



**TOWNSHIP OF MELANCTHON
COMMITTEE OF THE WHOLE ELECTRONIC MEETING
THURSDAY, AUGUST 11, 2022 – 6:30 P.M.**

Join Zoom Meeting

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Meeting ID: 833 6945 7741

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AGENDA

1. Call to Order

2. Land Acknowledgement Statement

We will begin the meeting by sharing the Land Acknowledgement Statement:

We would like to begin by acknowledging that Melancthon Township recognizes the ancestral lands and treaty territories of the Tionontati (Petun/Wyandot(te)), Haudenosaunee (Six Nations), and Anishinaabe Peoples. The Township of Melancthon resides within the lands named under the Haldimand Deed of 1784 and the Lake Simcoe-Nottawasaga Treaty (Treaty 18).

These territories upon which we live and learn, are steeped in rich Indigenous history and traditions. It is with this statement that we declare to honour and respect the past and present connection of Indigenous peoples with this land, its waterways and resources.

3. Additions/Deletions/Approval of Agenda

Motion - that the Agenda be approved as _____.

4. Disclosure of Pecuniary Interest

5. Adoption of Draft Minutes – May 5, 2022

Motion: that the minutes of the Committee of the Whole Meeting held on May 5, 2022 be approved as circulated.

6. Business Arising from the Minutes

7. Correspondence

8. General Business

1. R.J. Burnside Report - 2022 Asset Management Plan (Core Assets)
2. Other/Addition(s)

9. Delegations

1. 6:30 p.m. Arunas Kalinauskas, Business Manager – Asset Management and GIS – to review the 2022 Asset Management Plan (Core Assets)

10. Adjournment and Date of Next Meeting

Motion: that we adjourn Committee of the Whole at _____ p.m. to meet again on _____ at _____ p.m. or at the call of the Chair.



BURNSIDE

2022 Asset Management Plan (Core Assets)

Township of Melancthon

**R.J. Burnside & Associates Limited
15 Townline
Orangeville ON L9W 3R4 CANADA**

**July 19, 2022
300052972.0000**

Township of Melancthon

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2022 Asset Management Plan (Core Assets)
July 19, 2022

Record of Revisions

Revision	Date	Description
1	July 7, 2022	Final Report
2	July 19, 2022	Revised Final Report

R.J. Burnside & Associates Limited

Report Prepared By:



Arunas Kalinauskas
Business Manager – Asset Management / GIS
AK:sd,ao

Executive Summary

This report contains the Asset Management Plan for the Township of Melancthon (Township) core assets. The report has been organized as follows:

- Section 1: Introduction;
- Section 2: State of Local Infrastructure;
- Section 3: Expected Levels of Service;
- Section 4: Asset Management Strategy;
- Section 5: Financing Strategy; and,
- Section 6: Recommendations.

The “state of local infrastructure” section provides an overview of the core capital assets owned by the Township. This includes detailed information on asset inventory, including asset attributes, accounting valuations, replacement costs, useful life, age, and asset condition. This information provides the foundation for other sections of the asset management plan.

Based on data provided by the Township and discussions with Township Staff, it is believed that the Township’s core assets including Water, Wastewater, Storm Water, Roads, and Bridges have a Good weighted average condition (with the weighting based on asset replacement cost) as outlined in the following assets table. Please note that weighted average conditions do not fully reflect the many assets that need to have capital improvement investments but provide an overall high-level perspective of all the assets found in that asset grouping/network.

Asset Type	Asset Sub-Type	Condition (Weighted Average)	Risk (Weighted Average)	Useful Life (UL) - Weighted Average	Remaining Service Life (RSL) - Weighted Average	RSL as a % of UL
Road Base	Base		Low			
Road Surface	Asphalt	Good	Moderate	25	9	36%
	Gravel	Average	Moderate	3	1.5	50%
Bridge & Culverts	Bridges & Culverts	Good	Moderate	70	33	47%
	Crossroad Culverts	Excellent	Low	50	47	94%

2022 Asset Management Plan (Core Assets)
July 19, 2022

Asset Type	Asset Sub-Type	Condition (Weighted Average)	Risk (Weighted Average)	Useful Life (UL) - Weighted Average	Remaining Service Life (RSL) - Weighted Average	RSL as a % of UL
Storm Water	Storm Mains	Good	Low	100	74	74%
	Catch Basins	Good	Low	50	47	94%
Water		Good	Moderate	28	1	4%
Wastewater		Good	Moderate	25	0	0%

Looking at the remaining life as a percentage of useful life one may quickly identify the most used up asset value is Wastewater assets, and yet the few wastewater assets the Township owns work very well and are not expected to be replaced within the ten-year asset management project vision window. So, it is important to view these percentages not as absolutes but as triggers to seek more information about an asset type. For example, when looking at the Bridge & Culvert assets there are zero of 50 bridges/culverts that the inspection report indicate "Poor" condition, yet the Remaining Service Life as a percentage of Useful Life calculates to 47%. This percentage may lead one to believe that the Township bridges are moving towards the end of their lifecycle, which is incorrect. In fact, the Township has invested well in their bridges/culverts and have one culvert which will require a rehabilitation and two others recommended for replacement over the 10 year asset management vision period.

"Expected levels of service" compares the current level of service provided by the Township, and the recommended levels of service that will help extend the life of the above-mentioned asset types as well as help accommodate for growth of the Township. The Township of Melancthon takes great care in the service levels they offer their constituents and public. This report has made a few additional Levels of Service (LOS) recommendations that can extend the life of the Township's core tangible capital assets and therefore reduce the total lifecycle costs of these assets.

The "asset management strategy" for core assets provides a long-term operating and capital forecast for these asset related capital costs, indicating the requirements for maintaining, rehabilitating, replacing/disposing, and expanding the Township's assets, while moving towards the specified expected levels of service identified above. The goal of the asset management strategy is to have the Township moving towards a more sustainable asset management position over the 10 year forecast period. We have also taken into consideration the potential risk of each asset by identifying the asset consequence of failure and probability of failure.

Asset risk was assessed based on the asset's age, condition, consequence of failure, and probability of failure. The following have been identified based on Township data as assets that need to be replaced or major improvement over the next few years:

Roads

- 2nd Line South West from Highway 89 to 300 Sideroad – Top coat of asphalt (recommended improvement in 2022, approximate cost \$217,000)
- 2nd Line South West from 250 Sideroad to Southgate – Top coat of asphalt (recommended improvement in 2022, approximate cost \$283,500)
- 5th Line OS from County Road 17 to 280 Sideroad – Asphalt Surface with additional geogrid road base support (recommended improvement in 2023, approximate cost \$401,300)
- 5th Line OS from 280 Sideroad to 4th Line North East – Asphalt Surface (recommended improvement in 2023, approximate cost \$24,750)
- 5th Line OS from 4th Line North East to 15 Sideroad – Asphalt Surface (recommended improvement in 2023, approximate cost \$68,750)
- 5th Line OS from 15 Sideroad to 270 Sideroad – Asphalt Surface (recommended improvement in 2024, approximate cost \$232,750)
- 5th Line OS from 270 Sideroad to 6th Line North East – Asphalt Surface with additional geogrid road base support (recommended improvement in 2024, approximate cost \$109,500)

Bridges

- Bridge 11 (G. Anderson Bridge – 8th Line SW 3.4km North of Highway 89) – Rehabilitation of concrete that is showing signs of deterioration on the deck top and moisture through the deck joints (recommended improvement in 2022, approximate cost \$255,000).
- Culvert 2023 (4th Line North East south of 260 Sideroad) – Rehabilitate the concrete and remove the vegetation and fill over top of the culvert ends (recommended improvement 2023, approximate cost \$200,000).
- Bridge 7 (Gray Bridge – 1.5 km South of 270 Sideroad) – Rehabilitation with concrete repairs, waterproofing and paving, and barrier replacement (recommended improvement in 2024, approximate cost \$215,000).
- Bridge 18 (Fluney Bridge – 2nd Line North East 750 m South of County Road) – Concrete repairs, waterproofing and paving, barrier replacement, and erosion protection should be included in the rehabilitation (recommended improvement in 2024, approximate cost \$240,000).

Storm Water

- The Township continues to collect crossroad culvert information as they are replaced. Ideally a project not only collecting information both on size and material but also assessing the crossroad culvert condition will help the Township to understand if the Township Road assets can withstand some more regular extreme

weather events. Federation of Canadian Municipalities provides asset management project 80% funding up to \$50,000. It is recommended that the Township seek funding for this Storm Water asset project which may only cost the Township \$12,500.

Wastewater

- The Township owns three septic systems. Two of these systems (Administration Office and Public Works Yard Office) are connected. It is the pump for the Public Works Office that is recommended to be replaced in 2022 (approximate cost \$2,000)

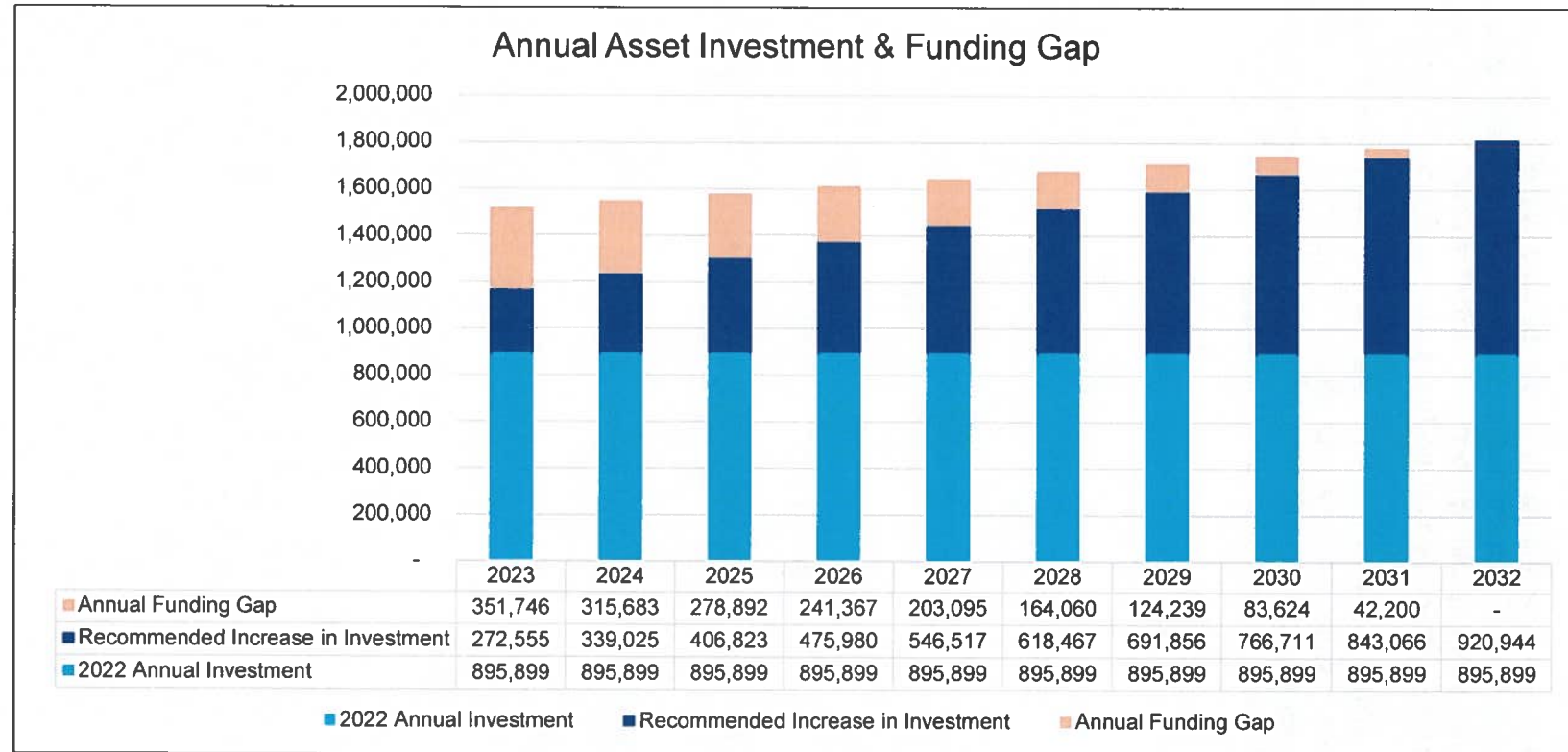
The above listed projects summarise the most current core assets improvement needs for the Township. Adding up the total costs of these projects and comparing this to the Township's past capital funding investments shows a growing gap in infrastructure funding, which is found not only in the Township of Melancthon but throughout Ontario, and across Canada. See the graphic representation below that identifies the Township's funding gap. The Township has been making steps to close this funding gap and working hard to seek available funding grants to help close the gap. However, more needs to be done to ensure that the Township can offer appropriate levels of service to the public now and into the future.

We have recommended that detailed inspections of the Township's crossroad culverts are undertaken to provide an inventory and asset condition, remaining life, potential risk of failure, and future levels of service requirements.

The "financing strategy" described in Section 5 of this report identifies a funding plan for the recommended asset management strategy, including a review of historical results and recommendations with respect to the required amounts and types of funding (revenue) annually over the forecast period. Also, any infrastructure funding gaps are identified, and recommendations are made regarding potential approaches to reduce and mitigate these gaps over the 10 year forecast period.

2022 Asset Management Plan (Core Assets)
July 19, 2022

Annual Asset Investment & Funding Gap



2022 Asset Management Plan (Core Assets)
July 19, 2022

Overall, this asset management plan is a tool to be used by the Township for capital and financial decision making. It can be tied to various existing reports (such as budget, official plan, and strategic planning reports) to ensure the asset management plan can be updated to reflect any changes in the Township of Melancthon's priorities.

Please note that this study only focused on the Township's core assets (Water, Wastewater, Storm Water, Roads, and Bridges). The identified gap in infrastructure funding is expected to change when incorporating all of the remaining Township's asset types of which Facilities, and Vehicles are the major contributors.

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Appendix A Municipality Asset Inventory & Asset Management Plan Assumptions
Appendix B Draft Data Verification and Condition Assessment Policy
Appendix C 10 Year Detailed Asset Management Strategy & Financing Strategy

2022 Asset Management Plan (Core Assets)
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Disclaimer

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.

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R.J. Burnside & Associates Limited makes no warranties, either express or implied, of merchantability and fitness of the documents and other instruments of service for any purpose other than that specified by the contract.

1.0 Introduction

1.1 Overview

R.J. Burnside & Associates Limited (Burnside) was retained by the Township of Melancthon (Township) to prepare an asset management plan for core assets. This plan is intended to be a tool for the Township to use during various decision-making processes, including the annual budget process and Provincial/Federal capital grant application processes. This plan will serve as a road map for sustainable infrastructure planning going forward.

Assets included in this asset management plan are the following:

- Water (Mains, Wells, Equipment);
- Wastewater (Septic Systems);
- Storm Water (Gravity Mains, Catch Basins);
- Roads (Bases and Surfaces - Asphalt, Gravel); and,
- Bridges/Culverts.

It is recommended that this plan be updated on an annual basis to ensure that it is kept up to date. All assets listed above are tax supported and are discussed more thoroughly in this report.

1.2 Plan Objectives

The Township's goals and objectives with respect to their core capital assets relate to the level of service being provided to the Township's residents and visitors. Services should continue to be provided at expected levels, as defined within this asset management plan. The Township's infrastructure and other capital assets are anticipated to be maintained at condition levels that provide for a safe and functional environment for its residents and visitors. Therefore, the asset management plan and its implementation will be evaluated based on the Township's ability to meet these goals and objectives.

1.3 Plan Development

The development of the Township's asset management plan was based on the steps summarized below:

1. Develop a complete listing of core capital assets to be included in the plan, including attributes such as useful life, age, accounting valuation and current replacement valuation. Update the replacement cost of assets to 2021 dollars, and where required, using applicable inflationary indices.

2. Assess current condition of the assets, based on a combination of the following:
 - Existing reports;
 - Burnside desktop assessments;
 - Staff assessments; and,
 - Asset age analysis.
3. Assess the risk of asset failure for each asset, based on determining the probability of each asset failing, as well as the consequence of the asset failing. This risk analysis is one of the components used to identify priority projects for inclusion in the asset management plan, as well as asset risk levels that require mitigation.
4. Determine current levels of service, based on standard practices and discussions with Township staff and discussions with Burnside Engineering staff. Further analysis of the maintenance practices and identification of additional measures that can be applied to the assets to extend their lifecycle and potentially provide a lower asset total lifecycle cost.
5. Prepare an asset management strategy (i.e., operating and capital forecast) based on the core asset inventory, identified priorities, forecast scenarios and level of service analysis discussed above.
6. Determine a financial strategy to support the asset management strategy, thus determining how the operating and capital related expenditure forecast will be funded over the plan period.
7. Prepare a final report, summarizing the process, strategy, and results of the asset management plan.

1.4 Maintaining the Asset Management Plan

The asset management plan should be updated as the capital needs and priorities of the Township changes. This can be accomplished in conjunction with the Township's budget process. With the delivery of this project spreadsheet file, the Township will have the tools available to perform updates to the plan when needed.

When updating the asset management plan, note that the state of local infrastructure, expected levels of service, asset management strategy and financing strategy are integrated and impact each other. Looking at these components in reverse order, one can see the financing strategy outlines how the asset management strategy will be funded. The asset management strategy illustrates the costs required to maintain expected levels of service at a sustainable level. The expected levels of service component summarizes and links each service area to specific assets contained in the state of local infrastructure section and thus determines how these assets will be used to provide expected service levels.

This report covers a forecast period of 10 years; however, it is suggested that more focus and attention be put on the first 5 years of the asset management plan, to ensure accurate capital planning in the short term. It is also recommended that the Township start moving towards 50 year forecasts. This longer-term vision will ensure that future infrastructure investments are not lost in the shorter 10 year forecast window.

1.5 Plan Integration

The municipal environment is continually changing and demanding when it comes to legislation and other responsibilities. Integrating the asset management plan with the Township's budget process, as well as Public Standards Accounting Board Handbook Section 3150 (tangible capital asset) requirements can make updates in all three areas more efficient.

With respect to integrating the Township's budget process with asset management planning, requires a projection of capital and operating costs over a future period. The budget outlines total operating and capital requirements for the Township, while the asset management plan focuses in on specific asset related requirements. With this link to the annual budget, the budget update process can also become an asset management plan update process.

Both asset management and PSAB 3150 require a complete and accurate asset inventory. The significant difference between the two lies in valuation approaches (PSAB 3150 requires historical cost valuation, while asset management requires future replacement cost valuation). Using a single asset inventory as developed in the asset management spreadsheets for the core assets contain both historic and current replacement valuation methods as an effective approach to maintaining the Township's asset data (digital spreadsheets of these assets are provided in Appendix A).

2.0 State of Local Infrastructure

2.1 Scope and Process

This section of the plan provides an opportunity to develop a greater understanding of the core capital assets owned by the Township. The state of local infrastructure analysis includes:

- An asset inventory documenting asset types, sub-types including quantities, materials, and other similar asset attributes (where available);
- Financial accounting valuation (where available);
- Replacement cost valuation;
- Asset age distribution analysis and asset age as a proportion of expected useful life;
- Asset condition information (mostly based on report and/or staff assessment as well as the age of the asset);
- Draft Data Verification and Asset Condition policies; and,
- Documentation of assumptions made in creating the asset inventory.

Burnside developed a detailed asset inventory listing for the Township which was used as a starting point in fulfilling the requirements for this report. This inventory provides current financial accounting valuations (i.e., historical cost, accumulated amortization, and net book value), as well as attributes such as replacement cost, useful life, and age). With respect to replacement cost, the Township provided various recent valuations, which were inflated in order to estimate current 2021 replacement costs. Other valuations were made for assets that were not part of the PSAB 3150 asset listing using a current 2021 replacement cost and deflating the value to the year or estimated year that the asset was constructed and/or acquired.

The following data and reports were used to develop the Township's asset inventory during this project:

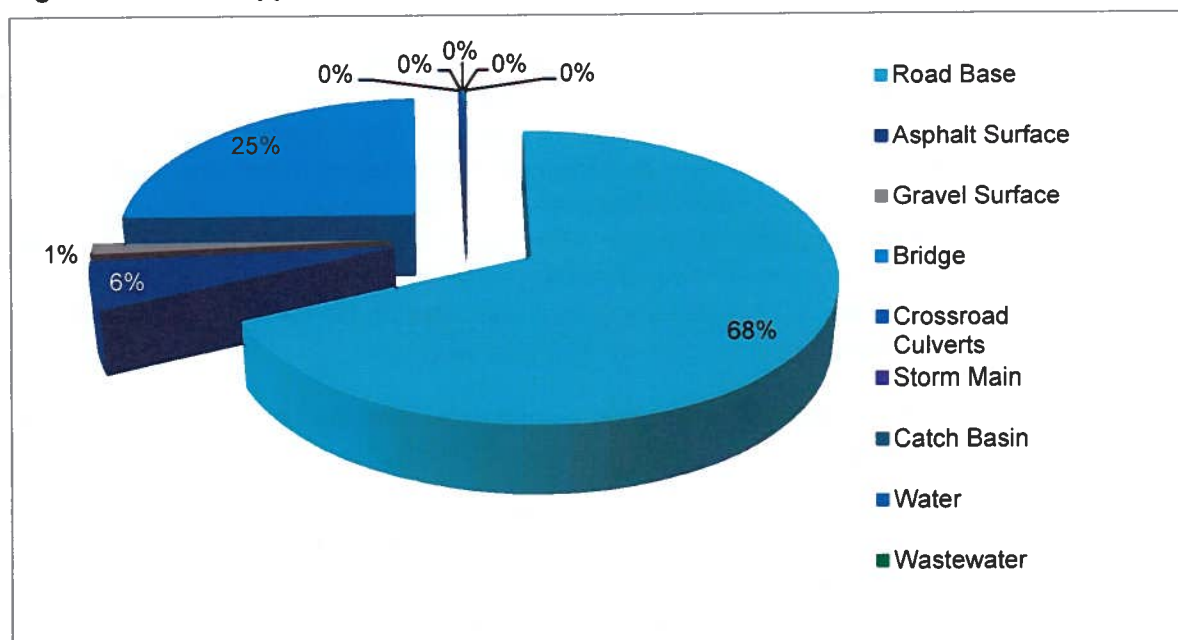
- Township PSAB 3150 asset inventory;
- Township reports (such as spreadsheets; septic system documents; well records; and notes from staff);
- Township 2020 Road Needs Study spreadsheets;
- Township 2021 Bridge Inspection Report;
- Recent purchase information from the Township; and,
- Discussions with Township staff.

Some adjustments to asset useful lives have been made but further analysis may reveal that the Township will want to update some useful life values in the tangible capital asset financial reporting so that they better reflect the lifecycle and remaining life of the Township's assets. Burnside engineers have reviewed the useful lives of the core assets identified in this project and believe they now better reflect the conditions, maintenance practices and management of the Township's assets.

2.2 Capital Asset Overview

The Township presently owns core capital assets with a 2021 replacement value of approximately \$154.8 million. All of the assets studied in this project are tax supported assets. Over 2/3 of the total replacement value is contained in Road Base assets (\$105.6 million) which then results in the remaining replacement asset value of \$49.2 million. Table 2.2, Figure 2.1, and Figure 2.2 outline the breakdown of these totals into the Township's asset categories.

Figure 2.1: Tax Supported Asset Distribution Replacement Costs (2021)



The capital asset inventory was organized in a Microsoft Excel spreadsheet and delivered to the Township in digital form shown in Appendix A. Each of the asset types were assessed for their age, condition (where available) and for data accuracy and completeness.

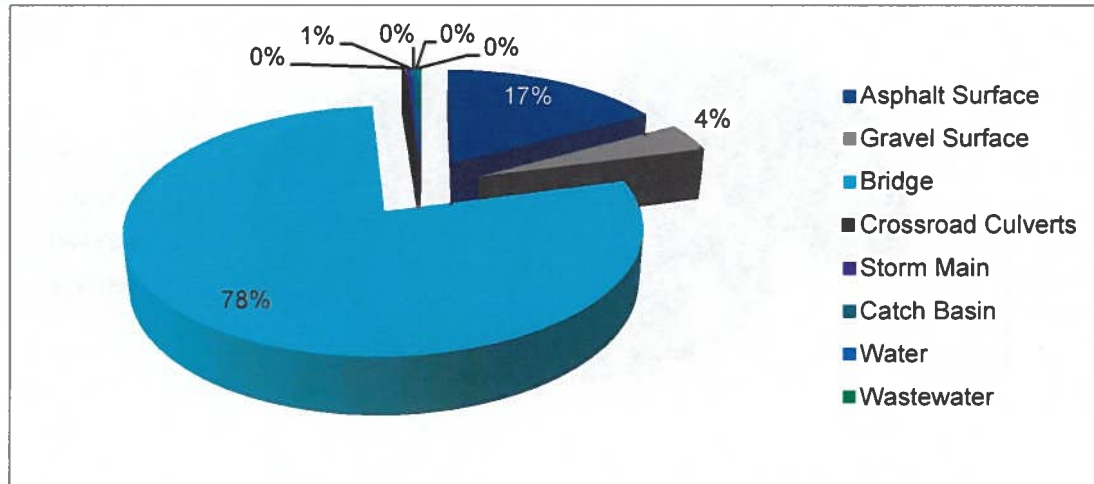
Table 2.1 and Figure 2.2 show the Township's financial accounting valuation summary by asset type for tax supported assets. Since 2009, municipalities have been required under the Public Sector Accounting Board Handbook Section 3150 (PSAB 3150) to maintain asset listings complete with historical cost (i.e., the original cost to purchase or construct an asset), accumulated amortization and net book value. These values were to be reported on the Township's audited financial statements each year. Burnside has done the additional work of developing the 2021 Cost for assets that have been added to the Township's asset inventory. If the Township chooses to use the asset inventory developed in this project to report the PSAB 3150 values, the data/information is found in Appendix A.

Including all the Township's assets studied in this project, the total tangible capital asset historical cost is approximately \$18 million. This is approximately 11.7% of the total replacement cost, or 28.2% excluding road base historic/replacement costs. It is expected that historical cost totals are less than replacement cost totals, given inflationary adjustments that would occur between the original asset purchase/construction date and 2021. Total accumulated amortization for the Township's project assets is approximately \$8.7 million or 48% of the total asset historical cost and \$6.1 million or 44.2% without road base costs included. This represents the proportion of tangible capital assets that have been amortized (i.e., used up) to date from a financial valuation perspective.

Clearly the Township's owned road assets have the greatest percentage tax supported replacement cost if the road base values were included in the calculation (see Table 2.1). Road bases are considered assets that will never be totally replaced but will from time to time be improved and in spot locations reconstructed on an as needed basis. Therefore, by excluding road base asset values (see Figure 2.2), the Township's bridges percentage replacement costs are 77.9% of the asset types studied in this project. Other asset types studied are Road Surfaces with 20.8% (made up of Asphalt 16.9%, and Gravel 3.9%), Storm Water with 0.9% (made up of Crossroad Culverts 0.3%, Storm Mains 0.4% and Catch Basins 0.2%) Water with 0.2%, and Wastewater with 0.2%. Please note that the Township does not have a complete inventory of crossroad culverts. The crossroad culvert value documented in this project are those that the Township has replaced over the past 10 years. It is assumed that the value of the crossroad culverts has been incorporated in the approximate costs of the road sections. More in depth discussion of these asset types follows below.

Table 2.1: Municipality Tax Supported Asset Summary

Asset Type	Asset Sub-Type	Historic Cost	2021 Accumulated Amortization	2021 Net Book Value	2021 Replacement Cost	Condition (Weighted Average)		Useful Life (Years)	Age (Weighted Average)	Remaining Life (Weighted Average)	Risk (Weighted Average)	
						Value	Text				Value	Text
Road Base	Base	\$4,156,356	\$2,528,968	\$1,627,388	\$105,612,068			75	127	12		Low
Road Surface	Asphalt	\$4,248,291	\$2,090,103	\$2,158,188	\$8,333,556	8.4	Good	25	21	9	1.5	Moderate
	Gravel	\$1,981,199	\$1,195,618	\$785,581	\$1,919,140	N/A	Average	3	1.5	1.5	2	Moderate
Bridges & Culverts	Bridges & Culverts	\$7,365,646	\$2,778,232	\$4,587,414	\$38,367,000	7.0	Good	75 / 50	37	33	2	Moderate
	Crossroad Culverts	\$112,261	\$6,496	\$105,766	\$131,164	10.0	Excellent	50	3	47	1	Low
Storm Water	Storm Mains	\$86,104	\$15,681	\$70,422	\$182,590	8.0	Good	100	26	74	1	Low
	Catch Basins	\$47,368	\$13,539	\$33,829	\$110,000	7.6	Good	50	25.8	24.2	1	Low
Water		\$21,765	\$18,671	\$3,094	\$77,000	7.0	Good	15, 20, 25, 30	39	1	2	Moderate
Wastewater		\$23,493	\$22,983	\$510	\$106,500	8.9	Good	25	40	0	1	Moderate
	Total	\$18,042,483	\$8,670,291	\$9,372,192	\$154,839,018	6.0	Average		45	22	1	Low
	Total without Road Base Replacement Costs				\$49,226,950	7	Good		33	26	2	Moderate

Figure 2.2: Tax Supported Asset Distribution Replacement Costs, Without Road Bases (2021)

It is important to note that the identified Township's Water and Wastewater assets in this project are all tax supported as these assets are related to Township buildings. These assets are separated out to ensure that the Township can best maintain and prepare for future asset replacements.

2.3 Road Environment Assets

The Township's Road assets make up a key service that reflects the economic and social development of the community. The road environment assets are 99.6% of the assets studied in this project and are made up of the following asset types:

- Road Surface Asphalt – 5.4% of the total Township's asset replacement costs;
- Road Surface Gravel – 1.2% of the total Township's asset replacement costs;
- Road Bases – 68.2% of the total Township's asset replacement costs;
- Bridges – 24.8% of the total Township's asset replacement costs; and

Figure 2.3 and Figure 2.4 outline the replacement cost distribution of Road assets with and without Road Base values included.

Figure 2.3: Road Environment Asset Distribution Replacement Costs (2021)

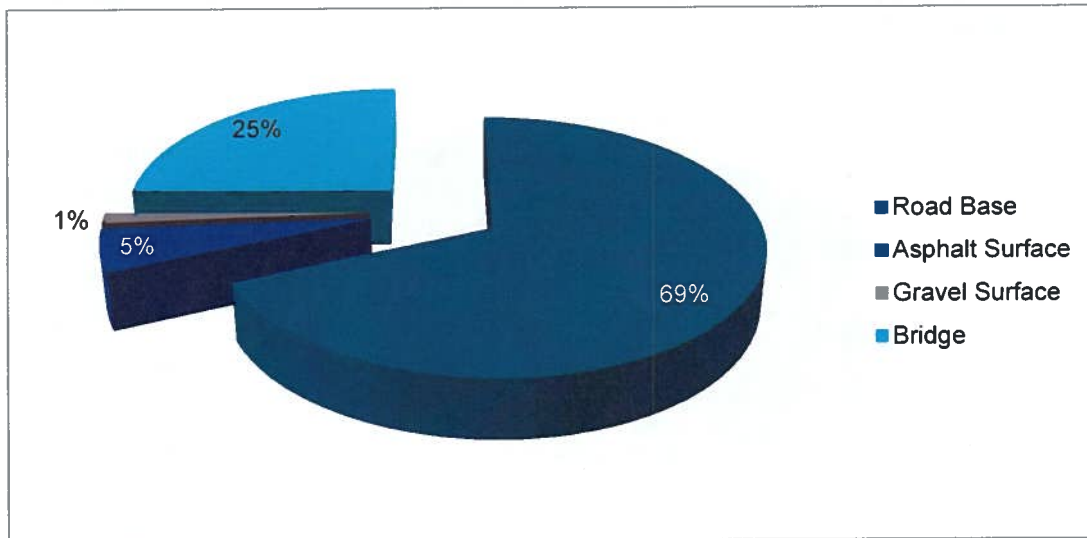
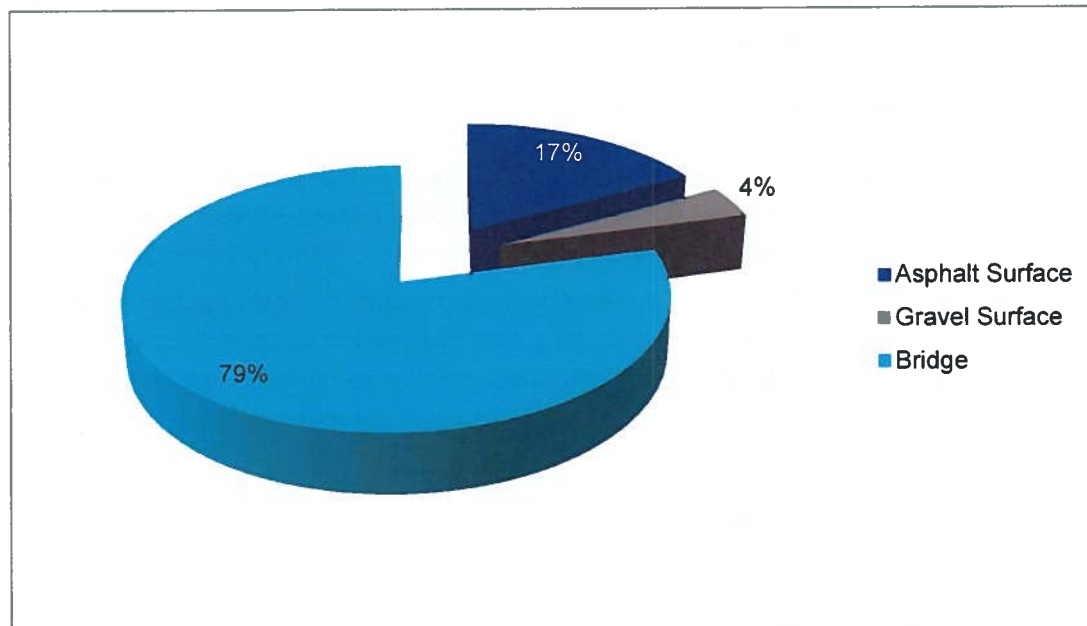


Figure 2.4: Road Environment Asset Distribution Replacement Costs (2021) without Road Bases



Below we provide more detail on the two key asset groups in the Road Environment group of assets, Roads, and Bridges.

2.3.1 Roads

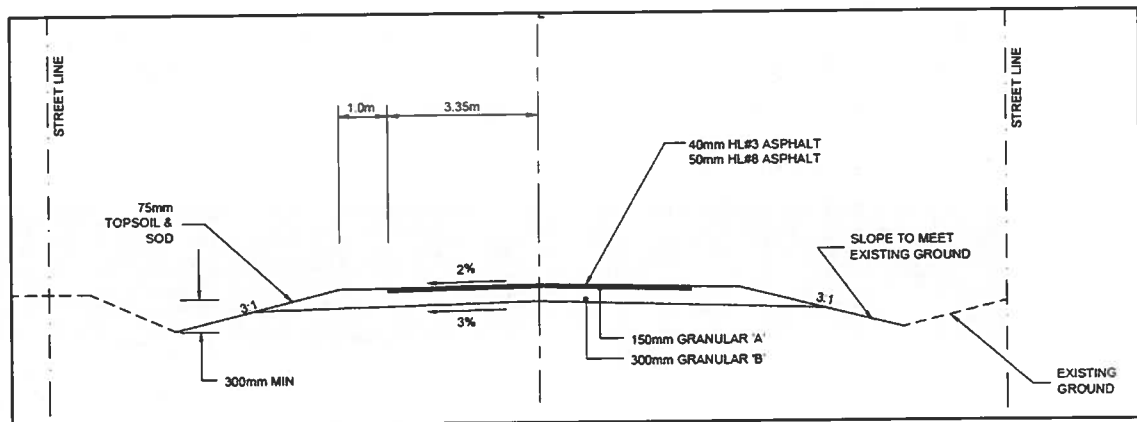
At the current replacement cost the road assets account for \$115.9 million dollars and without Road Bases included \$10.3 million or 74.8% of the assets studied in this project. The composition of the road surfaces is outlined in Table 2.2.

Table 2.2: Road Surface Assets

Road Surface	Surface Length (m)	Condition (Weighted Average)	Condition (Text)	Replacement Cost		
				Surface	Base	Total
Asphalt	69,446	8.4	Good	\$8,333,556	\$31,882,244	\$40,215,800
Gravel	180,141	N/A	Average	\$1,919,140	\$73,729,824	\$75,648,964
Total	249,587		Average	\$10,252,696	\$105,612,068	\$115,864,764

The Township had completed a Road Management Plan study in 2019 and established the prioritization of both capital and operational maintenance programs for the Township. The results of the road study project are included in the asset strategy component of this project.

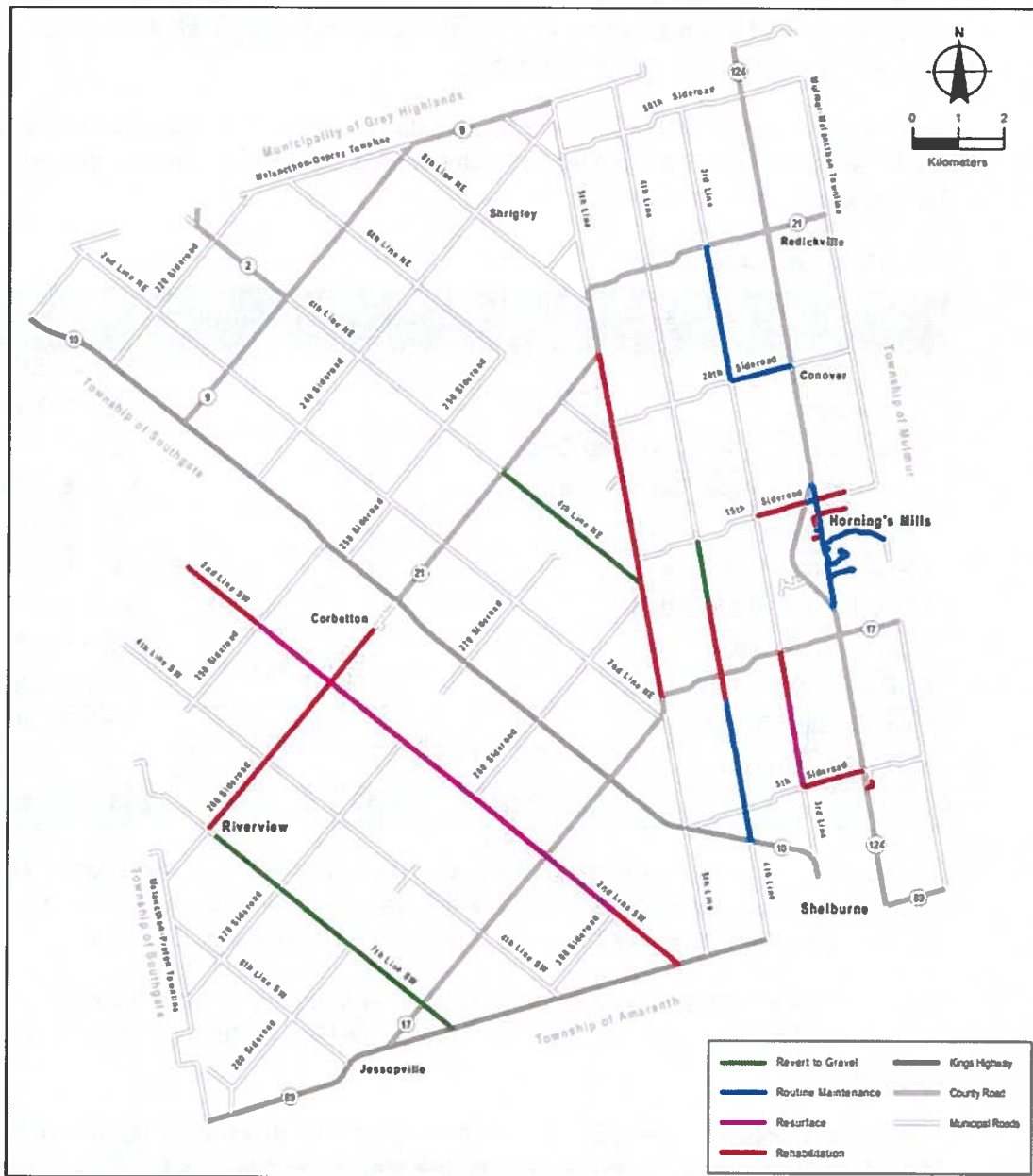
Key to all roads is the road base on which they are built. These road bases in most cases have been established many years ago. Hard top (asphalt, and surface treated) road surface roads provide the longest life cycle with best level of service when constructed on excellent road bases. Once the road base becomes soft it cannot economically support a hardtop road surface and it can be best to convert it to a gravel road until funding is made available and the base has been reinforced. Figure 2.5 provides a typical road cross-section diagram. This can be applied for all surface types as asphalt (shown in figure), and without asphalt for gravel road surfaces. Please note that the Township has some roads located in challenging wet areas, which require more specific localized engineering design.

Figure 2.5: Typical Asphalt Road Surface Cross-Section

The Township's gravel surface roads are upgraded approximately every three to four years or as required with surface gravel replacement/top-up. In some locations additional gravel is at times required to help reinforce the road base.

The Road Management Plan study report provides detailed explanations of the Township's Road conditions and related deficiencies that impact longevity or operations of the roads, including road widths, drainage, surface type, alignment, and brushing maintenance where required. Results of the road study were incorporated into this asset management plan.

Figure 2.6: Ten Year Road Improvement Plan



2.3.2 Bridges & Culverts

The Township has fifty bridges and culverts structures over the span of 3.0 m inspected in 2021. The inspection report was reviewed, and information used in this asset management analysis. Visual inspections are required to be carried out every 2 years in accordance with the Ministry of Transportation – Ontario Structure Inspection Manual

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(OSIM). The inspections are to be completed under the direction of a Professional Engineer to assess their condition and identify any material defects, performance deficiencies, maintenance needs, additional studies and/or repairs/rehabilitation work required on a structure-by-structure basis.

The Township has a total of just over \$38.3 million replacement cost of bridge, and culvert assets. Table 2.3 provides the distribution of the types of bridges that the Township owns.

Table 2.3: Structure Types

Bridge Type	Number	Replacement Cost
Rigid Frame	22	\$16,531,000
Box Girder	2	\$2,719,000
I-Beam Steel Girder (Concrete Deck)	2	\$3,225,000
I-Beam Steel Girder (Timber Deck)	1	\$1,078,500
CIP Box Culvert	5	\$2,910,500
Precast Box Culvert	4	\$2,154,000
Precast Concrete I-Girders	1	\$1,621,500
Open Bottom Culvert	1	\$478,500
CSP Multi-Plate Arch Culvert	10	\$6,313,000
Twin Circular CSP Culvert	1	\$598,500
Multi-Plate Culvert	1	\$737,500
Total	50	\$38,367,000

Load postings may be recommended for structures based on age, condition, noted performance deficiencies or based on the findings of a structural evaluation. There are currently no structures in the Township's inventory that have load postings.

Structure 004 previously had a load posting of 5 Tonnes but was closed to through traffic in 2020 and has been removed from the Township's biennial bridge inspection inventory while closed.

The Bridge Condition Index (BCI) for each structure was determined based on the Ministry of Transportation Ontario (MTO) methodology followed in the MTO Document, MTO Bridge Condition index and Overall Measure of Bridge Condition, July 2009.

It was identified that the Township's defined PSAB 3150 Useful Life for some of the structures was not representative of true nature of the lifecycle of these assets. The useful life was adjusted and highlighted in red in the asset tables found in Appendix A.

The capital works needs include any repair, rehabilitation or replacement work which would typically be completed by the Township's hired Contractor, to assist in extending the service life of a structure and increasing the Bridge Condition Index (BCI). In accordance with the OSIM, the capital and maintenance works required are based on a priority of 6 to 10 years, 1 to 5 years, within 1 year, and urgent now needs have been estimated and presented in Table 2-4.

Table 2.4: Bridge Capital Works Costs and Timeframes (OSIM Report)

Time Frame	Capital and Maintenance Cost
< 1 year	\$292,000
1 – 5 years	\$1,253,500
6 – 10 years	\$1,232,500
Total	\$2,778,000

It should be noted that the Capital Works costs include recommended replacement or rehabilitation costs for structures in need.

Taking into consideration the structures estimated condition index, eleven structures have been identified for some form of replacement/rehabilitation.

Based on the biennial inspection of each structure, the estimated Structure Condition Index Distribution graph, shown in Figure 2.6 and Figure 2.7 below, provides a summary of the current state of the Township's structures.

Figure 2.7: Estimated Structure Condition Distribution

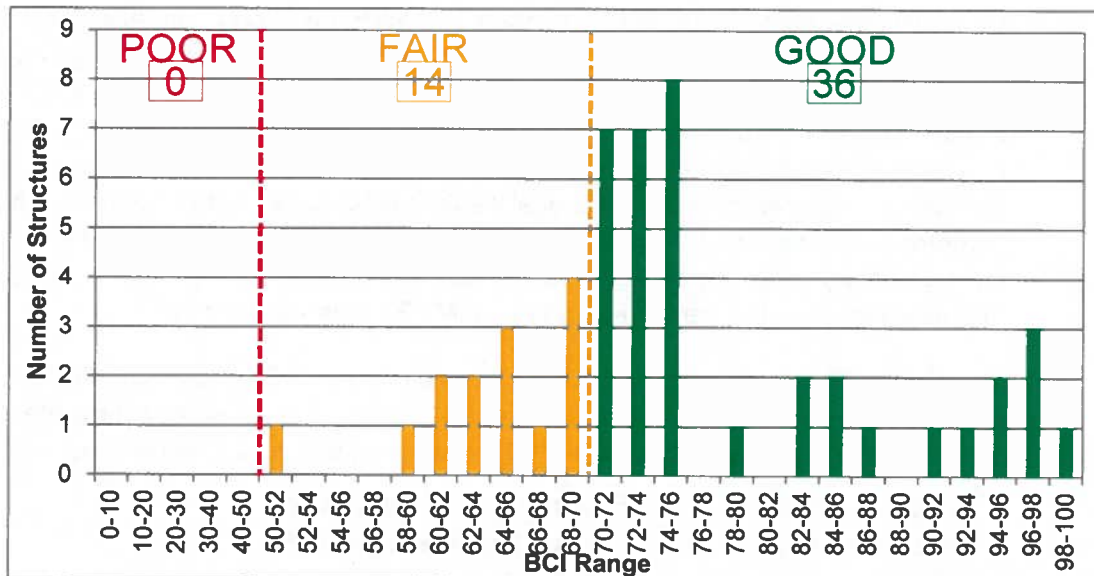
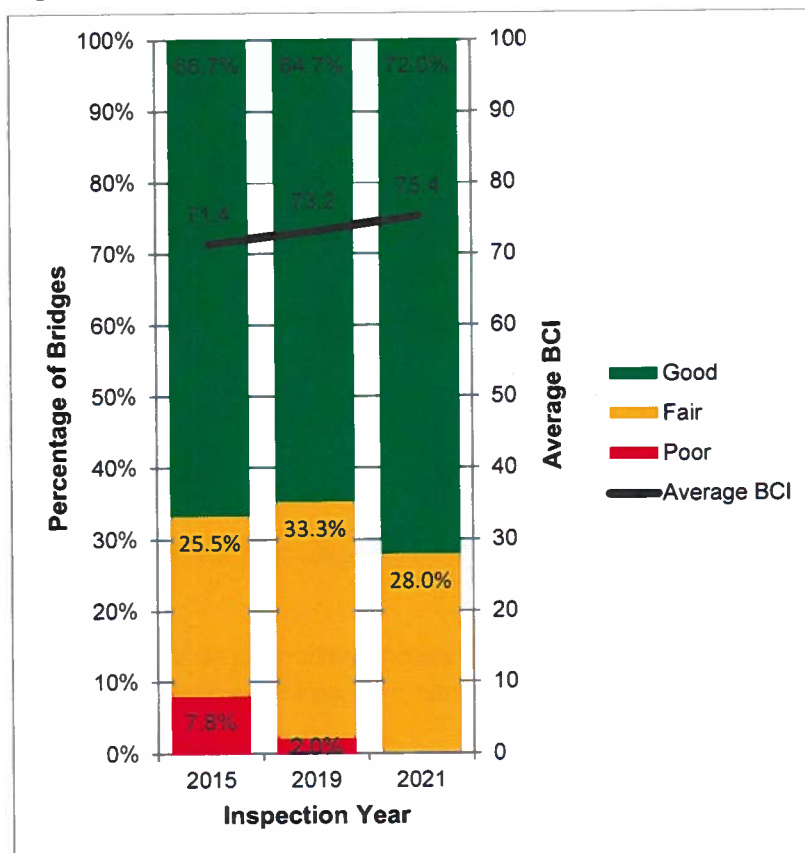


Figure 2.8: Bridge Condition Index Historical Trend

*Note: Structure 004 historical data included in 2015 & 2019 however removed for 2021 since structure is closed to traffic

Currently, 72% of the Township's structures are within the "good" range, with 28% of the structures classified as "fair" and 0% classified as "poor", as illustrated in Figure 2.6 above. Of interest, the Ministry of Transportation Ontario (MTO) has established a goal to have 85% of their structures in "good" condition by the year 2021, and to maintain that condition moving forward by addressing rehabilitations and replacements as necessary. Burnside recognizes that the above goal was not established by the Township. It should be noted that based on the current state of the inspected structures and the recent improvements made, the Township is only slightly underperforming on the management of their bridge assets when compared to the MTO's established goal.

The trend in Figure 2.7 identifies that the overall average BCI of the Township's inventory has generally increased over the last 6 years due to recently completed capital works projects completed since the 2015 inspections, which include the following:

- Structure No. 2028 – Main Street Replacement (2015);
- Structure No. 2010, 2020 & 2024 – Replacement (2016);
- Structure No. 15 – 2nd Line SW Rehabilitation (2017);

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- Structure No. 10 – 280 Sideroad Rehabilitation (2018);
- Structure No. 2003 – 3rd Line Rehabilitation (2019);
- Structure No. 2021 – 2nd Line NE Temporary Repair (2019);
- Structure No. 2013 – 30th Sideroad Replacement (2020); and
- Structure No. 13 – 260 Sideroad Rehabilitation (2021)

Projects currently in design stage include:

- Structure No. 11 – 8th Line SW

Continued maintenance and completion of rehabilitative or replacement works as recommended in the Bridge Study Report will help to continue this trend of overall improvement of the Township's bridge assets.

2.4 Storm Water Assets

The Township has only since 2012 started to identify and classify their crossroad culverts as Storm Water assets. These crossroad culverts are key to ensuring that water stays away from the Township's Road base. This is particularly important during extreme weather events which produce large volumes of rain over a short period of time.

It is recommended that the Township undertake an inventory to locate all the crossroad culverts and any other municipal drainage network assets that are not recorded along with their attributes (material, length, diameter, year of construction etc.). These assets are best incorporated, if possible, in the Township's GIS or Asset Management dataset.

The Federation of Canadian Municipalities (FCM) has Asset Management funding that has provided funding for the above noted work up to \$50,000 or 80% of the cost of the project.

Other Storm Water assets as catch basins and storm sewer pipes etc. in the Hornings Mills area are relatively new and are performing well. However, it has been noted that the Corbetton storm water assets were added to the asset inventory. These assets are performing well as identified by Township staff. Resurfacing of the Corbetton Main Street provided the required improvements to these storm water assets. It is recommended that the storm water assets in the Corbetton village be inspected in five to ten years to assess their condition.

2.5 Water Assets

The Township does not have a formal water distribution network however the Township owns water assets implemented for each of the Township's facilities. These assets include wells and filtration systems. Water quality testing is completed as required to ensure potable water is provided to staff and public at each facility.

In general, the condition of the water assets are “good”.

2.6 Wastewater Assets

The Township wastewater assets provide an environmentally acceptable safe process of returning back to nature used water supplies. These septic systems are located at Township owned facilities. The Township’s wastewater assets are in good condition, except for a septic pump located at the Public Works Yard. This septic pump is recommended for replacement to prevent any back-up issues. The septic tanks are cleaned out on a regular basis or as required.

2.7 Asset Condition

Each asset was tracked based on estimated total useful life and remaining service life. Using this data, along with staff information, and age analysis of the Township’s assets assisted in identifying potential areas of focus where inspected asset condition was not available. We want to state that asset condition is always best defined via engineering best practices. Engineering based condition assessments can provide more realistic estimates of an asset’s remaining service life, which can then be used to establish asset rehabilitation and/or replacement schedules. Age related condition values can be problematic if the asset’s useful life is not appropriately defined. For example, if a useful life of an asset is defined shorter than the assets true performance, this will result in a lower/poorer age assessed condition rating. This method of condition approximation was only used when inspected or staff commented conditions were not available.

A rating out of 10 was established for all assets and was based on a combination of past reported physical inspections, current inspections, staff assessment, and asset age analysis. This rating was then converted to a condition description of “Very Good” to “Very Poor” as shown in Table 2.5.

Table 2.5: Asset Condition Format for all Assets

Condition (Value 0-10)	Condition
9 – 10	Very Good
7 – 8	Good
5 – 6	Average
3 – 4	Poor
1 – 2	Very Poor

The condition of the assets is an important element of any lifecycle assessment process. This process also identifies maintenance and operating practices that can be applied to ensure appropriate service levels, as well as extending the life of the asset to its maximum service life.

A draft policy has been proposed that will ensure the Township's core assets are reviewed using established engineering methods and practices. Appendix B contains the draft Data Verification and Condition Assessment Policy, which identifies how often the Township's assets are recommended to be assessed.

A high-level summary of the average conditions for the Township's assets are shown in Table 2.1. The conditions listed in Table 2.1 were calculated using weighted average conditions. The weighting factor used was the asset replacement costs so that the greater the cost the greater the weighting of that asset's condition used to determine the average. Using this method provides more emphasis on the more expensive to replace assets. However please note that averages are a composition of many assets in a group. Averages can be misleading with respect to immediate needs as the new assets offset the old assets requiring urgent replacement.

2.8 Data Accuracy and Completeness

An important element of this asset management plan is ensuring that tools and procedures are in place to maintain accuracy and completeness of the asset data and calculations moving forward. As time passes, assets are used, maintained, improved, disposed of, and replaced.

All of these lifecycle events can trigger changes to the asset database used within the asset management plan. Therefore, tools and procedures are essential to ensure the asset data remains accurate and complete. Please refer to Appendix B of this report for the draft "Data Verification and Condition Assessment Policy" for the Township. This policy illustrates how the asset data can be updated and verified going forward. This includes the timing of condition assessments for each asset type and what should be included within the condition assessment procedures.

3.0 Expected Levels of Service

The Township has been offering and maintaining for its residents and visitors, good service levels, during challenging economic times. The Province has demanded via Ontario Regulation 588/17 that municipalities complete asset management plans on a regular basis to ensure that appropriate investments are being made in municipal infrastructure. Reviewing past records has shown that investments were being made into maintaining and replacing the Township's infrastructure. The last few years have seen much improvement with greater investments in Township infrastructure. It is important to note that the long term objective of the Township needs to be infrastructure sustainability. In general, the Township is performing maintenance activities when required.

3.1 Scope and Process

A levels of service (LOS) analysis gives the Township an opportunity to document the levels of service that are currently being provided and compare it to the levels of service that will ensure the assets achieve their full lifecycle potential. This can be done through a review of current practices and procedures, an examination of trends or issues facing the Township and/or through an analysis of performance measures and targets that staff can use to measure performance.

Expected LOS can be impacted by a number of factors, including:

- Legislative requirements (e.g., minimum maintenance standards for roads, water guidelines, etc.);
- Strategic planning goals and objectives;
- Resident expectations;
- Visitor expectations;
- Council expectations; and,
- Financial or resource constraints.

The previous task of determining the state of the Township's local infrastructure establishes the asset inventory and condition, as well as asset management policies and principles to guide the refinement and upkeep of asset infrastructure. The LOS analysis utilizes this information and factors in the impact of asset service level targets. It is important to document an expected LOS that is realistic to the community. It is common to strive for the highest LOS; however, these service levels usually come at a cost. It is also helpful to consider the risk associated with a certain LOS. Therefore, expected LOS should be determined in a way that balances both level of investment and associated risk to the Township.

Burnside received verbal confirmation of maintenance practices that the Township undertakes. We recommend that the Township revisit and update the Road Needs

Study every 10 years and continue the biannual bridge inspections and analysis utilizing the most up to date MTO bridge/culvert degradation models. These practices will provide historic condition information as well as information related to any changes to asset maintenance. This will also help better determine the remaining life of the municipality's assets.

This information will help not only identify the current needs but also future requirements due to Levels of Service changes. Ensuring that appropriate levels of service are determined and recorded will help when additional growth occurs across the Township.

Figure 3.1 illustrates an example of a recommended strategy of investing more often in smaller amounts which provides higher levels of service and better asset condition with over all lower total cost over the lifecycle of the asset.

The Township's Road Management Plan Study recommended that all of the asphalt road surface improvements will be completed with the following methodology when they reach a rehabilitation point of their lifecycle requiring pulverization of the current surface and adding some gravel to reinforce the base structure and then adding the surface material. This is a practice that many rural communities are using to maintain their level of service of their hard top roads.

3.2 Current Levels of Service versus Expected Levels of Service

The Township's current LOS has resulted in the current state of infrastructure as discussed in the previous section of the report. The current LOS also relates to the risk assessment discussed in later report sections. Regarding the cost of this LOS, the Township has established an operating and capital budget for the current year that includes the cost of providing this LOS. The Township is doing well with delivering levels of service as only under \$30,000 per year was identified as additional cost to deliver identified expected levels of service.

Table 3-1 outlines broad LOS descriptions (both current and enhanced LOS). This analysis was noted through discussions with the Township's staff and engineering best practices. Based on the information provided there are a few enhanced maintenance related LOS identified. The Levels of Service cost impact analysis was factored into the financial strategy discussed in Section 5 of this report.

Figure 3.1: Benefit of Applying Preventative Maintenance – Asphalt Road Surface Service Life

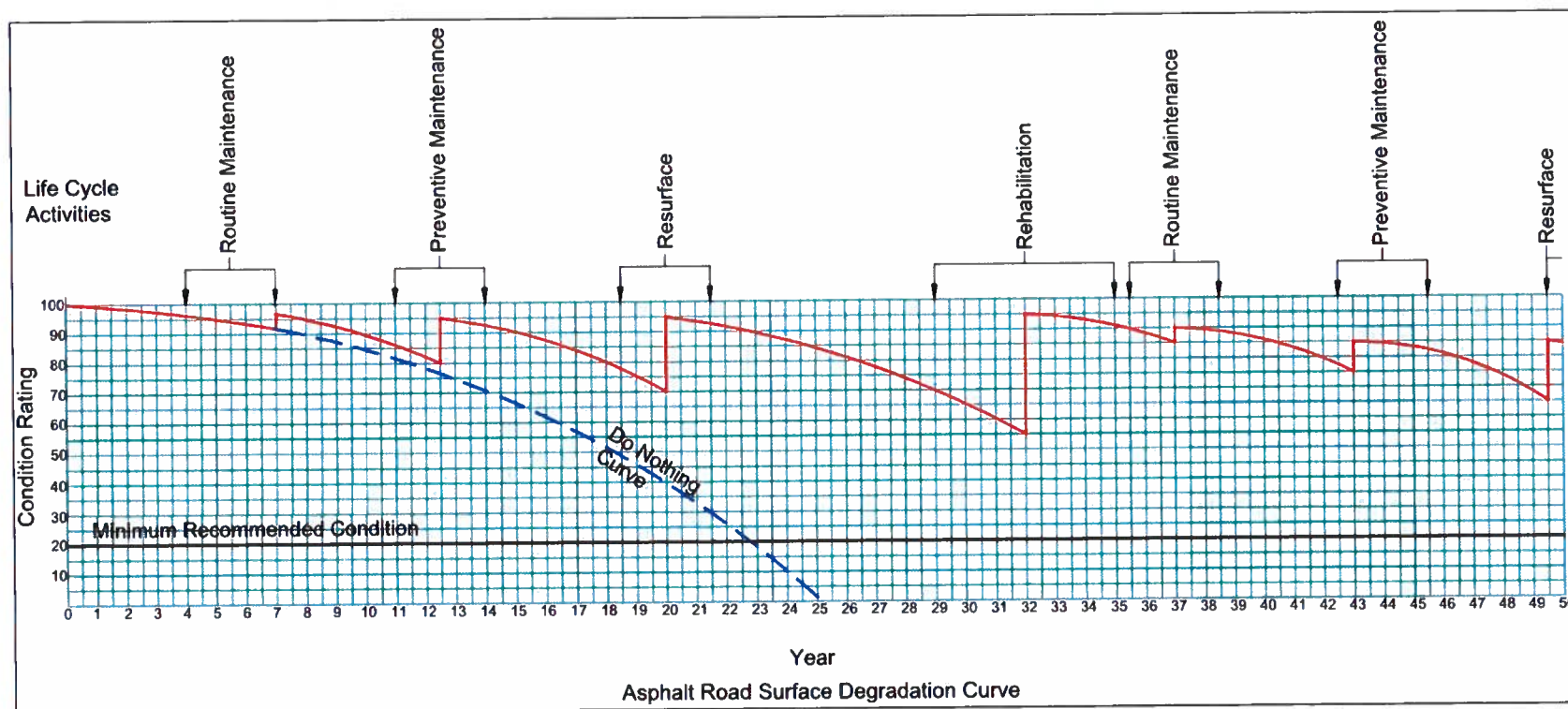


Table 3.1: Expected Levels of Service

Roads and Road Related Assets

Expected Strategic LOS	Level of Service (LOS) Analysis					
	Current LOS	Expected LOS	Benchmark (if Applicable)	Current Cost of LOS	Estimated Cost of Expected LOS	Cost Description
Safe Roads	Meet "Minimum Maintenance Standards" as defined by Ontario Regulation 239/02 and Amendments.	Meet "Minimum Maintenance Standards" as defined by Ontario Regulation 239/02 and Amendments.	Regulation Standard	\$6,000	\$10,000	Municipality has an AVL system in all vehicles recording Roads Patrolled. Cost represent annual pothole patching.
Fix Public Identified Issues Quickly	Track complaints and resolve them as quickly as possible	Track complaints by road segment so that history can be recorded.	Respond to Public Inquiry within 7 days			Municipality delivers this Level of Service well
Maintain Road System Network Condition for Safe Use	Road Maintenance is completed regularly and when required	Maintain adequate road network condition index to ensure safe roads	Assess Road Conditions every 10 years with Internal assessment annually	\$45,000 every 10 years	\$45,000 every 10 years	Roads Needs Study every 10 years to include Network Condition analysis (next proposed for 2029). Municipality completing crack seal, and slurry seal program well.
Asphalt Roads are Clean and Clear	Street sweeping and flushing are completed annually	Roads are swept and flushed to ensure they are clear of debris and safe.		\$5,500	\$6,000	Municipality has minimal Asphalt roads. Debris is collected as per Minimum Maintenance Standards.
Follow Best Practice for Asphalt Roads	Completing a regular Crack Seal program.	Completing a regular crack seal program.			\$10,000	Municipality is looking to start a Crack Seal Program with some of the newly paved roads. The older asphalt roads are beyond this type of maintenance.
Gravel Roads are Well Maintained and Dust Inhibited	Gravel roads are smoothed when required, and Calcium Chloride applied to control dust	Gravel roads are smoothed when required, and Calcium Chloride applied to control dust		\$165,000	\$175,000	Municipality delivers this Level of Service well
Safe and Well Maintained Roadsides	Municipality provides brushing, ditching, grass mowing, and shoulder maintenance to ensure roadsides are safe and well maintained	Roadsides are clear of obstructions and well maintained for safe road travel.		\$50,000	\$50,000	Municipality delivers this Level of Service well
Winter Road Maintenance	Winter roads are cleared and safe.	Roads are maintained and meet "Minimum Maintenance Standards" as defined by Ontario Regulation 239/02 and Amendments.		\$35,000	\$40,000	Municipality can use more material to deliver an improved Level of Service
Weather Forecast Information	Municipal staff check weather forecasts minimum 3 times per day in the Winter months (October 1 - April 30)	Weather forecasts are reviewed three times per day during the Winter Maintenance months.				Municipality delivers this Level of Service well
Signs can be Seen Clearly	Signs: Visual inspections done in the evening. Replaced when required/needed.	Signs: Visual inspections. Replace when needed.	Reflectivity Standard			Municipality delivers this Level of Service well
Safe Well-lit Urban and Semi-Urban Street Areas	Maintenance activated by Winter Staff evening Patrols and Public Notice for Street Lights	Maintenance activated by Public Notice for Street Lights	Correction of Issues within MMS			Municipality delivers this Level of Service well

Bridge and Culvert Assets

Expected Strategic LOS	Level of Service (LOS) Analysis					
	Current LOS	Expected LOS	Benchmark (if Applicable)	Current Cost of LOS	Estimated Cost of Expected LOS	Cost Description
Safe Bridges	Maintain good bridge condition and no bridges with load limits.	Maintain good condition and no load limits.	MTO bridge guides			Municipality delivers this Level of Service well
Bridges Maintained	Follow Bridge Inspection Report recommendations for Bridge and Culvert maintenance.	Proactive Bridge and Culvert maintenance (based on bridge inspection report).			\$4,000 annually over 10 years	OSIM Report has recommended that the municipality complete the safety related improvements over the next 5 years. As this relates to risk tolerance of the municipality the recommendation is to improve safety annually starting with the greatest risk potential structures.
Proper Bridge Spring Maintenance	Bridge washing is completed in Spring	Blowing out Expansion Joints & Washing of Bridges in Spring				Municipality delivers this Level of Service well.
Bridge Inspections	Bridge inspections (i.e., using OSIM forms) required every 2 years.	Bridge inspections (i.e., using current OSIM forms) required every 2 years.	Completed every 2 years	\$16,600 every two years	\$16,600 every two years	Municipality delivers this Level of Service well.

Storm Water Assets

Expected Strategic LOS	Level of Service (LOS) Analysis					
	Current LOS	Expected LOS	Benchmark (if Applicable)	Current Cost of LOS	Estimated Cost to Move to Expected LOS	Cost Description
Effective Storm Water Management	Investigate and respond based on public complaints/concerns.	Proper flows and clear system with little to no inhibitors.	No storm water back-up incidents			Municipality delivers this Level of Service well
Crossroad Culverts are Appropriately Sized and Maintained	Cross Road Culverts are replaced when required.	Climate Change and/or Extreme Weather events do not cause adverse issues with the Municipal road network.		\$15,000	\$15,000	Cross road culverts are replaced when required. It is recommended that assessment of the size of the cross road culverts can withstand extreme weather events to ensure Road Bases are secure.
Catch Basins are clear and well Maintained	Catch Basin cleaning annually.	Annual Catch Basin cleaning.		\$2,500	\$2,500	Municipality delivers this Level of Service most of the time
Storm Water Mains are clear and well Maintained	No identified issues.	Regular inspection for condition and no physical obstructions.				Municipality delivers this Level of Service well

Water Assets

Expected Strategic LOS	Level of Service (LOS) Analysis					
	Current LOS	Expected LOS	Benchmark (if Applicable)	Current Cost of LOS	Estimated Cost of Expected LOS	Cost Description
Source Water is well Protected	Maintaining appropriate Zoning and Planning to ensure Source Water Protection	Maintaining appropriate Zoning and Planning to ensure Source Water Protection.				Municipality delivers this Level of Service well.
Production Wells are well Maintained	Appropriate maintenance is undertaken when required	Appropriate maintenance is undertaken when required				Municipality has not had any issues with their wells
Treatment Processes Meet Legislative Requirements	Meet all legislative requirements.	Meet all Provincial legislative requirements.	Provincial Guidelines			Municipality is completing this LOS, with water testing 3 times per week.
Appropriate Water Storage for Distribution Network	Water Storage is sufficient for currently approved systems.	Water Storage meets the needs of the Water Distribution Network				Municipality is completing this LOS.
Efficient Water Distribution System	Water losses are tracked and at a minimized.	Water Losses are tracked and minimized.				Municipality delivers this Level of Service well.

Wastewater Assets

Expected Strategic LOS	Level of Service (LOS) Analysis					
	Current LOS	Expected LOS	Benchmark (if Applicable)	Current Cost of LOS	Estimated Cost of Expected LOS	Cost Description
Treatment Processes Meet Legislative Requirements	Meet all legislative requirements.	Meet all Provincial legislative requirements.	Provincial Guidelines			Municipality delivers this Level of Service well
Safe Treatment Structures (Tanks and Septic Beds)	Meet legislative requirement (Building Code, Fire Code, Health & Safety, etc.)	Meet legislative requirement (Building Code, Fire Code, Health & Safety, etc.)	Provincial Guidelines	\$1,000	\$1,000	Septic tanks clean out every other year.
Wastewater Pipes are clear and well Maintained	Ensuring Obstruction and/or Infiltration into Wastewater system.	Review of flows to be completed when septic tanks are cleaned out.		staff		No additional costs but good practice staff can perform when septic tanks are cleaned out.

4.0 Asset Management Strategy

4.1 Scope and Process

The asset management strategy provides the recommended course of actions required to maintain (or move towards) a sustainable asset position while delivering the levels of service discussed in the previous section. The course of actions, when combined together, form a long-term operating and capital forecast that includes:

- **Non-infrastructure solutions:** Reduce costs and/or extend expected useful life estimates;
- **Maintenance activities:** Regularly scheduled activities to maintain existing levels of service levels, or repairs needed due to unplanned events;
- **Renewal/Rehabilitation:** Significant repairs or maintenance planned to maintain the levels of service and increase the remaining life of assets; and,
- **Replacement/Disposal:** Complete disposal and replacement of assets when renewal or rehabilitation is no longer an option.

Priority identification becomes a critical process during the development of an asset management strategy. Priorities have been determined based on assessment of the overall risk of asset failure, which is determined by looking at both the probability of an asset failing, as well as the consequences of asset failure. The consequences of the municipality not meeting desired levels of service must also be considered in determining risk. As discussed in Section 3.0, adding enhanced levels of service results in both operating and capital budget impacts over the 10 year forecast period. This has to be taken into consideration, with the overall objective of reaching sustainable levels while mitigating risk.

4.2 Risk Assessment

The risk of an asset failing is defined by the following calculation:

Risk of Asset Failure = Probability of Failure X Consequence of Failure

Probability of failure has been linked to the condition assessment for each asset, assuming that an asset in "very good" condition has a "rare" probability of failure. The following table outlines the probability factor tied to each condition rating:

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Table 4.1: Probability of Failure Matrix

Condition (Value)	Condition	Probability of Failure
9 – 10	Very Good	Rare
7 – 8	Good	Unlikely
5 – 6	Average	Possible
3 – 4	Poor	Likely
1 – 2	Very Poor	Almost Certain

Consequence of failure has been determined by examining each asset type separately. Consequence refers to the impact on the municipality if a particular asset were to fail.

Types of impacts include the following:

- **Cost impacts:** the cost of failure to the Township (i.e., capital replacement, rehabilitation, fines and penalties, damages, etc.);
- **Social impacts:** potential injury or death to residents/public;
- **Environmental impacts:** the impact of the asset failure on the environment; and,
- **Service delivery impacts:** the impact of the asset failure on the Township's ability to provide services at desired levels.

Each type of impact was reviewed and consequence of failure for each asset type was determined by using the information contained in Table 4.2 as a guide to assess the level of impact. Levels of impact were documented as ranging from "significant" to "insignificant".

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Table 4.2: Consequence of Failure Matrix

	Cost	Social	Environmental	Service Delivery
Significant	Significant Cost – Difficult to Recover	Death, Serious Injury	Long-term Impact – Permanent	Major Interruptions
Major	Substantial Cost – Multi-year Budget Impacts	Major Injury	Long-term Impact – Fixable	Significant Interruptions
Moderate	Considerable Cost – Requires Revisions to Budget	Moderate Injury	Medium-term Impact – Fixable	Moderate Interruptions
Minor	Small/Minor Cost – within Budget Allocations	Minor Injury	Short-term/Minor Impact – Fixable	Minor Interruptions
Insignificant	Negligible or Insignificant Cost	No Injury	No Impact	No Interruptions

With both probability of failure and consequence of failure documented, total risk of asset failure was determined using the matrix contained in Table 4-3. Total risk has been classified under the following categories:

- **Extreme Risk (E):** Risk beyond acceptable levels;
- **High Risk (H):** Risk slightly beyond acceptable levels;
- **Medium/Moderate Risk (M):** Risk at acceptable levels, monitoring required to ensure risk does not become high; and,
- **Low Risk (L):** Very little risk.

Table 4.3: Total Risk of Asset Failure Matrix

Probability of Failure	Consequence of Failure				
	Significant	Major	Moderate	Minor	Insignificant
Almost Certain	E	E	H	H	M
Likely	E	H	H	M	M
Possible	H	H	M	M	L
Unlikely	H	M	M	L	L
Rare	M	M	L	L	L

Risk levels can be reduced or mitigated through planned maintenance, rehabilitation and/or replacement of an asset. An objective of this asset management plan is to reduce risk levels where they are deemed to be too high, as well as ensure assets are maintained in a way that keeps risk at acceptable levels.

4.3 Priority Identification

Through a review of the asset risk of failure assessment, the assets/categories listed below were identified as being priorities of the Township for over the next few years.

4.3.1 Roads

- 2nd Line South West from Highway 89 to 300 Sideroad – Top coat of asphalt (recommended improvement in 2022, approximate cost \$217,000).
- 2nd Line South West from 250 Sideroad to Southgate – Top coat of asphalt (recommended improvement in 2022, approximate cost \$283,500).
- 5th Line OS from County Road 17 to 280 Sideroad – Asphalt Surface with additional geogrid road base support (recommended improvement in 2023, approximate cost \$401,300).
- 5th Line OS from 280 Sideroad to 4th Line North East – Asphalt Surface (recommended improvement in 2023, approximate cost \$24,750).
- 5th Line OS from 4th Line North East to 15 Sideroad – Asphalt Surface (recommended improvement in 2023, approximate cost \$68,750).
- 5th Line OS from 15 Sideroad to 270 Sideroad – Asphalt Surface (recommended improvement in 2024, approximate cost \$232,750).
- 5th Line OS from 270 Sideroad to 6th Line North East – Asphalt Surface with additional geogrid road base support (recommended improvement in 2024, approximate cost \$109,500).

4.3.2 Bridges

All bridges and large culverts (over 3 m diameter) are a concern to the Township as a failure of this type of asset can result in a major consequence of failure.

- Bridge 11 (G. Anderson Bridge – 8th Line SW 3.4km North of Highway 89) – Rehabilitation of concrete that is showing signs of deterioration on the deck top and moisture through the deck joints (recommended improvement in 2022, approximate cost \$255,000).
- Culvert 2023 (4th Line North East south of 260 Sideroad) – Rehabilitate the concrete and remove the vegetation and fill over top of the culvert ends (recommended improvement 2023, approximate cost \$200,000).
- Bridge 7 (Gray Bridge – 1.5km South of 270 Sideroad) – Rehabilitation with concrete repairs, waterproofing and paving, and barrier replacement (recommended improvement in 2024, approximate cost \$215,000).
- Bridge 18 (Fluney Bridge – 2nd Line North East 750 m South of County Road) – Concrete repairs, waterproofing and paving, barrier replacement, and erosion protection should be included in the rehabilitation (recommended improvement in 2024, approximate cost \$240,000).

4.3.3 Storm Water

The Township continues to collect crossroad culvert information as they are replaced. Ideally a project not only collecting information both on size and material but also assessing the crossroad culvert condition will help the Township to understand if the Township Road assets can withstand some more regular extreme weather events. Federation of Canadian Municipalities provides asset management project 80% funding up to \$50,000. It is recommended that the Township seek funding for this Storm Water asset project which may only cost the Township \$12,500.

Wastewater

The Township owns three septic systems. Two of these systems (Administration Office and Public Works Yard Office) are connected. It is the pump for the Public Works Office that is recommended to be replaced in 2022 (approximate cost \$2,000)

This list of capital asset improvements/replacements is only for the next few years, and do not limit the needs that the Township requires to become fully sustainable. The Finance Strategy will further outline the needs for investing in assets annually via reserves to ensure that funds are available for future asset replacements.

4.4 Climate Change

Over the past decade there has been increased numbers of extreme weather events which are putting greater stress on municipal infrastructure, and pressure to ensure levels of service are maintained. Climate change poses a real risk management question which needs to be addressed within the context of municipal decision making.

Some climate change projections (Federation of Canadian Municipalities):

- Warmer summer temperatures;
- Warmer winter temperatures;
- More intense storms;
- Longer droughts;
- Increased frequency and amount of ice;
- Summers stretching longer; and,
- Sea level rising.

The Township of Melancthon has witnessed some of these climate change projections already causing potential challenges with road washouts from an extreme weather events, or quick winter thaw runoff. Many roads have not been designed for such intense high-volume rainstorms.

Identifying areas of concern will help the Township to design road and storm water assets to improve resiliency to extreme weather events. This type of investment will

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reduce risk of failure of infrastructure and ensure appropriate levels of service are maintained for the public.

Another factor to climate change issues is the materials used in asset construction. The focus is to reduce the total carbon footprint on the construction of infrastructure assets. Investing in infrastructure with a long-term view provides both better levels of service as well as reducing the total carbon footprint.

As recommended above for the Township to start collecting crossroad culvert data which will be a start to identifying if the culverts can withstand potential extreme weather. Then focusing on concern areas and upgrading them over a 10 year period will make good progress to becoming a more climate change resilient municipality.

4.5 Long-term Forecast

For many years, lifecycle costing has been used in the field of engineering to evaluate the advantages of using alternative materials in construction or production design. The method has gained wider acceptance and use recently in the management of capital assets. By definition, lifecycle costs are **all** the costs which are incurred during the lifecycle of a capital asset, from the time it is purchased or constructed, to the time it is taken out of service for disposal/replacement.

In defining the long-term forecast for the Township's asset management strategy, costs incurred through an asset's lifecycle, the asset's condition, expected LOS, and risk were considered and documented. Asset replacement analysis in forecasting the Township's asset replacement needs are summarized in Figure 4-1, which we are calling Asset Strategy based on expected levels of service.

The asset strategy incorporated all of the information discussed above in this report and based on the information provided by the Township, past reports, staff input, and understanding of the asset's reaction in their current environment as well as the expected asset maintenance levels, and the current asset condition, which is expected to produce a reduced asset potential risk of failure. The outcome of this scenario approach was to provide appropriate asset service levels, and the assets were expected to meet or exceed their useful life which reduces expected infrastructure deficits. In total (all core assets), \$16.9 million in assets (inflated to appropriate year) are shown as maintenance, improvement, rehabilitation and replacement needs over the 10 year forecast. This is the recommended asset strategy for the Township of Melancthon.

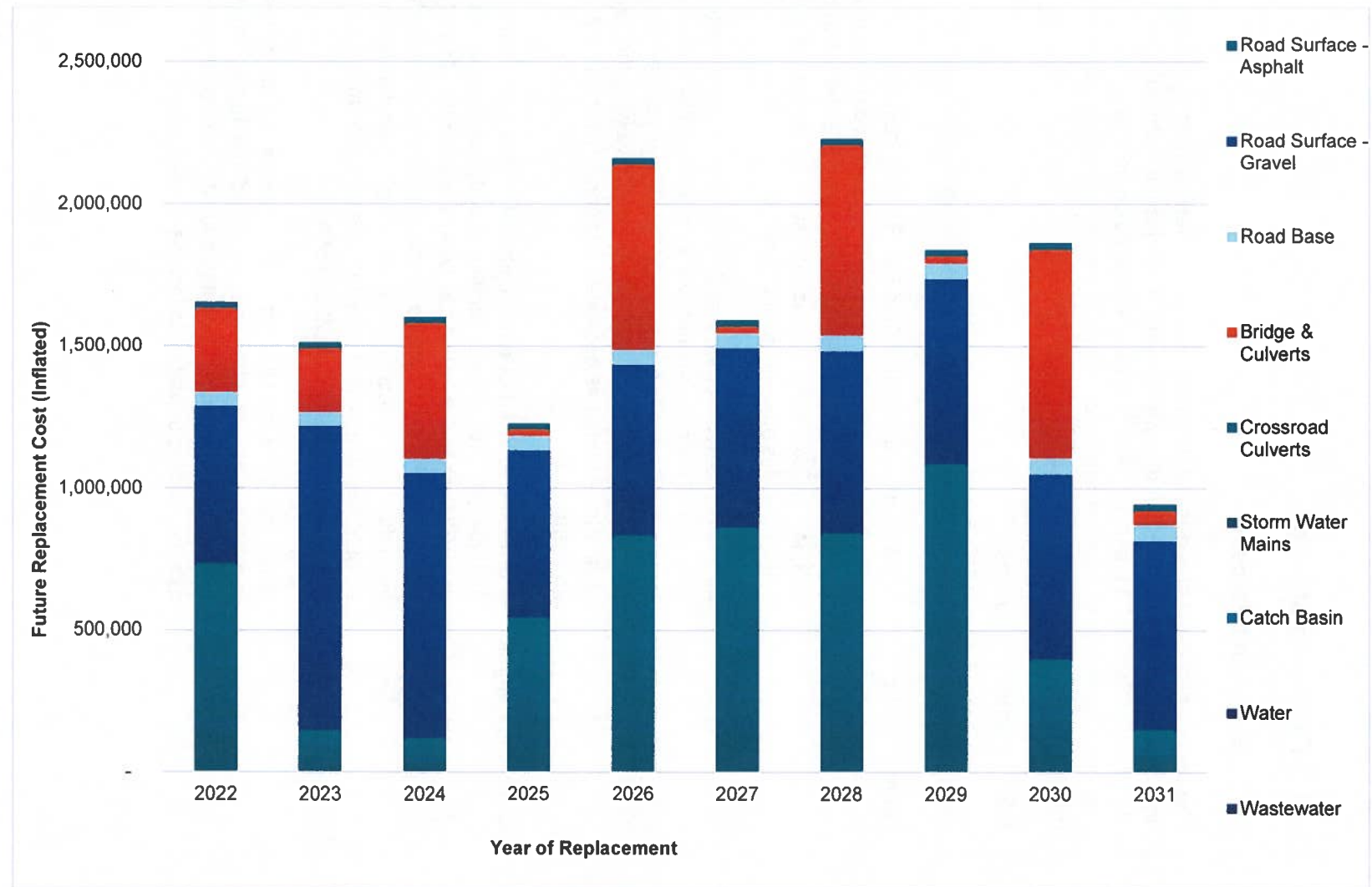
Assets like Bridges, and major culverts, are not expected to be replaced for usually over 50 years. It needs to be stated, to ensure that these assets have reserve funding for their rehabilitation/replacement schedule in the future. The Financial Strategy provides the Township with an investment plan into their reserve accounts.

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For the recommended scenario to be feasible, the expected level of service adjustments discussed in Section 3 are needed in conjunction with the current level of service amounts in order to effectively maintain and rehabilitate the assets as required.

The financing strategy discussed in the next section will incorporate the level of service adjustments into the recommended financing analysis.

Figure 4.1: Proposed Asset Strategy Based on Expected Levels of Service



5.0 Financing Strategy

5.1 Scope and Process

The financing strategy provides the recommended use of various funding sources to finance the asset management strategy and levels of service recommendations discussed in Sections 3.0 and 4.0. The financing strategy also provides recommendations to increase annual investments in assets that will be used beyond this report's 10 year forecast period.

5.2 Funding Sources

The following funding sources have been used within the financing strategy:

Grant Funding: It has been assumed that Gas Tax Funding (now called the Canada Community Building Fund) will continue throughout the forecast period. The Township's allocation is expected to reach \$99,547 by 2023 and it has been assumed that funding will remain constant at this amount moving forward.

It has also been assumed that Ontario Community Infrastructure Fund (OCIF) annual amounts will increase to 2022 levels and remain constant at this amount, \$108,537 per year, over the forecast period. The province is currently reviewing the formula for OCIF funding and has dedicated additional funding to this program.

Operating Budget: The Township includes annual amounts in the operating budget to fund capital. This is either funding directly from annual revenues or from Working Capital. It has been assumed that \$551,700 of this funding will be dedicated to core infrastructure annually throughout the forecast period. This is equivalent to the annual amount invested in core infrastructure capital from operations, on average, over the 2020 to 2022 period.

Given that there are levels of service recommendations that are operating in nature, it has been assumed that these costs will be funded from the annual operating budget. This could be through existing funding or proposed increases each year.

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Reserves: The Township's existing "Road Reserve" has been utilized as a funding source for core infrastructure capital needs over the forecast period. This reserve becomes the primary source of capital funding over the forecast period. It is recommended that increases in annual asset investment for core infrastructure be allocated to this reserve for capital use. The Township also has an "Environmental Rehabilitation Reserve" that relates to core infrastructure.

Debt: If all other funding sources fall short in funding recommended lifecycle needs each year, debt financing is recommended. Debt financing is anticipated within the forecast period for core infrastructure (see the analysis provided below).

Historic Asset Investment

The following table outlines the Township's historic capital investment in assets. As shown, the annual investment has fluctuated over the last three years.

Table 5.1: Historic Asset Investment - Capital

Funding Type (Core Infrastructure)	2020	2021	2022
Canada Community Building Fund (Gas Tax)	91,251	95,399	95,399
OCIF Funding	50,000	50,000	108,537
Transfer from Operating / Working Capital	694,459	588,669	371,963
Contribution to Environmental Rehabilitation Reserve	10,000	10,000	10,000
Total 2021 Asset Investment - Capital (Sustainable)	845,710	744,068	585,899

* Excludes the Safe Restart and OMPF grants as they are operating in nature. Excludes ICIP grants and any other one-time contributions.

** OCIF Funding Formula for 2023 is under review, however a province wide sustainable increase in funding has been announced.

Therefore, a capital asset investment in 2022 of \$585,899 becomes the starting point for recommending increases in annual asset investments over the forecast period.

5.3 Optimal Asset Investment

Based on an analysis of the Township's capital assets in terms of replacement cost and useful life, the following summary of optimal annual asset investment has been created.

Table 5.2: Optimal Asset Investment Summary

Core Infrastructure	Replacement Cost (2022 \$)	Weighted Average Useful Life	Annual Replacement Investment (2022 \$)
Road Surface	10,252,696	20	512,600
Road Base	105,612,068	75	50,000
Bridge & Culverts	38,367,000	70	548,100
Crossroad Culverts	131,164	50	2,600
Storm Water Mains	182,590	100	1,800
Catch Basins	110,000	50	2,200
Water	77,000	28	2,800
Wastewater	106,500	25	4,300
Total	154,839,018		1,124,400

In summary, an annual asset investment of \$1,124,400 is needed to fund long-term asset management planning needs for core infrastructure. This does not include other non-core assets that have been excluded from this asset management plan. In addition, annual asset investments for road base assets are based on level of service costs identified in this asset management plan and not full replacement.

This \$1,124,400 annual asset investment becomes the funding target over the forecast period. However, this target increases over time as inflation increases this amount annually. Assuming 2% annual inflation, the target annual capital asset investment amount becomes \$1,398,120 by the year 2032.

5.4 Financing Strategy

The detailed 10 year financing strategy is provided in Appendix C to this report.

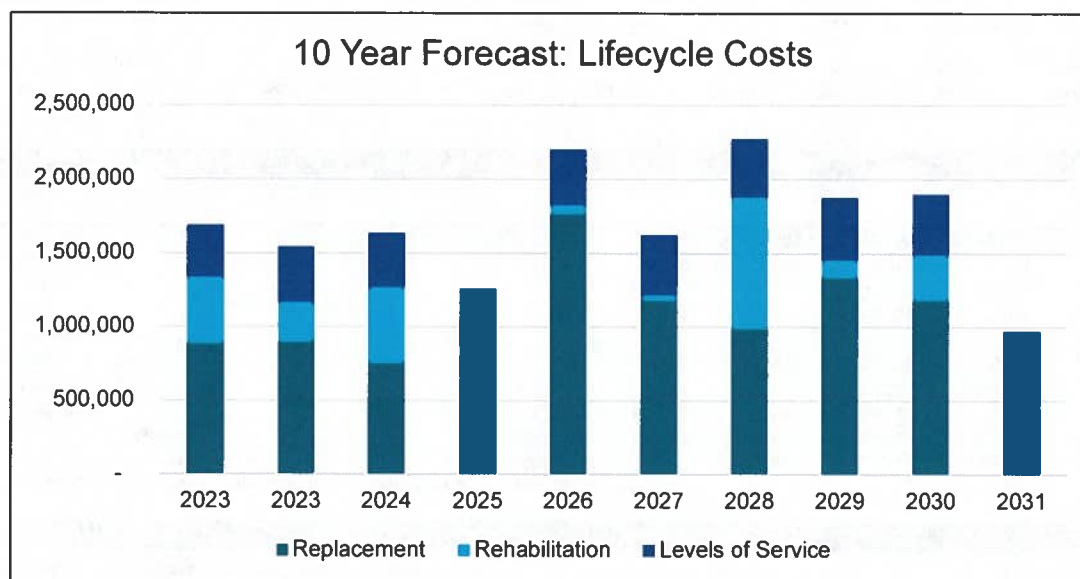
As the 2022 Budget has already been developed and passed by the Township, all recommendations provided in Section 4 have been shifted by one year. For example, all 2022 recommendations from Section 4 are shown as 2023 funding requirements in this section. Also, like Section 4, a 2% inflation factor has been applied annually to all costs.

The following table provides a high-level summary of the 10 year forecast by cost type (i.e., asset replacement needs, asset rehabilitation needs, and levels of service recommendations).

Table 5.3: Forecast Summary

Forecast	2023	2023	2024	2025	2026	2027	2028	2029	2030	2031
Replacement	884,330	894,473	750,595	811,641	1,762,270	1,177,442	987,085	1,333,070	1,180,153	444,933
Rehabilitation	452,457	273,194	518,243	50,782	61,770	40,196	891,682	120,749	309,265	24,380
Levels of Service	350,370	374,648	364,524	389,784	379,251	405,531	394,574	421,914	410,515	493,814
Total	1,687,157	1,542,315	1,633,362	1,252,207	2,203,291	1,623,169	2,273,341	1,875,733	1,899,933	963,127

Figure 5.1 shows the same forecast in graph form. As illustrated, there are minor fluctuations in annual lifecycle needs throughout the forecast.

Figure 5.1: Forecast Summary

As shown in Appendix C, the 10-year forecast has a recommended funding plan as follows:

Table 5.4: Capital Forecast with Funding Sources

Asset Class	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Totals by Asset Class (Replacement, Rehabilitation and Levels of Service)											
Road Surface - Asphalt	748,961	150,635	122,624	556,312	851,014	880,021	860,284	1,109,643	407,502	155,056	5,842,052
Road Surface - Gravel	564,876	1,090,901	950,951	599,451	611,440	642,808	652,052	661,695	661,842	675,079	7,111,095
Road Base	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950	558,436
Bridge & Culverts	301,920	229,512	487,095	22,298	665,208	23,199	682,320	24,136	748,725	49,491	3,233,904
Crossroad Culverts	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285	167,529
Storm Water Mains	-	-	-	-	-	-	-	-	-	-	-
Catch Basin	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047	27,921
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	2,550	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	12,698
Total	1,687,157	1,542,315	1,633,362	1,252,207	2,203,291	1,623,169	2,273,341	1,875,733	1,899,933	963,127	16,953,635

Funding Analysis	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Total Funding by Source											
Canada Community Building Fund (Gas Tax)	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	995,470
OCIF Funding (estimate)	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	1,085,370
Transfer from Operations (for Core Infrastructure capital)	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	5,517,000
Transfer from/(to) Capital Reserves	227,003	100,154	184,054	120,607	414,256	376,548	418,983	513,485	564,634	(215,381)	2,704,343
Operating Funding (LOS Impacts)	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724	3,836,452
Debt Funding (see section 2)	350,000	325,000	325,000	-	650,000	100,000	700,000	200,000	165,000	-	2,815,000
Total	1,687,157	1,542,315	1,633,362	1,252,207	2,203,291	1,623,169	2,273,341	1,875,733	1,899,933	963,127	16,953,635

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As noted in Section 5.2 above, Gas Tax and OCIF funding is shown as a funding source in each year of the forecast period, reserves are used as the primary funding source, operating budget funding is used for a fixed \$551,700 in capital funding annually as well as for levels of service recommendations that are considered operating in nature, and debt funding is used to finance the remaining funding needs each year, if applicable.

Debt Funding

Debt funding is anticipated within the forecast period for core infrastructure. As shown above in Table 5.4, debt principal amounts of \$2,815,000 is required in total from 2023 to 2032 to fund recommended asset lifecycle needs for core infrastructure. This assessment should be reviewed when other assets are added to the asset management plan. Given that the Township's ability to use debt funding is restricted based on the province's debt capacity (annual repayment limit) calculations, an analysis of all current and proposed debt was completed (see Table 5.2 and Table 5.3).

Figure 5.2: Summary of Current and Proposed Debt Payments

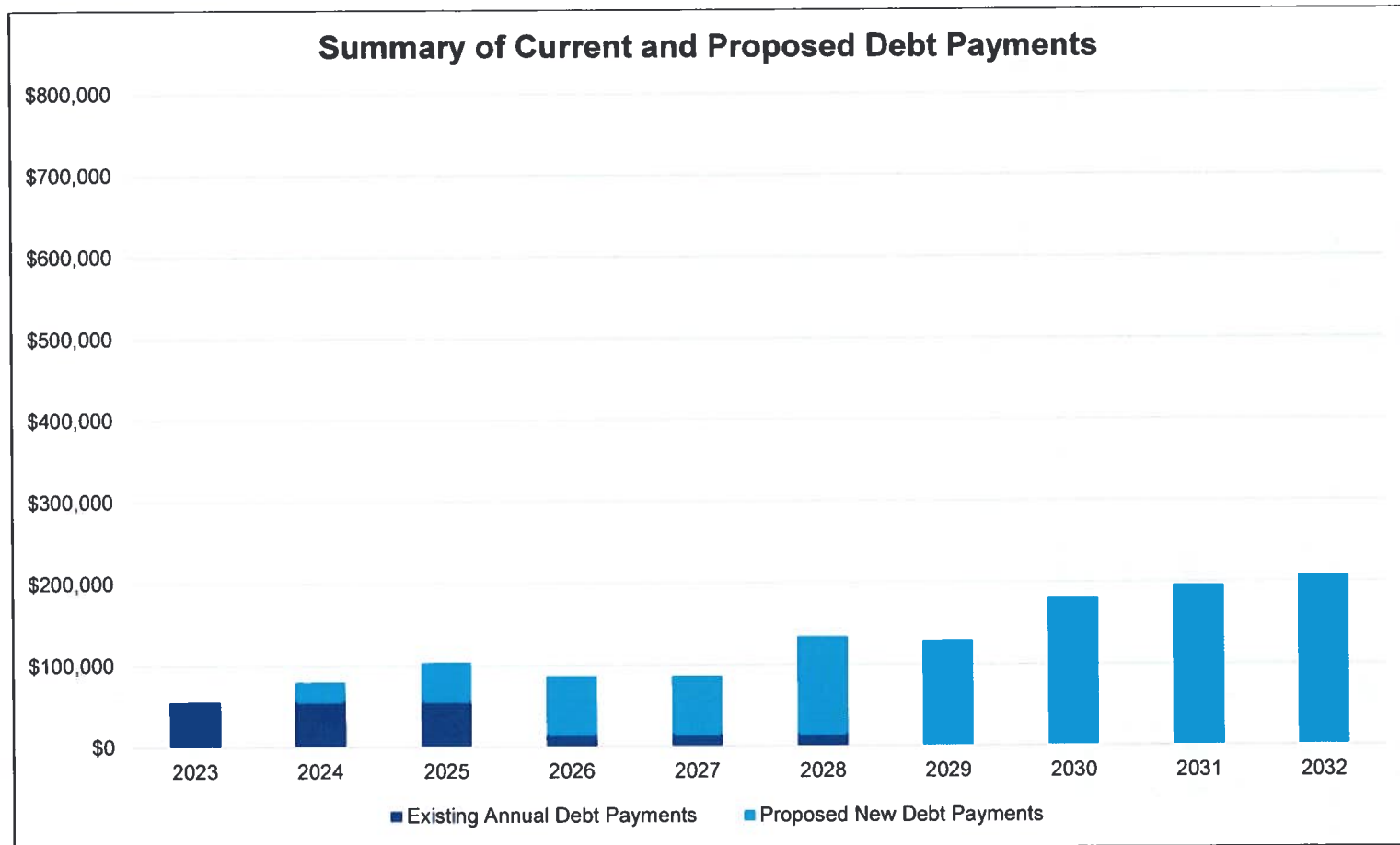


Figure 5.3: Percent of Annual Repayment Limit Used

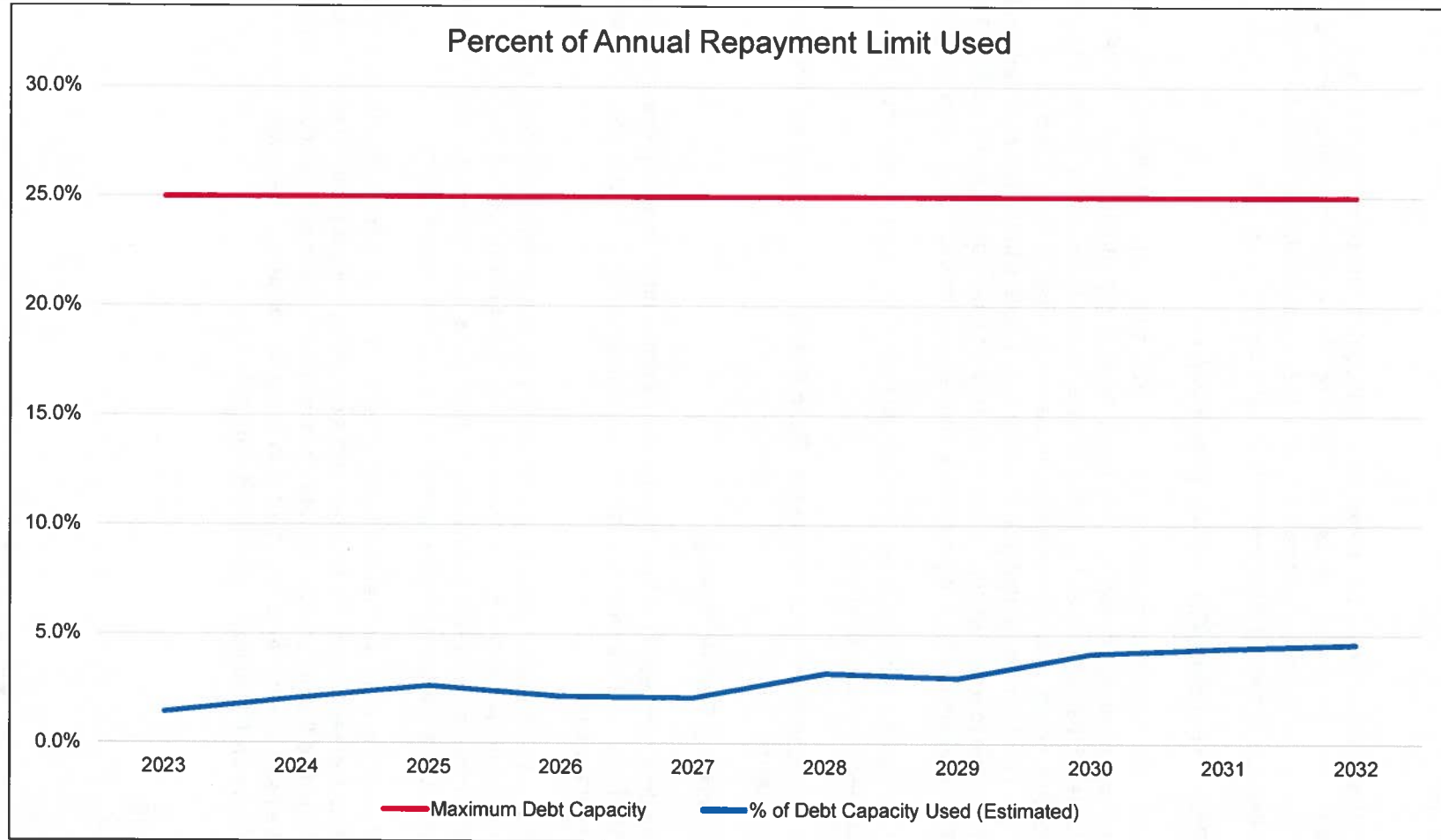


Figure 5.2 and Figure 5.3 above show that current and projected debt requirements are well within the annual debt capacity limits of 25% of Township revenues, reaching a maximum level of 4.6% of revenues in 2032. Future debt payments have been estimated assuming an interest rate of 4.0% over a 20 year term.

Reserve Funding (Core Infrastructure Only)

With reserve funding becoming a primary source of funding within this financing strategy, a recommended phased-in approach to increasing contributions to reserves is provided. Table 5.5 below outlines the actual transfer amounts for 2022 (totalling \$10,000) with a recommended plan to increase those transfers to reach \$638,336 by 2032. This combined with anticipated grant funding and transfers from operations allows the Township to reach an annual asset capital investment amount of \$1,398,120 by 2032. This represents 100% of the optimal annual asset investment amount in 2032.

This analysis will have to be updated once other non-core assets have been included in this asset management plan.

It is recommended that the existing "Road Reserve" be used to fund core infrastructure capital needs.

Operating Budget Funding

As discussed earlier in this chapter, the recommended financing strategy assumes that \$551,700 will be available annually from the operating budget to fund core infrastructure capital needs.

From a levels of service perspective, many recommendations outlined in Section 3.0 are already implemented by the Township. Section 4 of Appendix C to this report outlines that minor adjustments are needed to the Township's operating budget to account for any further levels of service impacts that are not currently funded.

If debt financing was needed to fund the recommended financing strategy, this would also have an impact on the Township's operating budget going forward. It has also been assumed that when existing debt payments are complete, the budget space created will be used to either fund new debt or to increase transfers to reserves. This is outlined in Appendix C and summarized below in Table 5.6.

Table 5.5: Contributions to Reserves

Funding Type (Core Infrastructure)	Actual	Forecast									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Contribution to Road Reserve	-	58,300	117,763	178,414	240,279	303,381	367,746	433,397	500,362	568,666	638,336
Contribution to Enviro. Rehabilitation Reserve	10,000	-	-	-	-	-	-	-	-	-	-
Total	10,000	58,300	117,763	178,414	240,279	303,381	367,746	433,397	500,362	568,666	638,336
Transfer from Operations (Core Infrastructure)	371,963	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700
Canada Community Building Fund (Gas Tax)	95,399	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547
OCIF Funding	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537
Total Asset Investment	585,899	818,084	877,547	938,198	1,000,063	1,063,166	1,127,530	1,193,181	1,260,146	1,328,450	1,398,120

Table 5.6: Increase in Funding Summary

Increase in Funding	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Increase (Decrease) in Transfers to Reserves	48,300	59,463	60,652	61,865	63,102	64,364	65,652	66,965	68,304	69,670
Increase (Decrease) in Operating - LOS	40,370	7,007	7,147	7,292	7,435	7,586	7,737	7,890	8,051	8,209
Increase (Decrease) in Operating - Debt	-	25,750	3,910	(16,998)	-	47,830	(5,697)	51,510	14,720	12,140
Total Impact on Annual Tax Supported Budget	88,670	92,220	91,708	52,159	70,538	119,780	67,692	126,365	91,074	90,019
Estimated Taxation Impact (1% in 2023 = \$29,148)	3.04%	3.10%	3.02%	1.69%	2.24%	3.72%	2.06%	3.77%	2.67%	2.58%

Table 5.6 above outlines the total annual increase in funding recommended from 2023 to 2032. These increases can be incorporated through:

- a) Finding efficiencies in the annual budget.
- b) Increase in external funding (i.e., grants or third party contributions).
- c) Allocations of annual surpluses to capital reserves (if available).
- d) Recommending budget (taxation) increases.

As shown in Table 5.6, if taxation increases are required each year to allow for the total recommended increases in funding (i.e., items a, b, and c above are not available), an increase in taxation would be required annually, ranging from 3.77% to 1.69%.

Funding Gap

Figure 5.4 below provides an overall summary of the recommended annual investment levels (shown in orange and gray) as well as the funding gap (shown in yellow). The funding recommendations outlined in this chapter ensure the funding gap is eliminated (for core infrastructure only) by 2032.

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Figure 5.4: Annual Asset Investment & Funding Gap

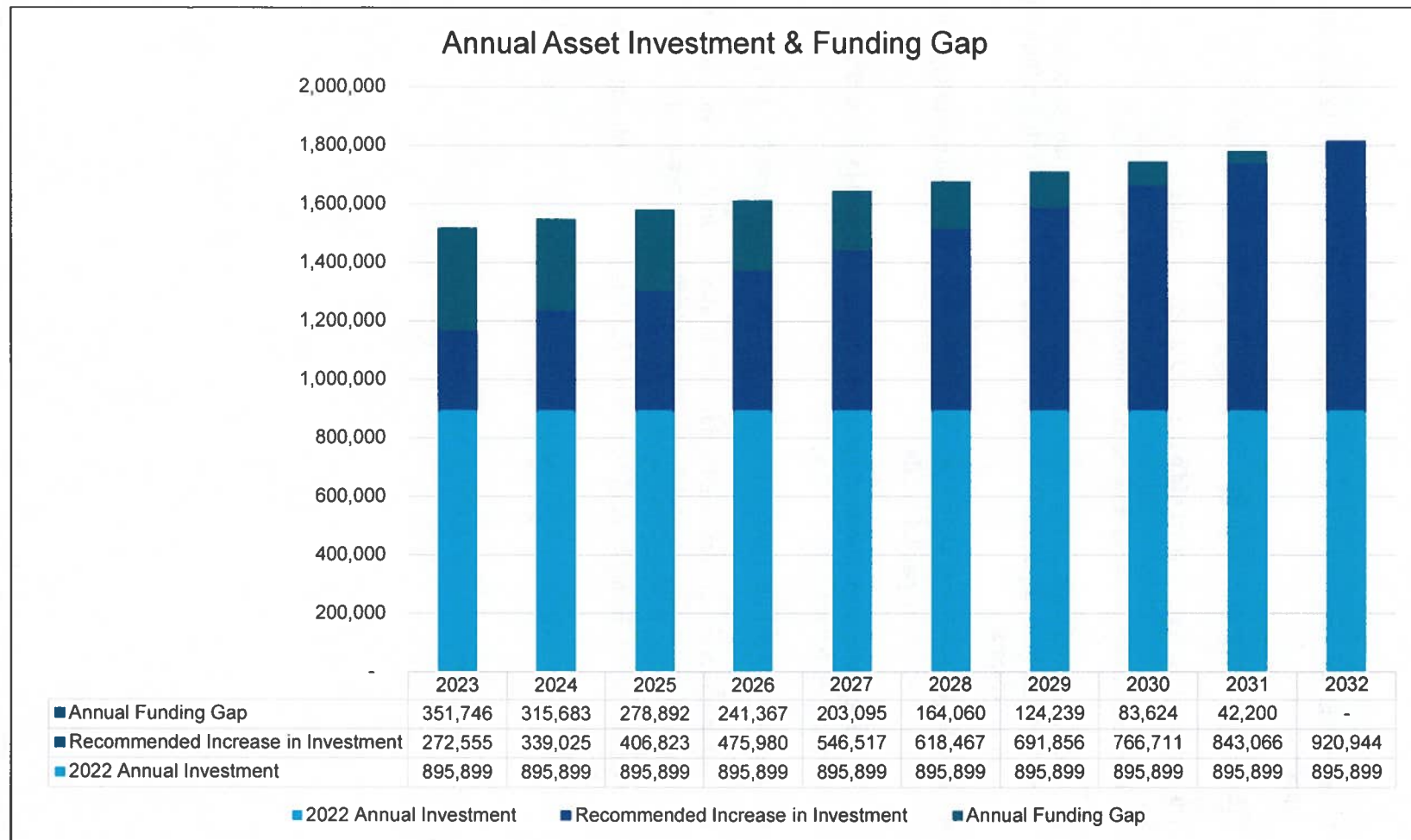


Figure 5.4 is also provided in Appendix C to this report, along with detailed figures to support the calculations.

5.5 Summary of Financing Strategy Recommendations

The following represents a list of financing strategy recommendations:

1. Use the "Roads Reserve" to fund core infrastructure capital needs.
2. Use capital reserves as the primary source of asset investment annually. Funds should flow from the operating budget to these reserves, which are then used to fund capital projects.
3. Ensure a minimum of \$551,700 is available from the annual operating budget to fund core-infrastructure capital needs.
4. Increase asset management funding annually as outlined in Table 5.6: Increase in Funding Summary
5. Transfer any annual Township surpluses to capital reserves annually.
6. Dedicate any budget savings from the elimination of debt payments to funding asset management needs (i.e., either new debt or transfers to reserves).
7. Update this financing strategy to account for other non-core infrastructure assets.

6.0 Recommendations

The following recommendations have been provided for the Township of Melancthon's consideration:

- that this Asset Management Plan be received and approved by the Township of Melancthon Council; and,
- that consideration of this Asset Management Plan be given as part of the annual budgeting process to ensure sufficient capital funds are available to fund capital requirements over the 10-year period.

The current level of funding for asset replacement and renewal at the Township will not sufficiently fund required capital needs or close the infrastructure funding gap. As such, it is recommended that the following be considered:

- That the "levels of service" strategies discussed in this report be approved;
- The Township use the "Roads Reserve" to fund core infrastructure capital needs;
- The Township use capital reserves as the primary source of asset investment annually. Funds should flow from the operating budget to these reserves, which are then used to fund capital projects;
- The Township ensure a minimum of \$551,700 is available from the annual operating budget to fund core-infrastructure capital needs;
- The Township increase asset management funding as outlined in Table 5.6;
- The Township transfer annual surpluses to capital reserves;
- The Township dedicate any budget savings from the elimination of debt payments to funding asset management needs (i.e., Either new debt or transfers to reserves);
- The Township update the financing strategy to account for other non-core as well as any road base replacement needs in the future;
- That this Asset Management Plan be updated as per the Municipality's Asset Management Strategy Policy; and,
- The Township consider the capital priorities identified within this report when applying for future grants or deciding on how to utilize Gas Tax, OCIF funding, and/or other funding that becomes available.

Substantial investment in asset capital needs will be required over the 10 year forecast period and beyond. Through the recommendations provided above, proactive steps will be made to increase capital investment, as well as reduce the annual infrastructure funding gap for the Township's core assets. Enhanced maintenance plans will assist in maintaining adequate asset conditions, mitigate asset risk as well as potentially defer capital needs within the forecast period. In addition, the Township of Melancthon is recommended to pursue all available capital grants wherever possible to further reduce the infrastructure funding gap.

Through the creation of this plan, the Township has been provided with Excel spreadsheets in which amendments and revisions can be made as needed by the Township. It is anticipated that this plan adopted by the Township of Melancthon Council will be monitored and updated frequently as part of the budget process, with refinements and specific recommendations being provided with respect to the priority of each individual project.



BURNSIDE

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Appendix A

Municipality Asset Inventory & Asset Management Plan Assumptions

APPENDIX A: Asset Management Plan Assumptions

The following assumptions were made and applied during the creation of the Township of Melancthon's asset management plan.

1. State of Local Infrastructure

- a) All replacement costs were estimates based on current 2020/21 pricing;
- b) Historic Costs of assets that were added to the Township's asset inventory and did not have a historic cost identified made use of deflation tables from estimated current 2021 costs back to the installation date of the asset. Indexes were using Non-Residential Building Construction Price Index (NRBCPI);
- c) Amortization of assets was using the Township's PSAB 1350 data tables where possible but assets that were added to the Township's asset inventory a straight line amortization was used;
- d) Useful life of an asset was provided by the Township, or reports provided to the Township by engineering consultants;
- e) Condition was extracted from Township reports, from staff's understanding of the asset's relative condition, and finally via estimation from the asset's age; and
- f) Condition values were used to provide estimated remaining life to the assets.

2. Asset Management Strategy

- a) Capital inflation rate was assumed to be 2.0% annually.
- b) Operating budget inflation rate was assumed to be 2.0% annually.
- c) Regarding operating expenses included in the Township's current budget, it is assumed that they will increase at an operating inflation rate annually.

3. Financing Strategy

- a) Gas Tax and OCIF Formula Based Funding revenue have been identified as a funding source for the purposes of this analysis (i.e., for asset replacement purposes), and has been assumed to continue throughout the forecast period.
- b) Interest rate earned on a Capital Replacement Reserve Funds will be 1.0% annually.

Agency ID	Road Name	From	To	Classification	Surface Material	Boundary Rd	Length (m)	Width (m)	Road Area (m2)	Install Year	Useful Life based on Road Study	Remaining Useful Life (calculation)	Age
							249,687		1,639,493		20	8	17
1491	15th Side Road	Main Street (Hornings Mills)	End of Asphalt	Rural	Asphalt	0	691	6.7	4,630	2013	25	17	8
176	15TH SIDEROAD	3RD LINE OS	CTY RD 124	Rural	Asphalt	0	1,142	6.7	7,649	1986	25	0	35
194	15TH SIDEROAD	CTY RD 124	MAIN ST	Rural	Asphalt	0	227	6.7	1,523	1983	25	0	38
1345	20TH SIDEROAD	3RD LINE OS	CTY RD 124	Rural	Asphalt	0	1,378	6.7	9,231	2010	25	14	11
31	260 SIDEROAD	7TH LINE SW	4TH LINE SW	Rural	Asphalt	0	2,013	6.7	13,486	1983	25	0	38
32	260 SIDEROAD	4TH LINE SW	2ND LINE SW	Rural	Asphalt	0	2,228	6.7	14,928	1983	25	0	38
1662	260 SR	2nd Line SW	Gierson St	Rural	Asphalt	0	1,526	6.7	10,224	2021	25	25	0
81	2ND LINE SW	260 SDRD	250 SDRD	Rural	Asphalt	0	2,054	6.7	13,764	1983	25	0	38
117	2ND LINE SW	280 Sideroad	270 Sideroad	Rural	Asphalt	0	1,611	6.7	10,790	2006	25	10	15
1278	2ND LINE SW	CTY RD 17	280 SDRD	Rural	Asphalt	0	2,051	6.7	13,744	2009	25	13	12
1279	2ND LINE SW	280 Sideroad	270 Sideroad	Rural	Asphalt	0	418	6.7	2,802	2009	25	13	12
1351	2ND LINE SW	300 SDRD	County Rd 17	Rural	Asphalt	0	1,981	6.7	13,273	2011	25	15	10
1509	2nd Line SW	270 SR	260 SR	Rural	Asphalt	0	2,045	6.7	13,698	2014	25	18	7
1633	2nd Line SW	Hwy 89	300 SR	Rural	Asphalt	0	1,800	6.7	12,060	2020	25	24	1
1634	2nd Line SW	250 SR	Proton W Back Line	Rural	Asphalt	0	2,350	6.7	15,745	2020	25	24	1
93	3RD LINE	5 SR	2 KM N OF 5TH SIDEROAD	Rural	Asphalt	0	2,011	6.7	13,470	2007	25	11	14
96	3RD LINE	CTY RD 17	15 SR	Rural	Asphalt	0	3,052	6.7	20,448	2008	25	12	13
102	3RD LINE	1.5 KM SOUTH OF 20TH SIDEROAD	20TH SIDEROAD	Rural	Asphalt	0	3,045	6.7	20,401	1983	25	0	38
544	3RD LINE	2 KM N OF 5TH SIDEROAD	CTY RD 17	Rural	Asphalt	0	1,048	6.7	7,025	2008	25	12	13
1467	3rd Line	15th Sideroad	1.5km S of 20th Sideroad	Rural	Asphalt	0	1,523	6.7	10,201	1983	25	0	38
1490	3rd Line Old Survey	20th Side Road	County Road 21	Rural	Asphalt	0	3,055	6.7	20,469	2013	25	17	8
1507	3rd Line OS	Highway 10	5th SR	Rural	Asphalt	0	1,650	6.7	11,058	2014	25	18	7
65	4TH LINE NE	5TH LINE OS	CTY RD 21	Rural	Asphalt	0	3,937	6.7	26,379	2007	25	11	14
72	4TH LINE NE	240 SDRD	RD 9 AND CTY RD 2	Rural	Asphalt	0	2,048	6.7	13,720	1983	25	0	38
95	4TH LINE OS	CTY RD 17	North Strada Entrance	Rural	Asphalt	0	1,584	6.7	10,613	1983	25	0	38
1274	4TH LINE OS	Railway Tracks	HWY 10	Rural	Asphalt	0	956	6.7	6,406	2009	25	13	12
1494	4th Line OS	5th Side Road	County Road 17	Rural	Asphalt	0	3,038	6.7	20,355	2013	25	17	8
1495	4th Line OS	Highway 10	5th Side Road	Rural	Asphalt	0	713	6.7	4,777	2013	25	17	8
206	5TH SIDEROAD	CTY RD 124	TL	Rural	Asphalt	0	1,250	8	9,998	1983	25	0	38
207	5TH SIDEROAD	3RD LINE OS	CTY RD 124	Rural	Asphalt	0	1,488	6.7	9,968	1983	25	0	38
1489	7th Line South West	270 Side Road	260 Side Road	Rural	Asphalt	0	2,048	6.7	13,722	2013	25	17	8
111	7TH LINE SW	280 SDRD	270 SDRD	Rural	Asphalt	0	2,033	6.7	13,624	1983	25	0	38
142	7TH LINE SW	CTY RD 17	280 SDRD	Rural	Asphalt	0	2,040	6.7	13,666	1983	25	0	38
143	7TH LINE SW	HWY 89	CTY RD 17	Rural	Asphalt	0	853	6.7	5,714	1983	25	0	38
186	ADDESON	GEORGE	LLOYD	Semi-Urban	Asphalt	0	155	5	775	1983	25	0	38
201	CHARLES ST W	MAIN	END OF ROAD	Semi-Urban	Asphalt	0	141	6.7	947	1983	25	0	38

Agency ID	Road Name	From	To	Classification	Surface Material	Boundary Rd	Length (m)	Width (m)	Road Area (m2)	Install Year	Useful Life based on Road Study	Remaining Useful Life (calculation)	Age
1667	Church St	Main St Horning's Mills	End	Semi-Urban	Asphalt	0	242	6.7	1,621	2021	25	25	0
182	FIELDWAY	MAIN	END OF ROAD	Semi-Urban	Asphalt	0	800	6.7	5,363	1983	25	0	38
188	GEORGE	ADDESON	MAIN	Semi-Urban	Asphalt	0	114	5	568	1983	25	0	38
185	HIGH	MAIN	William	Semi-Urban	Asphalt	0	170	6.7	1,141	1983	25	0	38
205	HUNTER	CTY ROAD 124	END OF ROAD	Semi-Urban	Asphalt	0	291	6.7	1,947	1983	25	0	38
187	LLOYD	ADDESON	MAIN	Semi-Urban	Asphalt	0	110	5	551	1983	25	0	38
1663	Main St Corbetton	Grierson St	Manitoba St	Urban	Asphalt	0	159	6.7	1,065	2021	25	25	0
1664	Main St Corbetton	Manitoba St	Cedar St	Urban	Asphalt	0	74	6.7	496	2021	25	25	0
1665	Main St Corbetton	Cedar St	Shook St	Urban	Asphalt	0	153	6.7	1,025	2021	25	25	0
1666	Main St Corbetton	Shook St	Highway 10	Rural	Asphalt	0	418	6.7	2,801	2021	25	25	0
183	MAIN St Hornings Mills	15 SR	CTY RD 124	Rural	Asphalt	0	366	6.7	2,449	1983	25	0	38
193	MAIN St Hornings Mills	MILL LANE	15 SR	Rural	Asphalt	0	335	6.7	2,246	1983	25	0	38
1310	MAIN St Hornings Mills	MILL ST	CHURCH ST	Urban	Asphalt	0	214	6.7	1,434	2009	25	13	12
1311	MAIN St Hornings Mills	HIGH ST	MILL ST	Urban	Asphalt	0	120	6.7	803	2009	25	13	12
1312	MAIN St Hornings Mills	CHURCH ST	CHARLES ST W	Urban	Asphalt	0	153	6.7	1,024	2009	25	13	12
1313	MAIN St Hornings Mills	CHARLES ST W	GEORGE	Urban	Asphalt	0	126	6.7	847	2009	25	13	12
1314	MAIN St Hornings Mills	GEORGE ST	TO LLOYD ST	Urban	Asphalt	0	212	6.7	1,419	2009	25	13	12
1315	MAIN St Hornings Mills	FIELDWAY CRT	HIGH ST	Semi-Urban	Asphalt	0	323	6.7	2,166	2009	25	13	12
1346	MAIN St Hornings Mills	OLDFIELD CRT	FIELDWAY CRT	Semi-Urban	Asphalt	0	277	6.7	1,855	2010	25	14	11
1347	MAIN St Hornings Mills	CTY RD 124	OLDFIELD CRT	Semi-Urban	Asphalt	0	692	6.7	4,639	2010	25	14	11
195	MILL Lane	MAIN	END OF ROAD	Rural	Asphalt	0	655	6.7	4,387	1983	25	0	38
196	MILL St	MAIN	WILLIAM	Semi-Urban	Asphalt	0	95	6.7	637	1983	25	0	38
184	OLDFIELD	MAIN	END OF ROAD	Semi-Urban	Asphalt	0	643	6.7	4,310	1983	25	0	38
189	RIVER	Mulmur-Melancthon Townline	WILLIAM	Rural	Asphalt	0	1,401	6.7	9,390	1983	25	0	38
181	WILLIAM	HIGH	MILL St. / River Road	Semi-Urban	Asphalt	0	120	6.7	803	1983	25	0	38
1485	10 Line North East	240 Side Road	Osprey / Melancthon Townline	Rural	Gravel	0	856	7	5,992				
1625	10th Line NE	5th Line OS	240 SR	Rural	Gravel	0	859	7	6,013				
1448	10TH LINE SW	280 SDRD	RD ALLOW	Rural	Gravel	0	706	5	3,528				
1577	15TH SIDEROAD	Bridge 2009 east	Townline	Rural	Gravel	0	684	8	5,472				
1621	15TH SIDEROAD	5TH LINE OS	4TH LINE OS	Rural	Gravel	0	1,422	7.5	10,665				
1622	15th Sideroad	4th Line OS	3rd Line OS	Rural	Gravel	0	1,451	7.5	10,883				
1619	20TH SIDEROAD	5TH LINE OS	4TH LINE OS	Rural	Gravel	0	1,431	8	11,448				
1620	20TH SIDEROAD	County Rd 124	Townline	Rural	Gravel	0	1,368	7.5	10,260				
1618	20TH SR	4TH LINE OS	3RD LINE OS	Rural	Gravel	0	1,426	8	11,407				
1542	220 SIDEROAD	HWY 10	2ND LINE NE	Rural	Gravel	0	1,527	6	9,162				
1626	220 SR	2nd Line NE	Cty Rd 2	Rural	Gravel	0	2,046	6	12,276				
1647	220 SR	County Rd 2	Melancthon / Osprey TL	Rural	Gravel	0	1,366	6	8,196				
1458	240 SIDEROAD	8TH LINE NE	10TH LINE NE	Rural	Gravel	0	2,050	6.5	13,326				

Agency ID	Road Name	From	To	Classification	Surface Material	Boundary Rd	Length (m)	Width (m)	Road Area (m2)	Install Year	Useful Life based on Road Study	Remaining Useful Life (calculation)	Age
1543	240 SIDEROAD	HWY 10	2ND LINE NE	Rural	Gravel	0	1,521	6.5	9,887				
1544	240 SIDEROAD	4TH LINE NE	6TH LINE NE	Rural	Gravel	0	2,030	6.5	13,195				
1602	240 SIDEROAD	2ND LINE NE	4TH LINE NE	Rural	Gravel	0	2,046	6.5	13,299				
1523	240 SR	6th Line NE	8th Line NE	Rural	Gravel	0	2,039	6.5	13,254				
1627	240 SR	10th Line NE	5th Line OS	Rural	Gravel	0	739	6.5	4,804				
55	250 SIDEROAD	8TH LINE NE	5TH LINE OS	Rural	Gravel	0	1,042	3	3,127				
1204	250 SIDEROAD	2ND LINE NE	1.7 KM NE OF 2nd LINE NE	Rural	Gravel	0	1,718	7	12,029				
1228	250 SIDEROAD	4TH LINE SW	END OF ROAD	Rural	Gravel	0	303	5.7	1,727				
1233	250 SIDEROAD	HWY 10	2ND LINE NE	Rural	Gravel	0	1,629	4	6,518				
1459	250 SIDEROAD	4TH LINE NE	1.7 KM NE OF 2nd LINE NE	Rural	Gravel	0	325	6	1,950				
1460	250 SIDEROAD	4TH LINE SW	2ND LINE SW	Rural	Gravel	0	2,223	6.7	14,897				
1461	250 SIDEROAD	2ND LINE SW	HWY 10	Rural	Gravel	0	2,340	5.7	13,336				
1514	250th SR	4th Line NE	6th Line NE	Rural	Gravel	0	2,022	7	14,154				
1611	260 SIDEROAD	MELANCTHON-PROTON TL	7TH LINE SW	Rural	Gravel	0	1,477	5.7	8,421				
86	270 SIDEROAD	5th LINE	END	Rural	Gravel	0	477	6.5	3,098				
134	270 SIDEROAD	MELANCTHON-PROTON TL	8TH LINE SW	Rural	Gravel	0	1,179	3.5	4,127				
1216	270 SIDEROAD	4TH LINE SW	2ND LINE SW	Rural	Gravel	0	2,235	5	11,176				
1251	270 SIDEROAD	7TH LINE SW	4TH LINE SW	Rural	Gravel	0	2,023	5	10,117				
1462	270 SIDEROAD	RD ALLOW W OF HWY 10	HWY 10	Rural	Gravel	0	883	6.5	5,741				
1545	270 SIDEROAD	HWY 10	2ND LINE NE	Rural	Gravel	0	1,746	7	12,222				
1546	270 SIDEROAD	2ND LINE NE	RD ALLOWANCE	Rural	Gravel	0	1,417	10	14,170				
1644	270 SR	8th Line SW	7th Line SW	Rural	Gravel	0	2,116	4.5	9,522				
1215	280 SIDEROAD	2ND LINE SW	HWY 10	Rural	Gravel	0	2,203	4	8,812				
1272	280 SIDEROAD	END	4TH LINE SW	Rural	Gravel	0	480	3.8	1,824				
1273	280 SIDEROAD	4TH LINE SW	END	Rural	Gravel	0	310	3.88	1,203				
1463	280 SIDEROAD	HWY 89	10TH LINE SW	Rural	Gravel	0	573	5	2,867				
1464	280 SIDEROAD	.76 KM NE OF 10TH LINE	8TH LINE SW	Rural	Gravel	0	1,302	5	6,510				
1465	280 SIDEROAD	10TH LINE SW	.76 KM NE OF 10TH LINE	Rural	Gravel	0	761	5	3,804				
1612	280 SR	Highway 10	2nd Line NE	Rural	Gravel	0	1,753	8	14,024				
1648	280 SR	2nd Line NE	5th Line OS	Rural	Gravel	0	1,913	8	15,304				
1435	2ND LINE NE	250 SR SW	250 SR NE	Rural	Gravel	0	202	8	1,618				
1436	2ND LINE NE	CTY RD 21	250 SDRD	Rural	Gravel	0	1,429	8	11,436				
1437	2ND LINE NE	250 SR NE	240 SR NE	Rural	Gravel	0	2,448	8	19,581				
1438	2ND LINE NE	240 SR NE	CTY RD 9	Rural	Gravel	0	2,041	8	16,328				
1516	2nd Line NE	280 SR	270 SR	Rural	Gravel	0	2,051	8	16,408				
1517	2nd Line NE	270 SR	County Rd 21	Rural	Gravel	0	2,042	8	16,336				
1650	2nd Line NE	County Rd 9	220 SR	Rural	Gravel	0	2,054	6.7	13,762				
1651	2nd Line NE	220 SR	Melancthon / Osprey TL	Rural	Gravel	0	2,337	6.7	15,658				

Agency ID	Road Name	From	To	Classification	Surface Material	Boundary Rd	Length (m)	Width (m)	Road Area (m2)	Install Year	Useful Life based on Road Study	Remaining Useful Life (calculation)	Age
1653	2nd Line NE	County Rd 17	280 SR	Rural	Gravel	0	2,046	8.2	16,777				
1248	300 SIDEROAD	4TH LINE NE	1.8 KM NE OF 4TH LINE SW	Rural	Gravel	0	1,787	4	7,147				
1476	30th Side Road	3rd Line Old Survey	4th Line Old Survey	Rural	Gravel	0	1,457	6.5	9,471				
1477	30th Side Road	County Road 124	3rd Line Old Survey	Rural	Gravel	0	1,384	6.5	8,996				
1478	30th Side Road	Mulmur / Melancthon Townline	County Road 124	Rural	Gravel	0	1,384	7	9,688				
1328	30TH SIDEROAD	5TH LINE OS	4TH LINE OS	Rural	Gravel	0	1,434	6.5	9,320				
1607	30th SR	3rd Line OS	4th Line OS	Rural	Gravel	0	1,457	6.5	9,471				
1617	3rd Line OS	County Rd 21	30th SR	Rural	Gravel	0	3,065	8	24,520				
1585	4th Line NE	County Rd 21	Townline	Rural	Gravel	0	331	4	1,324				
1594	4TH LINE NE	250 SR	240 SR	Rural	Gravel	0	2,447	6.7	16,394				
1595	4TH LINE NE	CTY RD 21	250 SR	Rural	Gravel	0	1,634	6.7	10,948				
1596	4TH LINE NE	240 SR	1 KM north of 240 SR	Rural	Gravel	0	1,000	6.7	6,700				
1449	4TH LINE OS	15 SR	20 SR	Rural	Gravel	0	3,050	8	24,403				
1580	4TH LINE OS	Highway 89	Railway tracks	Rural	Gravel	Yes	1,265	6.7	8,476				
1581	4th Line OS	30th SR	County Rd 21	Rural	Gravel	0	3,054	6.5	19,851				
1582	4th Line OS	Townline	30th SR	Rural	Gravel	0	1,105	6.5	7,183				
1628	4th Line OS	Cty Rd 21	20 SR	Rural	Gravel	0	3,055	6.5	19,858				
1652	4th Line OS	Strada North Entrance	15 SR	Rural	Gravel	0	1,406	6.7	9,420				
1442	4TH LINE SW	CTY RD 17	280 SR	Rural	Gravel	0	2,042	5.7	11,639				
1499	4th Line SW	Highway 89	280 Side Road	Rural	Gravel	0	270	5.7	1,539				
1547	4TH LINE SW	260 SDRD	250 SDRD	Rural	Gravel	0	2,058	5.7	11,731				
1548	4TH LINE SW	250 SDRD	PROTON W BASE LINE	Rural	Gravel	0	3,268	5.7	18,628				
1578	4th Line SW	280 SR	270 SR	Rural	Gravel	0	2,026	5.7	11,548				
1616	4TH LINE SW	270 SDRD	260 SDRD	Rural	Gravel	0	2,046	5.7	11,660				
1641	4th Line SW	300 SR	CTY RD 17	Rural	Gravel	0	1,980	7.5	14,850				
1482	5th Line Old Survey	Highway 89	Highway 10	Rural	Gravel	0	2,892	4.5	13,014				
1452	5TH LINE OS	30th SR	County Rd 21	Rural	Gravel	0	3,102	8	24,816				
1519	5th Line OS	30th SR OS	240 SR NE	Rural	Gravel	0	816	8	6,528				
1520	5th Line OS	240 SR NE	County Rd 9	Rural	Gravel	0	351	8	2,808				
1629	5th Line OS	Highway 10	Cty Rd 17	Rural	Gravel	0	2,603	7	18,221				
1655	5th Line OS	County Rd 17	280 SR	Rural	Gravel	0	2,293	7	16,051				
1656	5th Line OS	280 SR	4th Line NE	Rural	Gravel	0	205	6.7	1,374				
1657	5th Line OS	4th Line NE	15 SR	Rural	Gravel	0	570	6.7	3,819				
1658	5th Line OS	15 SR	270 SR	Rural	Gravel	0	1,930	6.7	12,931				
1659	5th Line OS	270 SR	6th Line NE	Rural	Gravel	0	654	6.7	4,382				
1660	5th Line OS	6th Line NE	20 SR	Rural	Gravel	0	466	6.7	3,122				
1661	5th Line OS	20 SR	County Rd 21	Rural	Gravel	0	1,577	6.7	10,566				

Agency ID	Road Name	From	To	Classification	Surface Material	Boundary Rd	Length (m)	Width (m)	Road Area (m2)	Install Year	Useful Life based on Road Study	Remaining Useful Life (calculation)	Age
154	5TH SIDEROAD	.47 KM HIGHWAY 10	4TH LINE OS	Rural	Gravel	0	880	4.5	3,961				
1269	5TH SIDEROAD	HIGHWAY 10	END	Rural	Gravel	0	476	6	2,855				
1606	5TH SIDEROAD	4TH LINE OS	3RD LINE OS	Rural	Gravel	0	1,455	6.5	9,458				
1615	6TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	Rural	Gravel	0	1,604	6.5	10,428				
1630	6th Line NE	5th Line OS	Cty Rd 21	Rural	Gravel	0	1,552	6.5	10,088				
1645	6th Line NE	240 SR	County Rd 9	Rural	Gravel	0	2,049	6.5	13,319				
1646	6th Line NE	250 SR	240 SR	Rural	Gravel	0	2,449	6.5	15,919				
1642	7th Line SW	260 SR	Southgate TL	Rural	Gravel	0	1,461	5.7	8,328				
1511	8th Line NE	240 SR NE	County Rd 9	Rural	Gravel	0	2,040	6	12,240				
1603	8TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	Rural	Gravel	0	228	6.5	1,482				
1613	8TH LINE NE	CTY RD 21 5TH LINE JO	250 SR NE	Rural	Gravel	0	1,219	6	7,315				
1614	8TH LINE NE	250 SDRD	240 SR	Rural	Gravel	0	2,033	6	12,197				
1446	8TH LINE SW	280 SDRD	270 SDRD	Rural	Gravel	0	1,906	5.7	10,864				
1512	8th Line SW	Highway 89	280 SR SW	Rural	Gravel	0	1,665	5.7	9,491				
1605	8TH LINE SW	270 SR (south)	MELANCTHON-PROTON TL	Rural	Gravel	0	1,520	6.7	10,184				
536	CEDAR	MAIN	END	Rural	Gravel	0	54	5	272				
543	HUNTER	CTY ROAD 124	END OF ROAD	Rural	Gravel	0	232	8	1,859				
1207	MANITOBA ST & Argyle St	MAIN ST	END	Rural	Gravel	0	220	6.7	1,476				
1624	MELANCTHON - Mulmur TL	15 SR	20 SR	Rural	Gravel	Yes	3,051	7	21,357				
1631	Melancthon / Mulmur TL	20 SR	Cty Rd 21	Rural	Gravel	Yes	3,052	8	24,416				
1480	Melancthon / Mulmur Townline	County Road 21	30th Side Road	Rural	Gravel	Yes	3,061	7.5	22,958				
1649	Melancthon / Osprey TL	6th Line NE	8th Line NE	Rural	Gravel	Yes	2,455	7	17,185				
1522	Melancthon / Southgate TL	8th Line SW	260 SR	Rural	Gravel	Yes	877	7	6,139				
1643	Melancthon / Southgate TL	Southgate 8 SR	8th Line SW	Rural	Gravel	Yes	476	7	3,332				
169	MELANCTHON-NOTTAWASAGA TL	CTY RD 124	1 KM E OF CTY RD 124	Rural	Gravel	Yes	1,037	5	5,183				
546	MELANCTHON-NOTTAWASAGA TL	1 KM E OF CTY RD 124	TL	Rural	Gravel	Yes	582	4	2,329				
1264	MELANCTHON-OSPREY TL	8TH LINE NE	CTY RD 9	Rural	Gravel	Yes	428	5	2,138				
1623	MELANCTHON-OSPREY TOWNLINE	220 SR	6TH LINE NE	Rural	Gravel	Yes	814	5	4,070				
1197	MELANCTHON-PROTON TL	270 SDRD	8th Line SW	Rural	Gravel	Yes	1,818	7	12,726				
1271	MELANCTHON-PROTON TL	CONCESSION ROAD 2	270 SDRD	Rural	Gravel	Yes	681	4.5	3,065				
179	MULMUR-MELANCTHON TL	RIVER ROAD	END OF ROAD	Rural	Gravel	Yes	536	3.5	1,875				
109	SHOOK	MAIN	END	Rural	Gravel	0	96	7	673				

Agency ID	Road Name	From	To	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2022 Replacement Cost/Section	Cost per Linear m	Condition Based On Age	Condition from Study 2020	Condition Used for Analysis
				\$ 6,229,489	\$ 3,285,721	\$2,943,769	\$10,252,698				7.8
1491	15th Side Road	Main Street (Hornings Mills)	End of Asphalt	\$ 2,877	\$ 2,302	\$575	\$82,920	\$120	0	6	6
176	15TH SIDEROAD	3RD LINE OS	CTY RD 124	\$ 32,893	\$ 32,893	\$0	\$136,990	\$120	0	8	8
194	15TH SIDEROAD	CTY RD 124	MAIN ST	\$ 5,704	\$ 5,704	\$0	\$27,269	\$120	0	10	10
1345	20TH SIDEROAD	3RD LINE OS	CTY RD 124	\$ 108,016	\$ 47,527	\$60,489	\$165,326	\$120	6	10	10
31	260 SIDEROAD	7TH LINE SW	4TH LINE SW	\$ 50,526	\$ 50,526	\$0	\$241,539	\$120	0	6	6
32	260 SIDEROAD	4TH LINE SW	2ND LINE SW	\$ 59,389	\$ 59,389	\$0	\$267,367	\$120	0	6	6
1662	260 SR	2nd Line SW	Gierson St	\$ 185,375	\$ -	\$185,375	\$183,120	\$120	10	6	6
81	2ND LINE SW	260 SDRD	250 SDRD	\$ 232,980	\$ 168,997	\$63,983	\$246,518	\$120	0	10	10
117	2ND LINE SW	280 Sideroad	270 Sideroad	\$ 218,774	\$ 77,719	\$141,056	\$193,261	\$120	4	10	10
1278	2ND LINE SW	CTY RD 17	280 SDRD	\$ 102,282	\$ 49,095	\$53,187	\$246,166	\$120	5	9	9
1279	2ND LINE SW	280 Sideroad	270 Sideroad	\$ 42,126	\$ 15,015	\$27,112	\$50,185	\$120	5	10	10
1351	2ND LINE SW	300 SDRD	County Rd 17	\$ 124,686	\$ 41,091	\$83,595	\$237,722	\$120	6	10	10
1509	2nd Line SW	270 SR	260 SR	\$ 106,576	\$ 14,921	\$91,655	\$245,340	\$120	7	10	10
1633	2nd Line SW	Hwy 89	300 SR	\$ 168,718	\$ 6,749	\$161,969	\$216,000	\$120	10	10	10
1634	2nd Line SW	250 SR	Proton W Back Line	\$ 192,994	\$ 7,720	\$185,274	\$282,000	\$120	10	10	10
93	3RD LINE	5 SR	2 KM N OF 5TH SIDEROAD	\$ 129,596	\$ 72,144	\$57,452	\$241,260	\$120	4	9	9
96	3RD LINE	CTY RD 17	15 SR	\$ 185,357	\$ 96,386	\$88,971	\$366,240	\$120	5	8	8
102	3RD LINE	1.5 KM SOUTH OF 20TH SIDEROAD	20TH SIDEROAD	\$ 38,218	\$ 38,218	\$0	\$365,397	\$120	0	8	8
544	3RD LINE	2 KM N OF 5TH SIDEROAD	CTY RD 17	\$ 72,286	\$ 37,589	\$34,697	\$125,819	\$120	5	9	9
1467	3rd Line	15th Sideroad	1.5km S of 20th Sideroad	\$ 38,218	\$ 38,218	\$0	\$182,700	\$120	0	8	8
1490	3rd Line Old Survey	20th Side Road	County Road 21	\$ 250,465	\$ 129,009	\$121,456	\$366,600	\$120	0	10	10
1507	3rd Line OS	Highway 10	5th SR	\$ 88,675	\$ 12,415	\$76,261	\$198,048	\$120	7	10	10
65	4TH LINE NE	5TH LINE OS	CTY RD 21	\$ 247,729	\$ 138,728	\$109,001	\$472,459	\$120	4	7	7
72	4TH LINE NE	240 SDRD	RD 9 AND CTY RD 2	\$ 103,240	\$ 103,240	\$0	\$245,730	\$120	0	10	10
95	4TH LINE OS	CTY RD 17	North Strada Entrance	\$ 76,595	\$ 76,595	\$0	\$190,080	\$120	0	8	8
1274	4TH LINE OS	Railway Tracks	HWY 10	\$ 35,440	\$ 17,011	\$18,429	\$114,742	\$120	5	9	9
1494	4th Line OS	5th Side Road	County Road 17	\$ 56,532	\$ 28,516	\$28,016	\$364,560	\$120	7	8	8
1495	4th Line OS	Highway 10	5th Side Road	\$ 70,911	\$ 33,038	\$37,873	\$85,560	\$120	7	10	10
206	5TH SIDEROAD	CTY RD 124	TL	\$ 40,965	\$ 40,965	\$0	\$149,969	\$120	0	6	6
207	5TH SIDEROAD	3RD LINE OS	CTY RD 124	\$ 57,602	\$ 52,963	\$4,638	\$178,537	\$120	0	9	9
1489	7th Line South West	270 Side Road	260 Side Road	\$ 5,395	\$ 4,316	\$1,079	\$245,760	\$120	0	6	6
111	7TH LINE SW	280 SDRD	270 SDRD	\$ 51,042	\$ 51,042	\$0	\$244,006	\$120	0	6	6
142	7TH LINE SW	CTY RD 17	280 SDRD	\$ 51,201	\$ 51,201	\$0	\$244,763	\$120	0	6	6
143	7TH LINE SW	HWY 89	CTY RD 17	\$ 21,408	\$ 21,408	\$0	\$102,340	\$120	0	6	6
186	ADDESON	GEORGE	LLOYD	\$ 2,904	\$ 2,904	\$0	\$18,603	\$120	0	8	8
201	CHARLES ST W	MAIN	END OF ROAD	\$ 3,549	\$ 3,549	\$0	\$16,964	\$120	0	10	10

Agency ID	Road Name	From	To	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2022 Replacement Cost/Section	Cost per Linear m	Condition Based On Age	Condition from Study 2020	Condition Used for Analysis
1667	Church St	Main St Horning's Mills	End	\$ 69,098	\$ -	\$69,098	\$29,040	\$120	10	5	5
182	FIELDWAY	MAIN	END OF ROAD	\$ 20,094	\$ 20,094	\$0	\$96,058	\$120	0	9	9
188	GEORGE	ADDESON	MAIN	\$ 2,127	\$ 2,127	\$0	\$13,626	\$120	0	8	8
185	HIGH	MAIN	William	\$ 45,950	\$ 14,695	\$31,255	\$20,443	\$120	0	10	10
205	HUNTER	CTY ROAD 124	END OF ROAD	\$ 7,294	\$ 7,294	\$0	\$34,868	\$120	0	8	8
187	LLOYD	ADDESON	MAIN	\$ 2,066	\$ 2,066	\$0	\$13,236	\$120	0	8	8
1663	Main St Corbetton	Grierson St	Manitoba St	\$ 31,021	\$ -	\$31,021	\$19,080	\$120	10	9	9
1664	Main St Corbetton	Manitoba St	Cedar St	\$ 14,437	\$ -	\$14,437	\$8,880	\$120	10	9	9
1665	Main St Corbetton	Cedar St	Shook St	\$ 29,850	\$ -	\$29,850	\$18,360	\$120	10	9	9
1666	Main St Corbetton	Shook St	Highway 10	\$ 50,778	\$ -	\$50,778	\$50,160	\$120	10	9	9
183	MAIN St Hornings Mills	15 SR	CTY RD 124	\$ 9,175	\$ 9,175	\$0	\$43,863	\$120	0	10	10
193	MAIN St Hornings Mills	MILL LANE	15 SR	\$ 21,945	\$ 21,945	\$0	\$40,232	\$120	0	10	10
1310	MAIN St Hornings Mills	MILL ST	CHURCH ST	\$ 74,006	\$ 29,602	\$44,404	\$25,692	\$120	5	10	10
1311	MAIN St Hornings Mills	HIGH ST	MILL ST	\$ 41,449	\$ 16,580	\$24,869	\$14,390	\$120	5	10	10
1312	MAIN St Hornings Mills	CHURCH ST	CHARLES ST W	\$ 58,990	\$ 22,248	\$36,742	\$18,334	\$120	5	10	10
1313	MAIN St Hornings Mills	CHARLES ST W	GEORGE	\$ 48,785	\$ 18,404	\$30,381	\$15,170	\$120	5	10	10
1314	MAIN St Hornings Mills	GEORGE ST	TO LLOYD ST	\$ 81,750	\$ 30,832	\$50,918	\$25,408	\$120	5	10	10
1315	MAIN St Hornings Mills	FIELDWAY CRT	HIGH ST	\$ 124,805	\$ 47,076	\$77,729	\$38,799	\$120	5	10	10
1346	MAIN St Hornings Mills	OLDFIELD CRT	FIELDWAY CRT	\$ 17,632	\$ 7,758	\$9,874	\$33,229	\$120	6	10	10
1347	MAIN St Hornings Mills	CTY RD 124	OLDFIELD CRT	\$ 44,089	\$ 19,399	\$24,690	\$83,091	\$120	6	10	10
195	MILL Lane	MAIN	END OF ROAD	\$ 16,436	\$ 16,436	\$0	\$78,573	\$120	0	7	7
196	MILL St	MAIN	WILLIAM	\$ 2,388	\$ 2,388	\$0	\$11,414	\$120	0	10	10
184	OLDFIELD	MAIN	END OF ROAD	\$ 16,147	\$ 16,147	\$0	\$77,191	\$120	0	8	8
189	RIVER	Mulmur-Melancthon Townline	WILLIAM	\$ 153,729	\$ 153,729	\$0	\$168,177	\$120	0	10	10
181	WILLIAM	HIGH	MILL St. / River Road	\$ 3,008	\$ 3,008	\$0	\$14,381	\$120	0	10	10
1485	10 Line North East	240 Side Road	Osprey / Melancthon Townline	\$ 8,195	\$ 8,195	\$0	\$7,276	\$8.5	0	5	5
1625	10th Line NE	5th Line OS	240 SR	\$ 5,768	\$ 1,923	\$3,845	\$7,302	\$8.5	0	5	5
1448	10TH LINE SW	280 SDRD	RD ALLOW	\$ 4,667	\$ 4,667	\$0	\$5,998	\$8.5	0	5	5
1577	15TH SIDEROAD	Bridge 2009 east	Townline	\$ 9,682	\$ 6,721	\$2,961	\$5,814	\$8.5	0	5	5
1621	15TH SIDEROAD	5TH LINE OS	4TH LINE OS	\$ 11,177	\$ 7,451	\$3,726	\$12,087	\$8.5	0	5	5
1622	15th Sideroad	4th Line OS	3rd Line OS	\$ 10,809	\$ 7,206	\$3,603	\$12,334	\$8.5	0	5	5
1619	20TH SIDEROAD	5TH LINE OS	4TH LINE OS	\$ 10,060	\$ 6,707	\$3,353	\$12,164	\$8.5	0	5	5
1620	20TH SIDEROAD	County Rd 124	Townline	\$ 22,470	\$ 8,442	\$14,027	\$11,628	\$8.5	0	5	5
1618	20TH SR	4TH LINE OS	3RD LINE OS	\$ 11,545	\$ 7,697	\$3,848	\$12,120	\$8.5	0	5	5
1542	220 SIDEROAD	HWY 10	2ND LINE NE	\$ 26,010	\$ 26,010	\$0	\$12,980	\$8.5	0	5	5
1626	220 SR	2nd Line NE	Cty Rd 2	\$ 10,006	\$ 3,335	\$6,671	\$17,391	\$8.5	0	5	5
1647	220 SR	County Rd 2	Melancthon / Osprey TL	\$ 6,822	\$ -	\$6,822	\$11,611	\$8.5	0	5	5
1458	240 SIDEROAD	8TH LINE NE	10TH LINE NE	\$ 30,450	\$ 22,767	\$7,683	\$17,427	\$8.5	0	5	5

Agency ID	Road Name	From	To	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2022 Replacement Cost/Section	Cost per Linear m	Condition Based On Age	Condition from Study 2020	Condition Used for Analysis
1543	240 SIDEROAD	HWY 10	2ND LINE NE	\$ 22,143	\$ 18,902	\$3,241	\$12,929	\$8.5	0	5	5
1544	240 SIDEROAD	4TH LINE NE	6TH LINE NE	\$ 37,014	\$ 27,141	\$9,873	\$17,255	\$8.5	0	5	5
1602	240 SIDEROAD	2ND LINE NE	4TH LINE NE	\$ 18,999	\$ 11,152	\$7,847	\$17,391	\$8.5	0	5	5
1523	240 SR	6th Line NE	8th Line NE	\$ 35,291	\$ 26,086	\$9,205	\$17,332	\$8.5	0	5	5
1627	240 SR	10th Line NE	5th Line OS	\$ 2,887	\$ 962	\$1,925	\$6,282	\$8.5	0	5	5
55	250 SIDEROAD	8TH LINE NE	5TH LINE OS	\$ 4,641	\$ 3,861	\$779	\$8,860	\$8.5	0	5	5
1204	250 SIDEROAD	2ND LINE NE	1.7 KM NE OF 2nd LINE NE	\$ 2,749	\$ 2,749	\$0	\$14,606	\$8.5	0	5	5
1228	250 SIDEROAD	4TH LINE SW	END OF ROAD	\$ 485	\$ 485	\$0	\$2,576	\$8.5	0	5	5
1233	250 SIDEROAD	HWY 10	2ND LINE NE	\$ 2,607	\$ 2,607	\$0	\$13,850	\$8.5	0	5	5
1459	250 SIDEROAD	4TH LINE NE	1.7 KM NE OF 2nd LINE NE	\$ 3,459	\$ 3,459	\$0	\$2,763	\$8.5	0	5	5
1460	250 SIDEROAD	4TH LINE SW	2ND LINE SW	\$ 39,010	\$ 35,029	\$3,981	\$18,899	\$8.5	0	5	5
1461	250 SIDEROAD	2ND LINE SW	HWY 10	\$ 38,067	\$ 33,607	\$4,460	\$19,887	\$8.5	0	5	5
1514	250th SR	4th Line NE	6th Line NE	\$ 28,401	\$ 18,396	\$10,005	\$17,187	\$8.5	0	5	5
1611	260 SIDEROAD	MELANCHTHON-PROTON TL	7TH LINE SW	\$ 20,987	\$ 8,228	\$12,760	\$12,558	\$8.5	0	5	5
86	270 SIDEROAD	5th LINE	END	\$ 1,759	\$ 1,759	\$0	\$4,051	\$8.5	0	5	5
134	270 SIDEROAD	MELANCHTHON-PROTON TL	8TH LINE SW	\$ 7,770	\$ 7,770	\$0	\$10,022	\$8.5	0	5	5
1216	270 SIDEROAD	4TH LINE SW	2ND LINE SW	\$ 3,576	\$ 3,576	\$0	\$18,999	\$8.5	0	5	5
1251	270 SIDEROAD	7TH LINE SW	4TH LINE SW	\$ 3,238	\$ 3,238	\$0	\$17,199	\$8.5	0	5	5
1462	270 SIDEROAD	RD ALLOW W OF HWY 10	HWY 10	\$ 6,866	\$ 6,866	\$0	\$7,507	\$8.5	0	5	5
1545	270 SIDEROAD	HWY 10	2ND LINE NE	\$ 4,840	\$ 4,840	\$0	\$14,841	\$8.5	0	5	5
1546	270 SIDEROAD	2ND LINE NE	RD ALLOWANCE	\$ 9,316	\$ 9,316	\$0	\$12,045	\$8.5	0	5	5
1644	270 SR	8th Line SW	7th Line SW	\$ 10,480	\$ -	\$10,480	\$17,986	\$8.5	0	5	5
1215	280 SIDEROAD	2ND LINE SW	HWY 10	\$ 6,416	\$ 4,971	\$1,446	\$18,726	\$8.5	0	5	5
1272	280 SIDEROAD	END	4TH LINE SW	\$ 768	\$ 768	\$0	\$4,079	\$8.5	0	5	5
1273	280 SIDEROAD	4TH LINE SW	END	\$ 496	\$ 496	\$0	\$2,636	\$8.5	0	5	5
1463	280 SIDEROAD	HWY 89	10TH LINE SW	\$ 2,217	\$ 2,217	\$0	\$4,874	\$8.5	0	5	5
1464	280 SIDEROAD	.76 KM NE OF 10TH LINE	8TH LINE SW	\$ 3,886	\$ 3,886	\$0	\$11,066	\$8.5	0	5	5
1465	280 SIDEROAD	10TH LINE SW	.76 KM NE OF 10TH LINE	\$ 2,271	\$ 2,271	\$0	\$6,467	\$8.5	0	5	5
1612	280 SR	Highway 10	2nd Line NE	\$ 14,901	\$ 9,934	\$4,967	\$14,901	\$8.5	0	5	5
1648	280 SR	2nd Line NE	5th Line OS	\$ 10,446	\$ -	\$10,446	\$16,261	\$8.5	0	5	5
1435	2ND LINE NE	250 SR SW	250 SR NE	\$ 5,066	\$ 5,066	\$0	\$1,719	\$8.5	0	5	5
1436	2ND LINE NE	CTY RD 21	250 SDRD	\$ 23,685	\$ 20,090	\$3,594	\$12,151	\$8.5	0	5	5
1437	2ND LINE NE	250 SR NE	240 SR NE	\$ 40,071	\$ 30,558	\$9,514	\$20,805	\$8.5	0	5	5
1438	2ND LINE NE	240 SR NE	CTY RD 9	\$ 42,821	\$ 32,796	\$10,026	\$17,349	\$8.5	0	5	5
1516	2nd Line NE	280 SR	270 SR	\$ 33,669	\$ 28,466	\$5,203	\$17,434	\$8.5	0	5	5
1517	2nd Line NE	270 SR	County Rd 21	\$ 30,356	\$ 25,320	\$5,036	\$17,357	\$8.5	0	5	5
1650	2nd Line NE	County Rd 9	220 SR	\$ 16,070	\$ -	\$16,070	\$17,459	\$8.5	0	5	5
1651	2nd Line NE	220 SR	Melanchthon / Osprey TL	\$ 14,415	\$ -	\$14,415	\$19,865	\$8.5	0	5	5

Agency ID	Road Name	From	To	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2022 Replacement Cost/Section	Cost per Linear m	Condition Based On Age	Condition from Study 2020	Condition Used for Analysis
1653	2nd Line NE	County Rd 17	280 SR	\$ 17,041	\$ -	\$17,041	\$17,391	\$8.5	0	5	5
1248	300 SIDEROAD	4TH LINE NE	1.8 KM NE OF 4TH LINE SW	\$ 7,845	\$ 5,352	\$2,493	\$15,187	\$8.5	0	5	5
1476	30th Side Road	3rd Line Old Survey	4th Line Old Survey	\$ 13,436	\$ 13,436	\$0	\$12,385	\$8.5	0	5	5
1477	30th Side Road	County Road 124	3rd Line Old Survey	\$ 14,457	\$ 14,457	\$0	\$11,764	\$8.5	0	5	5
1478	30th Side Road	Mulmur / Melancthon Townline	County Road 124	\$ 32,415	\$ 27,527	\$4,888	\$11,764	\$8.5	0	5	5
1328	30TH SIDEROAD	5TH LINE OS	4TH LINE OS	\$ 13,173	\$ 13,173	\$0	\$12,187	\$8.5	0	5	5
1607	30th SR	3rd Line OS	4th Line OS	\$ 7,519	\$ 7,519	\$0	\$12,385	\$8.5	0	5	5
1617	3rd Line OS	County Rd 21	30th SR	\$ 23,848	\$ 15,899	\$7,949	\$26,053	\$8.5	0	5	5
1585	4th Line NE	County Rd 21	Townline	\$ 1,024	\$ 1,024	\$0	\$2,814	\$8.5	0	5	5
1594	4TH LINE NE	250 SR	240 SR	\$ 57,774	\$ 21,726	\$36,049	\$20,798	\$8.5	0	5	5
1595	4TH LINE NE	CTY RD 21	250 SR	\$ 25,513	\$ 15,061	\$10,451	\$13,889	\$8.5	0	5	5
1596	4TH LINE NE	240 SR	1 KM north of 240 SR	\$ 29,333	\$ 10,640	\$18,693	\$8,500	\$8.5	0	5	5
1449	4TH LINE OS	15 SR	20 SR	\$ 76,753	\$ 55,106	\$21,647	\$25,928	\$8.5	0	5	5
1580	4TH LINE OS	Highway 89	Railway tracks	\$ 16,966	\$ 13,061	\$3,905	\$10,753	\$8.5	0	5	5
1581	4th Line OS	30th SR	County Rd 21	\$ 20,964	\$ 17,743	\$3,222	\$25,959	\$8.5	0	5	5
1582	4th Line OS	Townline	30th SR	\$ 8,551	\$ 8,551	\$0	\$9,393	\$8.5	0	5	5
1628	4th Line OS	Cty Rd 21	20 SR	\$ 18,507	\$ 6,169	\$12,338	\$25,968	\$8.5	0	5	5
1652	4th Line OS	Strada North Entrance	15 SR	\$ 11,678	\$ -	\$11,678	\$11,951	\$8.5	0	5	5
1442	4TH LINE SW	CTY RD 17	280 SR	\$ 77,634	\$ 52,810	\$24,824	\$17,357	\$8.5	0	5	5
1499	4th Line SW	Highway 89	280 Side Road	\$ 3,026	\$ 2,124	\$902	\$2,295	\$8.5	0	5	5
1547	4TH LINE SW	260 SDRD	250 SDRD	\$ 35,677	\$ 26,871	\$8,807	\$17,493	\$8.5	0	5	5
1548	4TH LINE SW	250 SDRD	PROTON W BASE LINE	\$ 21,888	\$ 15,856	\$6,032	\$27,778	\$8.5	0	5	5
1578	4th Line SW	280 SR	270 SR	\$ 37,753	\$ 18,086	\$19,667	\$17,221	\$8.5	0	5	5
1616	4TH LINE SW	270 SDRD	260 SDRD	\$ 23,534	\$ 8,703	\$14,831	\$17,388	\$8.5	0	5	5
1641	4th Line SW	300 SR	CTY RD 17	\$ 10,815	\$ -	\$10,815	\$16,830	\$8.5	0	5	5
1482	5th Line Old Survey	Highway 89	Highway 10	\$ 5,675	\$ 5,675	\$0	\$24,582	\$8.5	0	5	5
1452	5TH LINE OS	30th SR	County Rd 21	\$ 70,563	\$ 55,275	\$15,287	\$26,367	\$8.5	0	5	5
1519	5th Line OS	30th SR OS	240 SR NE	\$ 19,269	\$ 14,229	\$5,039	\$6,936	\$8.5	0	5	5
1520	5th Line OS	240 SR NE	County Rd 9	\$ 7,916	\$ 5,795	\$2,121	\$2,984	\$8.5	0	5	5
1629	5th Line OS	Highway 10	Cty Rd 17	\$ 13,595	\$ 4,532	\$9,063	\$22,126	\$8.5	0	5	5
1655	5th Line OS	County Rd 17	280 SR	\$ 45,692	\$ -	\$45,692	\$321,020	\$140.0	0	5	5
1656	5th Line OS	280 SR	4th Line NE	\$ 4,085	\$ -	\$4,085	\$24,600	\$120.0	0	5	5
1657	5th Line OS	4th Line NE	15 SR	\$ 11,358	\$ -	\$11,358	\$68,400	\$120.0	0	5	5
1658	5th Line OS	15 SR	270 SR	\$ 38,459	\$ -	\$38,459	\$16,405	\$8.5	0	5	5
1659	5th Line OS	270 SR	6th Line NE	\$ 13,032	\$ -	\$13,032	\$5,559	\$8.5	0	5	5
1660	5th Line OS	6th Line NE	20 SR	\$ 9,286	\$ -	\$9,286	\$3,961	\$8.5	0	5	5
1661	5th Line OS	20 SR	County Rd 21	\$ 31,425	\$ -	\$31,425	\$13,405	\$8.5	0	5	5

Agency ID	Road Name	From	To	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2022 Replacement Cost/Section	Cost per Linear m	Condition Based On Age	Condition from Study 2020	Condition Used for Analysis
154	5TH SIDEROAD	.47 KM HIGHWAY 10	4TH LINE OS	\$ 2,603	\$ 2,603	\$0	\$7,482	\$8.5	0	5	5
1269	5TH SIDEROAD	HIGHWAY 10	END	\$ 995	\$ 995	\$0	\$4,044	\$8.5	0	5	5
1606	5TH SIDEROAD	4TH LINE OS	3RD LINE OS	\$ 15,208	\$ 8,683	\$6,525	\$12,368	\$8.5	0	5	5
1615	6TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	\$ 20,049	\$ 7,071	\$12,978	\$13,637	\$8.5	0	5	5
1630	6th Line NE	5th Line OS	Cty Rd 21	\$ 8,968	\$ 2,989	\$5,979	\$13,192	\$8.5	0	5	5
1645	6th Line NE	240 SR	County Rd 9	\$ 14,079	\$ -	\$14,079	\$17,417	\$8.5	0	5	5
1646	6th Line NE	250 SR	240 SR	\$ 14,544	\$ -	\$14,544	\$20,817	\$8.5	0	5	5
1642	7th Line SW	260 SR	Southgate TL	\$ 8,183	\$ -	\$8,183	\$12,419	\$8.5	0	5	5
1511	8th Line NE	240 SR NE	County Rd 9	\$ 44,514	\$ 37,617	\$6,897	\$17,340	\$8.5	0	5	5
1603	8TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	\$ 4,777	\$ 4,777	\$0	\$1,938	\$8.5	0	5	5
1613	8TH LINE NE	CTY RD 21 5TH LINE JO	250 SR NE	\$ 9,341	\$ 6,227	\$3,114	\$10,362	\$8.5	0	5	5
1614	8TH LINE NE	250 SDRD	240 SR	\$ 11,950	\$ 7,967	\$3,983	\$17,279	\$8.5	0	5	5
1446	8TH LINE SW	280 SDRD	270 SDRD	\$ 44,623	\$ 35,876	\$8,747	\$16,201	\$8.5	0	5	5
1512	8th Line SW	Highway 89	280 SR SW	\$ 27,470	\$ 19,780	\$7,691	\$14,153	\$8.5	0	5	5
1605	8TH LINE SW	270 SR (south)	MELANCTHON-PROTON TL	\$ 16,012	\$ 7,613	\$8,399	\$12,920	\$8.5	0	5	5
536	CEDAR	MAIN	END	\$ 161	\$ 161	\$0	\$462	\$8.5	0	5	5
543	HUNTER	CTY ROAD 124	END OF ROAD	\$ 783	\$ 783	\$0	\$1,975	\$8.5	0	5	5
1207	MANITOBA ST & Argyle St	MAIN ST	END	\$ 353	\$ 353	\$0	\$1,873	\$8.5	0	5	5
1624	MELANCHTON - Mulmur TL	15 SR	20 SR	\$ 17,791	\$ 11,861	\$5,930	\$25,934	\$8.5	0	5	5
1631	Melancthon / Mulmur TL	20 SR	Cty Rd 21	\$ 16,924	\$ 5,641	\$11,282	\$25,942	\$8.5	0	5	5
1480	Melancthon / Mulmur Townline	County Road 21	30th Side Road	\$ 51,666	\$ 45,892	\$5,774	\$26,019	\$8.5	0	5	5
1649	Melancthon / Osprey TL	6th Line NE	8th Line NE	\$ 12,709	\$ -	\$12,709	\$20,868	\$8.5	0	5	5
1522	Melancthon / Southgate TL	8th Line SW	260 SR	\$ 15,120	\$ 10,277	\$4,843	\$7,455	\$8.5	0	5	5
1643	Melancthon / Southgate TL	Southgate 8 SR	8th Line SW	\$ 3,174	\$ -	\$3,174	\$4,046	\$8.5	0	5	5
169	MELANCTHON-NOTTAWASAGA TL	CTY RD 124	1 KM E OF CTY RD 124	\$ 1,532	\$ 1,532	\$0	\$8,811	\$8.5	0	5	5
546	MELANCTHON-NOTTAWASAGA TL	1 KM E OF CTY RD 124	TL	\$ 861	\$ 861	\$0	\$4,949	\$8.5	0	5	5
1264	MELANCTHON-OSPREY TL	8TH LINE NE	CTY RD 9	\$ 684	\$ 684	\$0	\$3,634	\$8.5	0	5	5
1623	MELANCTHON-OSPREY TOWNLIN	220 SR	6TH LINE NE	\$ 11,850	\$ 3,991	\$7,859	\$6,919	\$8.5	0	5	5
1197	MELANCTHON-PROTON TL	270 SDRD	8th Line SW	\$ 4,036	\$ 4,036	\$0	\$15,453	\$8.5	0	5	5
1271	MELANCTHON-PROTON TL	CONCESSION ROAD 2	270 SDRD	\$ 1,090	\$ 1,090	\$0	\$5,790	\$8.5	0	5	5
179	MULMUR-MELANCTHON TL	RIVER ROAD	END OF ROAD	\$ 1,584	\$ 1,584	\$0	\$4,555	\$8.5	0	5	5
109	SHOOK	MAIN	END	\$ 284	\$ 284	\$0	\$817	\$8.5	0	5	5

Agency ID	Road Name	From	To	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Rehabilitation		
									Rehabilitation Year	Rehabilitation Unit Cost/m^2	Proposed Rehabilitation Cost (2022)
								1.6			\$529,815
1491	15th Side Road	Main Street (Hornings Mills)	End of Asphalt	Average	Possible	Minor	M	2	2022	\$0.80	\$3,704
176	15TH SIDEROAD	3RD LINE OS	CTY RD 124	Good	Unlikely	Moderate	M	2	2022	\$0.80	\$6,119
194	15TH SIDEROAD	CTY RD 124	MAIN ST	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$1,218
1345	20TH SIDEROAD	3RD LINE OS	CTY RD 124	Very Good	Rare	Moderate	L	1	2027	\$0.80	\$7,385
31	260 SIDEROAD	7TH LINE SW	4TH LINE SW	Average	Possible	Moderate	M	2	2022	\$0.80	\$10,789
32	260 SIDEROAD	4TH LINE SW	2ND LINE SW	Average	Possible	Moderate	M	2	2024	\$0.80	\$11,942
1662	260 SR	2nd Line SW	Gierson St	Average	Possible	Moderate	M	2	2022	\$0.80	\$8,179
81	2ND LINE SW	260 SDRD	250 SDRD	Very Good	Rare	Moderate	L	1	2023	\$0.80	\$11,011
117	2ND LINE SW	280 Sideroad	270 Sideroad	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$8,632
1278	2ND LINE SW	CTY RD 17	280 SDRD	Very Good	Rare	Moderate	L	1	2022	\$4.50	\$61,849
1279	2ND LINE SW	280 Sideroad	270 Sideroad	Very Good	Rare	Moderate	L	1			\$0
1351	2ND LINE SW	300 SDRD	County Rd 17	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$10,618
1509	2nd Line SW	270 SR	260 SR	Very Good	Rare	Moderate	L	1	2023	\$0.80	\$10,959
1633	2nd Line SW	Hwy 89	300 SR	Very Good	Rare	Moderate	L	1			
1634	2nd Line SW	250 SR	Proton W Back Line	Very Good	Rare	Moderate	L	1			
93	3RD LINE	5 SR	2 KM N OF 5TH SIDEROAD	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$10,776
96	3RD LINE	CTY RD 17	15 SR	Good	Unlikely	Moderate	M	2	2026	\$0.80	\$16,359
102	3RD LINE	1.5 KM SOUTH OF 20TH SIDEROAD	20TH SIDEROAD	Good	Unlikely	Moderate	M	2	2026	\$0.80	\$16,321
544	3RD LINE	2 KM N OF 5TH SIDEROAD	CTY RD 17	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$5,620
1467	3rd Line	15th Sideroad	1.5km S of 20th Sideroad	Good	Unlikely	Moderate	M	2	2026	\$0.80	\$8,161
1490	3rd Line Old Survey	20th Side Road	County Road 21	Very Good	Rare	Minor	L	1	2023	\$0.80	\$16,375
1507	3rd Line OS	Highway 10	5th SR	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$8,846
65	4TH LINE NE	5TH LINE OS	CTY RD 21	Good	Unlikely	Moderate	M	2	2030	\$6.00	\$158,274
72	4TH LINE NE	240 SDRD	RD 9 AND CTY RD 2	Very Good	Rare	Moderate	L	1			
95	4TH LINE OS	CTY RD 17	North Strada Entrance	Good	Unlikely	Moderate	M	2	2023	\$0.00	\$0
1274	4TH LINE OS	Railway Tracks	HWY 10	Very Good	Rare	Moderate	L	1	2024	\$0.80	\$5,125
1494	4th Line OS	5th Side Road	County Road 17	Good	Unlikely	Moderate	M	2	2024	\$0.80	\$16,284
1495	4th Line OS	Highway 10	5th Side Road	Very Good	Rare	Moderate	L	1	2025	\$0.80	\$3,822
206	5TH SIDEROAD	CTY RD 124	TL	Average	Possible	Moderate	M	2	2025	\$0.80	\$7,998
207	5TH SIDEROAD	3RD LINE OS	CTY RD 124	Very Good	Rare	Moderate	L	1	2022	\$0.80	\$7,975
1489	7th Line South West	270 Side Road	260 Side Road	Average	Possible	Minor	M	2			
111	7TH LINE SW	280 SDRD	270 SDRD	Average	Possible	Moderate	M	2			
142	7TH LINE SW	CTY RD 17	280 SDRD	Average	Possible	Moderate	M	2			
143	7TH LINE SW	HWY 89	CTY RD 17	Average	Possible	Moderate	M	2			
186	ADDESON	GEORGE	LLOYD	Good	Unlikely	Moderate	M	2			
201	CHARLES ST W	MAIN	END OF ROAD	Very Good	Rare	Moderate	L	1	2027	\$0.80	\$758

Agency ID	Road Name	From	To	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Rehabilitation		
									Rehabilitation Year	Rehabilitation Unit Cost/m^2	Proposed Rehabilitation Cost (2022)
1667	Church St	Main St Horning's Mills	End	Average	Possible	Moderate	M	2	2022	\$0.80	\$1,297
182	FIELDWAY	MAIN	END OF ROAD	Very Good	Rare	Moderate	L	1	2025	\$4.50	\$24,135
188	GEORGE	ADDESON	MAIN	Good	Unlikely	Moderate	M	2	2022	\$0.80	\$454
185	HIGH	MAIN	William	Very Good	Rare	Moderate	L	1	2027	\$0.80	\$913
205	HUNTER	CTY ROAD 124	END OF ROAD	Good	Unlikely	Moderate	M	2	2022	\$0.80	\$1,557
187	LLOYD	ADDESON	MAIN	Good	Unlikely	Moderate	M	2	2022	\$0.80	\$441
1663	Main St Corbetton	Grierson St	Manitoba St	Very Good	Rare	Moderate	L	1	2023	\$4.50	\$4,794
1664	Main St Corbetton	Manitoba St	Cedar St	Very Good	Rare	Moderate	L	1	2023	\$4.50	\$2,231
1665	Main St Corbetton	Cedar St	Shook St	Very Good	Rare	Moderate	L	1	2023	\$4.50	\$4,613
1666	Main St Corbetton	Shook St	Highway 10	Very Good	Rare	Moderate	L	1	2023	\$4.50	\$12,603
183	MAIN St Hornings Mills	15 SR	CTY RD 124	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,959
193	MAIN St Hornings Mills	MILL LANE	15 SR	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,797
1310	MAIN St Hornings Mills	MILL ST	CHURCH ST	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,148
1311	MAIN St Hornings Mills	HIGH ST	MILL ST	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$643
1312	MAIN St Hornings Mills	CHURCH ST	CHARLES ST W	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$819
1313	MAIN St Hornings Mills	CHARLES ST W	GEORGE	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$678
1314	MAIN St Hornings Mills	GEORGE ST	TO LLOYD ST	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,135
1315	MAIN St Hornings Mills	FIELDWAY CRT	HIGH ST	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,733
1346	MAIN St Hornings Mills	OLDFIELD CRT	FIELDWAY CRT	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$1,484
1347	MAIN St Hornings Mills	CTY RD 124	OLDFIELD CRT	Very Good	Rare	Moderate	L	1	2026	\$0.80	\$3,711
195	MILL Lane	MAIN	END OF ROAD	Good	Unlikely	Moderate	M	2	2022	\$0.80	\$3,510
196	MILL St	MAIN	WILLIAM	Very Good	Rare	Moderate	L	1	2027	\$0.80	\$510
184	OLDFIELD	MAIN	END OF ROAD	Good	Unlikely	Moderate	M	2	2025	\$0.80	\$3,448
189	RIVER	Mulmur-Melancthon Townline	WILLIAM	Very Good	Rare	Moderate	L	1	2025	\$0.80	\$7,512
181	WILLIAM	HIGH	MILL St. / River Road	Very Good	Rare	Moderate	L	1	2027	\$0.80	\$642
1485	10 Line North East	240 Side Road	Osprey / Melancthon Townline	Average	Possible	Minor	M	2			
1625	10th Line NE	5th Line OS	240 SR	Average	Possible	Minor	M	2			
1448	10TH LINE SW	280 SDRD	RD ALLOW	Average	Possible	Minor	M	2			
1577	15TH SIDEROAD	Bridge 2009 east	Townline	Average	Possible	Minor	M	2			
1621	15TH SIDEROAD	5TH LINE OS	4TH LINE OS	Average	Possible	Minor	M	2			
1622	15th Sideroad	4th Line OS	3rd Line OS	Average	Possible	Minor	M	2			
1619	20TH SIDEROAD	5TH LINE OS	4TH LINE OS	Average	Possible	Minor	M	2			
1620	20TH SIDEROAD	County Rd 124	Townline	Average	Possible	Minor	M	2			
1618	20TH SR	4TH LINE OS	3RD LINE OS	Average	Possible	Minor	M	2			
1542	220 SIDEROAD	HWY 10	2ND LINE NE	Average	Possible	Minor	M	2			
1626	220 SR	2nd Line NE	Cty Rd 2	Average	Possible	Minor	M	2			
1647	220 SR	County Rd 2	Melancthon / Osprey TL	Average	Possible	Minor	M	2			
1458	240 SIDEROAD	8TH LINE NE	10TH LINE NE	Average	Possible	Minor	M	2			

Agency ID	Road Name	From	To	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Rehabilitation		
									Rehabilitation Year	Rehabilitation Unit Cost/m^2	Proposed Rehabilitation Cost (2022)
1543	240 SIDEROAD	HWY 10	2ND LINE NE	Average	Possible	Minor	M	2			
1544	240 SIDEROAD	4TH LINE NE	6TH LINE NE	Average	Possible	Minor	M	2			
1602	240 SIDEROAD	2ND LINE NE	4TH LINE NE	Average	Possible	Minor	M	2			
1523	240 SR	6th Line NE	8th Line NE	Average	Possible	Minor	M	2			
1627	240 SR	10th Line NE	5th Line OS	Average	Possible	Minor	M	2			
55	250 SIDEROAD	8TH LINE NE	5TH LINE OS	Average	Possible	Minor	M	2			
1204	250 SIDEROAD	2ND LINE NE	1.7 KM NE OF 2nd LINE NE	Average	Possible	Minor	M	2			
1228	250 SIDEROAD	4TH LINE SW	END OF ROAD	Average	Possible	Minor	M	2			
1233	250 SIDEROAD	HWY 10	2ND LINE NE	Average	Possible	Minor	M	2			
1459	250 SIDEROAD	4TH LINE NE	1.7 KM NE OF 2nd LINE NE	Average	Possible	Minor	M	2			
1460	250 SIDEROAD	4TH LINE SW	2ND LINE SW	Average	Possible	Minor	M	2			
1461	250 SIDEROAD	2ND LINE SW	HWY 10	Average	Possible	Minor	M	2			
1514	250th SR	4th Line NE	6th Line NE	Average	Possible	Minor	M	2			
1611	260 SIDEROAD	MELANCTHON-PROTON TL	7TH LINE SW	Average	Possible	Minor	M	2			
86	270 SIDEROAD	5th LINE	END	Average	Possible	Minor	M	2			
134	270 SIDEROAD	MELANCTHON-PROTON TL	8TH LINE SW	Average	Possible	Minor	M	2			
1216	270 SIDEROAD	4TH LINE SW	2ND LINE SW	Average	Possible	Minor	M	2			
1251	270 SIDEROAD	7TH LINE SW	4TH LINE SW	Average	Possible	Minor	M	2			
1462	270 SIDEROAD	RD ALLOW W OF HWY 10	HWY 10	Average	Possible	Minor	M	2			
1545	270 SIDEROAD	HWY 10	2ND LINE NE	Average	Possible	Minor	M	2			
1546	270 SIDEROAD	2ND LINE NE	RD ALLOWANCE	Average	Possible	Minor	M	2			
1644	270 SR	8th Line SW	7th Line SW	Average	Possible	Minor	M	2			
1215	280 SIDEROAD	2ND LINE SW	HWY 10	Average	Possible	Minor	M	2			
1272	280 SIDEROAD	END	4TH LINE SW	Average	Possible	Minor	M	2			
1273	280 SIDEROAD	4TH LINE SW	END	Average	Possible	Minor	M	2			
1463	280 SIDEROAD	HWY 89	10TH LINE SW	Average	Possible	Minor	M	2			
1464	280 SIDEROAD	.76 KM NE OF 10TH LINE	8TH LINE SW	Average	Possible	Minor	M	2			
1465	280 SIDEROAD	10TH LINE SW	.76 KM NE OF 10TH LINE	Average	Possible	Minor	M	2			
1612	280 SR	Highway 10	2nd Line NE	Average	Possible	Minor	M	2			
1648	280 SR	2nd Line NE	5th Line OS	Average	Possible	Minor	M	2			
1435	2ND LINE NE	250 SR SW	250 SR NE	Average	Possible	Minor	M	2			
1436	2ND LINE NE	CTY RD 21	250 SDRD	Average	Possible	Minor	M	2			
1437	2ND LINE NE	250 SR NE	240 SR NE	Average	Possible	Minor	M	2			
1438	2ND LINE NE	240 SR NE	CTY RD 9	Average	Possible	Minor	M	2			
1516	2nd Line NE	280 SR	270 SR	Average	Possible	Minor	M	2			
1517	2nd Line NE	270 SR	County Rd 21	Average	Possible	Minor	M	2			
1650	2nd Line NE	County Rd 9	220 SR	Average	Possible	Minor	M	2			
1651	2nd Line NE	220 SR	Melancthon / Osprey TL	Average	Possible	Minor	M	2			

Agency ID	Road Name	From	To	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Rehabilitation		
									Rehabilitation Year	Rehabilitation Unit Cost/m^2	Proposed Rehabilitation Cost (2022)
1653	2nd Line NE	County Rd 17	280 SR	Average	Possible	Minor	M	2			
1248	300 SIDEROAD	4TH LINE NE	1.8 KM NE OF 4TH LINE SW	Average	Possible	Minor	M	2			
1476	30th Side Road	3rd Line Old Survey	4th Line Old Survey	Average	Possible	Minor	M	2			
1477	30th Side Road	County Road 124	3rd Line Old Survey	Average	Possible	Minor	M	2			
1478	30th Side Road	Mulmur / Melancthon Townline	County Road 124	Average	Possible	Minor	M	2			
1328	30TH SIDEROAD	5TH LINE OS	4TH LINE OS	Average	Possible	Minor	M	2			
1607	30th SR	3rd Line OS	4th Line OS	Average	Possible	Minor	M	2			
1617	3rd Line OS	County Rd 21	30th SR	Average	Possible	Minor	M	2			
1585	4th Line NE	County Rd 21	Townline	Average	Possible	Minor	M	2			
1594	4TH LINE NE	250 SR	240 SR	Average	Possible	Minor	M	2			
1595	4TH LINE NE	CTY RD 21	250 SR	Average	Possible	Minor	M	2			
1596	4TH LINE NE	240 SR	1 KM north of 240 SR	Average	Possible	Minor	M	2			
1449	4TH LINE OS	15 SR	20 SR	Average	Possible	Minor	M	2			
1580	4TH LINE OS	Highway 89	Railway tracks	Average	Possible	Minor	M	2			
1581	4th Line OS	30th SR	County Rd 21	Average	Possible	Minor	M	2			
1582	4th Line OS	Townline	30th SR	Average	Possible	Minor	M	2			
1628	4th Line OS	Cty Rd 21	20 SR	Average	Possible	Minor	M	2			
1652	4th Line OS	Strada North Entrance	15 SR	Average	Possible	Minor	M	2			
1442	4TH LINE SW	CTY RD 17	280 SR	Average	Possible	Minor	M	2			
1499	4th Line SW	Highway 89	280 Side Road	Average	Possible	Minor	M	2			
1547	4TH LINE SW	260 SDRD	250 SDRD	Average	Possible	Minor	M	2			
1548	4TH LINE SW	250 SDRD	PROTON W BASE LINE	Average	Possible	Minor	M	2			
1578	4th Line SW	280 SR	270 SR	Average	Possible	Minor	M	2			
1616	4TH LINE SW	270 SDRD	260 SDRD	Average	Possible	Minor	M	2			
1641	4th Line SW	300 SR	CTY RD 17	Average	Possible	Minor	M	2			
1482	5th Line Old Survey	Highway 89	Highway 10	Average	Possible	Minor	M	2			
1452	5TH LINE OS	30th SR	County Rd 21	Average	Possible	Minor	M	2			
1519	5th Line OS	30th SR OS	240 SR NE	Average	Possible	Minor	M	2			
1520	5th Line OS	240 SR NE	County Rd 9	Average	Possible	Minor	M	2			
1629	5th Line OS	Highway 10	Cty Rd 17	Average	Possible	Minor	M	2			
1655	5th Line OS	County Rd 17	280 SR	Average	Possible	Minor	M	2			
1656	5th Line OS	280 SR	4th Line NE	Average	Possible	Minor	M	2			
1657	5th Line OS	4th Line NE	15 SR	Average	Possible	Minor	M	2			
1658	5th Line OS	15 SR	270 SR	Average	Possible	Minor	M	2			
1659	5th Line OS	270 SR	6th Line NE	Average	Possible	Minor	M	2			
1660	5th Line OS	6th Line NE	20 SR	Average	Possible	Minor	M	2	2029	\$0.80	\$2,498
1661	5th Line OS	20 SR	County Rd 21	Average	Possible	Minor	M	2	2029	\$0.80	\$8,453

Agency ID	Road Name	From	To	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Rehabilitation		
									Rehabilitation Year	Rehabilitation Unit Cost/m^2	Proposed Rehabilitation Cost (2022)
154	5TH SIDEROAD	.47 KM HIGHWAY 10	4TH LINE OS	Average	Possible	Minor	M	2			
1269	5TH SIDEROAD	HIGHWAY 10	END	Average	Possible	Minor	M	2			
1606	5TH SIDEROAD	4TH LINE OS	3RD LINE OS	Average	Possible	Minor	M	2			
1615	6TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	Average	Possible	Minor	M	2			
1630	6th Line NE	5th Line OS	Cty Rd 21	Average	Possible	Minor	M	2			
1645	6th Line NE	240 SR	County Rd 9	Average	Possible	Minor	M	2			
1646	6th Line NE	250 SR	240 SR	Average	Possible	Minor	M	2			
1642	7th Line SW	260 SR	Southgate TL	Average	Possible	Minor	M	2			
1511	8th Line NE	240 SR NE	County Rd 9	Average	Possible	Minor	M	2			
1603	8TH LINE NE	CTY RD 9 T	MELANCTHON-OSPREY TL	Average	Possible	Minor	M	2			
1613	8TH LINE NE	CTY RD 21 5TH LINE JO	250 SR NE	Average	Possible	Minor	M	2			
1614	8TH LINE NE	250 SDRD	240 SR	Average	Possible	Minor	M	2			
1446	8TH LINE SW	280 SDRD	270 SDRD	Average	Possible	Minor	M	2			
1512	8th Line SW	Highway 89	280 SR SW	Average	Possible	Minor	M	2			
1605	8TH LINE SW	270 SR (south)	MELANCTHON-PROTON TL	Average	Possible	Minor	M	2			
536	CEDAR	MAIN	END	Average	Possible	Minor	M	2			
543	HUNTER	CTY ROAD 124	END OF ROAD	Average	Possible	Minor	M	2			
1207	MANITOBA ST & Argyle St	MAIN ST	END	Average	Possible	Minor	M	2			
1624	MELANCTHON - Mulmur TL	15 SR	20 SR	Average	Possible	Minor	M	2			
1631	Melancthon / Mulmur TL	20 SR	Cty Rd 21	Average	Possible	Minor	M	2			
1480	Melancthon / Mulmur Townline	County Road 21	30th Side Road	Average	Possible	Minor	M	2			
1649	Melancthon / Osprey TL	6th Line NE	8th Line NE	Average	Possible	Minor	M	2			
1522	Melancthon / Southgate TL	8th Line SW	260 SR	Average	Possible	Minor	M	2			
1643	Melancthon / Southgate TL	Southgate 8 SR	8th Line SW	Average	Possible	Minor	M	2			
169	MELANCTHON-NOTTAWASAGA TL	CTY RD 124	1 KM E OF CTY RD 124	Average	Possible	Minor	M	2			
546	MELANCTHON-NOTTAWASAGA TL	1 KM E OF CTY RD 124	TL	Average	Possible	Minor	M	2			
1264	MELANCTHON-OSPREY TL	8TH LINE NE	CTY RD 9	Average	Possible	Minor	M	2			
1623	MELANCTHON-OSPREY TOWNLINE	220 SR	6TH LINE NE	Average	Possible	Minor	M	2			
1197	MELANCTHON-PROTON TL	270 SDRD	8th Line SW	Average	Possible	Minor	M	2			
1271	MELANCTHON-PROTON TL	CONCESSION ROAD 2	270 SDRD	Average	Possible	Minor	M	2			
179	MULMUR-MELANCTHON TL	RIVER ROAD	END OF ROAD	Average	Possible	Minor	M	2			
109	SHOOK	MAIN	END	Average	Possible	Minor	M	2			

Agency ID	Road Name	From	To	Capital Improvements		Rehabilitation			
				Subsequent Improvement Year (2)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)	Subsequent Improvement Year (3)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)
						\$4,302,622			\$404,361
1491	15th Side Road	Main Street (Hornings Mills)	End of Asphalt						
176	15TH SIDEROAD	3RD LINE OS	CTY RD 124	2025	\$18.00	\$137,675	2030	\$0.80	\$6,119
194	15TH SIDEROAD	CTY RD 124	MAIN ST	2025	\$20.50	\$31,211	2028	\$3.75	\$5,709
1345	20TH SIDEROAD	3RD LINE OS	CTY RD 124						
31	260 SIDEROAD	7TH LINE SW	4TH LINE SW	2029	\$20.00	\$269,718			
32	260 SIDEROAD	4TH LINE SW	2ND LINE SW	2029	\$20.00	\$298,560			
1662	260 SR	2nd Line SW	Gierson St	2029	\$20.00	\$204,484			
81	2ND LINE SW	260 SDRD	250 SDRD	2028	\$18.00	\$247,751			
117	2ND LINE SW	280 Sideroad	270 Sideroad	2027	\$18.00	\$194,227			
1278	2ND LINE SW	CTY RD 17	280 SDRD	2027	\$18.00	\$247,397			
1279	2ND LINE SW	280 Sideroad	270 Sideroad						
1351	2ND LINE SW	300 SDRD	County Rd 17	2027	\$18.00	\$238,911			
1509	2nd Line SW	270 SR	260 SR	2028	\$18.00	\$246,567			
1633	2nd Line SW	Hwy 89	300 SR	2028	\$18.00	\$217,080	2028	\$0.80	\$9,648
1634	2nd Line SW	250 SR	Proton W Back Line	2028	\$18.00	\$283,410	2028	\$0.80	\$12,596
93	3RD LINE	5 SR	2 KM N OF 5TH SIDEROAD	2026	\$18.00	\$242,467			
96	3RD LINE	CTY RD 17	15 SR						
102	3RD LINE	1.5 KM SOUTH OF 20TH SIDEROAD	20TH SIDEROAD						
544	3RD LINE	2 KM N OF 5TH SIDEROAD	CTY RD 17	2026	\$30.00	\$210,747			
1467	3rd Line	15th Sideroad	1.5km S of 20th Sideroad						
1490	3rd Line Old Survey	20th Side Road	County Road 21				2029	\$4.50	\$92,108
1507	3rd Line OS	Highway 10	5th SR				2028	\$4.50	\$49,760
65	4TH LINE NE	5TH LINE OS	CTY RD 21						
72	4TH LINE NE	240 SDRD	RD 9 AND CTY RD 2						
95	4TH LINE OS	CTY RD 17	North Strada Entrance				2027	\$0.80	\$8,490
1274	4TH LINE OS	Railway Tracks	HWY 10						
1494	4th Line OS	5th Side Road	County Road 17				2030	\$4.25	\$86,507
1495	4th Line OS	Highway 10	5th Side Road						
206	5TH SIDEROAD	CTY RD 124	TL						
207	5TH SIDEROAD	3RD LINE OS	CTY RD 124	2026	\$18.00	\$179,429	2028	\$9.50	\$94,699
1489	7th Line South West	270 Side Road	260 Side Road						
111	7TH LINE SW	280 SDRD	270 SDRD						
142	7TH LINE SW	CTY RD 17	280 SDRD						
143	7TH LINE SW	HWY 89	CTY RD 17						
186	ADDESON	GEORGE	LLOYD	2025	\$25.00	\$19,378	2030	\$0.80	\$620
201	CHARLES ST W	MAIN	END OF ROAD						

Agency ID	Road Name	From	To	Capital Improvements			Rehabilitation		
				Subsequent Improvement Year (2)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)	Subsequent Improvement Year (3)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)
1667	Church St	Main St Horning's Mills	End	2025	\$30.00	\$48,642	2030	\$0.80	\$1,297
182	FIELDWAY	MAIN	END OF ROAD						\$0
188	GEORGE	ADDESON	MAIN	2025	\$20.00	\$11,355	2030	\$0.80	\$454
185	HIGH	MAIN	William						\$0
205	HUNTER	CTY ROAD 124	END OF ROAD	2025	\$18.00	\$35,043	2030	\$0.80	\$1,557
187	LLOYD	ADDESON	MAIN	2025	\$25.00	\$13,787	2030	\$0.80	\$441
1663	Main St Corbetton	Grierson St	Manitoba St						
1664	Main St Corbetton	Manitoba St	Cedar St						
1665	Main St Corbetton	Cedar St	Shook St						
1666	Main St Corbetton	Shook St	Highway 10						
183	MAIN St Hornings Mills	15 SR	CTY RD 124						
193	MAIN St Hornings Mills	MILL LANE	15 SR						
1310	MAIN St Hornings Mills	MILL ST	CHURCH ST						
1311	MAIN St Hornings Mills	HIGH ST	MILL ST						
1312	MAIN St Hornings Mills	CHURCH ST	CHARLES ST W						
1313	MAIN St Hornings Mills	CHARLES ST W	GEORGE						
1314	MAIN St Hornings Mills	GEORGE ST	TO LLOYD ST						
1315	MAIN St Hornings Mills	FIELDWAY CRT	HIGH ST						
1346	MAIN St Hornings Mills	OLDFIELD CRT	FIELDWAY CRT						
1347	MAIN St Hornings Mills	CTY RD 124	OLDFIELD CRT						
195	MILL Lane	MAIN	END OF ROAD	2025	\$20.00	\$87,740	2030	\$0.80	\$3,510
196	MILL St	MAIN	WILLIAM						
184	OLDFIELD	MAIN	END OF ROAD						
189	RIVER	Mulmur-Melancthon Townline	WILLIAM						
181	WILLIAM	HIGH	MILL St. / River Road						
1485	10 Line North East	240 Side Road	Osprey / Melancthon Townline						
1625	10th Line NE	5th Line OS	240 SR						
1448	10TH LINE SW	280 SDRD	RD ALLOW						
1577	15TH SIDEROAD	Bridge 2009 east	Townline						
1621	15TH SIDEROAD	5TH LINE OS	4TH LINE OS						
1622	15th Sideroad	4th Line OS	3rd Line OS						
1619	20TH SIDEROAD	5TH LINE OS	4TH LINE OS						
1620	20TH SIDEROAD	County Rd 124	Townline						
1618	20TH SR	4TH LINE OS	3RD LINE OS						
1542	220 SIDEROAD	HWY 10	2ND LINE NE						
1626	220 SR	2nd Line NE	Cty Rd 2						
1647	220 SR	County Rd 2	Melancthon / Osprey TL						
1458	240 SIDEROAD	8TH LINE NE	10TH LINE NE						

Agency ID	Road Name	From	To	Capital Improvements		Rehabilitation			
				Subsequent Improvement Year (2)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)	Subsequent Improvement Year (3)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)
1543	240 SIDEROAD	HWY 10	2ND LINE NE						
1544	240 SIDEROAD	4TH LINE NE	6TH LINE NE						
1602	240 SIDEROAD	2ND LINE NE	4TH LINE NE						
1523	240 SR	6th Line NE	8th Line NE						
1627	240 SR	10th Line NE	5th Line OS						
55	250 SIDEROAD	8TH LINE NE	5TH LINE OS						
1204	250 SIDEROAD	2ND LINE NE	1.7 KM NE OF 2nd LINE NE						
1228	250 SIDEROAD	4TH LINE SW	END OF ROAD						
1233	250 SIDEROAD	HWY 10	2ND LINE NE						
1459	250 SIDEROAD	4TH LINE NE	1.7 KM NE of 2nd LINE NE						
1460	250 SIDEROAD	4TH LINE SW	2ND LINE SW						
1461	250 SIDEROAD	2ND LINE SW	HWY 10						
1514	250th SR	4th Line NE	6th Line NE						
1611	260 SIDEROAD	MELANCTHON-PROTON TL	7TH LINE SW						
86	270 SIDEROAD	5th LINE	END						
134	270 SIDEROAD	MELANCTHON-PROTON TL	8TH LINE SW						
1216	270 SIDEROAD	4TH LINE SW	2ND LINE SW						
1251	270 SIDEROAD	7TH LINE SW	4TH LINE SW						
1462	270 SIDEROAD	RD ALLOW W OF HWY 10	HWY 10						
1545	270 SIDEROAD	HWY 10	2ND LINE NE						
1546	270 SIDEROAD	2ND LINE NE	RD ALLOWANCE						
1644	270 SR	8th Line SW	7th Line SW						
1215	280 SIDEROAD	2ND LINE SW	HWY 10						
1272	280 SIDEROAD	END	4TH LINE SW						
1273	280 SIDEROAD	4TH LINE SW	END						
1463	280 SIDEROAD	HWY 89	10TH LINE SW						
1464	280 SIDEROAD	.76 KM NE OF 10TH LINE	8TH LINE SW						
1465	280 SIDEROAD	10TH LINE SW	.76 KM NE OF 10TH LINE						
1612	280 SR	Highway 10	2nd Line NE						
1648	280 SR	2nd Line NE	5th Line OS						
1435	2ND LINE NE	250 SR SW	250 SR NE						
1436	2ND LINE NE	CTY RD 21	250 SDRD						
1437	2ND LINE NE	250 SR NE	240 SR NE						
1438	2ND LINE NE	240 SR NE	CTY RD 9						
1516	2nd Line NE	280 SR	270 SR						
1517	2nd Line NE	270 SR	County Rd 21						
1650	2nd Line NE	County Rd 9	220 SR						
1651	2nd Line NE	220 SR	Melancthon / Osprey TL						

Agency ID	Road Name	From	To	Capital Improvements			Rehabilitation		
				Subsequent Improvement Year (2)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)	Subsequent Improvement Year (3)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)
1653	2nd Line NE	County Rd 17	280 SR						
1248	300 SIDEROAD	4TH LINE NE	1.8 KM NE OF 4TH LINE SW						
1476	30th Side Road	3rd Line Old Survey	4th Line Old Survey						
1477	30th Side Road	County Road 124	3rd Line Old Survey						
1478	30th Side Road	Mulmur / Melancthon Townline	County Road 124						
1328	30TH SIDEROAD	5TH LINE OS	4TH LINE OS						
1607	30th SR	3rd Line OS	4th Line OS						
1617	3rd Line OS	County Rd 21	30th SR						
1585	4th Line NE	County Rd 21	Townline						
1594	4TH LINE NE	250 SR	240 SR						
1595	4TH LINE NE	CTY RD 21	250 SR						
1596	4TH LINE NE	240 SR	1 KM north of 240 SR						
1449	4TH LINE OS	15 SR	20 SR						
1580	4TH LINE OS	Highway 89	Railway tracks						
1581	4th Line OS	30th SR	County Rd 21						
1582	4th Line OS	Townline	30th SR						
1628	4th Line OS	Cty Rd 21	20 SR						
1652	4th Line OS	Strada North Entrance	15 SR						
1442	4TH LINE SW	CTY RD 17	280 SR						
1499	4th Line SW	Highway 89	280 Side Road						
1547	4TH LINE SW	260 SDRD	250 SDRD						
1548	4TH LINE SW	250 SDRD	PROTON W BASE LINE						
1578	4th Line SW	280 SR	270 SR						
1616	4TH LINE SW	270 SDRD	260 SDRD						
1641	4th Line SW	300 SR	CTY RD 17						
1482	5th Line Old Survey	Highway 89	Highway 10						
1452	5TH LINE OS	30th SR	County Rd 21						
1519	5th Line OS	30th SR OS	240 SR NE						
1520	5th Line OS	240 SR NE	County Rd 9						
1629	5th Line OS	Highway 10	Cty Rd 17						
1655	5th Line OS	County Rd 17	280 SR	2023	\$25.00	\$401,275	2027	\$0.80	\$12,841
1656	5th Line OS	280 SR	4th Line NE	2023	\$18.00	\$24,723	2027	\$0.80	\$1,099
1657	5th Line OS	4th Line NE	15 SR	2023	\$18.00	\$68,742	2027	\$0.80	\$3,055
1658	5th Line OS	15 SR	270 SR	2024	\$18.00	\$232,758	2028	\$0.80	\$10,345
1659	5th Line OS	270 SR	6th Line NE	2024	\$25.00	\$109,545	2028	\$0.80	\$3,505
1660	5th Line OS	6th Line NE	20 SR						
1661	5th Line OS	20 SR	County Rd 21						

Agency ID	Road Name	From	To	Capital Improvements		Rehabilitation			
				Subsequent Improvement Year (2)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)	Subsequent Improvement Year (3)	Rehabilitation Unit Cost/m^2	Subsequent Improvement Cost (2022)
154	5TH SIDEROAD	.47 KM HIGHWAY 10	4TH LINE OS						
1269	5TH SIDEROAD	HIGHWAY 10	END						
1606	5TH SIDEROAD	4TH LINE OS	3RD LINE OS						
1615	6TH LINE NE	CTY RD 9 T	MELANCHTHON-OSPREY TL						
1630	6th Line NE	5th Line OS	Cty Rd 21						
1645	6th Line NE	240 SR	County Rd 9						
1646	6th Line NE	250 SR	240 SR						
1642	7th Line SW	260 SR	Southgate TL						
1511	8th Line NE	240 SR NE	County Rd 9						
1603	8TH LINE NE	CTY RD 9 T	MELANCHTHON-OSPREY TL						
1613	8TH LINE NE	CTY RD 21 5TH LINE JO	250 SR NE						
1614	8TH LINE NE	250 SDRD	240 SR						
1446	8TH LINE SW	280 SDRD	270 SDRD						
1512	8th Line SW	Highway 89	280 SR SW						
1605	8TH LINE SW	270 SR (south)	MELANCHTHON-PROTON TL						
536	CEDAR	MAIN	END						
543	HUNTER	CTY ROAD 124	END OF ROAD						
1207	MANITOBA ST & Argyle St	MAIN ST	END						
1624	MELANCHTON - Mulmur TL	15 SR	20 SR						
1631	Melancthon / Mulmur TL	20 SR	Cty Rd 21						
1480	Melancthon / Mulmur Townline	County Road 21	30th Side Road						
1649	Melancthon / Osprey TL	6th Line NE	8th Line NE						
1522	Melancthon / Southgate TL	8th Line SW	260 SR						
1643	Melancthon / Southgate TL	Southgate 8 SR	8th Line SW						
169	MELANCHTHON-NOTTAWASAGA TL	CTY RD 124	1 KM E OF CTY RD 124						
546	MELANCHTHON-NOTTAWASAGA TL	1 KM E OF CTY RD 124	TL						
1264	MELANCHTHON-OSPREY TL	8TH LINE NE	CTY RD 9						
1623	MELANCHTHON-OSPREY TOWNLIN	220 SR	6TH LINE NE						
1197	MELANCHTHON-PROTON TL	270 SDRD	8th Line SW						
1271	MELANCHTHON-PROTON TL	CONCESSION ROAD 2	270 SDRD						
179	MULMUR-MELANCHTHON TL	RIVER ROAD	END OF ROAD						
109	SHOOK	MAIN	END						

Road Base Inventory

Road Needs ID	Agency ID	GIS Map Link	Asset Name	From	To	Surface Material	Length (m)	Install Year	Useful Life	Remaining Useful Life	Road Needs Remaining Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2021 Replacement Cost/Section
	701	176	Municipal Road Base - 15TH SIDEROAD	3RD LINE OS	CTY RD 124	Asphalt	284,030		75	12	12	127	\$4,186,356	\$2,826,968	\$1,627,388	\$105,012,068
	718	194	Municipal Road Base - 15TH SIDEROAD	CTY RD 124	MAIN ST	Asphalt	1,142	1983	75	37	37	38	\$45,634	\$28,902	\$16,733	\$ 456,632
	702	177	Municipal Road Base - 15TH SIDEROAD	MAIN ST	END OF ASPHALT (Bridge 2009)	Asphalt	227	1983	75	37	37	38	\$9,084	\$5,753	\$3,331	\$ 90,896
	699	1345	Municipal Road Base - 20TH SIDEROAD	3RD LINE OS	CTY RD 124	Asphalt	691	1983	75	37	37	38	\$27,611	\$17,487	\$10,124	\$ 276,284
	567	29	Municipal Road Base - 260 SIDEROAD	2ND LINE SW	ARGYLE ST	Asphalt	1,378	1983	75	37	37	38	\$55,074	\$34,680	\$20,394	\$ 551,088
	570	32	Municipal Road Base - 260 SIDEROAD	4TH LINE SW	2ND LINE SW	Asphalt	1,526	1983	75	37	37	38	\$60,996	\$38,630	\$22,365	\$ 610,344
	569	31	Municipal Road Base - 260 SIDEROAD	7TH LINE SW	4TH LINE SW	Asphalt	2,228	1983	75	37	37	38	\$89,066	\$56,408	\$32,657	\$ 891,224
	625	82	Municipal Road Base - 2ND LINE SW	250 SDRD	Melanchon / Southgate Boundary Line	Asphalt	2,013	1983	75	37	37	38	\$80,462	\$50,959	\$29,503	\$ 805,128
										0	0	168	\$1,526	\$1,526	\$0	\$ 939,836
	624	81	Municipal Road Base - 2ND LINE SW	260 SDRD	250 SDRD	Asphalt	2,350	1983	75	37	37	38	\$165,267	\$63,202	\$102,066	\$ 821,728
	623	118	Municipal Road Base - 2ND LINE SW	270 SDRD	260 SDRD	Asphalt	2,045	1983	75	37	37	38	\$82,120	\$52,010	\$30,111	\$ 817,872
	622	117	Municipal Road Base - 2ND LINE SW	280 Sideroad	270 Sideroad	Asphalt	2,029	1983	75	37	37	38	\$81,735	\$51,766	\$29,970	\$ 811,484
	621	1278	Municipal Road Base - 2ND LINE SW	CTY RD 17	280 SDRD	Asphalt	2,051	1986	75	40	40	35	\$93,087	\$54,300	\$38,786	\$ 820,556
	673	147	Municipal Road Base - 2ND LINE SW	HWY 89	300 SDRD	Asphalt	1,799	1983	75	37	37	38	\$224,417	\$51,399	\$173,018	\$ 719,788
	645	102	Municipal Road Base - 3RD LINE	1.5 KM SOUTH OF 20TH SIDEROAD	20TH SIDEROAD	Asphalt	3,045	1853	75	0	0	168	\$133	\$133	\$0	\$ 1,217,988
	900	544	Municipal Road Base - 3RD LINE	2 KM N OF 5TH SIDEROAD	CTY RD 17	Asphalt	1,048	1988	75	42	42	33	\$57,618	\$31,690	\$25,928	\$ 418,396
	690	165	Municipal Road Base - 3RD LINE	20 SR	RD 21	Asphalt	3,055	1983	75	37	37	38	\$122,109	\$77,336	\$44,773	\$ 1,221,868
	636	93	Municipal Road Base - 3RD LINE	5 SR	2 KM N OF 5TH SIDEROAD	Asphalt	2,011	1983	75	37	37	38	\$91,659	\$58,051	\$33,608	\$ 804,200
	639	96	Municipal Road Base - 3RD LINE	CTY RD 17	15 SR	Asphalt	2,689	1983	75	37	37	38	\$22,797	\$14,438	\$8,359	\$ 1,075,420
	901	545	Municipal Road Base - 3RD LINE	CTY RD 17	15 SR	Asphalt	363	1983	75	37	37	38	\$14,495	\$9,180	\$5,315	\$ 145,044
	635	92	Municipal Road Base - 3RD LINE	HWY 10	5 SR	Asphalt	1,650	1987	75	41	41	34	\$102,484	\$58,063	\$44,401	\$ 660,148
	678	153	Municipal Road Base - 4TH LINE	5TH SR	CTY RD 17	Asphalt	3,038	1983	75	37	37	38	\$121,461	\$76,926	\$44,536	\$ 1,215,388
	638	95	Municipal Road Base - 4TH LINE	CTY RD 17	1.591 km North of Cty Rd 17	Asphalt	1,591	1988	75	42	42	33	\$147,745	\$81,260	\$66,485	\$ 636,400
	677	152	Municipal Road Base - 4TH LINE	HWY 10	5TH SDRD	Asphalt	713	1983	75	37	37	38	\$31,383	\$31,383	\$0	\$ 285,352
	609	72	Municipal Road Base - 4TH LINE NE	240 SDRD	RD 9 AND CTY RD 2	Asphalt	2,048	1853	75	0	0	168	\$985	\$985	\$0	\$ 819,100
	600	63	Municipal Road Base - 4TH LINE NE	250 SDRD	240 SDRD	Asphalt	2,447	1984	75	38	38	37	\$69,649	\$41,822	\$27,827	\$ 978,704
	602	65	Municipal Road Base - 4TH LINE NE	5TH LINE OS	CTY RD 21	Asphalt	3,937	1853	75	0	0	168	\$109	\$109	\$0	\$ 1,574,864
	601	64	Municipal Road Base - 4TH LINE NE	CTY RD 21	250 SDRD	Asphalt	1,634	1987	75	41	41	34	\$200,655	\$113,705	\$86,951	\$ 653,592
	897	1274	Municipal Road Base - 4TH LINE OS	Railway Tracks	HWY 10	Asphalt	956	1983	75	37	37	38	\$22,950	\$14,535	\$8,415	\$ 382,400
	686	161	Municipal Road Base - 5TH LINE	20 SR	RD 21 5TH LINE JOG	Asphalt	1,577	1983	75	37	37	38	\$63,045	\$39,929	\$23,117	\$ 630,856
	644	101	Municipal Road Base - 5TH LINE	280 SDRD	4TH LINE NE	Asphalt	205	1983	75	37	37	38	\$121,721	\$77,090	\$44,631	\$ 82,196
	640	97	Municipal Road Base - 5TH LINE	4TH LINE NE	15 SIDEROAD	Asphalt	570	1853	75	0	0	168	\$1,999	\$1,999	\$0	\$ 228,120
	685	160	Municipal Road Base - 5TH LINE	6TH LINE NE	20th SIDEROAD	Asphalt	466	1983	75	37	37	38	\$18,617	\$11,791	\$6,826	\$ 186,292
	637	94	Municipal Road Base - 5TH LINE	CTY RD 17 5TH LINE JOG	280 SR	Asphalt	2,293	1983	75	37	37	38	\$121,975	\$77,251	\$44,724	\$ 917,176
	684	159	Municipal Road Base - 5th Line OS - 15th SR - 270 SR	15TH SIDEROAD	270 SIDEROAD	Asphalt	1,930	1983	75	37	37	38	\$77,165	\$48,871	\$28,294	\$ 772,140
	683	158	Municipal Road Base - 5th Line OS - 270 SR - 6th Line NE	270 SIDEROAD	6th LINE NE	Asphalt	654	1983	75	37	37	38	\$26,145	\$16,558	\$9,586	\$ 261,616
	730	207	Municipal Road Base - 5TH SIDEROAD	3RD LINE OS	CTY RD 124	Asphalt	1,488	1983	75	37	37	38	\$54,797	\$34,705	\$20,092	\$ 595,124
	729	206	Municipal Road Base - 5TH SIDEROAD	CTY RD 124	TL	Asphalt	1,250	1983	75	37	37	38	\$65,236	\$41,316	\$23,920	\$ 499,896
	559	1489	Municipal Road Base - 7TH LINE SW	270 SR	260 SR	Asphalt	2,048	1983	75	37	37	38	\$81,856	\$51,842	\$30,014	\$ 819,084
	654	111	Municipal Road Base - 7TH LINE SW	280 SDRD	270 SDRD	Asphalt	2,033	1853	75	0	0	168	\$777	\$777	\$0	\$ 813,352
	668	142	Municipal Road Base - 7TH LINE SW	CTY RD 17	280 SDRD	Asphalt	2,040	1983	75	37	37	38	\$81,536	\$51,639	\$28,896	\$ 815,876
	669	143	Municipal Road Base - 7TH LINE SW	HWY 89	CTY RD 17	Asphalt	853	1983	75	37	37	38	\$34,062	\$21,591	\$12,500	\$ 341,136
	710	186	Municipal Road Base - ADDISON	GEORGE	LLOYD	Asphalt	155	1983	75	37	37	38	\$4,625	\$2,929	\$1,696	\$ 62,008
	725	201	Municipal Road Base - CHARLES ST W	MAIN	END OF ROAD	Asphalt	141	1983	75	37	37	38	\$5,651	\$3,579	\$2,072	\$ 56,548
	724	200	Municipal Road Base - CHURCH	MAIN	END OF ROAD	Asphalt	242	1983	75	37	37	38	\$9,676	\$6,128	\$3,548	\$ 96,820
	706	182	Municipal Road Base - FIELDWAY	MAIN	END OF ROAD	Asphalt	800	1983	75	37	37	38	\$31,999	\$20,266	\$11,733	\$ 320,192
	712	188	Municipal Road Base - GEORGE	ADDISON	MAIN	Asphalt	114	1983	75	37	37	38	\$3,387	\$2,145	\$1,242	\$ 45,420
	709	185	Municipal Road Base - HIGH	MAIN	70 M E OF MAIN	Asphalt	170	1983	75	37	37	38	\$6,810	\$4,313	\$2,497	\$ 68,144
	728	205	Municipal Road Base - HUNTER	CTY ROAD 124	END OF ROAD	Asphalt	291	1983	75	37	37	38	\$11,615	\$7,356	\$4,259	\$ 116,228
	711	187	Municipal Road Base - LLOYD	ADDISON	MAIN	Asphalt	110	1983	75	37	37	38	\$3,290	\$2,084	\$1,206	\$ 44,120
	707	183	Municipal Road Base - MAIN	15 SR	CTY RD 124	Asphalt	366	1983	75	37	37	38	\$14,612	\$9,254	\$5,358	\$ 148,208
	566	26	Municipal Road Base - MAIN	CEDAR ST	SHOOK ST	Asphalt	153	1978	75	32	32	43	\$14,271	\$8,182	\$6,089	\$ 61,300

Road Base Inventory

Road Needs ID	Agency ID	GIS Map Link	Asset Name	From	To	Surface Material	Length (m)	Install Year	Useful Life	Remaining Useful Life	Road Needs Remaining Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2021 Replacement Cost/Section
	726	1313	Municipal Road Base - MAIN	CHARLES ST W	GEORGE	Asphalt	126	1978	75	32	32	43	\$35,074	\$13,481	\$21,593	\$ 50,584
	723	1312	Municipal Road Base - MAIN	CHURCH ST	CHARLES ST W	Asphalt	153	1978	75	32	32	43	\$42,391	\$16,293	\$26,097	\$ 61,112
	716	1347	Municipal Road Base - MAIN	CTY RD 124	OLDFIELD CRT	Asphalt	692	1983	75	37	37	38	\$27,679	\$17,530	\$10,149	\$ 276,972
	715	1315	Municipal Road Base - MAIN	FIELDWAY CRT	HIGH ST	Asphalt	323	1983	75	37	37	38	\$12,925	\$8,186	\$4,739	\$ 129,328
	727	1314	Municipal Road Base - MAIN	GEORGE ST	TO LLOYD ST	Asphalt	212	1978	75	32	32	43	\$58,746	\$22,580	\$36,167	\$ 84,692
	564	24	Municipal Road Base - MAIN	GRIERSON ST	MANITOBA ST	Asphalt	159	1978	75	32	32	43	\$14,770	\$8,468	\$6,302	\$ 63,444
	722	1311	Municipal Road Base - MAIN	HIGH ST	MILL ST	Asphalt	120	1978	75	32	32	43	\$11,167	\$6,402	\$4,764	\$ 47,964
	565	25	Municipal Road Base - MAIN	MANITOBA ST	CEDAR ST	Asphalt	74	1978	75	32	32	43	\$8,897	\$3,954	\$2,943	\$ 29,624
	717	193	Municipal Road Base - MAIN	MILL LANE	15 SR	Asphalt	335	1983	75	37	37	38	\$13,402	\$8,488	\$4,914	\$ 134,108
	721	1310	Municipal Road Base - MAIN	MILL ST	CHURCH ST	Asphalt	214	1978	75	32	32	43	\$19,938	\$11,431	\$8,507	\$ 85,640
	714	1346	Municipal Road Base - MAIN	OLDFIELD CRT	FIELDWAY CRT	Asphalt	277	1983	75	37	37	38	\$11,069	\$7,011	\$4,059	\$ 110,764
	650	107	Municipal Road Base - MAIN	VICTORIA ST RD ALLOW	HWY 10	Asphalt	418	1853	75	0	0	168	\$829	\$829	\$0	\$ 167,268
	719	195	Municipal Road Base - MILL LN	MAIN	END OF ROAD	Asphalt	655	1983	75	37	37	38	\$26,174	\$16,577	\$9,597	\$ 261,912
	720	196	Municipal Road Base - MILL ST	MAIN	WILLIAM	Asphalt	95	1983	75	37	37	38	\$3,802	\$2,408	\$1,394	\$ 38,048
	708	184	Municipal Road Base - OLDFIELD	MAIN	END OF ROAD	Asphalt	643	1983	75	37	37	38	\$25,714	\$16,286	\$9,428	\$ 257,304
	713	189	Municipal Road Base - RIVER	Mulmur-Melancthon Towline	WILLIAM	Asphalt	1,401	1983	75	37	37	38	\$56,023	\$35,481	\$20,542	\$ 560,588
	705	181	Municipal Road Base - WILLIAM	HIGH	MILL	Asphalt	120	1983	75	37	37	38	\$4,791	\$3,034	\$1,757	\$ 47,936
	1352	1351	Municipal Road Base 2nd Line SW	300 SORD	CTY RD 17	Asphalt	1,981	2011	75	65	65	10	\$71,745	\$11,958	\$59,788	\$ 792,400
	592	56	Municipal Road Base - 10TH LINE NE	240 SORD	Grey Road 9	Gravel	856	1853	75	0	0	168	\$491	\$491	\$0	\$ 342,456
	633	1238	Municipal Road Base - 10TH LINE NE	5TH LINE OS	240 SORD	Gravel	859	1853	75	0	0	168	\$775	\$775	\$0	\$ 343,420
	666	1448	Municipal Road Base - 10TH LINE SW	280 SORD north	RD ALLOW	Gravel	706	1853	75	0	0	168	\$289	\$289	\$0	\$ 282,280
	643	1455	Municipal Road Base - 15TH SIDEROAD	4TH LINE OS	3RD LINE OS	Gravel	1,451	1983	75	37	37	38	\$8,215	\$5,203	\$3,012	\$ 580,544
	642	1454	Municipal Road Base - 15TH SIDEROAD	5TH LINE OS	4TH LINE OS	Gravel	1,422	1853	75	0	0	168	\$892	\$892	\$0	\$ 568,668
	903	1270	Municipal Road Base - 15TH SIDEROAD	Bridge 2009	Mulmur-Melancthon Townline	Gravel	684	1853	75	0	0	168	\$448	\$448	\$0	\$ 273,488
	689	1456	Municipal Road Base - 20TH SIDEROAD	4TH LINE OS	3RD LINE OS	Gravel	1,426	1853	75	0	0	168	\$934	\$934	\$0	\$ 570,368
	582	44	Municipal Road Base - 20TH SIDEROAD	5TH LINE OS	4TH LINE OS	Gravel	1,431	1853	75	0	0	168	\$938	\$938	\$0	\$ 572,404
	698	1414	Municipal Road Base - 20TH SIDEROAD	CTY RD 124	TL	Gravel	1,368	1853	75	0	0	168	\$841	\$841	\$0	\$ 547,288
	579	1242	Municipal Road Base - 220 SIDEROAD	2ND LINE NE	COUNTY ROAD 2	Gravel	2,046	1853	75	0	0	168	\$1,005	\$1,005	\$0	\$ 818,324
	578	1241	Municipal Road Base - 220 SIDEROAD	COUNTY ROAD 2	MELANCTHON-OSPREY TL	Gravel	1,366	1853	75	0	0	168	\$671	\$671	\$0	\$ 546,304
	649	1235	Municipal Road Base - 220 SIDEROAD	HWY 10	2ND LINE NE	Gravel	1,527	1983	75	37	37	38	\$16,716	\$10,587	\$6,129	\$ 610,676
	606	1198	Municipal Road Base - 240 SIDEROAD	10TH LINE NE	5TH LINE OS	Gravel	739	1853	75	0	0	168	\$121	\$121	\$0	\$ 295,624
	575	1423	Municipal Road Base - 240 SIDEROAD	2ND LINE NE	4TH LINE NE	Gravel	2,046	1853	75	0	0	168	\$1,089	\$1,089	\$0	\$ 818,212
	608	1415	Municipal Road Base - 240 SIDEROAD	4TH LINE NE	6TH LINE NE	Gravel	2,030	1983	75	37	37	38	\$83,984	\$52,170	\$31,814	\$ 812,084
	576	1326	Municipal Road Base - 240 SIDEROAD	6TH LINE NE	8TH LINE NE	Gravel	2,039	1853	75	0	0	168	\$1,086	\$1,086	\$0	\$ 815,676
	577	1458	Municipal Road Base - 240 SIDEROAD	8TH LINE NE	10TH LINE NE	Gravel	2,050	1853	75	0	0	168	\$1,092	\$1,092	\$0	\$ 820,092
	648	1234	Municipal Road Base - 240 SIDEROAD	HWY 10	2ND LINE NE	Gravel	1,521	1853	75	0	0	168	\$750	\$750	\$0	\$ 608,240
	610	1204	Municipal Road Base - 250 SIDEROAD	2ND LINE NE	1.7 KM NE Of 2nd LINE NE	Gravel	1,718	1853	75	0	0	168	\$1,254	\$1,254	\$0	\$ 687,360
	574	1461	Municipal Road Base - 250 SIDEROAD	2ND LINE SW	HWY 10	Gravel	2,340	1853	75	0	0	168	\$1,092	\$1,092	\$0	\$ 935,876
	571	33	Municipal Road Base - 250 SIDEROAD	4TH LINE NE	6TH LINE NE	Gravel	2,022	1853	75	0	0	168	\$1,159	\$1,159	\$0	\$ 808,888
	890	1459	Municipal Road Base - 250 SIDEROAD	4TH LINE NE	1.7 KM NE of 2nd LINE NE	Gravel	325	1853	75	0	0	168	\$160	\$160	\$0	\$ 130,012
	573	1460	Municipal Road Base - 250 SIDEROAD	4TH LINE SW	2ND LINE SW	Gravel	2,223	1853	75	0	0	168	\$1,220	\$1,220	\$0	\$ 889,380
	591	55	Municipal Road Base - 250 SIDEROAD	8TH LINE NE	5TH LINE OS	Gravel	1,042	1853	75	0	0	168	\$256	\$256	\$0	\$ 416,920
	647	1233	Municipal Road Base - 250 SIDEROAD	HWY 10	2ND LINE NE	Gravel	1,629	1853	75	0	0	168	\$810	\$810	\$0	\$ 651,776
	572	1228	Municipal Road Base - 250 SIDEROAD	W OF 4TH LINE SW	END OF ROAD	Gravel	303	1853	75	0	0	168	\$141	\$141	\$0	\$ 121,212
	568	1419	Municipal Road Base - 260 SIDEROAD	MELANCTHON-Southgate TL	7TH LINE SW	Gravel	1,477	1853	75	0	0	168	\$690	\$690	\$0	\$ 590,952
	665	1220	Municipal Road Base - 270 SIDEROAD	7 KM E OF 8TH LINE	7TH LINE SW	Gravel	1,392	1853	75	0	0	168	\$513	\$513	\$0	\$ 556,612
	682	1203	Municipal Road Base - 270 SIDEROAD	2ND LINE NE	RD ALLOW	Gravel	1,417	1853	75	0	0	168	\$1,160	\$1,160	\$0	\$ 566,728
	562	1216	Municipal Road Base - 270 SIDEROAD	4TH LINE SW	2ND LINE SW	Gravel	2,235	1853	75	0	0	168	\$915	\$915	\$0	\$ 894,076
	629	86	Municipal Road Base - 270 SIDEROAD	5th LINE	END	Gravel	477	1853	75	0	0	168	\$799	\$799	\$0	\$ 190,656
	651	1251	Municipal Road Base - 270 SIDEROAD	7TH LINE SW	4TH LINE SW	Gravel	2,023	1853	75	0	0	168	\$55	\$55	\$0	\$ 809,376
	893	1220	Municipal Road Base - 270 SIDEROAD	8TH LINE SW	7 KM E OF 8TH LINE	Gravel	725	1853	75	0	0	168	\$267	\$267	\$0	\$ 289,924
	613	76	Municipal Road Base - 270 SIDEROAD	HWY 10	2ND LINE NE	Gravel	1,746	1853	75	0	0	168	\$1,374	\$1,374	\$0	\$ 698,552

Road Base Inventory

Road Needs ID	Agency ID	GIS Map Link	Asset Name	From	To	Surface Material	Length (mi)	Install Year	Useful Life	Remaining Useful Life	Road Needs Remaining Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2021 Replacement Cost/Section
660	134		Municipal Road Base - 270 SIDEROAD	MELANCTHON-Southgate TL	8TH LINE SW	Gravel	1,179	1853	75	0	0	168	\$338	\$338	\$0	\$ 471,624
557	1462		Municipal Road Base - 270 SIDEROAD	RD ALLOW W OF HWY 10	HWY 10	Gravel	883	1853	75	0	0	168	\$470	\$470	\$0	\$ 353,292
658	1464		Municipal Road Base - 280 SIDEROAD	.76 KM NE OF 10TH LINE	8TH LINE SW	Gravel	1,302	1853	75	0	0	168	\$533	\$533	\$0	\$ 520,772
891	1465		Municipal Road Base - 280 SIDEROAD	10TH LINE SW	.76 KM NE OF 10TH LINE	Gravel	761	1853	75	0	0	168	\$312	\$312	\$0	\$ 304,352
561	1205		Municipal Road Base - 280 SIDEROAD	2ND LINE NE	HWY 10	Gravel	2,203	1853	75	0	0	168	\$722	\$722	\$0	\$ 881,232
611	1331		Municipal Road Base - 280 SIDEROAD	2ND LINE NE	5TH LINE OS	Gravel	1,913	1853	75	0	0	168	\$1,148	\$1,148	\$0	\$ 765,344
1115	1273		Municipal Road Base - 280 SIDEROAD	4TH LINE SW east	END	Gravel	310	1853	75	0	0	168	\$97	\$97	\$0	\$ 124,032
659	1276		Municipal Road Base - 280 SIDEROAD	8TH LINE SW	7TH LINE SW	Gravel	2,046	1853	75	0	0	168	\$838	\$838	\$0	\$ 818,332
1116	1272		Municipal Road Base - 280 SIDEROAD	END	4TH LINE SW west	Gravel	480	1853	75	0	0	168	\$151	\$151	\$0	\$ 191,948
612	1205		Municipal Road Base - 280 SIDEROAD	HWY 10	2ND LINE NE	Gravel	1,753	1853	75	0	0	168	\$1,001	\$1,001	\$0	\$ 701,008
667	1463		Municipal Road Base - 280 SIDEROAD	HWY 89	10TH LINE SW	Gravel	573	1853	75	0	0	168	\$235	\$235	\$0	\$ 229,348
619	1355		Municipal Road Base - 2ND LINE NE	220 SDRD	MELANCTHON-ARTMESIA TL	Gravel	2,048	1983	75	37	37	38	\$79,190	\$50,154	\$29,036	\$ 819,060
617	1438		Municipal Road Base - 2ND LINE NE	240 SR	County Rd 9	Gravel	2,041	1996	75	50	50	25	\$140,152	\$140,152	\$0	\$ 816,412
616	1437		Municipal Road Base - 2ND LINE NE	250 SR	240 SR	Gravel	2,448	1853	75	0	0	168	\$1,337	\$1,337	\$0	\$ 979,072
615	1410		Municipal Road Base - 2ND LINE NE	270 SDRD	CTY RD 21	Gravel	2,042	1853	75	0	0	168	\$1,604	\$1,604	\$0	\$ 816,968
605	1405		Municipal Road Base - 2ND LINE NE	280 SDRD	270 SDRD	Gravel	2,051	1853	75	0	0	168	\$393	\$393	\$0	\$ 820,568
614	1412		Municipal Road Base - 2ND LINE NE	CTY RD 17	280 SDRD	Gravel	2,046	1853	75	0	0	168	\$1,338	\$1,338	\$0	\$ 818,528
604	1436		Municipal Road Base - 2ND LINE NE	CTY RD 21	250 SDRD	Gravel	1,430	1853	75	0	0	168	\$1,344	\$1,344	\$0	\$ 571,800
618	1113		Municipal Road Base - 2ND LINE NE	CTY RD 9	220 SDRD	Gravel	2,054	1996	75	50	50	25	\$139,709	\$139,709	\$0	\$ 821,656
646	1435		Municipal Road Base - 2ND LINE NE	JOG OF 250 SDRD	250 SIDEROAD	Gravel	202	1853	75	0	0	168	\$534	\$534	\$0	\$ 80,888
552	1354		Municipal Road Base - 2ND LINE NE	MELANCTHON-ARTEMESIA TL	MELANCTHON-OSPREY TL	Gravel	290	1996	75	50	50	25	\$19,771	\$19,771	\$0	\$ 115,908
894	1268		Municipal Road Base - 300 SIDEROAD	1.8 KM NE OF 4TH LINE SW	2ND LINE SW	Gravel	439	1853	75	0	0	168	\$144	\$144	\$0	\$ 175,552
672	1248		Municipal Road Base - 300 SIDEROAD	4TH LINE NE	1.8 KM NE OF 4TH LINE SW	Gravel	1,787	1853	75	0	0	168	\$585	\$585	\$0	\$ 714,684
692	1227		Municipal Road Base - 30TH SIDEROAD	3RD LINE	CTY RD 124	Gravel	1,384	1853	75	0	0	168	\$737	\$737	\$0	\$ 553,448
584	1259		Municipal Road Base - 30TH SIDEROAD	4TH LINE OS	3RD LINE OS	Gravel	1,457	1853	75	0	0	168	\$776	\$776	\$0	\$ 582,892
583	1328		Municipal Road Base - 30TH SIDEROAD	5TH LINE OS	4TH LINE OS	Gravel	1,434	1853	75	0	0	168	\$763	\$763	\$0	\$ 573,520
693	168		Municipal Road Base - 30TH SIDEROAD	CTY RD 124	TL	Gravel	1,384	1853	75	0	0	168	\$794	\$794	\$0	\$ 553,792
691	1411		Municipal Road Base - 3RD LINE	CTY RD 21	30 SR	Gravel	3,065	1853	75	0	0	168	\$2,008	\$2,008	\$0	\$ 1,225,972
641	1449		Municipal Road Base - 4TH LINE	15 SR	20 SR	Gravel	3,050	1853	75	0	0	168	\$873	\$873	\$0	\$ 1,220,156
688	1450		Municipal Road Base - 4TH LINE	20 SR	RD 21	Gravel	3,055	1853	75	0	0	168	\$1,626	\$1,626	\$0	\$ 1,221,808
555	1417		Municipal Road Base - 4TH LINE	30 SR	MELANCTHON-OSPREY TL	Gravel	1,105	1853	75	0	0	168	\$588	\$588	\$0	\$ 441,852
556	1418		Municipal Road Base - 4TH LINE	CTY RD 21	30 SR	Gravel	3,054	1853	75	0	0	168	\$5,919	\$2,914	\$3,005	\$ 1,221,640
1100	1099		Municipal Road Base - 4TH LINE	HWY 89	Railway Tracks	Gravel	1,265	1983	75	37	37	38	\$14,796	\$9,709	\$5,087	\$ 502,852
603	1231		Municipal Road Base - 4TH LINE NE	CTY RD 2	OSPREY E BACK LINE	Gravel	331	1853	75	0	0	168	\$937	\$937	\$0	\$ 132,464
1632			Municipal Road Base - 4th Line OS	15 SR	1.46 km South of 15 SR	Gravel	1,460	2020	75	74	74	1	\$4,940	\$62	\$4,879	\$ 584,000
626	1426		Municipal Road Base - 4TH LINE SW	250 SDRD	Melancthon / Southgate Boundary Line	Gravel	3,268	1853	75	0	0	168	\$961	\$961	\$0	\$ 1,307,320
627	1422		Municipal Road Base - 4TH LINE SW	260 SDRD	250 SDRD	Gravel	2,058	1853	75	0	0	168	\$955	\$955	\$0	\$ 823,020
628	1443		Municipal Road Base - 4TH LINE SW	270 SDRD	260 SDRD	Gravel	2,046	1853	75	0	0	168	\$254	\$254	\$0	\$ 818,248
558	1442 & 1496		Municipal Road Base - 4TH LINE SW	CTY RD 17	270 SR	Gravel	4,068	1853	75	0	0	168	\$1,899	\$1,899	\$0	\$ 1,627,216
671	1421		Municipal Road Base - 4TH LINE SW	Highway 89	CTY RD 17	Gravel	2,250	1853	75	0	0	168	\$1,216	\$1,216	\$0	\$ 900,000
554	1209		Municipal Road Base - 5TH LINE	240 SDRD	County Road 9	Gravel	351	1853	75	0	0	168	\$196	\$196	\$0	\$ 140,400
631	1201		Municipal Road Base - 5TH LINE	30 SR	240 SR	Gravel	816	1853	75	0	0	168	\$208	\$208	\$0	\$ 326,228
553	1452		Municipal Road Base - 5TH LINE	County road 21	30th Sideroad	Gravel	3,102	1853	75	0	0	168	\$1,013	\$1,013	\$0	\$ 1,240,800
674	1482		Municipal Road Base - 5TH LINE	Highway 89	Highway 10	Gravel	2,892	1853	75	0	0	168	\$853	\$853	\$0	\$ 1,156,800
676	1340		Municipal Road Base - 5TH LINE	HWY 10	CTY RD 17	Gravel	2,603	1853	75	0	0	168	\$1,492	\$1,492	\$0	\$ 1,041,356
679	154		Municipal Road Base - 5TH SIDEROAD	.47 KM HIGHWAY 10	4TH LINE OS	Gravel	880	1853	75	0	0	168	\$324	\$324	\$0	\$ 352,108
634	91		Municipal Road Base - 5TH SIDEROAD	4TH LINE OS	3RD LINE OS	Gravel	1,455	1983	75	37	37	38	\$65,973	\$41,783	\$24,190	\$ 582,100
898	1269		Municipal Road Base - 5TH SIDEROAD	HIGHWAY 10	Bridge 4	Gravel	476	1853	75	0	0	168	\$234	\$234	\$0	\$ 190,304
598	1407		Municipal Road Base - 6TH LINE NE	240 SDRD	CTY RD 9	Gravel	2,049	1853	75	0	0	168	\$854	\$854	\$0	\$ 819,592
596	1488		Municipal Road Base - 6th Line NE	250 Sideroad	240 Sideroad	Gravel	2,449	1853	75	0	0	168	\$826	\$826	\$0	\$ 979,656
597	1439		Municipal Road Base - 6TH LINE NE	5TH LINE OS	END	Gravel	1,552	1853	75	0	0	168	\$1,091	\$1,091	\$0	\$ 620,868

Road Base Inventory

Road Needs ID	Agency ID	GIS Map Link	Asset Name	From	To	Surface Material	Length (m)	Install Year	Useful Life	Remaining Useful Life	Road Needs Remaining Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	2021 Replacement Cost/Section
	599	1408	Municipal Road Base - 6TH LINE NE	CTY RD 9 T	MELANCHTHON-OSPREY TL	Gravel	1,604	1983	75	37	37	38	\$101,415	\$62,500	\$38,915	\$ 641,720
	560	1444	Municipal Road Base - 7TH LINE SW	260 SR	MELANCHTHON-Southgate TL	Gravel	1,582	1853	75	0	0	168	\$738	\$738	\$0	\$ 632,696
	594	1413	Municipal Road Base - 8TH LINE NE	240 SDRD	CTY RD 9	Gravel	2,040	1853	75	0	0	168	\$1,337	\$1,337	\$0	\$ 815,948
	593	1441	Municipal Road Base - 8TH LINE NE	250 SDRD	240 SR	Gravel	2,033	1853	75	0	0	168	\$1,332	\$1,332	\$0	\$ 813,124
	630	1440	Municipal Road Base - 8TH LINE NE	CTY RD 21 5TH LINE JO	250 SR	Gravel	1,219	1853	75	0	0	168	\$534	\$534	\$0	\$ 487,660
	607	1199	Municipal Road Base - 8TH LINE NE	CTY RD 9 T	MELANCHTHON-OSPREY TL	Gravel	278	1853	75	0	0	168	\$1,081	\$1,081	\$0	\$ 91,260
	657	1447	Municipal Road Base - 8TH LINE SW	270 SDRD	MELANCHTHON-Southgate TL	Gravel	1,390	1853	75	0	0	168	\$649	\$649	\$0	\$ 556,188
	656	1446	Municipal Road Base - 8TH LINE SW	280 SDRD	270 SDRD	Gravel	2,036	1853	75	0	0	168	\$61	\$61	\$0	\$ 814,400
	655	1425	Municipal Road Base - 8TH LINE SW	HWY 89	280 SDRD	Gravel	1,665	1853	75	0	0	168	\$890	\$890	\$0	\$ 665,836
	895	536	Municipal Road Base - CEDAR	MAIN	END	Gravel	54	1853	75	0	0	168	\$22	\$22	\$0	\$ 21,736
	899	543	Municipal Road Base - HUNTER	CTY ROAD 124	END OF ROAD	Gravel	232	1853	75	0	0	168	\$152	\$152	\$0	\$ 92,948
	551	9	Municipal Road Base - MANITOBA & Argyle ST	MAIN ST	END	Gravel	220	1853	75	0	0	168	\$124	\$124	\$0	\$ 88,132
	580	1243	Municipal Road Base - MELANCHTHON-ARTMESIA TL	HWY 10	2ND LINE NE	Gravel	1,843	1853	75	0	0	168	\$491	\$491	\$0	\$ 737,224
	902	546	Municipal Road Base - MELANCHTHON-NOTTAWASAGA TL	1 KM E OF CTY RD 124	TL	Gravel	582	1853	75	0	0	168	\$95	\$95	\$0	\$ 232,912
	694	169	Municipal Road Base - MELANCHTHON-NOTTAWASAGA TL	CTY RD 124	1 KM E OF CTY RD 124	Gravel	1,037	1853	75	0	0	168	\$212	\$212	\$0	\$ 414,640
	581	1224	Municipal Road Base - MELANCHTHON-OSPREY TL	2ND LINE NE	ARTEMISIA E BACK LINE	Gravel	812	1853	75	0	0	168	\$233	\$233	\$0	\$ 324,908
	585	1260	Municipal Road Base - MELANCHTHON-OSPREY TL	4TH LINE NE	RD ALLOW	Gravel	701	1853	75	0	0	168	\$201	\$201	\$0	\$ 280,200
	588	1256	Municipal Road Base - MELANCHTHON-OSPREY TL	5TH LINE OS	4TH LINE OS	Gravel	1,387	1853	75	0	0	168	\$397	\$397	\$0	\$ 554,620
	586	49	Municipal Road Base - MELANCHTHON-OSPREY TL	6TH LINE NE	OSPREY S VIEW LN	Gravel	2,455	1853	75	0	0	168	\$704	\$704	\$0	\$ 981,988
	889	1264	Municipal Road Base - MELANCHTHON-OSPREY TL	8TH LINE NE	CTY RD 9	Gravel	428	1853	75	0	0	168	\$88	\$88	\$0	\$ 171,028
	681	1406	Municipal Road Base - MELANCHTHON-OSPREY TOWNLINE	220 SR	6TH LINE NE	Gravel	814	1853	75	0	0	168	\$167	\$167	\$0	\$ 325,692
	680	1424	Municipal Road Base - MELANCHTHON-OSPREY TOWNLINE	RD ALLOW	220 SR	Gravel	330	1853	75	0	0	168	\$68	\$68	\$0	\$ 131,984
	1104	1247	Municipal Road Base - MELANCHTHON-Southgate TL	260 SDRD	PROTON CON 4	Gravel	657	1853	75	0	0	168	\$188	\$188	\$0	\$ 262,888
	662	1197	Municipal Road Base - MELANCHTHON-Southgate TL	270 SDRD	8th line SW	Gravel	1,818	1853	75	0	0	168	\$247	\$247	\$0	\$ 727,200
	1103	1257	Municipal Road Base - MELANCHTHON-Southgate TL	7TH LINE SW	PROTON CON 8	Gravel	706	1853	75	0	0	168	\$165	\$165	\$0	\$ 282,340
	664	1420	Municipal Road Base - MELANCHTHON-Southgate TL	8TH LINE SW	260 SDRD	Gravel	877	1853	75	0	0	168	\$251	\$251	\$0	\$ 350,700
	1102	1258	Municipal Road Base - MELANCHTHON-Southgate TL	Highway 89	270 SR	Gravel	2,786	1853	75	0	0	168	\$513	\$513	\$0	\$ 1,114,576
	661	1271	Municipal Road Base - MELANCHTHON-Southgate TL	HWY 89	270 SDRD	Gravel	681	1853	75	0	0	168	\$126	\$126	\$0	\$ 272,484
	700	1261	Municipal Road Base - MULMUR-MELANCHTHON TL	15 SR	20 SR	Gravel	3,051	1853	75	0	0	168	\$875	\$875	\$0	\$ 1,220,484
	697	1343	Municipal Road Base - MULMUR-MELANCHTHON TL	20 SR	RD 21	Gravel	3,052	1853	75	0	0	168	\$1,000	\$1,000	\$0	\$ 1,220,872
	696	1344	Municipal Road Base - MULMUR-MELANCHTHON TL	30 SR	TL	Gravel	962	1853	75	0	0	168	\$236	\$236	\$0	\$ 384,692
	703	1262	Municipal Road Base - MULMUR-MELANCHTHON TL	5 SR	CTY RD 17	Gravel	3,073	1853	75	0	0	168	\$944	\$944	\$0	\$ 1,229,076
	695	170	Municipal Road Base - MULMUR-MELANCHTHON TL	CTY RD 21	30 SR	Gravel	3,061	1853	75	0	0	168	\$940	\$940	\$0	\$ 1,224,468
	731	1263	Municipal Road Base - MULMUR-MELANCHTHON TL	HWY 89	5TH SR	Gravel	2,975	1853	75	0	0	168	\$914	\$914	\$0	\$ 1,190,184
	704	179	Municipal Road Base - MULMUR-MELANCHTHON TL	RIVER ROAD	END OF ROAD	Gravel	536	1853	75	0	0	168	\$77	\$77	\$0	\$ 214,340
	653	109	Municipal Road Base - SHOOK	MAIN	END	Gravel	96	1983	75	37	37	38	\$81,284	\$51,480	\$29,804	\$ 38,456

Bridge Inventory - tax funded

Fixed Asset ID	Line ID	OSM#	Bridge ID	Asset Name	Location	Structure Type	Load Posting										2021 Accumulated Amortization	2021 Net Book Value	Replacement Cost 2021	Condition by Age	Condition Based on OSM 2021	Asset Condition (aka per Public Works)	Probability of Failure (Based on Condition & Exposure to Damaging)	Consequence of Failure	
							L1	L2	L3	Nb of Spans	Deck Length (m)	Deck Width (m)	Install Year	TCA Useful Life	Remaining Life 2021	Age									Historic Cost
942	942	1		BRIDGE 1 - 4th Line SW - 1 km North of Hwy B9		rigid frame, vertical legs	0	0	0	1	7.5	6.8	1960	75	14	61	\$15,862	\$12,738	\$2,924	2	7	Good	Unlikely	Major	
940	940	3		Lyonis Bridge 3 - 5 SR - 100m West of 4th Line OS		rigid frame, vertical legs	0	0	0	1	8	3.9	1993	75	47	28	\$29,940	\$78,191	\$131,249	5557	6	7	Good	Unlikely	Major
939	939	4					0	0	0	0	10.8	5.5	1930	75	0	91	\$128,153	\$61,303	\$66,850						
938	938	5		Leader Bridge 5 - 2nd Line SW - 1.4 km North of County Rd 17		rigid frame, vertical legs	0	0	0	1	8.7	7.9	1975	75	29	46	\$98,146	\$60,441	\$58,104	\$977	5	7	Good	Unlikely	Major
937	937	6		Held Bridge 6 - 4th Line SW - 1.7 km North of County Rd 17		rigid frame, vertical legs	0	0	0	1	7.9	6.7	2003	75	67	18	\$46,733	\$35,216	\$111,517	\$3,038	8	8	Good	Unlikely	Major
936	936	7		Gray Bridge 7 - 7th Line SW - 1.5 km South of 270 SR		rigid frame, vertical legs	0	0	0	1	8.6	7.4	1960	75	14	61	\$43,811	\$35,636	\$8,179	\$1,037	2	7	Good	Unlikely	Major
935	935	8		Bridge 8 - 7th Line SW - 1.5 km South of 270 SR		rigid frame, vertical legs	0	0	0	1	18.7	6.9	1980	75	34	41	\$65,010	\$90,205	\$24,808	\$737	5	7	Good	Unlikely	Major
934	934	9		Anderson Bridge 9 - 8th Line SW - 2.5 km North of Hwy B9		Box Culvert	0	0	0	1	8.8	7.8	1980	75	34	41	\$49,113	\$81,521	\$67,602	\$1,097	5	7	Good	Unlikely	Major
933	933	10		Hutchinson Bridge 10 - 280 SR - east of 8th Line SW		I-beam Steel Girders (Timber Deck)	0	0	0	1	5.5	4.9	2000	75	54	21	\$16,844	\$32,532	\$284,313	\$1,078	9	9	Very Good	Rare	Major
932	932	11		G. Anderson Bridge - 8th Line SW - 3.4 km North of Hwy B9		rigid frame, vertical legs	0	0	0	1	8.5	7.3	1960	75	14	61	\$120,385	\$71,313	\$48,972	\$1,075	0	7	Good	Unlikely	Major
931	931	12		Riverside South Bridge 12 - 7th Line SW -		I-beam Steel Girders (Concrete Deck)	0	0	0	1	8.7	7	2008	75	62	13	\$43,234	\$101,094	\$482,140	\$1,833	8	9	Very Good	Rare	Major
930	930	13		Riverside East Bridge 13 - 260 SR - 200m east of 7th Line SW		Precast Concrete Girders	0	0	0	1	10.7	8.6	1980	75	34	41	\$386,455	\$171,039	\$335,416	\$1,621	5	7	Good	Unlikely	Major
929	929	14		Winowski Bridge 14 - 4th Line SW - 500m North of 250 SR		Box Culvert	0	0	0	1	8.6	7.7	1977	75	31	44	\$64,383	\$96,385	\$67,904	\$1,621	4	7	Good	Unlikely	Major
928	928	15		Offield Bridge 15 - 2nd Line SW - 70m North of 250 SR		rigid frame, vertical legs	0	0	0	1	7.5	6.2	1960	75	14	61	\$99,156	\$96,126	\$213,030	\$1,603	5	7	Good	Unlikely	Major
927	927	16		Jack Bridge - 16 - 250 SR - 2km west of Hwy 10		I-beam Steel Girders (Concrete Deck)	0	0	0	1	6.3	5.3	1998	75	92	23	\$4,128	\$28,866	\$65,367	\$1,391	5	7	Good	Unlikely	Major
958	958	17		Maat Bridge 17 - 250 SR - 370m west of Hwy 10		CSP Multi-Plate Arch Culvert	0	0	0	2	12.8	7.3	2003		32	18	\$193,429	\$46,471	\$147,158	\$1,488	5	6	Good	Unlikely	Major
957	957	18		Pharney Bridge 18 - 2nd Line NE - 750m South of County Rd 21		rigid frame, vertical legs	0	0	0	1	8.7	7.5	1960	75	14	61	\$24,455	\$19,890	\$4,565	\$807	5	2	Good	Unlikely	Major
956	956	2021		4th Bridge - 3rd Line - 2.5 km South of County Rd 17		CSP Multi-Plate Arch Culvert	0	0	0	1	15.8	7.9	1989		18	32	\$78,000	\$33,280	\$44,720	\$538	5	4	Good	Unlikely	Major
955	955	2002		Clark Bridge - 5 SR - 200m East of 4th Line OS		CSP Multi-Plate Arch Culvert	0	0	0	1	22.5	6.5	1988		17	33	\$13,312	\$19,065	\$24,246	\$398	5	7	Good	Unlikely	Major
954	954	2003		Culvert - 3rd Line - 1km South of 5 SR		Multi-Plate Culverts	0	0	0	1	16	7	1970	50	0	51	\$22,787	\$18,485	\$130,299	\$737	0	8	Good	Unlikely	Major
953	953	2004		Culvert 2004 - 5 SR 300m west of County Rd 124		rigid frame, vertical legs	0	0	0	1	8	7.4	1990		44	31	\$62,936	\$31,121	\$191,116	\$737	5	6	Good	Unlikely	Major
1432	1432	2005		Culvert 2005 - 3rd Line - 1.1km south of County Rd 17		CSP Multi-Plate Arch Culvert	0	0	0	1	17	8.4	2013	50	42	8	\$43,756	\$23,934	\$120,872	\$478	5	9	Very Good	Rare	Major
951	951	2006		Culvert - 3rd Line - South of 35 SR		rigid frame, vertical legs	0	0	0	1	8	7.4	1990		44	31	\$191,881	\$118,966	\$72,915	\$478	5	6	Good	Unlikely	Major
972	972	2007		Culvert - 15 SR East of 3rd Line OS		rigid frame, vertical legs	0	0	0	1	8	7	1980		34	41	\$86,016	\$70,867	\$15,156	\$497	5	7	Good	Unlikely	Major
950	950	2008		Culvert - 15 SR - 600m East of County Rd 124		rigid frame, vertical legs	0	0	0	1	9.3	6.2	1970		24	51	\$23,929	\$25,929	\$0	\$517	5	3	Good	Unlikely	Major
949	949	2009		Culvert - 15 SR - 1km East of County Rd 124		OP Box Culvert	0	0	0	1	9.1	8	2008		62	13	\$24,233	\$66,101	\$188,133	\$778	5	8	Very Good	Rare	Major
1564	948	2010		Multi-Plate Culvert - 3rd Line OS, south of 20th SR		CSP Multi-Plate Arch Culvert	0	0	0	1	19.6	6.7	2016	50	45	5	\$102,000	\$10,209	\$91,881	\$538	5	10	Very Good	Rare	Major
947	947	2011		Culvert - 20th SR - 2km East of 5th Line		rigid frame, vertical legs	0	0	0	1	12.7	6.5	1985		39	36	\$21,772	\$87,316	\$33,956	\$627	5	6	Average	Possible	Major
946	946	2012		Culvert - 30th SR - 250m east of County Rd 124		rigid frame, vertical legs	0	0	0	1	7.5	5.6	1960		14	61	\$15,667	\$15,662	\$0	\$618	5	2	Good	Unlikely	Major
1608	945	2013		Culvert 2013 30th SR 500m west of 3rd Line		Precast Box Culvert	0	0	0	1	14.6	8	2020	75	74	1	\$263,127	\$55,263	\$257,865	\$338	5	10	Very Good	Rare	Major
944	944	2014		Culvert - 4th Line SW - north of 250 SR		rigid frame, vertical legs	0	0	0	1	8	5	1950		4	71	\$28,198	\$28,198	\$0	\$725	5	1	Good	Unlikely	Major
943	943	2015		Culvert - 10th Line NE		Precast Box Culvert	0	0	0	1	9.5	6	2008		62	13	\$194,843	\$20,619	\$146,184	\$598	5	8	Good	Unlikely	Major
971	971	2016		Culvert - 4th Line NE South of County Rd 9		rigid frame, vertical legs	0	0	0	1	14.9	6.6	1980		34	41	\$3,547	\$52,108	\$11,438	\$478	5	7	Good	Unlikely	Major
970	970	2017		Culvert - 2nd Line NE North of 240 SR		CSP Multi-Plate Arch Culvert	0	0	0	1	17.3	6.3	1980	50	9	41	\$6,606	\$52,977	\$11,629	\$497	5	6	Average	Possible	Major
963	963	2018		Culvert - 2nd Line NE South of 240 SR		OP Box Culvert	0	0	0	1	12.3	6.3	1960		14	61	\$21,813	\$21,853	\$0	\$497	5	2	Good	Unlikely	Major
962	962	2019		Culvert - 4th Line NE North of 250 SR		rigid frame, vertical legs	0	0	0	1	18.4	6.5	1985		39	36	\$4,814	\$46,738	\$18,176	\$718	5	7	Good	Unlikely	Major
1563	968	2020		Rectangular Culvert - 4th Line NE, south of 240 SR and just north of Bridge 2019		OP Box Culvert	0	0	0	1	16.8	6.5	2016		70	5	\$125,433	\$8,362	\$117,071	\$538	5	10	Very Good	Rare	Major
966	966	2021		Culvert - 2nd Line NE		CSP Multi-Plate Arch Culvert	0	0	0	1	19.9	6.3	1980	50	9	41	\$154,263	\$120,422	\$33,841	\$598	5	2	Average	Possible	Major
965	965	2022		Culvert - 4th Line NE North of 260 SR		OP Box Culvert	0	0	0	1	18.5	6.5	1980		34	41	\$175,518	\$90,648	\$28,870	\$478	5	7	Good	Unlikely	Major
964	964	2023		Culvert - 4th Line NE South of 260 SR		OP Box Culvert	0	0	0	1	14	6.5	1960		14	61	\$27,317	\$27,317	\$0	\$617	5	2	Good	Unlikely	Major
1562	963	2024		Rectangular Culvert - 2nd Line NE, south of 240 SR and south of Bridge 2018		Open Bottom Culvert	0	0	0	1	17	6.3	2016		70	5	\$127,361	\$8,491	\$118,870	\$478	5	10	Very Good	Rare	Major
962	962	2025		Culvert - 260 Sideroad West of 2nd Line SW		CSP Multi-Plate Arch Culvert	0	0	0	1	19.1	8.5	1970	50	0	51	\$5,346	\$45,346	\$0	\$538	5	0	Good	Unlikely	Major
961	961	2026		Culvert - 8th Line SW North of Highway B9		CSP Multi-Plate Arch Culvert	0	0	0	1	17	8	2008	50	37	13	\$4,755	\$19,436	\$55,319	\$497	5	7	Good	Unlikely	Major
1559	960	2027		Precast Box Culvert - 15 SR 2km West of County Road 124 (Lot 15 & 16, Conc. 2 OS)		Precast Box Culvert	0	0	0	1	10	8.5	2015		69	6	\$32,872	\$58,745	\$284,128	\$538	5	10	Very Good	Rare	Major
1471	1117	2028		Bridge 2028 - Hemming L Mills		Precast Box Culvert	0	0	0	1	16.8	6.5	2013		67	8	\$78,887	\$53,044	\$125,819	\$478	5	9	Very Good	Rare	Major
1434	1434	2029		Bridge 2029 220 SR - 0.5km East of County Rd 2		rigid frame, vertical legs	0	0	0	1	8	4.7	1960	75	14	56	\$ 21,900	\$ 15,768	\$ 6,132	\$ 418	5	2	Good	Unlikely	Major
1492	1492	2030		Bridge 2030 740 SR West of 6th Line NE	240 SR West of 6th Line NE	rigid frame, vertical legs	0	0	0	1	8.3	4.6	1955	75	0	66	\$ 16,508	\$ 13,337	\$ 3,816	\$ 497	5	1	Average	Possible	Major
959	959	2031		Culvert 2031 - 240 SR - 0.5km East of Highway 10		CSP Multi-Plate Arch Culvert	0	0	0	1	16	6.7	2005	50	34	16	\$33,979	\$14,073	\$29,906	\$538	5	7	Very Good	Rare	Major
1493	1493	2032		2nd Line NE north of 260 SR		Twin Circular CSP Culvert	0	0	0	2	14.6	6	1975	50	4	46	\$50,990	\$46,828	\$4,162	\$598	5	1	Average	Possible	Major
1491	1491	2033		7th Line SW South of 260 SR		rigid frame, vertical legs	0	0	0	1	12.2	6	1960	75	14	61	\$3,891	\$19,371	\$4,520	\$557	5	2	Good	Unlikely	Major
1494	1494	2034		Melancotton / Mulmar Townline between 15th and 20th		rigid frame, vertical legs	0	0	0	1	9.6	5.5	1978	75	32	43	\$9,819	\$19,633	\$30,196	\$110	5	4	Good	Unlikely	Major

Bridge Inventory - Tax Funded

Bridge Inventory - tax funded			Current Levels of Service Replacement/Improvement Year Based on Current Levels Service										Expected Levels of Service Replacement/Improvement Year Based on Expected Levels Service				
FILED ASSE T ID	Link ID	OSM Bridge ID	Asset Name	Risk of Failure	Numerical Value of Risk of Failure	Year Replacement due to normal maintenance practices	Current Levels of Service % Benefit	Revised Levels of Service Replacement Year	Year Replacement Applying Risk Score	Proposed Rehabilitation Cost (2021 \$)	Year for Rehabilitation	Extended Life (Years) due to Betterment	OSM Inspection Replacement Year	Expected LOS % Benefit based on Condition at Age	Calculated based on Condition and Risk	Revised Remaining Useful Life	
					2					\$ 1,587,000							
942	942	1	BRIDGE 1 - 4th Line SW - 1 km North of Hwy 89	M	2	2028	10	2036	2036					40	2066	45	
940	940	3	Lyons Bridge 3 - 5 SR - 100m West of 4th Line OS	M	2	2061	10	2069	2069					5	2073	52	
939	939	4															
938	938	5	Leader Bridge 5 - 2nd Line SW - 1.4 km North of County Rd 17	M	2	2043	10	2051	2051					20	2066	45	
937	937	6	Held Bridge 6 - 4th Line SW - 1.7 km North of County Rd 17	M	2	2071	10	2079	2079	\$37 000		9		0	2079	58	
936	936	7	Gray Bridge 7 - 7th Line SW - 1.5 km South of 270 SR	M	2	2028	10	2036	2036	\$215 000	2024	30		40	2066	45	
935	935	8	Bridge 8 - 7th Line SW - 1.5 km South of 270 SR	M	2	2048	10	2056	2056					10	2064	43	
934	934	9	Anderson Bridge 9 - 8th Line SW - 2.5 km North of Hwy 89	M	2	2048	10	2056	2056	\$275 000	2028	30		10	2058	37	
933	933	10	Hutchinson Bridge 10 - 380 SR - east of 8th Line Hwy	M	2	2068	10	2076	2076					10	2064	63	
932	932	11	G. Anderson Bridge - 8th Line SW - 3.4km North of Hwy 89	M	2	2028	10	2036	2036	\$255 000		30		40	2066	45	
931	931	12	Ravenview South Bridge 12 - 7th Line SW -	M	2	2076	10	2084	2084					5	2088	67	
930	930	13	Ravenview East Bridge 13 - 260 SR - 200m east of 7th Line SW	M	2	2048	10	2056	2056					10	2064	43	
929	929	14	Witowski Bridge 14 - 4th Line SW - 500m North of 250 SR	M	2	2045	10	2053	2053	\$315 000	2028	30		20	2058	37	
928	928	15	Oldfield Bridge 15 - 2nd Line SW - 70m North of 250 SR	M	2	2028	10	2036	2036					40	2066	45	
927	927	16	Jack Bridge - 16 - 250 SR - 2km west of Hwy 10	M	2	2066	10	2074	2074					0	2074	53	
958	958	17	Isaac Bridge 17 - 250 SR - 370m west of Hwy 10	M	2	2048	10	2053	2053					5	2056	35	
957	957	18	Floney Bridge 18 - 2nd Line NE - 750m South of County Rd 21	M	2	2028	10	2036	2036	\$240 000	2024	30		40	2066	45	
956	956	2001	5th Bridge - 3rd Line - 2.5 km South of County Rd 17	M	2	2014	10	2039	2039					20	2048	28	
955	955	2002	Clark Bridge - 5 SR - 200m East of 4th Line OS	M	2	2033	10	2038	2038					40	2058	37	
954	954	2003	Culvert - 3rd Line - 1km South of 5 SR	M	2	2015	10	2020	2020					70	2056	35	
953	953	2004	Culvert 2004 - 5 SR 300m west of County Rd 124	M	2	2058	10	2066	2066					5	2070	49	
1432	1432	2005	Culvert 2005 - 3rd Line - 1.1km south of County Rd 17	M	2	2058	10	2063	2063					5	2066	45	
951	951	2006	Culvert - 3rd Line - South of 15 SR	M	2	2058	10	2066	2066					5	2070	49	
972	972	2007	Culvert - 15 SR East of 3rd Line OS	M	2	2048	10	2056	2056					10	2064	43	
950	950	2008	Culvert - 15 SR - 600m East of County Rd 124	M	2	2038	10	2046	2046					30	2069	48	
949	949	2009	Culvert - 15 SR - 1km East of County Rd 124	M	2	2076	10	2084	2084					5	2088	67	
1564	948	2010	Multi-Plate Culvert - 3rd Line OS, south of 20th SR	M	2	2061	10	2066	2066					5	2069	48	
947	947	2011	Culvert - 20th SR - 2km East of 5th Line	H	3	2053	10	2081	2053				2020			9	
946	946	2012	Culvert - 30th SR - 250m east of County Rd 124	M	2	2028	10	2036	2036					40	2066	45	
1608	945	2013	Culvert 2013 30th SR 500m west of 3rd Line	M	2	2088	10	2096	2096					0	2096	75	
944	944	2014	Culvert - 4th Line SW - north of 250 SR	M	2	2018	10	2026	2026					50	2064	43	
943	943	2015	Culvert - 10th Line NE	M	2	2076	10	2084	2084					0	2084	63	
971	971	2016	Culvert - 4th Line NE South of County Rd 9	M	2	2048	10	2056	2056					10	2064	43	
970	970	2017	Culvert - 2nd Line NE North of 240 SR	H	3	2025	10	2030	2025	\$10 000	2031	8		30	2040	19	
963	963	2018	Culvert - 2nd Line NE South of 260 SR	M	2	2028	10	2036	2036					40	2066	45	
967	967	2019	Culvert - 4th Line NE North of 250 SR	M	2	2053	10	2061	2061					10	2069	48	
1563	968	2020	Rectangular Culvert - 4th Line NE, south of 240 SR and just north of 8	M	2	2084	10	2092	2092					5	2096	75	
966	966	2021	Culvert - 2nd Line NE	H	3	2025	10	2030	2025				2020			5	
965	965	2022	Culvert - 4th Line NE North of 260 SR	M	2	2048	10	2056	2056					10	2064	43	
964	964	2023	Culvert - 4th Line NE South of 260 SR	H	3	2028	10	2036	2028	\$200 000	2023	30		30	2053	32	
1562	963	2024	Rectangular Culvert - 2nd Line NE, south of 240 SR and south of Blvd	M	2	2084	10	2092	2092					5	2096	75	
962	962	2025	Culvert - 260 Sideroad West of 2nd Line SW	M	2	2015	10	2020	2021					60	2051	30	
961	961	2026	Culvert - 8th Line SW North of Highway 89	M	2	2053	10	2066	2066					5	2061	40	
1559	960	2027	Prestest Box Culvert 2027 - 15 SR 2km West of County Road 124 (Lot	M	2	2083	10	2091	2091					5	2095	74	
1471	1117	2028	Bridge 2028 - Hartwig's Mdn	M	2	2081	10	2089	2089					0	2089	68	
1434			Bridge 2028 220 SR - 0.5km East of County Rd 2	M	2	2028	10	2036	2036					40	2066	45	
1430	1430	2030	Bridge 2030 240 SR West of 8th Line NE	H	3	2023	10	2031	2023					40	2053	37	
959	959	2031	Culvert 2031 - 240 SR - 0.5km East of Highway 10	M	2	2050	10	2055	2055					10	2060	39	
1493	2032		2nd Line NE north of 280 SR	H	3	2020	10	2025	2026	\$10 000	2031	8		40	2040	19	
1491	2033		7th Line SW South of 260 SR	M	2	2028	10	2036	2036					40	2066	45	
1494	2034		Malenchen / Mulmur Townline between 15th and 20th	M	2	2046	10	2054	2054					20	2069	48	

Bridge Inventory - tax funded

FIXED ASSET ID	Link ID	Asset Name	Location	Structure Type	Install Year	TCA Useful Life	Remaining Life 2021	Age	Historic Cost	2021 Accumulated Amortization	2021 Net Book Value	Replacement Cost 2022	Condition Based On Age	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure
						50	47	3	\$ 112,381	\$ 6,498	\$ 105,766	\$ 131,184	19.0					1
1433		Culvert - 250 Sideroad & 4th Line NE			2012	50	41	9	5,900	\$1,062	\$4,838	\$6,000	8	Good	Unlikely	Moderate	M	2
1350		CPS Culvert 6th Line NE between 5th Line OS and County Rd 21			2015	50	44	6	1,786	\$214	\$1,572	\$2,985	9	Very Good	Rare	Moderate	L	1
1359		CPS Culvert 6th Line NE between 5th Line OS and County Rd 21			2015	50	44	6	2,200	\$264	\$1,936	\$2,627	9	Very Good	Rare	Moderate	L	1
1373		CSP Culvert 4th Line OS north of County Rd 21			2015	50	44	6	\$2,225	\$267	\$1,958	\$2,985	9	Very Good	Rare	Moderate	L	1
1374		CSP Culvert 270 SR west of Highway 10			2015	50	44	6	2,361	\$283	\$2,078	\$2,985	9	Very Good	Rare	Moderate	L	1
1385		CSP Culvert 2nd Line SW just North of 280 SR			2015	50	44	6	\$2,935	\$352	\$2,583	\$3,582	9	Very Good	Rare	Moderate	L	1
1426		Culvert Melancthon / Mulmur Townline from 55R to County Rd 17			2015	50	44	6	18,910	\$2,269	\$16,640	\$25,000	9	Very Good	Rare	Moderate	L	1
1636		Cross-road Culvert - 30 SR between 4th Line and 5th Line OS			2020	50	49	1	53,516	\$1,784	\$51,732	\$60,000	10	Very Good	Rare	Moderate	L	1
1654		2021 Crossroad Culverts (5th Line OS between Cty RD 17 and 21; 240 SR at 2nd Line NE; 20 SR at 5th Line OS			2021	50	50	0	22,429	\$0	\$22,429	\$25,000	10	Very Good	Rare	Moderate	L	1

Bridge Inventory - tax funded

Bridge Inventory - Tax funded			Current Levels of Service Replacement/Improvement Year Based on Current Levels								Expected Levels of Service Replacement/Improvement Year Based on Expected		
FIXED ASSET ID	Link ID	Asset Name	Year Replacement due to minimal maintenance practices	Current Levels of Service % benefit	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score	Proposed Rehabilitation Cost (2022 \$)	Priority (based on OSIM Inspections)	Year for Rehabilitation	Extended Life (Years) due to Betterment	Expected Levels of Service % benefit over Current + Condition better then expected for age	Revised Levels Service With Risk Replacement Year	Revised Remaining Useful Life
1433		Culvert - 250 Sideroad & 4th Line NE	2057	10	2062	2062						2062	41
1551		CPS Culvert 6th Line NE between 5th Line OS and County Rd 21	2060	10	2065	2065						2065	44
1552		CPS Culvert 6th Line NE between 5th Line OS and County Rd 21	2060	10	2065	2065						2065	44
1553		CSP Culvert 4th Line OS north of County Rd 21	2060	10	2065	2065						2065	44
1554		CSP Culvert 270 SR west of Highway 10	2060	10	2065	2065						2065	44
1555		CSP Culvert 2nd Line SW just North of 280 SR	2060	10	2065	2065						2065	44
1561		Culvert Melancthon / Mulmur Townline from SSR to County Rd 17	2060	10	2065	2065						2065	44
1636		Cross-road Culvert - 30 SR between 4th Line and 5th Line OS	2065	10	2070	2070						2070	49
1654		2021 Crossroad Culverts (5th Line OS between Cty RD 17 and 21; 240 SR at 2nd Line NE; 20 SR at 5th Line OS	2066	10	2071	2071						2071	50

Storm/Sanitary - Catch Basin Inventory

Fund Asset #	Subtype	Road Name	Asset Name	Access diameter	Note	Install Year	Useful Life	Remaining Use-Ful Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	Replacement Cost	Condition Based On Useful Life	Assessed Condition	Condition Used for Anal, \$/s	Asset Condition (High Priority Rating)	Probability of Failure (Based on Condition of Expected Conditions)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure
						2009	50	38	12	\$1,500	\$360	\$1,140	\$2,500	8		8	Very Good	Rare	Moderate	L	1
1282	Catchbasin - Catch Basin	Main Street Hornings Mills	Main Street Catchbasin	0		2009	50	38	12	\$1,500	\$360	\$1,140	\$2,500	8		8	Very Good	Rare	Moderate	L	1
1283	Catchbasin - Catch Basin	Main Street Hornings Mills	Main Street Catchbasin	0		2009	50	38	12	\$1,500	\$360	\$1,140	\$2,500	8		8	Very Good	Rare	Moderate	L	1
1284	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1285	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1286	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	0		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1287	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1288	Catchbasin - Catch Basin	Main Street Hornings Mills	Main Street Catchbasin	0		2009	50	38	12	\$1,500	\$360	\$1,140	\$2,500	8		8	Very Good	Rare	Moderate	L	1
1289	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Storm Water Collector	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1290	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1291	Catchbasin - Ditch Inlet Catch Basin	Main Street Hornings Mills	Uyod Street Ditch Inlet Catchbasin	600		2009	50	38	12	\$1,500	\$360	\$1,140	\$2,500	8		8	Very Good	Rare	Moderate	L	1
1292	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1293	Catchbasin - Manhole Catch Basin	Main Street Hornings Mills	Main Street Manhole Catchbasin	1200		2009	50	38	12	\$3,300	\$792	\$2,508	\$5,500	8		8	Very Good	Rare	Moderate	L	1
1294	Catchbasin - Double Catch Basin	Main Street Hornings Mills	Main Street Double Catchbasin	600		2009	50	38	12	\$2,300	\$552	\$1,748	\$3,500	8		8	Very Good	Rare	Moderate	L	1
1295	Catchbasin - Double Catch Basin	Main Street Hornings Mills	Main Street Double Catchbasin	600		2009	50	38	12	\$2,300	\$552	\$1,748	\$3,500	8		8	Very Good	Rare	Moderate	L	1
	Catchbasin - Catch Basin	Main Street Corbetton	8 Single Catch Basins Main St. Corbetton	600		1978	50	7	43	\$4,232	\$516	\$3,716	\$20,000	1	7	7	Good	Unlikely	Moderate	MA	2
	Catchbasin - Double Catch Basin	Main Street Corbetton	2 Double Catch Basins	600		1978	50	7	43	\$1,481	\$516	\$965	\$7,000	1	7	7	Good	Unlikely	Moderate	MA	2
	Catchbasin - Manhole Catch Basin	Main Street Corbetton	4 Storm Manholes	1200		1978	50	7	43	\$4,655	\$3,827	\$1,028	\$22,000	1	7	7	Good	Unlikely	Moderate	MA	2

Storm/Sanitary - Catch Basin Inventory

Storm/Sanitary - Catch Basin Inventory			Current Levels of Service								Expected Levels of Service							
			Replacement/Improvement Year Based on Current Levels Service								Replacement/Improvement Year Based on Expected Levels Service							
Asset #	Subtype	Road Name	Year Replacement due to minimal maintenance practices	Current Levels of Service % benefit	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score	Subsequent Replacement Year	Revised Remaining Useful Life	Rehabilitation Year	Rehabilitation Cost (2021)	Year for Rehabilitation	Extended Life (Years) due to Betterment	Expected Levels of Service % benefit over Current	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score - or Still Override	Subsequent Replacement Year	Revised Remaining Useful Life	
1282	CatchBasin - Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1283	CatchBasin - Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1284	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1285	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1286	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1287	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1288	CatchBasin - Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1289	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1290	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1291	CatchBasin - Orsch Inlet Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1292	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1293	CatchBasin - Manhole Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1294	CatchBasin - Double Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
1295	CatchBasin - Double Catch Basin	Main Street Hornings Mills	2054	10	2059	2059	2109	38					0	2059	2059	2109	38	
	CatchBasin - Catch Basin	Main Street Corbett	2023	10	2028	2028	2078	7					30	2043	2043	2093	22	
	CatchBasin - Double Catch Basin	Main Street Corbett	2023	10	2028	2028	2078	7					30	2043	2043	2093	22	
	CatchBasin - Manhole Catch Basin	Main Street Corbett	2023	10	2028	2028	2078	7					30	2043	2043	2093	22	

Storm - Gravity Main Inventory - tax funded

Fixed Asset #	Subtype	Street ID	Street Name	Asset Name	Diameter (mm)	Length (m)	Material	Install Year	Useful Life	Remaining Useful Life	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	Replacement Cost (2021)	Condition Based On Useful Life	Condition from Municipality	Condition Used for Analysis	Asset Condition (As per Priority Rating)	Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure
						701			100	74	26	\$86,104	\$16,661	\$70,422	\$182,596			8.0				
1296	DischargePoint - Outfall w		Main Street Hornings Mills	Hornings Mills North H	450		PVC	2009	100	88	12	\$4,000	\$480	\$3,520	\$7,500	9		9	Very Good	Rare	Moderate	L
1297	Catch Basin Lead	199	Main Street Hornings Mills	Catchbasin Lead	300	6	PVC	2009	100	88	12	\$1,019	\$122	\$897	\$1,453	9		9	Very Good	Rare	Moderate	L
1298	Catch Basin Lead	202	Main Street Hornings Mills	Catchbasin Lead	300	6	PVC	2009	100	88	12	\$954	\$115	\$840	\$1,361	9		9	Very Good	Rare	Moderate	L
1299	Catch Basin Lead	202	Main Street Hornings Mills	Catchbasin Lead	300	6	PVC	2009	100	88	12	\$980	\$118	\$862	\$1,397	9		9	Very Good	Rare	Moderate	L
1300	Collector	199	Main Street Hornings Mills	Storm Water Collector	375	30	PVC	2009	100	88	12	\$5,100	\$612	\$4,488	\$7,271	9		9	Very Good	Rare	Moderate	L
1301	Collector	199	Main Street Hornings Mills	Storm Water Collector	375	57	PVC	2009	100	88	12	\$9,520	\$1,142	\$8,378	\$13,573	9		9	Very Good	Rare	Moderate	L
1302	Collector	202	Main Street Hornings Mills	Storm Water Collector	375	60	PVC	2009	100	88	12	\$10,200	\$1,224	\$8,976	\$14,543	9		9	Very Good	Rare	Moderate	L
1303	Collector	187	Main Street Hornings Mills	Storm Water Collector	300	9	PVC	2009	100	88	12	\$1,460	\$175	\$1,285	\$2,082	9		9	Very Good	Rare	Moderate	L
1304	Collector	193	Main Street Hornings Mills	Storm Water Collector	450	25	PVC	2009	100	88	12	\$4,750	\$570	\$4,180	\$6,772	9		9	Very Good	Rare	Moderate	L
1305	Collector	193	Main Street Hornings Mills	Storm Water Collector	450	43	PVC	2009	100	88	12	\$8,170	\$980	\$7,190	\$11,648	9		9	Very Good	Rare	Moderate	L
1306	Collector	193	Main Street Hornings Mills	Storm Sewer Collector	450	84	PVC	2009	100	88	12	\$15,960	\$1,915	\$14,045	\$22,755	9		9	Very Good	Rare	Moderate	L
1307	Collector	203	Main Street Hornings Mills	Storm Water Collector	375	28	PVC	2009	100	88	12	\$4,760	\$571	\$4,189	\$6,787	9		9	Very Good	Rare	Moderate	L
1308	Catch Basin Lead	203	Main Street Hornings Mills	Catchbasin Lead	300	4	PVC	2009	100	88	12	\$699	\$84	\$615	\$997	9		9	Very Good	Rare	Moderate	L
1309	Catch Basin Lead	203	Main Street Hornings Mills	Catchbasin Lead	300	6	PVC	2009	100	88	12	\$947	\$114	\$833	\$1,350	9		9	Very Good	Rare	Moderate	L
	Collector		Main St. Corbetton	Storm Water Collector	300	84		1978	100	57	43	\$2,666	\$1,131	\$1,535	\$12,600	6		6	Average	Possible	Moderate	M
	Collector		Main St. Corbetton	Storm Water Collector	375	84		1978	100	57	43	\$3,555	\$1,508	\$2,047	\$16,800	6		6	Average	Possible	Moderate	M
	Collector		Main St. Corbetton	Storm Water Collector	450	84		1978	100	57	43	\$4,444	\$1,885	\$2,559	\$21,000	6		6	Average	Possible	Moderate	M
	Collector		Main St. Corbetton	Storm Water Collector	600	84		1978	100	57	43	\$5,332	\$2,262	\$3,070	\$25,200	6		6	Average	Possible	Moderate	M
	Discharge Point		Main St. Corbetton	Corbetton Head Wall				1978	100	57	43	\$1,587	\$673	\$914	\$7,500	6		6	Average	Possible	Moderate	M

Storm - Gravity Main Inventory - tax funded

Fixed Asset #	Subtype	Street ID	Street Name	Asset Name	Numerical Value of Risk of Failure	Year Replacement due to minimal maintenance practices	Current Levels of Service Replacement/Improvement Year Based on Current Levels			Proposed Rehabilitation Cost (2021 \$)	Year for Rehabilitation	Extended Life (Years) due to Betterment	Expected Levels of Service + Town Input Replacement/Improvement Year Based on Expected Levels Service			
							Current Levels of Service % benefit	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score				Expected Levels of Service % benefit over Current + Condition better then expected for app	Revised Levels Service Plus Risk Replacement Year	Subsequent Replacement Year	Revised Remaining Useful Life
					1											
1296	DischargePoint - Outfall w		Main Street Hornings Mills	Hornings Mills North He	1	2099	10	2109	2109				0	2109	2209	88
1297	Catch Basin Lead	199	Main Street Hornings Mills	Catchbasin Lead	1	2099	10	2109	2109				0	2109	2209	88
1298	Catch Basin Lead	202	Main Street Hornings Mills	Catchbasin Lead	1	2099	10	2109	2109				0	2109	2209	88
1299	Catch Basin Lead	202	Main Street Hornings Mills	Catchbasin Lead	1	2099	10	2109	2109				0	2109	2209	88
1300	Collector	199	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1301	Collector	199	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1302	Collector	202	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1303	Collector	187	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1304	Collector	193	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1305	Collector	193	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1306	Collector	193	Main Street Hornings Mills	Storm Sewer Collector	1	2099	10	2109	2109				0	2109	2209	88
1307	Collector	203	Main Street Hornings Mills	Storm Water Collector	1	2099	10	2109	2109				0	2109	2209	88
1308	Catch Basin Lead	203	Main Street Hornings Mills	Catchbasin Lead	1	2099	10	2109	2109				0	2109	2209	88
1309	Catch Basin Lead	203	Main Street Hornings Mills	Catchbasin Lead	1	2099	10	2109	2109				0	2109	2209	88
	Collector		Main St. Corbetton	Storm Water Collector	2	2068	10	2078	2078				0	2078	2178	57
	Collector		Main St. Corbetton	Storm Water Collector	2	2068	10	2078	2078				0	2078	2178	57
	Collector		Main St. Corbetton	Storm Water Collector	2	2068	10	2078	2078				0	2078	2178	57
	Collector		Main St. Corbetton	Storm Water Collector	2	2068	10	2078	2078				0	2078	2178	57
	Discharge Point		Main St. Corbetton	Corbetton Head Wall	2	2068	10	2078	2078				0	2078	2178	57

Grand Valley
Water - Well Inventory

FIXED ASSET ID	Subtype	Asset Name	Asset Type	Make	Model	Install Year	Useful Life	Remaining Useful Life 2021	Age	Historic Cost	2021 Accumulated Amortization System	2021 Net Book Value System	Replacement Cost	Condition Based On Age	Condition (From Staff Assessment)	Condition Used for Analysis	Asset Condition (As per Priority Rating)
							28	1	39	\$ 21,765	\$ 18,671	\$ 3,094	\$ 77,000			7	
1111	Production Well	Public Works Garage Production Well	Production Well			1965	30	0	56	\$1,503	\$1,503	\$0	\$25,000	0	7	7	Good
1112	Equipment - Motor	Public Works Garage - Well Pump	Public Works Garage Well Pump -			1965	25	0	56	\$ 2,601	\$ 2,601	\$0	\$ 5,000	0	7	7	Good
1025	Other Equipment	Water Depot	Water Cooler			2018	15	12	3	\$ 262	\$ 262	\$0	\$ 500	0	7	7	Good
978	Production Well	Administration Building - Production Well -	Production Well			1992	30	1	29	\$5,201	\$5,022	\$179	\$15,000	0	7	7	Good
979	Equipment - Motor	Admin Office - Well Pump	Administration Building Well Pump -			1992	25	0	29	\$2,601	\$2,601	\$0	\$5,000	0	7	7	Good
	Reverse Osmosis	Admin Office - Purification System	Reverse Osmosis System & Pressure Tank			2019	20	18	2	\$2,466	\$130	\$2,336	\$3,500	9	7	7	Good
		Hornings Mills Hall - Well	Hornings Mills - Well			1986	30	0	35	\$3,838	\$3,838	\$0	\$15,000	0	7	7	Good
		Hornings Mills Hall - Well Pump	Hornings Mills Well Pump			1986	25	0	35	\$1,919	\$1,919	\$0	\$5,000	0	7	7	Good
		Hornings Mills Hall - Water Purification System	UV System			2019	20	8	12	\$1,375	\$796	\$579	\$3,000	4	7	7	Good

Current Levels of Service
Replacement/Improvement Year Based on Current Levels
Service

Expected Levels of Service
Replacement/Improvement Year Based on Expected Levels
Service

Probability of Failure (Based on Condition or Expected Condition)	Consequence of Failure	Risk of Failure	Numerical Value of Risk of Failure	Year Replacement due to minimal maintenance practices	Current Levels of Service % benefit	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score	Subsequent Replacement Year	Revised Remaining Useful Life	Proposed Rehabilitation Cost (2021 \$)	Year for Rehabilitation	Extended Life (Years) due to Betterment	Expected Levels of Service % benefit over Current	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score - or Staff Override	Subsequent Replacement Year	Revised Remaining Useful Life
			2							\$ -							
Unlikely	Major	M	2	1992	10	1995	2021	2077	0				60	2039	2039	2069	18
Unlikely	Major	M	2	1988	10	1991	2021	2077	5				60	2036	2036	2061	15
Unlikely	Minor	L	1	2032	10	2034	2034	2050	18				60	2043	2043	2058	22
Unlikely	Major	M	2	2019	10	2022	2022	2052	1				60	2040	2040	2070	19
Unlikely	Major	M	2	2015	10	2018	2021	2050	5				60	2036	2036	2061	15
Unlikely	Major	M	2	2037	10	2039	2039	2059	23				0	2039	2039	2059	18
Unlikely	Major	M	2	2013	10	2016	2021	2056	5				60	2039	2039	2069	18
Unlikely	Moderate	M	2	2009	10	2012	2021	2056	5				60	2036	2036	2061	15
Unlikely	Major	M	2	2027	10	2029	2029	2049	13				20	2033	2033	2053	12

Wastewater Systems (Tax Funded)

FILED ASSET ID	ASSET TYPE	Asset Name	Tank Size / Length	Install Year	Useful Life	Remaining Useful Life 2021	Age	Historic Cost	2021 Accumulated Amortization	2021 Net Book Value	Replacement Cost	Condition Based On Useful Life	Staff Assessed Condition	Condition Used for Analysis	Asset Condition (As per Project Rating)	Probability of Failure (Based on Condition & Expected Condition)	Consequence of Failure	Risk of Failure
					28	0	40	\$ 23,483	\$ 22,983	\$ 510	\$ 108,500			8.9				
1107	Septic System	Administration Septic System -		1992	25	0	29	\$10,403	\$10,403	\$0	\$35,000	0	7	9	Very Good	Rare	Major	M
1108	Septic System	Public Works Septic System -		1965	25	0	56	\$2,004	\$2,004	\$0	\$35,000	0	7	9	Very Good	Rare	Moderate	L
1110	Septic System	Septic System - Hornings Mills - Mill		1986	25	0	35	\$10,448	\$10,448	\$0	\$35,000	0	7	9	Very Good	Rare	Minor	L
1566	Septic System	Septic Pump - at Public Works Garage		2016	25	20	5	\$638	\$128	\$510	\$1,500	8	2	2	Very Poor	Almost Certain	Moderate	H

Wastewater Systems (Tax Funded)

			Current Levels of Service Replacement/Improvement Year Based on Current Levels Service							Expected Levels of Service Replacement/Improvement Year Based on Expected Levels Service					
FIXED ASSET ID	Asset Type	Asset Name	Numerical Value at Risk of Failure	Year Replacement due to minimal maintenance practices	Current Levels of Service % benefit	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score	Proposed Rehabilitation Cost (2021 \$)	Year for Rehabilitation	Extended Life (Years) due to Believement	Expected Levels of Service % benefit over Current + Condition better then expected for age	Revised Levels Service Replacement Year	Year Replacement Applying Risk Score - or Staff Override	Subsequent Replacement Year	Revised Remaining Useful Life
			1					\$							
1107	Septic System	Administration Septic System -	2	2015	10	2018	2021				80	2038	2038	2063	17
1108	Septic System	Public Works Septic System -	1	1988	10	1991	2021				80	2033	2033	2058	12
1110	Septic System	Septic System - Homings Mills - Mill	1	2009	10	2012	2021				80	2032	2032	2057	11
1566	Septic System	Septic Pump - at Public Works Garage	3	2039	10	2042	2039				0	2022		2047	1



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Appendix B

Draft Data Verification and Condition Assessment Policy

APPENDIX B: Draft Data Verification and Condition Assessment Policy

Data Verification

1. The main source of asset data updating, and editing will be through the Township of Melancthon's asset inventory that aligns with PSAB 3150 compliance procedures and/or annual reporting process.
2. Asset additions, disposals, betterments, and write-offs will be recorded based on the Municipality's PSAB 3150 Compliance Policies and/or general updates to the Asset Management Spreadsheets.
3. Verification of the correct treatment of asset revisions will be completed through frequent annual reviews by the Township's staff, as well as an annual review by the Township's auditor.
4. During years which condition assessments are not being performed, asset replacement cost will be determined based on a combination of inflating previous values or through the use of the current year's historical invoice data. Where indices are being used, the Non-Residential Building Construction Price Index (NRBCP) shall be used for construction related assets (i.e., infrastructure) and Consumer Price Index (CPI) shall be used for all other assets (i.e., furniture, interior finishes, appliances, etc.)

Condition Assessment

1. Condition assessments shall be performed as outlined in Table B-1 below.
2. Condition assessments shall be performed by qualified individuals (or companies) and shall include a review of the following:
 - a. Current asset condition (consistent with the rating format used within this report, unless the Township stipulates a new format, or regulatory body required format);
 - i. Identify any unusual wear from asset use that may hinder asset performance and eventually reduce useful life.
 - ii. Assess asset performance and identify (if any) capital improvements that can be applied to extend the asset's useful life and/or bring the asset back to appropriate service levels.
 - b. Current asset replacement cost. This is to be based on replacing the asset under current legislation/requirements using the Township's specification; and
 - c. Remaining service life, assuming current identified maintenance and usage levels.

Table B.1: Condition Assessment Timetable

Asset Type	Frequency of Condition Assessment	Comments
Bridges	Every two years	As per Provincial Regulation using OSIM Inspection format
Equipment (Office, Other)		As identified by Staff, so Equipment is safe and in good working order
Facilities	Every ten - fifteen years	Complete detailed assessment every ten years but annual staff and specialized inspection/cleaning of some components (e.g., HVAC, Fans, Pumps, etc.)
Land Improvements (Playing Surfaces, Parking Lots, Parks, Landscaping)	Annually	Staff assessment annually
Roads	Every five - ten years	Complete Roads Needs study every five years but internal staff review annually
Road Signs		As per Regulation 239 Minimum Maintenance Standards
Sidewalks		As per Regulation 239 Minimum Maintenance Standards
Software & Hardware		As identified by Staff, so software and hardware operating well
Storm Water Mains	Every fifteen years	CCTV scans and review of Storm Water system
Storm Water (Catch Basins, Manholes, Stormceptors)	Annually	To be assessed while doing a clean out
Vehicles		As per Manufacturer's Warranty and Maintenance Program
Generators	Every season	Minimum four times per year



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Appendix C

10 Year Detailed Asset Management Strategy & Financing Strategy

Township of Melancthon
2022 Asset Management Plan
Financing Strategy

Table of Contents:

- Section 1: Capital Forecast and Funding Analysis
- Section 2: Future Debt
- Section 3: Reserve Schedules
- Section 4: Budget Impacts & Funding Gap

Section 1: Capital Forecast and Funding Analysis

Asset Class	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Capital Replacement											
Road Surface - Asphalt	510,500	-	-	416,554	698,489	766,393	567,815	905,414	-	-	3,865,165
Road Surface - Gravel	357,000	878,867	734,677	378,851	386,428	394,157	402,040	410,081	418,282	426,648	4,787,031
Road Base	-	-	-	-	-	-	-	-	-	-	-
Bridge & Culverts	-	-	-	-	660,792	-	-	-	743,945	-	1,404,737
Crossroad Culverts	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285	167,529
Storm Water Mains	-	-	-	-	-	-	-	-	-	-	-
Catch Basin	-	-	-	-	-	-	-	-	-	-	-
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	1,530	-	-	-	-	-	-	-	-	-	1,530
Subtotal - Capital Replacement	884,330	894,473	750,595	811,641	1,762,270	1,177,442	987,085	1,333,070	1,180,153	444,933	10,225,992
Capital Rehabilitation											
Road Surface - Asphalt	154,617	65,114	35,393	50,782	61,770	21,057	198,047	107,919	309,265	-	1,003,964
Road Surface - Gravel	-	-	-	-	-	19,139	15,910	12,830	-	-	47,879
Road Base	-	-	-	-	-	-	-	-	-	-	-
Bridge & Culverts	297,840	208,080	482,850	-	-	-	677,725	-	-	24,380	1,690,875
Crossroad Culverts	-	-	-	-	-	-	-	-	-	-	-
Storm Water Mains	-	-	-	-	-	-	-	-	-	-	-
Catch Basin	-	-	-	-	-	-	-	-	-	-	-
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Capital Rehabilitation	452,457	273,194	518,243	50,782	61,770	40,196	891,682	120,749	309,265	24,380	2,742,718
Levels of Service Costs											
Road Surface - Asphalt	83,844	85,521	87,231	88,976	90,755	92,571	94,422	96,310	98,237	155,056	972,923
Road Surface - Gravel	207,876	212,034	216,274	220,600	225,012	229,512	234,102	238,784	243,560	248,431	2,276,185
Road Base	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950	558,436
Bridge & Culverts	4,080	21,432	4,245	22,298	4,416	23,199	4,595	24,136	4,780	25,111	138,292
Crossroad Culverts	-	-	-	-	-	-	-	-	-	-	-
Storm Water Mains	-	-	-	-	-	-	-	-	-	-	-
Catch Basin	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047	27,921
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	11,168
Subtotal - Levels of Service	350,370	374,648	364,524	389,784	379,251	405,531	394,574	421,914	410,515	493,814	3,984,925

Asset Class	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Totals by Asset Class (Replacement, Rehabilitation and Levels of Service)											
Road Surface - Asphalt	748,961	150,635	122,624	556,312	851,014	880,021	860,284	1,109,643	407,502	155,056	5,842,052
Road Surface - Gravel	564,876	1,090,901	950,951	599,451	611,440	642,808	652,052	661,695	661,842	675,079	7,111,095
Road Base	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950	558,436
Bridge & Culverts	301,920	229,512	487,095	22,298	665,208	23,199	682,320	24,136	748,725	49,491	3,233,904
Crossroad Culverts	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285	167,529
Storm Water Mains	-	-	-	-	-	-	-	-	-	-	-
Catch Basin	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047	27,921
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	2,550	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	12,698
Total	1,687,157	1,542,315	1,633,362	1,252,207	2,203,291	1,623,169	2,273,341	1,875,733	1,899,933	963,127	16,953,635

Funding Analysis	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Total Funding by Source											
Canada Community Building Fund (Gas Tax)	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	995,470
OCIF Funding (estimate)	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	1,085,370
Transfer from Operations (for Core Infrastructure capital)	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	5,517,000
Transfer from/(to) Capital Reserves	227,003	100,154	184,054	120,607	414,256	376,548	418,983	513,485	564,634	(215,381)	2,704,343
Operating Funding (LOS Impacts)	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724	3,836,452
Debt Funding (see section 2)	350,000	325,000	325,000	-	650,000	100,000	700,000	200,000	165,000	-	2,815,000
Total	1,687,157	1,542,315	1,633,362	1,252,207	2,203,291	1,623,169	2,273,341	1,875,733	1,899,933	963,127	16,953,635
Total Cost less Funding	-	-	-	-	-	-	-	-	-	-	-

Section 2: Future Debt

Year	Principal Amount	New Annual Payments									
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2023	350,000		25,750	25,750	25,750	25,750	25,750	25,750	25,750	25,750	25,750
2024	325,000			23,910	23,910	23,910	23,910	23,910	23,910	23,910	23,910
2025	325,000				23,910	23,910	23,910	23,910	23,910	23,910	23,910
2026	-					-	-	-	-	-	-
2027	650,000						47,830	47,830	47,830	47,830	47,830
2028	100,000							7,360	7,360	7,360	7,360
2029	700,000								51,510	51,510	51,510
2030	200,000									14,720	14,720
2031	165,000										12,140
2032	-										
Total	2,815,000	-	25,750	49,660	73,570	73,570	121,400	128,760	180,270	194,990	207,130

Assumptions:

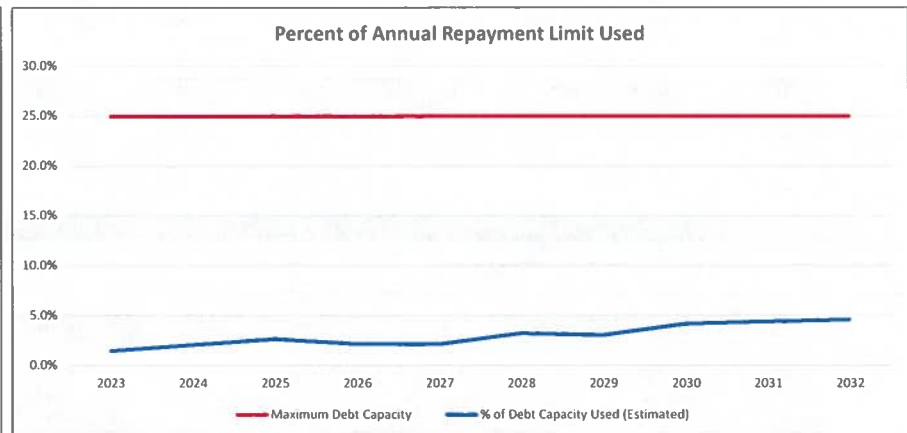
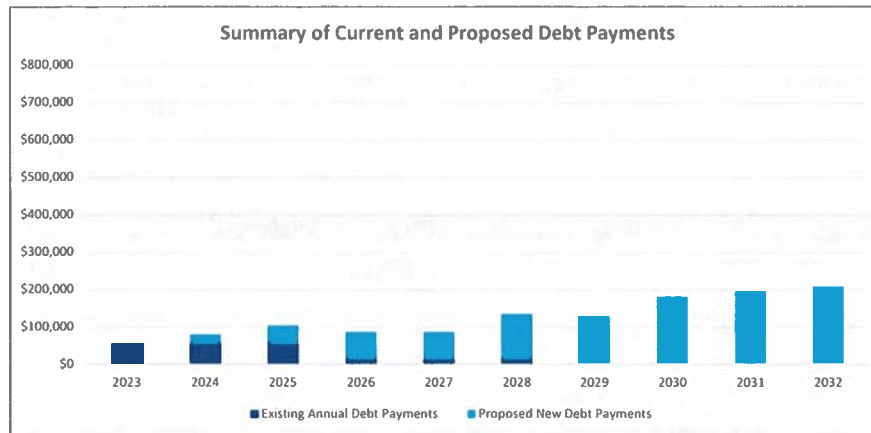
Term: 20 years
Rate: 4% per year
Timing: Debt is incurred at the end of the given year, with principal & interest payments starting in the following year.

Debt Capacity Analysis

* Ontario municipalities must maintain annual debt principal and interest payments below the equivalent of 25% of revenues.

Debt Analysis	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Existing Annual Debt Payments	53,965	53,965	53,965	13,057	13,057	13,057	-	-	-	-
Proposed New Debt Payments	-	25,750	49,660	73,570	73,570	121,400	128,760	180,270	194,990	207,130
Total Anticipated Debt Payments	53,965	79,715	103,625	86,627	86,627	134,457	128,760	180,270	194,990	207,130
Estimated Revenues*	3,792,566	3,868,417	3,945,785	4,024,701	4,105,195	4,187,299	4,271,045	4,356,466	4,443,595	4,532,467
Maximum Debt Capacity	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
% of Debt Capacity Used (Estimated)	1.4%	2.1%	2.6%	2.2%	2.1%	3.2%	3.0%	4.1%	4.4%	4.6%

* Annual revenue estimate assumes inflation of 2% annually.



Section 3: Reserve Schedules

Infrastructure Capital Reserve (Consolidated)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Opening Balance	200,602	31,899	49,508	43,868	163,540	52,666	43,863	58,277	45,155	49,186
Add: Contributions from Operating	58,300	117,763	178,414	240,279	303,381	367,746	433,397	500,362	568,666	638,336
Less: Contributions to/(from) Capital	(227,003)	(100,154)	(184,054)	(120,607)	(414,256)	(376,548)	(418,983)	(513,485)	(564,634)	215,381
Interest Earned (if applicable)	-	-	-	-	-	-	-	-	-	-
Ending Balance	31,899	49,508	43,868	163,540	52,666	43,863	58,277	45,155	49,186	902,903

Section 4: Budget Impacts & Funding Gap

Impact Analysis	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Replacement, Rehabilitation & LOS Impacts (Capital)										
Optimal Investment - Capital	1,169,830	1,193,230	1,217,090	1,241,430	1,266,260	1,291,590	1,317,420	1,343,770	1,370,650	1,398,060
Optimal Investment - Operating LOS	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724
Total Optimal Investment	1,520,200	1,550,607	1,581,614	1,613,246	1,645,511	1,678,427	1,711,994	1,746,234	1,781,165	1,816,784
Recommended Investment - Capital										
Canada Community Building Fund (Gas Tax)	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547	99,547
OCIF Funding (estimate)	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537	108,537
Transfer from Operations (for Core Infrastructure capital)	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700	551,700
Transfer from/(to) Capital Reserves	58,300	117,763	178,414	240,279	303,381	367,746	433,397	500,362	568,666	638,336
Total Recommended Investment - Capital	818,084	877,547	938,198	1,000,063	1,063,165	1,127,530	1,193,181	1,260,146	1,328,450	1,398,120
% of Optimal Investment (Capital) Reached	70%	74%	77%	81%	84%	87%	91%	94%	97%	100%
LOS Impacts - Operating										
Recommended Investment	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724
Total Recommended Investment - LOS Operating	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724
Total Recommended Investment - Capital & Operating	1,168,454	1,234,924	1,302,722	1,371,879	1,442,416	1,514,366	1,587,755	1,662,610	1,738,965	1,816,843
% of Optimal Investment (Operating & Capital) Reached	77%	80%	82%	85%	88%	90%	93%	95%	98%	100%
Funding Gap	(351,746)	(315,683)	(278,892)	(241,367)	(203,095)	(164,060)	(124,239)	(83,624)	(42,200)	60

Investment in Capital	2022
Canada Community Building Fund (Gas Tax)	95,399
OCIF Funding (estimate)	108,537
Transfer from Operating (Core Infrastructure)	371,963
Enviro. Rehabilitation Reserve	10,000
Total Investment	585,899

Investment in capital "starting point" for the capital forecast.

Impact on Funding	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total Recommended Investment - Capital	818,084	877,547	938,198	1,000,063	1,063,165	1,127,530	1,193,181	1,260,146	1,328,450	1,398,120
Previous Year's Investment	585,899	818,084	877,547	938,198	1,000,063	1,063,165	1,127,530	1,193,181	1,260,146	1,328,450
Annual Increase in Capital Investment										
Grants	4,148	-	-	-	-	-	-	-	-	-
Reallocation of Operating Funds to Core Infrastructure	179,737	-	-	-	-	-	-	-	-	-
Tax Supported	48,300	59,463	60,652	61,865	63,102	64,364	65,652	66,965	68,304	69,670
Total Change	232,185	59,463	60,652	61,865	63,102	64,364	65,652	66,965	68,304	69,670
Total Recommended Investment - Operating LOS	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515	418,724
Previous Year's Investment	310,000	350,370	357,377	364,524	371,816	379,251	386,837	394,574	402,464	410,515
Annual Increase/(Decrease) in Capital Investment										
Tax Supported	40,370	7,007	7,147	7,292	7,435	7,586	7,737	7,890	8,051	8,209
Total Change	40,370	7,007	7,147	7,292	7,435	7,586	7,737	7,890	8,051	8,209
A Total Change - Capital & LOS	88,670	66,470	67,798	69,157	70,538	71,950	73,389	74,855	76,354	77,879
B Net Increase (Decrease) in Debt Payments	-	25,750	23,910	(16,998)	-	47,830	(5,697)	51,510	14,720	12,140
A + B Total Impact on Annual Tax Supported Budget	88,670	92,220	91,708	52,159	70,538	119,780	67,692	126,365	91,074	90,019
Estimated Taxation Impact (1% in 2023 = \$29,148)	3.04%	3.10%	3.02%	1.69%	2.24%	3.72%	2.06%	3.77%	2.67%	2.58%

