F | Menzies Lane	T-Beam Pedestrian Bridge	Fergus	34.3	1991-01-01	90	56	$627,750	Low	Low	Low	2080	Good
TS-BR-00051	1-EL | Victoria Street	Not Applicable	Elora	64.2	2019-01-01	90	84	$3,032,700	Very Low	Very Low	Very Low	2108	Very Good

Township of Centre Wellington
Critical Assets Summary
Gravel Road Base

Asset ID	Name	From	To	In-Service Date	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-RB-00830	Second Line	Highway 6	Scotland St	1965-12-31	1,059.25	70	11	$992,565	High	Moderate	High	2035	Poor
TS-RB-00750	Beatty Line N	Sideroad 10	Sideroad 5	1964-08-06	1,642.95	70	10	$1,539,517	High	Low	Moderate	2034	Poor
TS-RB-00751	Beatty Line N	Sideroad 10	Sideroad 10	1962-10-23	401.55	70	8	$376,268	High	Low	Moderate	2032	Very Poor
TS-RB-00752	Beatty Line N	Sideroad 15	Sideroad 10	1961-11-05	2,034.58	70	7	$1,906,497	High	Low	Moderate	2031	Very Poor
TS-RB-00788	Fourth Line	Highway 6	Jones Baseline	1964-06-26	1,542.07	70	10	$1,444,994	High	Low	Moderate	2034	Poor
TS-RB-00812	Jones Baseline	Sideroad 10	Sideroad 15	1962-07-20	312.84	70	8	$293,142	High	Low	Moderate	2032	Very Poor
TS-RB-00840	Sideroad 10	Highway 6	Jones Baseline	1965-02-02	1,013.40	70	11	$949,603	High	Low	Moderate	2035	Poor
TS-RB-00845	Sideroad 11	First Line W	Wellington Rd 7	1967-07-26	1,030.27	70	13	$965,412	High	Low	Moderate	2037	Poor
TS-RB-00847	Sideroad 11	Third Line W	First Line W	1967-10-28	2,050.49	70	13	$1,921,404	High	Low	Moderate	2037	Poor
TS-RB-00855	Sideroad 15	Jones Baseline	First Line	1964-12-14	1,125.31	70	10	$1,054,467	High	Low	Moderate	2034	Poor
TS-RB-00857	Sideroad 15	First Line	Second Line	1965-02-03	1,340.13	70	11	$1,255,764	High	Low	Moderate	2035	Poor
TS-RB-00860	Sideroad 15	Seventh Line	East-West Garafraxa Townline	1963-10-17	1,378.50	70	9	$1,291,719	High	Low	Moderate	2033	Very Poor
TS-RB-00861	Sideroad 15	Sixth Line	Seventh Line	1961-01-13	1,378.96	70	7	$1,292,147	High	Low	Moderate	2031	Very Poor
TS-RB-00862	Sideroad 15	Fifth Line	Sixth Line	1963-07-04	1,399.01	70	9	$1,310,933	High	Low	Moderate	2033	Very Poor
TS-RB-00877	Sideroad 30	Wellington Rd 29	Third Line	1963-12-23	1,453.01	70	9	$1,361,539	High	Low	Moderate	2033	Very Poor
TS-RB-00878	Sideroad 30	Third Line	Fourth Line	1964-09-20	1,397.04	70	10	$1,309,087	High	Low	Moderate	2034	Poor
TS-RB-00902	Sixth Line	Wellington Rd 18	Sideroad 9	1966-08-04	2,229.49	70	12	$2,089,134	High	Low	Moderate	2036	Poor

Township of Centre Wellington
Critical Assets Summary
Paved Road Base

Asset ID	Name	From	To	In-Service Date	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-RB-00075	Bridge St	Bridge St	Norman Craig Sq	1968-12-30	207.00	70	14	$130,136	Critical	High	Critical	2038	Poor
TS-RB-00076	Bridge St	Bridge St	Union St W	1968-12-30	52.60	70	14	$33,060	Critical	High	Critical	2038	Poor
TS-RB-00077	Bridge St	Bridge St	Queen St W	1968-12-30	56.90	70	14	$35,742	Critical	High	Critical	2038	Poor
TS-RB-00524	Sideroad 15	Sideroad 15	Highway 6	1963-11-05	1,011.90	70	9	$636,033	High	Moderate	High	2033	Very Poor
TS-RB-00510	Second Line	Second Line	Guelph St	1965-12-31	2,193.90	70	11	$1,379,002	High	Moderate	High	2035	Poor
TS-RB-00511	Second Line	Second Line	Highway 6	1965-12-31	678.60	70	11	$426,568	High	Moderate	High	2035	Poor
TS-RB-00534	Sideroad 4	Sideroad 4	Wellington Rd 7	1963-05-10	1,292.40	70	9	$812,386	High	Moderate	High	2033	Very Poor
TS-RB-00535	Sideroad 4	Sideroad 4	Second Line E	1961-05-30	1,259.70	70	7	$791,780	High	Moderate	High	2031	Very Poor
TS-RB-00316	Tower St S	Tower St S	Tower St S	1970-12-31	126.40	70	16	$79,479	High	High	High	2040	Fair
TS-RB-00576	St David St N	St David St N	Forfar St E	1969-12-30	221.40	70	15	$139,177	High	High	High	2039	Fair
TS-RB-00577	St David St N	St David St N	Gordon St	1969-12-30	118.70	70	15	$74,621	High	High	High	2039	Fair
TS-RB-00580	St David St N	St David St N	Strathallan St	1969-12-30	187.60	70	15	$117,898	High	High	High	2039	Fair
TS-RB-00581	St David St N	St David St N	Parkside Dr E	1969-12-30	120.10	70	15	$75,478	High	High	High	2039	Fair
TS-RB-00583	St David St N	St David St N	Black St	1969-12-30	101.70	70	15	$63,952	High	High	High	2039	Fair
TS-RB-00584	St David St N	St David St N	Edinburgh Ave	1969-12-30	10.50	70	15	$6,587	High	High	High	2039	Fair
TS-RB-00585	St David St N	St David St N	Sideroad 19	1969-12-30	96.10	70	15	$60,409	High	High	High	2039	Fair
TS-RB-00586	St David St N	St David St N	Woodhill Dr	1969-12-30	135.30	70	15	$85,025	High	High	High	2039	Fair
TS-RB-00588	St David St N	St David St N	Bergin Ave	1969-12-30	100.60	70	15	$63,205	High	High	High	2039	Fair
TS-RB-00657	Tower St S	Tower St S	Albert St W	1970-12-31	96.30	70	16	$60,556	High	High	High	2040	Fair
TS-RB-00659	Tower St S	Tower St S	Elora St	1970-12-31	128.60	70	16	$80,858	High	High	High	2040	Fair
TS-RB-00660	Tower St S	Tower St S	Prince's St	1970-12-31	130.20	70	16	$81,842	High	High	High	2040	Fair
TS-RB-00661	Tower St S	Tower St S	Wellington St	1970-12-31	131.30	70	16	$82,561	High	High	High	2040	Fair
TS-RB-00523	Sideroad 15	Sideroad 15	Gerrie Rd	1967-05-08	1,017.50	70	13	$639,564	High	Moderate	High	2037	Poor
TS-RB-00522	Sideroad 15	Sideroad 15	Beatty Line N	1970-09-13	2,012.50	70	16	$1,265,002	High	Moderate	High	2040	Fair
TS-RB-00136	Colborne St	Colborne St	Beatty Line N	1963-03-18	2,252.70	70	9	$1,415,956	High	Moderate	High	2033	Very Poor
TS-RB-00249	Gerrie Rd	Gerrie Rd	Patrick Blvd	1962-06-06	260.60	70	8	$163,825	High	Moderate	High	2032	Very Poor
TS-RB-00719	Woolwich St E	Woolwich St E	Millford Cres	1964-12-25	144.80	70	10	$90,990	High	Moderate	High	2034	Poor
TS-RB-00720	Woolwich St E	Woolwich St E	Millford Cres	1966-07-08	266.20	70	12	$167,303	High	Moderate	High	2036	Poor
TS-RB-00721	Woolwich St E	Woolwich St E	Irvine St	1965-05-16	150.50	70	11	$94,607	High	Moderate	High	2035	Poor
TS-RB-00731	Water St	Water St	High St	1966-08-06	22.70	70	12	$14,257	High	Moderate	High	2036	Poor

Township of Centre Wellington
Critical Assets Summary
Gravel Road Surface

Asset ID	Name	From	To	In-Service Date	Road Class	Length (m)	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Condition
TS-RS-00837	Sideroad 10	Wellington Rd 7	Irvine St	1965-12-31	Collector	1,023.10	$9,305	Critical	Critical	Critical	Very Poor
TS-RS-00838	Sideroad 10	Irvine St	Gerrie Rd	1965-12-31	Collector	1,017.20	$9,251	Critical	Critical	Critical	Very Poor
TS-RS-00896	Sideroad 6 N	Second Line	First Line	1965-12-31	Collector	2,064.40	$18,776	Critical	Critical	Critical	Very Poor
TS-RS-00775	Erin-Garafraxa Townline	Wellington Rd 26	East-West Garafraxa Townline	1965-12-31	Collector	1,338.90	$12,177	High	Critical	Critical	Poor
TS-RS-00831	Second Line	Highway 6	Scotland St	1965-12-31	Collector	1,059.20	$9,634	High	Critical	Critical	Poor
TS-RS-00840	Sideroad 10	Beatty Line N	Highway 6	1965-12-31	Collector	1,001.60	$9,109	Critical	High	Critical	Very Poor
TS-RS-00879	Sideroad 30	Third Line	Fourth Line	1965-12-31	Collector	1,397.00	$12,706	High	Critical	Critical	Poor
TS-RS-00956	Sideroad 5	Gerrie Rd	Beatty Line N	1965-12-31	Collector	2,008.20	$18,265	Critical	High	Critical	Very Poor
TS-RS-00963	Fourth Line	Highway 6	Jones Baseline	1965-12-31	Collector	1,542.10	$14,025	High	Critical	Critical	Poor
TS-RS-00751	Beatty Line N	Sideroad 10	Sideroad 5	1965-12-31	Collector	1,642.90	$14,942	High	High	High	Poor
TS-RS-00846	Sideroad 11	First Line W	Wellington Rd 7	1965-12-31	Collector	1,030.30	$9,370	High	High	High	Poor
TS-RS-00973	Sideroad 15	Seventh Line	East-West Garafraxa Townline	1965-12-31	Collector	1,378.50	$12,537	High	High	High	Poor
TS-RS-00839	Sideroad 10	Gerrie Rd	Beatty Line N	1965-12-31	Collector	2,012.30	$18,302	Critical	Moderate	High	Very Poor
TS-RS-00961	Jones Baseline	Sixth Line	Fourth Line	1965-12-31	Local	1,861.70	$16,932	Critical	Moderate	High	Very Poor
TS-RS-00977	East-West Garafraxa Townline	Sideroad 20	Sideroad 25	1965-12-31	Collector	3,061.00	$27,840	Critical	Moderate	High	Very Poor
TS-RS-00853	Sideroad 14	Eighth Line E	Sixth Line E	2003-12-31	Collector	1,286.70	$11,703	Critical	Moderate	High	Very Poor
TS-RS-01045	Jones Baseline	Sixth Line	Fourth Line	2015-08-01	Local	206.90	$1,881	Critical	Moderate	High	Very Poor
TS-RS-00779	First Line	Sideroad 20	Sideroad 25	1965-12-31	Collector	3,070.10	$27,922	High	High	High	Poor
TS-RS-00812	Jones Baseline	Sideroad 15	Sideroad 5	1965-12-31	Collector	1,731.20	$15,745	High	High	High	Poor
TS-RS-00881	Sideroad 30	Fifth Line	Sixth Line	1965-12-31	Collector	1,407.60	$12,802	High	High	High	Poor
TS-RS-00886	Sideroad 5	Irvine St	Gerrie Rd	1965-12-31	Collector	1,022.20	$9,296	High	High	High	Poor
TS-RS-00894	Sideroad 6 N	Sixth Line	Fourth Line	1965-12-31	Collector	2,078.50	$18,904	High	High	High	Poor
TS-RS-00957	Sideroad 6 N	Fourth Line	Second Line	1965-12-31	Collector	1,982.10	$18,027	High	High	High	Poor
TS-RS-00958	Sideroad 6 N	Eighth Line	Sixth Line	1965-12-31	Collector	2,050.40	$18,648	High	High	High	Poor
TS-RS-00832	Second Line	Eramosa-Garafraxa Townline	Wellington Rd 18	2001-12-31	Collector	3,048.30	$27,724	High	High	High	Poor
TS-RS-00855	Sideroad 14	Fourth Line E	Second Line E	2003-12-31	Collector	1,272.30	$11,572	High	High	High	Poor
TS-RS-00791	Fourth Line E	Sideroad 4	Wellington Rd 21	1965-12-31	Collector	1,505.90	$13,696	Moderate	Critical	High	Fair
TS-RS-00878	Sideroad 30	Wellington Rd 29	Third Line	1965-12-31	Collector	1,453.00	$13,215	Moderate	Critical	High	Fair
TS-RS-00888	Sideroad 5	First Line W	Wellington Rd 7	1965-12-31	Local	1,030.20	$9,370	Critical	Moderate	High	Very Poor
TS-RS-00904	Sixth Line	Sideroad 9	Seventh St Pvt	1965-12-31	Collector	456.10	$4,148	Critical	Moderate	High	Very Poor
TS-RS-00922	Weisenberg Rd	Sideroad 12	Sideroad 10	1965-12-31	Collector	1,318.60	$11,993	Critical	Moderate	High	Very Poor
TS-RS-00955	Sideroad 5	Beatty Line N	Highway 6	1965-12-31	Collector	932.80	$8,484	Critical	Moderate	High	Very Poor
TS-RS-00852	Sideroad 14	Eighth Line E	Eighth Line E	2003-12-31	Collector	885.10	$8,050	Critical	Moderate	High	Very Poor

Township of Centre Wellington
Critical Assets Summary
Paved Road Surface

Asset ID	Name	From	To	In-Service Date	Road Class	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
TS-RS-00136	Colborne St	Gerrie Rd	Beatty Line N	1965-12-31	Local	2,252.70	20	0	$1,235,383	Critical	High	Critical	Past Due	Very Poor
TS-RS-00524	Sideroad 15	Irvine St	Gerrie Rd	1965-12-31	Collector	1,017.50	20	0	$558,002	Critical	High	Critical	Past Due	Very Poor
TS-RS-00584	St David St N	Bergin Ave	Black St	1969-12-31	Collector	101.70	20	0	$55,797	High	Critical	Critical	Past Due	Poor
TS-RS-00500	Scotland St	McQueen Blvd	Second Line	1965-12-31	Collector	1,001.40	20	0	$549,198	High	High	High	Past Due	Poor
TS-RS-00523	Sideroad 15	Gerrie Rd	Beatty Line N	1965-12-31	Collector	2,012.50	20	0	$1,103,680	High	High	High	Past Due	Poor
TS-RS-00535	Sideroad 4	Second Line E	Wellington Rd 7	1965-12-31	Collector	1,292.40	20	0	$708,785	High	High	High	Past Due	Poor
TS-RS-00721	Woolwich St E	Millford Cres	Millford Cres	1965-12-31	Collector	266.20	20	0	$145,968	High	High	High	Past Due	Poor
TS-RS-00722	Woolwich St E	Millford Cres	Irvine St	1965-12-31	Collector	150.50	20	0	$82,542	High	High	High	Past Due	Poor
TS-RS-00944	Union St W	Perth St	Craighead Dr	1973-12-31	Collector	215.20	20	0	$117,999	High	High	High	Past Due	Poor
TS-RS-01122	Union St W	Tower St S	Athol St	1973-12-31	Collector	89.60	20	0	$49,158	High	High	High	Past Due	Poor
TS-RS-00223	Forfar St E	Gzowski St	Douglas Cres	1976-12-31	Local	259.10	20	0	$142,080	High	High	High	Past Due	Poor
TS-RS-00127	Colborne St	Kertland St	Cuthbert St	1986-12-31	Collector	108.60	20	0	$59,561	High	High	High	Past Due	Poor
TS-RS-00128	Colborne St	Wellesley St	Kertland St	1986-12-31	Collector	81.40	20	0	$44,614	High	High	High	Past Due	Poor
TS-RS-00131	Colborne St	Wilson Cres	Steven Way	1986-12-31	Collector	56.00	20	0	$30,698	High	High	High	Past Due	Poor
TS-RS-00132	Colborne St	Steven Way	Wilson Cres	1986-12-31	Collector	157.30	20	0	$86,247	High	High	High	Past Due	Poor
TS-RS-00424	Millburn Blvd	Beirnes Crt	McTavish St	1993-12-31	Collector	88.90	20	0	$48,727	High	High	High	Past Due	Poor
TS-RS-00262	Gordon St	St David St N	Gibbons Dr	1998-12-31	Collector	442.60	20	0	$242,702	High	High	High	Past Due	Poor
TS-RS-00212	First Line	Spencer Dr	Gilkison St	1999-12-31	Collector	691.20	20	0	$379,069	High	High	High	Past Due	Poor
TS-RS-00401	McQueen Blvd	Tower St S	Millburn Blvd	1999-12-31	Collector	223.60	20	0	$122,608	High	High	High	Past Due	Poor
TS-RS-00509	Second Line	Wellington Rd 18	Wellington Rd 19	2001-12-31	Collector	2,513.60	20	0	$1,378,459	High	High	High	Past Due	Poor
TS-RS-00452	Orangeville Rd	Scotland St	Wellington Rd 18	2003-12-31	Local	890.10	20	0	$488,135	High	High	High	Past Due	Poor
TS-RS-01040	First Line	Hill St	Bridge St	2009-08-05	Local	207.70	20	5	$113,883	High	High	High	2029	Poor
TS-RS-01041	First Line	Spencer Dr	Gilkison St	2009-08-05	Local	255.70	20	5	$140,204	High	High	High	2029	Poor
TS-RS-00564	South River Rd	First Line	Union St W	2009-12-31	Collector	1,569.10	20	5	$860,532	High	High	High	2029	Poor
TS-RS-01194	Beatty Line N	Colborne St	Millage Lane	2020-10-15	Local	102.90	20	16	$56,453	High	High	High	2040	Poor
TS-RS-00283	Guelph St	Stephen's Crt	Second Line	1965-12-31	Local	930.90	20	0	$510,524	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00284	Guelph St	Cummings Cres N	Cummings Cres S	1965-12-31	Local	82.10	20	0	$45,006	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00285	Guelph St	Chambers Cres S	Cummings Cres N	1965-12-31	Local	82.40	20	0	$45,168	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00286	Guelph St	Chambers Cres N	Chambers Cres S	1965-12-31	Local	83.70	20	0	$45,876	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00290	Guelph St	Cummings Cres S	Stephen's Crt	1965-12-31	Local	156.60	20	0	$85,862	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00366	Jones Baseline	Eramosa-Garafraxa Townline	Second Line	1965-12-31	Collector	1,448.90	20	0	$794,583	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00548	Sixth Line E	Sideroad 10	Wellington Rd 21	1965-12-31	Collector	3,129.70	20	0	$1,716,379	Critical	Moderate	High	Past Due	Very Poor
TS-RS-01129	Guelph St	Stephen's Crt	Second Line	1965-12-31	Local	316.50	20	0	$173,578	Critical	Moderate	High	Past Due	Very Poor
TS-RS-00075	Bridge St	Queen St W	Norman Craig Sq	1968-12-31	Collector	207.00	20	0	$113,540	Moderate	Critical	High	Past Due	Fair
TS-RS-00076	Bridge St	Tower St S	Union St W	1968-12-31	Collector	52.60	20	0	$28,844	Moderate	Critical	High	Past Due	Fair
TS-RS-00577	St David St N	Garafraxa St W	Forfar St E	1969-12-31	Collector	221.40	20	0	$121,428	Moderate	Critical	High	Past Due	Fair
TS-RS-00585	St David St N	Black St	Edinburgh Ave	1969-12-31	Collector	10.50	20	0	$5,747	Moderate	Critical	High	Past Due	Fair
TS-RS-00589	St David St N	Forfar St E	Bergin Ave	1969-12-31	Collector	100.60	20	0	$55,144	Moderate	Critical	High	Past Due	Fair
TS-RS-00660	Tower St S	Tower St S	Elora St	1970-12-31	Collector	128.60	20	0	$70,546	Moderate	Critical	High	Past Due	Fair
TS-RS-00661	Tower St S	Albert St W	Prince's St	1970-12-31	Collector	130.20	20	0	$71,405	Moderate	Critical	High	Past Due	Fair
TS-RS-00662	Tower St S	Prince's St	Wellington St	1970-12-31	Collector	131.30	20	0	$72,032	Moderate	Critical	High	Past Due	Fair
TS-RS-00572	St Andrew St E	Gowrie St N	Cameron St	1993-12-31	Collector	172.70	20	0	$94,711	Moderate	Critical	High	Past Due	Fair
TS-RS-00573	St Andrew St E	Cameron St	Herrick St	1993-12-31	Collector	225.30	20	0	$123,558	Moderate	Critical	High	Past Due	Fair
TS-RS-00501	Scotland St	Belsyde Ave E	Denny Gate	2003-12-31	Collector	150.40	20	0	$82,492	Moderate	Critical	High	Past Due	Fair
TS-RS-00502	Scotland St	Denny Gate	Darroch Way	2003-12-31	Collector	50.40	20	0	$27,648	Moderate	Critical	High	Past Due	Fair
TS-RS-00504	Scotland St	Darroch Way	Millburn Blvd	2003-12-31	Collector	123.60	20	0	$67,789	Moderate	Critical	High	Past Due	Fair

Township of Centre Wellington
Critical Assets Summary
Watermains

Asset ID	Name	Location	Material	In-Service Date	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
ES-WM-00282	Watermain	Victoria Ter	CI	1930-12-31	135.02	60	0	$114,857	Critical	Moderate	High	Past Due	Very Poor
ES-WM-00863	Watermain	Victoria Ter	CI	1930-12-31	83.02	60	0	$70,627	Critical	Moderate	High	Past Due	Very Poor
ES-WM-00244	Watermain	Forfar St E	CI	1960-12-31	162.60	60	0	$138,318	Critical	Moderate	High	Past Due	Very Poor
ES-WM-00306	Watermain	Forfar St E	CI	1960-12-31	15.15	60	0	$12,889	Critical	Moderate	High	Past Due	Very Poor
ES-WM-00351	Watermain	St David St N	CI	1970-12-31	106.50	60	6	$90,594	High	Moderate	High	2030	Poor
ES-WM-00131	Watermain	Blair St	CI	1930-12-31	121.43	60	0	$93,038	Critical	Moderate	High	Past Due	Very Poor
ES-WM-00682	Watermain	Gowrie St N	CI	1930-12-31	50.87	60	0	$43,272	Moderate	High	High	Past Due	Very Poor
ES-WM-00524	Watermain	Tower St S	CI	1970-07-01	130.33	60	6	$102,205	High	Moderate	High	2030	Poor
ES-WM-00528	Watermain	Union St W	DI	1930-12-31	54.18	60	0	$42,484	Moderate	High	High	Past Due	Very Poor
ES-WM-00489	Watermain	East Mill St	CI	1960-12-31	12.09	60	0	$96,614	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00183	Watermain	Belsyde Ave E	DI	1977-07-01	114.29	60	13	$97,220	Moderate	High	Moderate	2037	Poor
ES-WM-00165	Watermain	Belsyde Ave E	CI	1970-12-31	183.96	60	6	$144,259	High	Moderate	Moderate	2030	Poor
ES-WM-00243	Watermain	Forfar St E	CI	1960-12-31	211.20	60	0	$179,663	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00307	Watermain	Gartshore St	CI	1960-12-31	64.69	60	0	$55,027	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00824	Watermain	Gartshore St	CI	1960-12-31	22.06	60	0	$18,766	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-01028	Watermain	Maiden Lane	CI	1930-12-31	22.01	60	0	$16,861	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00162	Watermain	Tower St S	CI	1930-12-31	129.31	60	0	$99,078	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00522	Watermain	Tower St S	CI	1930-12-31	357.56	60	0	$273,955	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00241	Watermain	Forfar St E	CI	1960-12-31	248.54	60	0	$194,897	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00395	Watermain	David St E	CI	1960-12-31	88.78	60	0	$69,617	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00720	Watermain	David St E	CI	1960-12-31	82.01	60	0	$64,309	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00261	Watermain	Garafraxa St E	CI	1930-12-31	171.69	60	0	$146,053	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-01101	Watermain	Garafraxa St E	CI	1930-12-31	8.30	60	0	$7,057	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00693	Watermain	Union St W	DI	1979-07-01	135.34	60	15	$106,133	Moderate	High	Moderate	2039	Poor
ES-WM-00340	Watermain	St. Andrew St W	CI	1930-12-31	258.09	60	0	$197,747	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00669	Watermain	East Mill St	CI	1960-12-31	97.21	60	0	$74,477	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00159	Watermain	Tower St S	DI	1960-12-31	87.96	60	0	$74,825	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00042	Watermain	Thistle St	CI	1930-12-31	128.98	60	0	$98,823	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00077	Watermain	Ferrier Crt	CI	1960-12-31	50.33	60	0	$38,564	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00585	Watermain	Beatty Line S	CI	1960-12-31	254.20	60	0	$194,764	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00854	Watermain	Tower St S	CI	1930-12-31	14.72	60	0	$11,544	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00566	Watermain	Princess St	CI	1960-12-31	101.66	60	0	$79,716	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00820	Watermain	Gzowski St	DI	1960-12-31	52.63	60	0	$44,774	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00352	Watermain	St David St N	CI	1970-12-31	34.82	60	6	$29,621	Moderate	Moderate	Moderate	2030	Poor
ES-WM-00877	Watermain	St David St N	CI	1970-12-31	6.52	60	6	$5,547	Moderate	Moderate	Moderate	2030	Poor
ES-WM-00139	Watermain	Brock Ave	CI	1960-12-31	55.73	60	0	$42,699	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00458	Watermain	Bridge St	CI	1960-12-31	64.90	60	0	$49,726	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00635	Watermain	Water St	CI	1950-12-31	15.21	60	0	$11,655	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00650	Watermain	Foote Cres	CI	1960-12-31	35.87	60	0	$27,480	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00203	Watermain	East Mill St	CI	1960-12-31	65.90	60	0	$50,488	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00204	Watermain	East Mill St	CI	1960-12-31	72.99	60	0	$55,924	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00207	Watermain	East Mill St	CI	1960-12-31	83.83	60	0	$64,232	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00055	Watermain	Grand Place Dr	CI	1968-12-31	66.72	60	4	$58,916	Moderate	Moderate	Moderate	2028	Poor
ES-WM-00665	Watermain	Gzowski St	CI	1967-07-01	342.48	60	3	$291,344	Moderate	Moderate	Moderate	2027	Poor
ES-WM-00051	Watermain	Queen St E	CI	1990-12-31	141.34	60	26	$110,834	High	Low	Moderate	2050	Fair
ES-WM-00815	Watermain	Queen St E	CI	1990-12-31	54.38	60	26	$42,643	High	Low	Moderate	2050	Fair
ES-WM-00312	Watermain	Gzowski St	DI	1960-12-31	478.08	60	0	$406,691	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00656	Watermain	St George St W	DI	1930-12-31	94.78	60	0	$72,619	Moderate	Moderate	Moderate	Past Due	Very Poor
ES-WM-00916	Watermain	St David St N	CI	1970-12-31	99.33	60	6	$84,500	Moderate	Moderate	Moderate	2030	Poor
ES-WM-00179	Watermain	Belsyde Ave E	DI	1977-07-01	244.59	60	13	$208,065	Moderate	Moderate	Moderate	2037	Poor
ES-WM-00764	Watermain	Wellington Rd 7	AC	1960-12-31	261.25	75	11	$200,167	Moderate	Moderate	Moderate	2035	Poor
ES-WM-00014	Watermain	Gzowski St	CI	1930-12-31	124.03	60	0	$95,026	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00043	Watermain	Union St E	CI	1930-12-31	336.39	60	0	$257,733	Critical	Low	Moderate	Past Due	Very Poor
ES-WM-00116	Watermain	Garafraxa St W	CI	1930-12-31	90.46	60	0	$69,306	Critical	Low	Moderate	Past Due	Very Poor

Township of Centre Wellington
Critical Assets Summary
Wastewater Mains

Asset ID	Name	Location	Material	In-Service Date	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
ES-SN-00448	Gravity Main	Elgin St	PVC	1960-12-31	49.81	80	16	$54,297	Critical	High	Critical	2040	Very Poor
ES-SN-01159	Gravity Main	St Patrick St E	AC	1975-07-01	20.36	75	26	$22,197	Critical	High	Critical	2050	Very Poor
ES-SN-00084	Gravity Main	David St W	AC	1960-12-31	89.19	75	11	$56,365	High	High	Critical	2035	Very Poor
ES-SN-00613	Gravity Main	Gzowski St	AC	1960-12-31	41.76	75	11	$26,393	High	High	Critical	2035	Very Poor
ES-SN-00599	Gravity Main	Tower St S	AC	1970-12-31	3.31	75	21	$2,099	High	Critical	Critical	2045	Poor
ES-SN-01340	Forced Main	Carlton Pl	DI	1985-06-07	477.68	80	41	$520,673	High	Critical	Critical	2065	Fair
ES-SN-00991	Gravity Main	Gzowski St	AC	1977-07-01	75.90	75	28	$48,195	High	High	High	2052	Poor
ES-SN-01250	Gravity Main	St David St S	PVC	1930-12-31	75.87	80	0	$47,953	High	High	High	Past Due	Poor
ES-SN-00092	Gravity Main	Union St W	AC	1970-07-01	111.12	75	21	$70,228	High	High	High	2045	Poor
ES-SN-01019	Gravity Main	Gzowski St	AC	1970-12-31	96.63	75	21	$61,068	High	High	High	2045	Poor
ES-SN-00452	Gravity Main	McAlister St	AC	1960-12-31	58.46	75	11	$37,122	High	High	High	2035	Very Poor
ES-SN-00519	Gravity Main	Elgin St	AC	1960-12-31	120.22	75	11	$131,045	High	High	High	2035	Poor
ES-SN-01169	Gravity Main	Menzies Lane	VC	1930-12-31	32.97	80	0	$35,941	High	High	High	Past Due	Poor
ES-SN-01158	Gravity Main	St Patrick St E	AC	1975-07-01	36.69	75	26	$39,995	High	High	High	2050	Poor
ES-SN-01334	Gravity Main	John St	AC	1972-07-01	44.64	75	23	$28,211	High	High	High	2047	Poor
ES-SN-01336	Gravity Main	John St	AC	1972-07-01	46.48	75	23	$29,374	High	High	High	2047	Poor
ES-SN-00251	Gravity Main	Metcalfe St	PE	1980-12-31	98.07	75	31	$106,896	Moderate	Critical	High	2055	Fair
ES-SN-01537	Forced Main	Blair St	PVC	1930-12-31	95.09	80	0	$60,099	Moderate	Critical	High	Past Due	Very Poor
ES-SN-00608	Gravity Main	Metcalfe St	PE	1980-12-30	99.19	75	31	$62,687	Moderate	High	High	2055	Fair
ES-SN-00250	Gravity Main	Carlton Pl	AC	1980-07-01	2.65	75	31	$2,893	Moderate	High	High	2055	Fair
ES-SN-00392	Gravity Main	Carlton Pl	AC	1980-07-01	41.33	75	31	$45,051	Moderate	High	High	2055	Fair
ES-SN-00391	Gravity Main	Clyde St	AC	1980-07-01	73.22	75	31	$79,808	Moderate	High	High	2055	Fair
ES-SN-00955	Gravity Main	St David St S	VC	1930-12-31	56.54	80	0	$35,905	Moderate	Critical	High	Past Due	Fair
ES-SN-01247	Gravity Main	St Andrew St W	VC	1930-12-31	81.84	80	0	$51,968	Moderate	Critical	High	Past Due	Fair
ES-SN-01344	Forced Main	Union St W	PVC	1969-08-31	463.84	80	25	$293,145	Moderate	Critical	High	2049	Poor
ES-SN-01549	Gravity Main	Tower St S	PVC	2013-07-01	55.16	80	69	$60,121	Moderate	Critical	High	2093	Fair
ES-SN-01550	Gravity Main	Tower St N	HDPE	2013-07-01	49.11	75	64	$53,531	Moderate	Critical	High	2088	Fair
ES-SN-00970	Gravity Main	Belsyde Ave E	PVC	2001-07-12	48.84	80	57	$30,864	Moderate	High	Moderate	2081	Fair
ES-SN-00533	Gravity Main	Colborne St	CONC	1968-07-01	42.91	80	24	$27,118	Moderate	High	Moderate	2048	Poor
ES-SN-00534	Gravity Main	Colborne St	CONC	1968-07-01	36.56	80	24	$23,105	Moderate	High	Moderate	2048	Poor
ES-SN-00453	Gravity Main	McAlister St	AC	1960-12-31	32.39	75	11	$20,565	Moderate	High	Moderate	2035	Poor
ES-SN-00521	Gravity Main	Elgin St	PVC	1960-12-31	63.69	80	16	$69,417	Moderate	High	Moderate	2040	Fair
ES-SN-01234	Gravity Main	Herrick St	VC	1930-12-31	107.72	80	0	$68,404	Moderate	High	Moderate	Past Due	Fair
ES-SN-01655	Gravity Main	Menzies Lane	CONC	2013-07-01	35.31	80	69	$38,486	Moderate	High	Moderate	2093	Fair
ES-SN-00093	Gravity Main	Braeside Rd	AC	1970-07-01	94.08	75	21	$59,461	Moderate	High	Moderate	2045	Fair
ES-SN-00094	Gravity Main	Braeside Rd	PVC	1990-12-31	14.78	80	46	$9,339	Moderate	High	Moderate	2070	Fair
ES-SN-00356	Gravity Main	St George St W	PVC	1960-12-31	65.38	80	16	$41,318	Moderate	High	Moderate	2040	Fair
ES-SN-00275	Gravity Main	Gartshore St	AC	1973-10-01	75.72	75	24	$82,537	High	Moderate	Moderate	2048	Poor
ES-SN-01202	Gravity Main	Queen St W	CONC	1991-07-01	10.11	80	47	$11,020	High	Moderate	Moderate	2071	Poor
ES-SN-01219	Gravity Main	Gartshore St	AC	1973-10-01	34.00	75	24	$37,055	High	Moderate	Moderate	2048	Poor
ES-SN-01220	Gravity Main	Gartshore St	AC	1973-10-01	109.58	75	24	$119,447	High	Moderate	Moderate	2048	Poor
ES-SN-01221	Gravity Main	Gartshore St	AC	1973-10-01	85.95	75	24	$93,689	High	Moderate	Moderate	2048	Poor
ES-SN-00564	Gravity Main	Erb St	PVC	1995-07-01	23.84	80	51	$15,068	Moderate	High	Moderate	2075	Fair
ES-SN-00577	Gravity Main	Erb St	PVC	1995-07-01	103.45	80	51	$65,381	Moderate	High	Moderate	2075	Fair
ES-SN-00985	Gravity Main	Gzowski St	AC	1977-07-01	74.85	75	28	$47,532	High	Moderate	Moderate	2052	Poor
ES-SN-00990	Gravity Main	Gzowski St	AC	1977-07-01	72.92	75	28	$46,303	High	Moderate	Moderate	2052	Poor
ES-SN-01296	Gravity Main	Garafraxa St E	AC	1975-07-01	12.55	75	26	$7,930	High	Moderate	Moderate	2050	Poor
ES-SN-01020	Gravity Main	Gzowski St	AC	1970-12-31	17.43	75	21	$11,019	High	Moderate	Moderate	2045	Poor

Township of Centre Wellington
Critical Assets Summary
Stormwater Mains

Asset ID	Name	Location	Material	In-Service Date	Length (m)	Estimated Useful Life	Remaining Useful Life	Replacement Cost	Probability of Failure	Consequence of Failure	Risk Matrix	Replacement Year	Condition
ES-ST-00423	Storm Main	Tower St S	CP	1970-07-01	1.49	75	20	$718	High	Critical	Critical	2044	Poor
ES-ST-01985	Storm Main	Tower St S	UNKN	1970-12-31	1.31	75	20	$1,099	High	Critical	Critical	2044	Poor
ES-ST-01991	Storm Main	Tower St S	UNKN	1970-12-31	0.63	75	20	$529	High	Critical	Critical	2044	Poor
ES-ST-01992	Storm Main	Tower St S	UNKN	1970-12-31	15.25	75	20	$12,811	High	Critical	Critical	2044	Poor
ES-ST-01993	Storm Main	Tower St S	UNKN	1970-12-31	8.89	75	20	$7,464	High	Critical	Critical	2044	Poor
ES-ST-01994	Storm Main	Tower St S	UNKN	1970-12-31	31.54	75	20	$26,496	High	Critical	Critical	2044	Poor
ES-ST-02172	Storm Main	St David St N	UNKN	1970-12-31	72.32	75	20	$34,947	High	Critical	Critical	2044	Poor
ES-ST-02203	Storm Main	St David St N	UNKN	1969-12-31	27.31	75	19	$22,853	High	Critical	Critical	2043	Poor
ES-ST-02922	Storm Main	St David St N	UNKN	1969-12-31	59.63	75	19	$50,092	High	Critical	Critical	2043	Poor
ES-ST-02998	Storm Main	Tower St S	CP	1970-07-01	8.08	75	20	$3,903	High	Critical	Critical	2044	Poor
ES-ST-03057	Storm Main	Tower St S	UNKN	1970-12-31	2.28	75	20	$1,919	High	Critical	Critical	2044	Poor
ES-ST-03083	Storm Main	St David St S	UNKN	1968-12-31	32.48	75	18	$27,176	High	Critical	Critical	2042	Poor
ES-ST-03184	Storm Main	David St E	CSP	1964-12-31	8.16	75	14	$3,944	Critical	High	Critical	2038	Very Poor
ES-ST-03421	Storm Main	Irvine St	CSP	1964-01-14	31.98	75	14	$26,761	Critical	High	Critical	2038	Very Poor
ES-ST-03869	Storm Main	CWCSP	UNKN	1976-12-31	31.77	75	26	$26,687	High	Critical	Critical	2050	Poor
ES-ST-03875	Storm Main	CWCSP	UNKN	1976-12-31	62.73	75	26	$52,696	High	Critical	Critical	2050	Poor
ES-ST-04099	Storm Main	Carlton Pl	CSP	1961-12-31	35.74	75	11	$26,579	Critical	High	Critical	2035	Very Poor
ES-ST-04366	Storm Main	Tower St S	UNKN	1970-07-01	10.78	75	20	$8,016	High	Critical	Critical	2044	Poor
ES-ST-00796	Storm Main	Irvine St	UNKN	1964-01-14	4.52	75	14	$1,507	High	High	High	2038	Very Poor
ES-ST-02087	Storm Main	Garafraxa St W	UNKN	1970-12-31	66.10	75	20	$49,163	High	High	High	2044	Poor
ES-ST-03006	Storm Main	Tower St S	UNKN	1970-07-01	15.74	75	20	$6,486	High	High	High	2044	Poor
ES-ST-03073	Storm Main	Queen St W	UNKN	1968-12-31	45.71	75	18	$15,233	High	High	High	2042	Poor
ES-ST-03075	Storm Main	Bridge St	UNKN	1968-12-31	14.79	75	18	$6,094	High	High	High	2042	Poor
ES-ST-03078	Storm Main	Bridge St	CP	1968-12-31	30.03	75	18	$10,009	High	High	High	2042	Poor
ES-ST-03146	Storm Main	Union St E	CSP	1974-12-31	7.34	75	24	$5,460	High	High	High	2048	Poor
ES-ST-03717	Storm Main	St David St N	UNKN	1969-12-31	56.93	75	19	$23,455	High	High	High	2043	Poor
ES-ST-03961	Storm Main	Hill St W	UNKN	1905-07-07	54.76	75	0	$22,562	High	High	High	Past Due	Very Poor
ES-ST-03962	Storm Main	Hill St W	UNKN	1905-07-07	39.04	75	0	$16,083	High	High	High	Past Due	Very Poor
ES-ST-00288	Storm Main	Scotland St	UNKN	1976-07-01	10.31	75	26	$7,667	High	High	High	2050	Poor
ES-ST-01973	Storm Main	Tower St S	UNKN	1970-07-01	13.52	75	20	$4,505	High	High	High	2044	Poor
ES-ST-01980	Storm Main	Tower St S	UNKN	1970-12-31	9.69	75	20	$3,994	High	High	High	2044	Poor
ES-ST-01983	Storm Main	Tower St S	UNKN	1970-07-01	14.61	75	20	$6,020	High	High	High	2044	Poor
ES-ST-01984	Storm Main	Tower St S	UNKN	1970-07-01	5.55	75	20	$2,287	High	High	High	2044	Poor
ES-ST-01987	Storm Main	Tower St S	UNKN	1970-12-31	12.68	75	20	$5,226	High	High	High	2044	Poor
ES-ST-02019	Storm Main	St David St N	UNKN	1969-12-31	97.58	75	19	$81,652	High	High	High	2043	Poor
ES-ST-02169	Storm Main	St David St N	UNKN	1969-12-31	2.32	75	19	$774	High	High	High	2043	Poor
ES-ST-02170	Storm Main	St David St N	UNKN	1970-12-31	9.66	75	20	$3,219	High	High	High	2044	Poor
ES-ST-02197	Storm Main	St David St N	UNKN	1969-12-31	7.69	75	19	$3,167	High	High	High	2043	Poor
ES-ST-02198	Storm Main	St David St N	UNKN	1969-12-31	14.99	75	19	$6,177	High	High	High	2043	Poor
ES-ST-02199	Storm Main	St David St N	CSP	1969-12-31	8.74	75	19	$3,599	High	High	High	2043	Poor
ES-ST-02224	Storm Main	St David St N	CSP	1969-12-31	8.48	75	19	$3,496	High	High	High	2043	Poor
ES-ST-02353	Storm Main	St David St N	CSP	1969-12-31	53.24	75	19	$44,548	High	High	High	2043	Poor
ES-ST-02822	Storm Main	Parkside Dr E	UNKN	1977-07-01	17.48	75	27	$14,627	High	High	High	2051	Poor
ES-ST-02914	Storm Main	St David St N	UNKN	1970-12-31	9.58	75	20	$3,194	High	High	High	2044	Poor
ES-ST-02918	Storm Main	St David St N	UNKN	1970-12-31	11.55	75	20	$4,759	High	High	High	2044	Poor
ES-ST-02923	Storm Main	St David St N	UNKN	1969-12-31	3.54	75	19	$1,180	High	High	High	2043	Poor
ES-ST-02924	Storm Main	St David St N	UNKN	1969-12-31	6.11	75	19	$2,037	High	High	High	2043	Poor
ES-ST-02926	Storm Main	St David St N	UNKN	1969-12-31	3.01	75	19	$1,003	High	High	High	2043	Poor
ES-ST-02927	Storm Main	St David St N	UNKN	1969-12-31	6.65	75	19	$2,216	High	High	High	2043	Poor

Township of Centre Wellington
Critical Assets Summary
Water Services Facilities

Building	Component	Component Description	Risk	Condition
Fergus Pump House 1	B2010 - Exterior Walls	Future Repairs - Stone masonry walls - Original Building	Critical	Very Poor
Elora Pump House 3	D4030 - Fire Protection Specialties	Fire Extinguisher, Wired Smoke Detector - Main Pump Room	Critical	Very Poor
Centre Wellington Booster Station	D4030 - Fire Protection Specialties	Fire Extinguisher, Wired Smoke Detector - Main Pump Room	Critical	Very Poor
Elora Pump House 4	D4030 - Fire Protection Specialties	Fire Extinguisher, Wired Smoke Detector - Main Pump Room	Critical	Very Poor
Fergus Pump House 1	B3010 - Roof Coverings	Conventional tar and felt multiply built up roofing system with prefinished metal flashings :Link corridor to waterworks building	Critical	Very Poor
Elora Pump House 1	D5010 - Electrical service & Distribution	100A Main Electrical Panel, 30 kVA Transformer, 200A Generator Manual Transfer Switch - Main Pump Room	High	Fair
Elora Pump House 3	D5010 - Electrical service & Distribution	Main and Secondary Electrical Panels, Transformer, 200A Generator Transfer Switch - Main Pump Room	High	Fair
Elora Pump House 4	A1010 - Standard Foundations	Cast-in-Place Concrete Foundations with Slab on Grade Floor - Entire Building	High	Fair
Elora Pump House 4	B2010 - Exterior Walls	Split Face Architectural Block - Entire Building	High	Poor
Fergus Pump House 2	D5010 - Electrical service & Distribution	Main and Secondary Electrical Panels, Transformer, 200A Generator Transfer Switch - Main Pump Room	High	Fair
Fergus Pump House 4	D5010 - Electrical service & Distribution	Main and Secondary Electrical Panels, Transformer, 200A Generator Transfer Switch - Main Pump Room	High	Fair
Fergus Pump House 6	D5010 - Electrical service & Distribution	Main and Secondary Electrical Panels, Transformer, 200A Generator Transfer Switch - Main Pump Room	High	Fair
Fergus Pump House 7	A1010 - Standard Foundations	Cast-in-Place Concrete Foundations with Slab on Grade Floor	High	Fair
Fergus Pump House 7	B2010 - Exterior Walls	Split Face Architectural Block Masonry	High	Poor
Fergus Pump House 7	D5010 - Electrical service & Distribution	Main and Secondary Electrical Panels, Transformer, 200A Generator Transfer Switch - Main Pump Room	High	Fair
Fergus Waterworks Office	B2010 - Exterior Walls	Concrete Block Masonry - Entire Building	High	Poor
Fergus Waterworks Office	B3010 - Roof Coverings	Conventional tar and felt built up roofing system with prefinished metal perimeter flashings - Entire Building	High	Poor
Fergus Waterworks Office	D5010 - Electrical service & Distribution	Main disconnect switch, panels and transformer - Entire Building	High	Fair
Fergus Pump House 1	A1010 - Standard Foundations	Foundations are assumed to comprise of rubble walls with a cast-in-place slab on grade floor. Reservoir consists of cast concrete with prefinished metal perimeter flashings - Entire Building	High	Fair
Elora Pump House 3	A1010 - Standard Foundations	Cast-in-Place Concrete Foundations with Slab on Grade Floor - Entire Building	High	Fair

Township of Centre Wellington
Critical Assets Summary
Wastewater Services Facilities

Building	Component	Component Description	Risk	Condition
Clyde St. Pumping Station	D4030 - Fire Protection Specialties	Clyde St PS - Fire Protection Equipment	**Critical**	Very Poor
David St Pumping Station	F1010 - Special Structures	David St Pumping Station - Entire Building	**Critical**	Poor
Union St Sewage Pumping Station	F1010 - Special Structures	Union St Sewage Pumping Station	**Critical**	Very Poor
Elora Wastewater Treatment Plant	A1010 - Standard Foundations	EWWTP Aerators (Not in Service) - Partially below-grade cast-in-place concrete tanks	**Critical**	Very Poor
Elora Wastewater Treatment Plant	A1010 - Standard Foundations	EWWTP Head Works Building - Cast-in-Place Concrete Foundations with Concrete Slab-on-grade	High	Fair
Elora Wastewater Treatment Plant	A1010 - Standard Foundations	EWWTP Lystek Building - Cast-in-Place Concrete Foundations with Concrete Slab-on-grade	High	Fair
Fergus Wastewater Treatment Plant	A1010 - Standard Foundations	FWWTP Head Works Building - Cast-in-Place Concrete Foundations with Concrete Slab-on-grade	High	Fair
Fergus Wastewater Treatment Plant	F1020 - Integrated construction	FWWTP Tertiary Treatment - Metal grille walkways with steel guardrails	High	Fair
Clyde St. Pumping Station	A1010 - Standard Foundations	Clyde St PS - Concrete Foundations	High	Fair
Clyde St. Pumping Station	D5010 - Electrical service & Distribution	Clyde St PS - Main and Secondary Electrical Panels	High	Fair
St. Andrew St. Sewage Pumping Station	A1010 - Standard Foundations	St. Andrew St SPS - Concrete foundations with slab on grade floor	High	Fair
St. Andrew St. Sewage Pumping Station	B2010 - Exterior Walls	St. Andrew St SPS - Brick masonry	High	Poor
St. Andrew St. Sewage Pumping Station	D5010 - Electrical service & Distribution	St. Andrew St SPS - Electrical panels	High	Fair
Stafford St. Pump Station	D5010 - Electrical service & Distribution	Stafford St. PS - Electrical Panels, Transformer, Generator Transfer Switch	High	Fair
Fergus Wastewater Treatment Plant	B1010 - Floor Construction	FWWTP Secondary Treatment - Exterior Concrete stairs with steel guardrails	High	Poor
Salem Chemical Injection Vault	F1010 - Special Structures	Salem Chemical Injection Vault - Entire Building	High	Very Poor
Stafford St. Pump Station	A1010 - Standard Foundations	Stafford St. PS - Concrete Foundations with Slab on Grade Floor	High	Fair
Stafford St. Pump Station	B2010 - Exterior Walls	Stafford St. PS - Brick Masonry	High	Poor
Elora Wastewater Treatment Plant	D5020 - Lighting & Branch Wiring	EWWTP Head Works Building - Interior Light fixtures	High	Very Poor
Elora Wastewater Treatment Plant	F1020 - Integrated construction	EWWTP Aerators (1&2) - Metal grille walkways with steel guardrails	High	Fair
Elora Wastewater Treatment Plant	F1020 - Integrated construction	EWWTP Aerators (Not in Service) - Metal grille walkways with steel guardrails	High	Fair
Elora Wastewater Treatment Plant	F1020 - Integrated construction	EWWTP Effluent Building - Metal grille walkways with steel guardrails	High	Fair
Fergus Wastewater Treatment Plant	F1020 - Integrated construction	FWWTP Secondary Treatment - Metal grille walkways with steel guardrails	High	Fair

Township of Centre Wellington
Critical Assets Summary
Tax Supported Facilities

Building	Component	Component Description	Risk	Condition
Elora Fire Hall	B2010 - Exterior Walls	Elora Fire Hall - Sealants (Original)	**Critical**	Very Poor
CW Community Sportsplex	B3010 - Roof Coverings	CW Sportsplex - Roof Area B - Arena Change Rooms & Icemaking Plant	**Critical**	Very Poor
CW Community Sportsplex	B3010 - Roof Coverings	CW Sportsplex - Roof Area I - Main Corridor & Reception	**Critical**	Very Poor
CW Community Sportsplex	D5010 - Electrical service & Distribution	CW Sportsplex - Main Switchgear, transformer and secondary	**Critical**	Very Poor
Elora Fire Hall	B2010 - Exterior Walls	Elora Fire Hall - Corrugated Prefinished Metal Siding	High	Fair
Fergus Firehall Storage Building	B1010 - Floor Construction	Fergus Firehall Storage Building - Concrete foundations and slab-	High	Fair
Victoria Park Rugby Club	B3010 - Roof Coverings	Rugby Club - Roofing System	High	Poor
Elora Community Center	A1010 - Standard Foundations	Main Switchgear (600A/600V), transformers (30kVA x2), and	High	Very Poor
Fergus Fire Hall	B1010 - Floor Construction	Fergus Fire Hall - Concrete slab-on-grade (Addition)	High	Fair
CW Community Sportsplex	B3010 - Roof Coverings	CW Sportsplex - Roof Area E - Aerobic Room	High	Very Poor
CW Community Sportsplex	B3010 - Roof Coverings	CW Sportsplex - Roof Area L - Entrance Canopy	High	Very Poor
CW Community Sportsplex	D5090 - Other Electrical Systems	CW Sportsplex - Emergency Lighting and Illuminated Exit Signage -	High	Very Poor
CW Community Sportsplex	D5010 - Electrical service & Distribution	CW Sportsplex - Secondary electrical centre fed from main	High	Very Poor
Elora Municipal Office	B2010 - Exterior Walls	Elora Municipal Office - Sealants	High	Poor
Elora Works Garage	C2010 - Stair Construction	Elora Works Garage - Interior staircases	High	Fair
Elora Fire Hall	D2090 - Other Plumbing Systems	Elora Fire Hall - Hot Water Heater	High	Poor
CW Community Sportsplex	D4030 - Fire Protection Specialties	CW Sportsplex - Fire Protection Equipment - Pad A, Mezzanine &	High	Very Poor
CW Community Sportsplex	D4030 - Fire Protection Specialties	CW Sportsplex - Fire Protection Equipment - Pad B	High	Very Poor
CW Community Sportsplex	D5090 - Other Electrical Systems	CW Sportsplex - Emergency Lighting and Illuminated Exit Signage -	High	Very Poor
Elora Municipal Office	D4030 - Fire Protection Specialties	Elora Municipal Office - Fire Protection Equipment - Council Chambers & Common	High	Very Poor
Pilkington Office	B2010 - Exterior Walls	Pilkington Office - Exterior Sealant	High	Poor
Belsyde Storage Building Pole Barn	D5030 - Communications & Security	Belsyde Storage Building Pole Barn - Fire Alarm and Detection	High	Very Poor
Elora Cemetery Chapel	B3010 - Roof Coverings	Elora Cemetery Chapel - Flashings at roof parapets	High	Very Poor