FINAL REPORT

PREPARED BY HEMSON FOR THE CITY OF DRYDEN

ASSET MANAGEMENT PLAN

November 7, 2025

HEMSON

1000 - 30 St. Patrick Street, Toronto ON M5T 3A3

416 593 5090 | hemson@hemson.com | www.hemson.com

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EXECUTIVE SUMMARY

The Asset Management Plan (2025 Plan) has been developed to be consistent with the requirements of *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure (O Reg. 588/17)* and meet the 2025 proposed level of service requirements. This 2025 Plan includes current level of service measures for all core and non-core infrastructure assets and defines proposed levels of service over a ten-year period. A summary of the key results is noted below along with relevant reporting outputs provided in the summary dashboard. Note that all figures are in constant 2025 dollars.

- The replacement cost for all City assets considered in the 2025 AMP is estimated at $893.0 million (represented in constant 2025 dollars). The largest share is related to sewer infrastructure, which totals 213.3 million (24%), followed by roads, which total about $198.2 million (22%) of the total replacement value. The next highest share is attributed water infrastructure, with a replacement value of $151.6 million (17%). The remaining asset categories total $330.0 million (37%) and include buildings, stormwater infrastructure, traffic signals, streetlights, sidewalks, curbs, fleet, machinery, equipment, and land improvements.

- About $349.1 million (39%) of the assets are in Good to Very Good condition while $171.5 million (19%) of the assets are Fair condition. The remaining $372.5 million (42%) are in Poor to Very Poor condition largely related to the paved roads and wastewater infrastructure.

- The proposed level of service is generally set to maintain the current level of service over the next 10-year period.

- Paved roads in the City are on average in Poor condition with an average Surface Condition Rating of 54 out of 100. This includes both Asphalt and Surface Treated Roads. Unpaved roads in the City are on average in Very Poor condition with an average Surface Condition Rating of 42 out of 100, and included all dirt, gravel, and unimproved roads.

- City bridges are on average in Fair condition (63.8 BCI) with one pedestrian bridge currently having loading or dimensional restrictions. The City aims to increase the condition of it's bridges and culverts to Good condition or better as the recommended works from the OSIM Report are undertaken. The city will continue to perform legislated inspections every two years.

- For water infrastructure, 78% of properties are connected to the municipal water system. The number of connection days per year where a boil water advisory is in place compared to the total number of properties connected to the municipal water system is 0. The number of connection days due to a water main breaks compared to the total number of properties connected to the municipal water system is 0.23%. The target for these two levels of service measures is to keep the current performance over the 10-year period.

- For wastewater infrastructure, 78% of properties are connected to the municipal wastewater system. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system is 12, and this has been set as the maximum over the next 10 years. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system is 0, and the proposed target was determined to be 0 over the next 10 years.

- All other asset categories are proposed to be maintained at their current level of service or better.

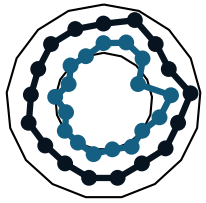
- For tax-supported assets, the total 10-year lifecycle costs to meet proposed levels of service amount to $105.0 million (an average of $10.5 million per year). To meet the proposed levels of service, the City would be required to increase capital spending by about $723,000 per annum (plus inflation) from the current 2025 tax levy of $16.3 million.

- For rate-supported assets, the total 10-year lifecycle costs to meet proposed levels of service amount to $109.4 million (an average of $10.9 million per year). To meet the proposed levels of service, the City would be required to increase its rate requirement by about $1.3 million per annum (plus inflation) from the current 2025 rate-supported capital spending of $1.6 million, translating to a rate increase of about 23% over the 2025 rate revenue.

- Monitoring of the funding gap will need to continue going forward to ensure that funding levels remain sufficient to meet level of service objectives.

Summary of 2025 Asset Management Plan

Maturity Assessment

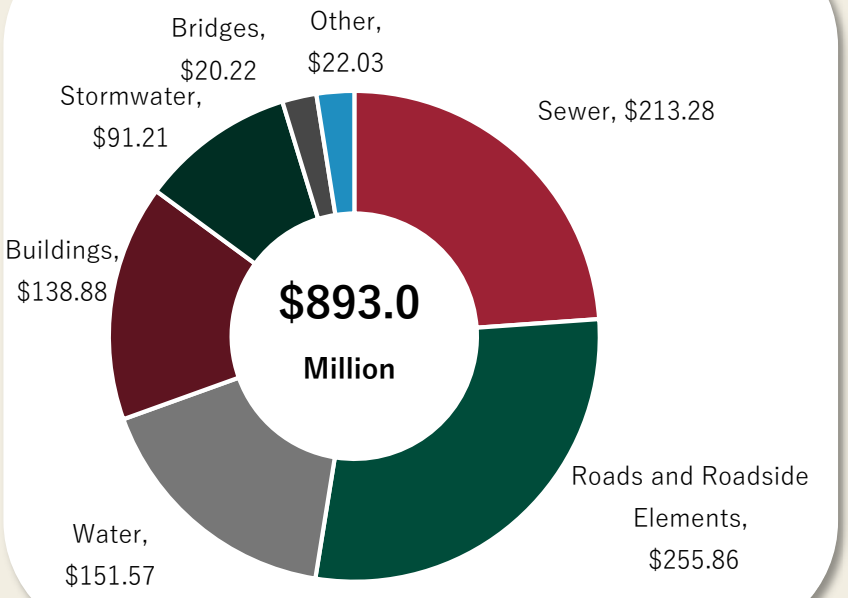


55/60

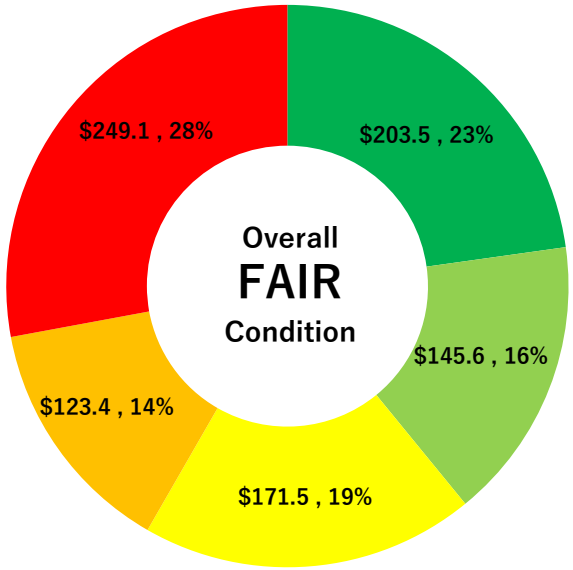
Total Need to Meet PLOS 2025-2034

$105.0 Million

Summary of Total Replacement Value ($M)



Summary of Asset Condition ($M)



1. INTRODUCTION

The City of Dryden's 2025 Asset Management Plan (2025 AMP) provides the City with a tool to assist in asset management financing decisions. The AMP covers all City owned and operated assets and follows the format set out by the Ministry of Infrastructure through the *Building Together: Guide for Municipal Asset Management Plans*, the requirements of *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure* (*O. Reg. 588/17*) and the City's Strategic Asset Management Policy.

An Excel based asset management financial model has been developed as part of the 2025 AMP. The model contains the City's detailed asset inventory and financing strategy used to develop this AMP. The model is provided to municipal staff and is intended to be updated on a regular basis to inform future capital investment decisions.

A. PURPOSE OF THE ASSET MANAGEMENT PLAN

The main purpose of the 2025 AMP is to advance the City's asset management practices by developing a set of asset management strategies to the specific needs of each service area. At the same time, these strategies align with the objectives of the requirements of *Ontario Regulation 588/17 (O. Reg. 588/17)*. This plan is focused on achieving several key objectives:

- **Ensuring Long-Term Sustainability** – management of the City's assets is a long-term commitment that must be sustainable to ensure effective service delivery for future generations.
- **Lowest Cost of Ownership** – long-term sustainability is only possible by ensuring costs are minimized through efficient management of assets by developing service area and asset specific objectives.
- **Minimizing Risk** – risk is minimized through the assessment, management and long-term planning of assets at more focused levels and through consultation with service area staff.
- **Enhancing Service Delivery** – the City strives for continual improvement in its asset management strategies as outlined in the Strategic Asset Management Policy and therefore tailored approaches to assessing long-term needs unique to each asset category is captured through this AMP.

- **Supporting Informed Decision-Making** – development of a set of asset management tools that help the decision-making process make evidence-based decisions. The Excel based financial model can be used to continually keep asset information up to date.

By following the key objectives above, the AMP establishes a "clear line of sight" from the service being provided to residents and businesses in the City. Any investment requirements included in the AMP are clearly linked to a well-defined need. These needs over the 10-year period are set to meet the proposed level of service, which in the case of Dryden, is largely related to maintaining or exceeding the current levels of service. Furthermore, the needs should be aligned with strategic objectives through capital and operating decisions made in the budget process.

B. REGULATORY CONTEXT

In 2015, the Province of Ontario passed the *Infrastructure for Jobs and Prosperity Act*. The purpose of this Act is to establish mechanisms to encourage principled, evidence-based and strategic long-term infrastructure planning that supports job creation and training opportunities, economic growth, protection of the environment, and incorporate design excellence into infrastructure planning.

In December 2017, *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure (O. Reg 588/17)* was passed under the *Infrastructure for Jobs and Prosperity Act*. The regulation requires municipalities to develop a Strategic Asset Management Policy, which will help municipalities document the relationship between their Asset Management Plan and existing policies and practices as well as provide guidance for future capital investment decisions. The regulation also contains more specific requirements on the type of analysis municipal asset management plans should contain, including policies, levels of service, lifecycle management and financing strategies. The aim is to provide guidance to municipalities so that asset management plans are more consistent across the Province. Furthermore, in March 2021 the Province amended the regulation to extend the regulatory timelines by one year. A summary timeline of the requirements of the regulation are outlined in Figure 1.

Figure 1 – Ontario Regulation 588/17 Requirements

A high-level summary of the technical requirements to be addressed for July 1, 2025 include[1]:

- An AMP for all municipal infrastructure assets that builds upon the previous requirements for all asset categories (core and non-core).
- Identification of the proposed levels of service for each of the next 10-years (core and non-core).
- The lifecycle activities required to meet proposed levels of service.
- The risks associated with the lifecycle activities to meet proposed levels of service and their associated costs.

The 2025 AMP meets the requirements of the regulation as it includes the proposed levels of service requirement to meet the 2025 deadline for all assets considered in this AMP. The 2025 AMP builds on the work completed in the City's 2024 Asset Management Plan which included all asset categories (core and non-core) and reported on the current level of service. Through this update, the City has updated the current level of service utilizing more recent engineering reports, updated inventories and datasets compiled through consultation with City staff.

[1] There are additional requirements of the regulation not explicitly stated here, however this AMP meets all requirements needed. Only the most relevant reporting requirements are listed for simplicity. See https://www.ontario.ca/laws/regulation/r17588#BK7.

C. ASSET MANAGEMENT PLAN STRUCTURE

The 2025 AMP is developed to be consistent with the structure recommended through the *2013 Building Together: Guide for Municipal Asset Management Plans*. At the same time, it has been developed to meet the requirements of O Reg. 588/17. Table 1 provides a guide to the sections of the 2025 AMP.

Table 1 – AMP Report Structure

Section	Requirement
Main Body	
Section 2 - State of Local Infrastructure	Summarizes the state of the City's infrastructure with reference to infrastructure quantity and quality. Additional details are provided in Appendix A.
Section 3 - Level of Service	A summary of the current and proposed levels of service summarized for each asset category. This section is consistent with the reporting requirements of O. Reg. 588/17.
Section 4 - Asset Management Strategy	Sets out several strategies and lifecycle costs that will assist the City in maintaining assets so that proposed levels of service can be met. This section also includes a risk analysis of City assets.
Section 5 - Financing Strategy	Establishes how asset management can be delivered in a financially sustainable way for all services. Outlines the lifecycle costs and funding strategy to meet proposed levels of service. Additional detailed calculations are provided in Appendix B.
Section 6 – Monitoring and Improvement Plan	Provides key recommendations on how to improve the asset management plan and related practices over the long-term.
Appendices	
Appendix A – State of Local Infrastructure Report Cards	Detailed reports on the state of local infrastructure by asset category including the asset portfolio, replacement values, age and condition.
Appendix B – Levels of Service Tracker	Detailed table of all customer, technical, current, and proposed levels of service for all asset categories and service areas.
Appendix C – Detailed Financing Strategy Tables	Additional detailed tables related to the lifecycle cost and financing strategy.

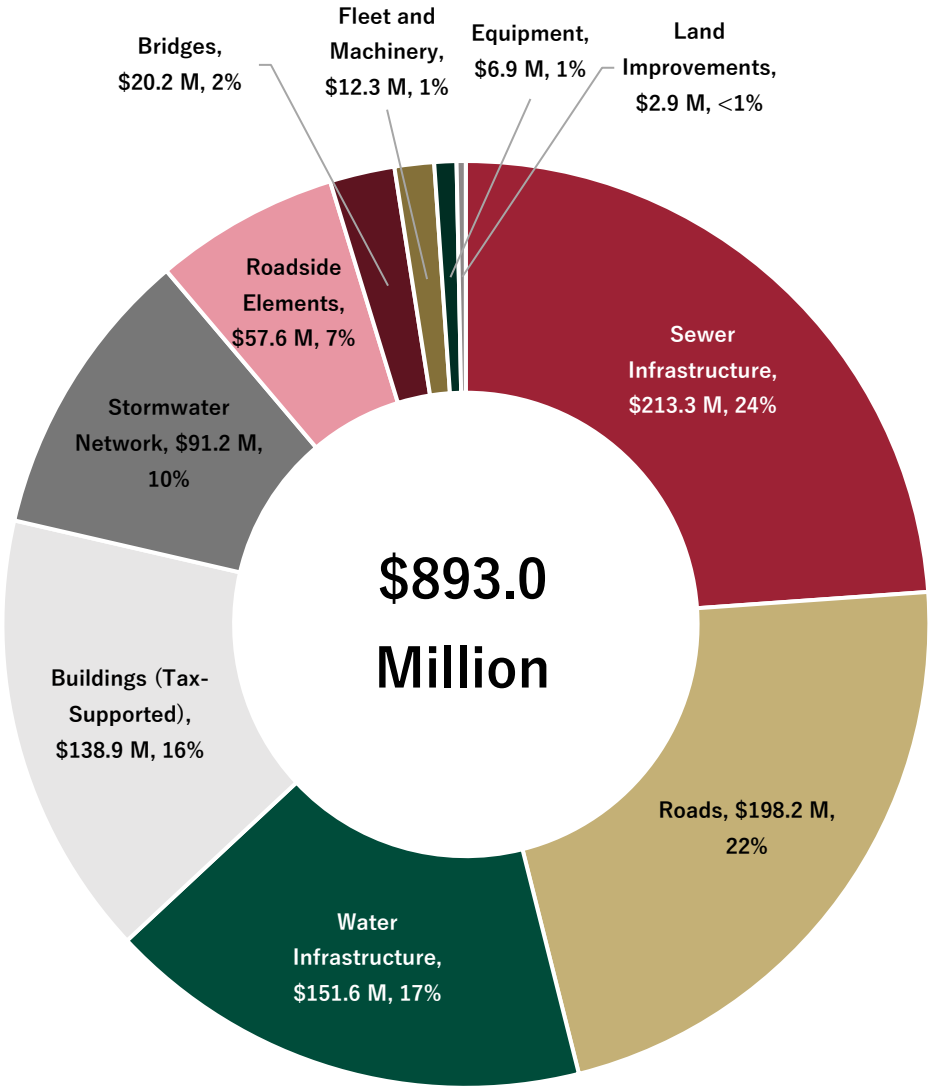
2. STATE OF LOCAL INFRASTRUCTURE

This section provides a summary of the City's assets with reference to asset quantity and quality. Most assets have condition assessments based on engineering inspections, while the balance of asset conditions are based on the useful life of the asset relative to its age or a high-level condition assessment developed in consultation with City staff. Detailed technical information on the asset inventory, remaining useful life and conditions for each asset category is provided in Appendix A.

A. REPLACEMENT COST OF INFRASTUCTURE

The replacement cost for all City assets considered in the 2025 AMP is estimated at $893.0 million (represented in constant 2025 dollars). The largest share is related to sewer infrastructure, which totals 213.3 million (24%), followed by roads, which total about $198.2 million (22%) of the total replacement value. The next highest share is attributed water infrastructure, with a replacement value of $151.6 million (17%). Buildings (not including the wastewater or water treatment plants) are the next largest category at $138.9 million (16%), and this is followed by stormwater infrastructure at $91.2 million (10%). The other asset categories in the City's asset portfolio are made up of $57.6 million (7%) for roadside elements (such as traffic signals, streetlights, sidewalks, and curbs), bridges at $20.2 million (2%), $12.3 million (1%) for fleet and machinery, $6.9 million (1%) for equipment, and $2.9 million (<1%) for land improvements.

Figure 2 - Summary of Assets by Total Replacement Value ($2025 millions)



Note: Sewer Infrastructure and Water Infrastructure include the WWTP and WTP, respectively.

Replacement values are used to estimate the cost of replacing an asset when it reaches the end of its engineered design life. For this reason, the replacement values represent an important input into the lifecycle cost analysis. The total replacement cost of assets of $893.0 million has been determined utilizing different methods that are appropriate for each asset category and dependent on data available at the time of developing this AMP.

Table 2 – Methodology Used for Replacement Values

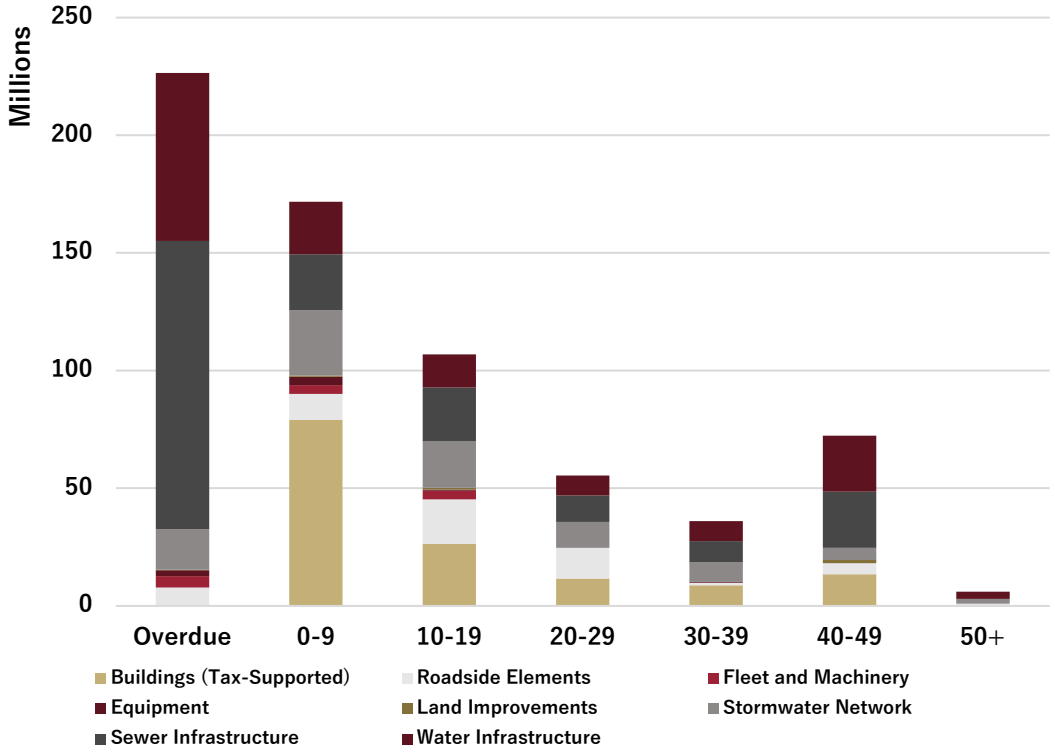
Asset Category	Methodology
Roads	▪ Based on replacement costs per kilometer of road section provided in the City's Roads dataset.
Bridges & Culverts	▪ Based on replacement cost per square meter of deck area as detailed in the OSIM Reports.
Buildings	▪ Combined approach between replacement costs provided in the facility condition assessments where applicable, inflated to 2025 dollars. Otherwise, historical costs inflated to 2025 dollars using NRBCPI.
Water and Wastewater	▪ For linear infrastructure, unit costs were sourced from the alternative municipal benchmarks.
Stormwater	▪ For linear infrastructure, unit costs were sourced from alternative municipal benchmarks.
Sidewalks	▪ Based on replacement costs per meter of sidewalk from previous AMP, inflated to 2025 dollars based on average NRBCPI.
All Remaining Asset Categories	▪ Based on combined approach of inflating historical costs.

B. REMAINING USEFUL LIFE OF THE INFRASTRUCTURE

Figure 3 provides a summary of the assets by replacement value shown by their remaining useful life (years). About $6.0 million (1%) of the infrastructure has greater than 50 years of remaining useful life. About $270.5 million (40%) has between 10 and 49 years of remaining useful life while about $171.7 million (25%) has 0 to 9 years of remaining useful life.

The remaining $226.4 million (34%) is considered overdue and past its design life. This is largely related to water and sewer infrastructure, consisting of about $193.8 million in assets overdue at this time. Although this infrastructure is considered past its design life, the infrastructure continues to be maintained and is in good working order.

Figure 3 - Summary of Assets by Remaining Useful Life ($2025)



C. CONDITION OF THE INFRASTRUCTURE

Consistent with the Canadian National Infrastructure Report Card, as well as other major organization and institution reporting formats, a five-point rating scale was used to assign a condition to all assets. This methodology provides a standard and easy to understand way of reporting on the condition of assets. Table 3 summarizes the assumed parameters.

Table 3 - Condition Assessment Parameters

Condition Rating	Definition
Very Good	▪ Well maintained, good condition, new or recently rehabilitated asset.
Good	▪ Good condition, few elements exhibit existing deficiencies.
Fair	▪ Some elements exhibit significant deficiencies. Asset requires attention.
Poor	▪ A large portion of the system exhibits significant deficiencies. Asset mostly below standard and approaching end of service life.
Very Poor	▪ Widespread signs of deterioration, some assets may be unusable. Service is affected.

Assets were categorized in the 5-tier rating system on an asset-by-asset basis. Three approaches have been utilized for the assets considered in this AMP. The approaches for each of these methods is outlined.

1. Engineered Conditions

Condition rating systems based on engineered and professional standards. These measures can then be translated into a 5-tier rating system. The City aims to continually update the asset inventory to reflect changes in conditions or when assets are replaced.

- Condition assessments for the roads are based the PCI (Pavement Condition Index) recorded within the City's road maintenance database. The condition of the roads has been translated to the 5-point scale based on the scale in Table 4.

Table 4 – Road Surface Condition Parameters

Condition Rating	PCI Range
Very Good	90 - 100
Good	70 - 90
Fair	55 - 70
Poor	40 - 55
Very Poor	Less than 40

- Condition assessments for bridges and culverts are based on the engineered assessments developed through the 2024 OSIM report (Ontario Structure Inspection Manual). The OSIM report rates the culverts utilizing a 100-point Bridge Condition Index scale (BCI). The condition of the culverts has been translated to the 5-point scale based on the scale in Table 5 below.

Table 5 – Culvert Condition Parameters

Condition Rating	BCI Range
Very Good	80 - 100
Good	70 - 80
Fair	60 – 70
Poor	50 – 60
Very Poor	Less than 50

2. Staff Consultation

For some assets where engineering conditions were not available, estimates were developed in consultation with City staff. This approach is important where there is low confidence that

age and useful life represents the condition of a particular asset. This method has been used for some assets contained in this 2025 AMP, where City staff who are familiar with the assets felt that the age-based condition did not match the true condition of the assets.

3. Age Based Approach

For some asset types where the City was not able to provide a condition assessment based on existing knowledge or inspection, the condition is estimated based on age and the remaining useful life of the asset. It is the intention that the City move towards a condition assessment methodology using approach 1 and 2 wherever possible. The age-based condition methodology is more appropriate for lower valued assets that have a shorter useful life. Table 6 shows the methodology where the condition is assigned based on the remaining useful life of the assets.

Table 6 – Age Based Condition Parameters

Condition Rating	Percentage of Remaining Useful
Very Good	80% - 100%
Good	60% - 80%
Fair	40% - 60%
Poor	20% – 40%
Very Poor	Less than 20%

Summary of the Condition of Assets

Figure 4 summarizes the condition of City assets which are determined to be in Fair condition on average. Overall, $349.1 million (39%) of the assets are in Good to Very Good condition while $171.5 million (19%) of the assets are Fair condition. The remaining $372.5 million (42%) are in Poor to Very Poor condition.

Figure 4 - Summary of Asset Condition ($2025)

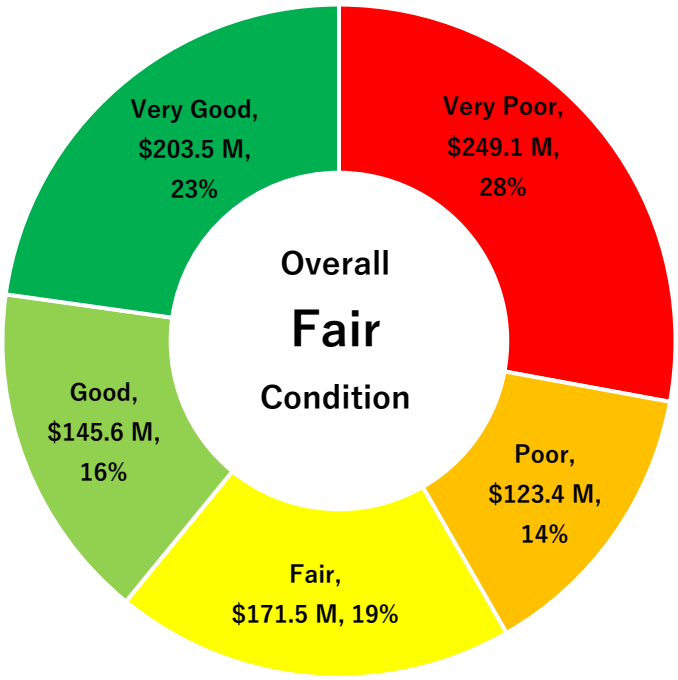


Figure 5 shows the condition of assets delineated by each asset category. Figure 5 shows the following for assets with larger shares in Poor or Very Poor condition:

- Sewer infrastructure is generally in Fair condition with about $18.1 million (9%) falling within that category. $81.9 million (38%) fall in Poor or Very Poor condition, and $113.4 million (53%) are in Good to Very Good condition.
- Following the parameters outlined in Table 4, Roads were determined to be in Poor condition overall. $25.2 million (13%) of Roads are in Good and Very Good Condition. With only $50.1 million (25%) falling in Fair condition, this leaves the majority of assets, or $122.9 (62%) million in Poor and Very Poor condition.
- Water infrastructure is generally in Poor condition. $39.4 million (26%) of the assets in this category are in Good and Very Good Condition. With only $8.4 million (6%) falling in Fair condition, this leaves the majority of assets, or $103.7 (68%) million in Poor and Very Poor condition.
- Buildings (specifically those supported by tax-levy) are in Fair condition overall, with $55.2 million (40%) in this condition. $57.1 million (41%) are in Good and Very Good condition, and the remaining $26.6 million (19%) are in Poor and Very Poor condition.

- Stormwater Infrastructure is in Good condition, on average. $77.3 million (85%) of these assets are in Good and Very Good condition. Only $3.9 million (4%) are in Poor and Very Poor, and the remaining $10.0 million (11%) are in Fair condition.

- Roadside Elements have been evaluated to be in Fair condition overall. This asset category includes traffic signals, sidewalks, curbs, and streetlights. $15.2 million (26%) of these assets are in Good and Very Good condition, and $19.1 million (34%) are in Poor and Very Poor condition. The remaining $23.3 million (40%) are in Fair condition.

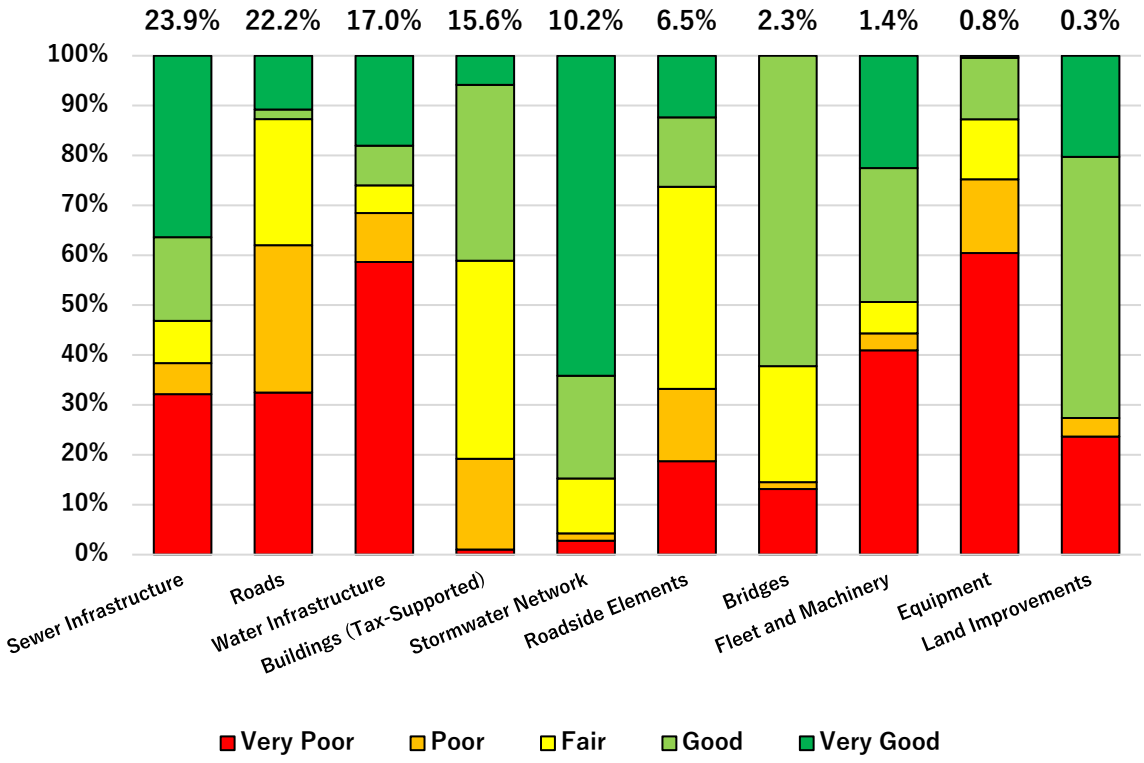
- Bridges and Culverts are generally in Fair condition with about $4.7 million (23%) falling within that category and $2.9 million (14%) falling in Poor or Very Poor condition. The majority of bridges and culverts of about $12.6 million (63%) are in Good to Very Good condition.

- Fleet and Machinery are generally in Fair condition, with about $6.0 million (49%) in Good and Very Good condition, and $5.4 million (44%) in Poor and Very Poor condition. The remaining $2.1 million (7%) are in Fair condition.

- Equipment is overall in Poor condition, with about $0.9 million (13%) in Good and Very Good condition, and $5.2 million (75%) in Poor and Very Poor condition. The remaining $0.8 million (12%) are in Fair condition.

- Land improvements are in Fair condition overall, with $2.1 million (72%) in Good or Very Good condition, and $0.8 million (28%) in Poor and Very Poor condition.

Figure 5 - Summary of Asset Condition by Asset Category



Note: The percentages above the bars represent the shares of replacement value relative to the total replacement value of City assets.

3. LEVEL OF SERVICE

Levels of service (LOS) describe the outputs or objectives the City intends to deliver to its residents, which includes measures from a customer, technical and community perspective. LOS provides a description of a particular activity or asset metric where performance may be measured to benchmark the current state and set targets to ensure resident's needs are met.

Levels of service measure how well the City is meeting business needs and this information can be utilized as key drivers to inform future investment decisions. Having well-defined service levels will allow the City to be transparent with its stakeholders to find the appropriate balance between affordability and service expectations.

A. THE CITY'S LEVEL OF SERVICE GOALS

The LOS Framework helps support and achieve key asset management goals:

- Develop and continuously improve asset management related documentation to provide evidence-based level of service linkages between the customer and technical levels with integration directly into service-based activities as it relates to both the operational and capital expenditures. This objective is achieved through development of the AMP financial model, and the City expects to continue to make improvements to its available asset data over the longer-term.

- Develop a clear relationship between the level of service and the costs associated to meeting level of service objectives by integrating the AMP LOS framework into the budget process. This integration is expected to be achieved over the longer-term however, the financing strategy makes recommendations on the financial needs to meet the proposed level of service which can be utilized to help inform the budget process.

- Meet the requirements of *O. Reg. 588/17* for 2025 to define the proposed level of service, identify costs to meet the proposed level of service and identify any risks of not meeting these targets.

B. CUSTOMER LEVELS OF SERVICE (CLOS)

Customer Levels of Service are specific parameters that describe the extent and quality of services that the City provides to residents from the resident's perspective. CLOS is comprised of qualitative measures such as the description of assets or the related service provided. CLOS can be evaluated through an understanding of the wants and needs of residents while understanding the assets the City owns and operates. The CLOS are documented as high-level qualitative statements that capture these characteristics. For the purposes of meeting *O. Reg. 588/17* requirements, the Community Levels of Service (outlined in the regulation) are also included under the CLOS.

C. TECHNICAL LEVELS OF SERVICE (TLOS)

Technical Levels of Service are specific parameters that measure asset performance. TLOS is comprised of quantitative measures such as asset age, condition or service performance. Part of the TLOS is to consider both the individual asset capability and how the assets are scheduled to be utilized as part of a system of service delivery. These measures are developed through a review of the City's asset data, engineering reports and in consultation with staff.

The technical levels of service have been defined to meet the following criteria:

- TLOS measures are relevant to the operation of City services
- TLOS are feasible to track and the data to inform the technical measures are readily available or will be tracked for future iterations of the AMP
- TLOS are developed recognizing the public as the main driver of service, they are designed to track internal asset specific performance, but the resulting quality of service will continue to be based on public input

TLOS measures are crucial for tracking levels of service as they provide quantifiable measures to evaluate the effectiveness and efficiency of service delivery. By systematically monitoring these measures, the City can assess whether service standards are being met, identify areas for improvement, and allocate resources effectively. An iterative consultation process with staff helped in developing an internal tracking tool to capture the necessary data for calculating the current and proposed levels of service and monitoring the trends moving forward.

D. OVERVIEW OF THE CITY'S LEVEL OF SERVICE

The City's 2024 Asset Management Plan was prepared for all City infrastructure assets under the "current level of service" framework as required by *O. Reg. 588/17*. The City defined its current levels of service in accordance with qualitative and technical metrics that have been established through the regulation and in consultation with staff. In general, the measures were derived from data collected in 2023 and the process ensured that the current level of service accurately reflected the performance and condition of infrastructure assets given the available data at the time.

Current Level of Service

For the purposes of this 2025 Asset Management Plan, the customer and technical level of service reporting measures remain generally consistent with those established through the 2024 process with some additional measures included for the 2025 Plan, however, the "current" baseline data has been updated with information that has been made available since 2023. Furthermore, improvements have been made to streamline the measures to focus in areas that are relevant and useful for service level monitoring and meeting the regulatory reporting requirements.

Proposed Level of Service

O. Reg 588/17 requires municipalities to define its proposed levels of service by July 1st, 2025. These proposed levels of service (PLOS) are intended to provide the City with a measurable future target state for the services it provides. The proposed level of service focuses on asset specific measures that capture the performance of infrastructure which forms part of the services provided by the City. Best efforts have been made to maintain the focus of the proposed level of service to infrastructure assets that support the service rather than the overall services provided by any specific service area. However, it is noted that in general the proposed level of service outlined in this AMP are required to continue to provide the overall level of service objectives of the City.

For every level of service that the City measures, a corresponding set of PLOS measures have been developed. Consultation with City staff was conducted to develop the proposed levels of service based on the needs of the community, existing data and assessing their appropriateness for the City. Overall, the proposed levels of service outlined in this report have been carefully evaluated based on the following criteria:

- **Options & Associated Risk** - Staff assess various options for the proposed levels of service and analyze the risks associated with each option to the long-term sustainability of the City. This assessment considers factors such as service quality, operational efficiency, and financial sustainability.

- **Differences from Current Levels of Service** – The analysis looks at a comparison of the proposed levels of service with the current levels to identify areas where adjustments or enhancements are necessary. While some proposed levels of service may mirror the current levels outlined in this AMP, adjustments or enhancements to the current procedures may still be necessary to ensure alignment with longer-term goals.

- **Achievability** - The feasibility of achieving the proposed levels of service considering factors such as available resources, technological capabilities, and operational constraints have been evaluated. Efforts have been made to ensure that the proposed targets are realistic and attainable within the City's operational capacity. Notwithstanding the City's intended ability to achieve the targets, it is expected that the proposed levels of service continue to be reviewed and monitored - further adjustments may be warranted moving forward.

- **Affordability** - The affordability of the proposed levels of service is conducted in conjunction with the budget process, ensuring alignment with the financial resources and fiscal capacity available. This process inherently involves approval by Council and the organization, with affordability considerations integrated into budgetary decisions.

Summary of the Level of Service

Table 7 summarizes the customer levels of service for the core assets only while Table 8 shows the technical levels of service as required by *O. Reg. 588/17*. A detailed version of the LOS table can be found in Appendix B which includes the customer, technical, current, and proposed LOS for all assets and service areas. Table 8 shows the following:

- Local road lane kilometres as a proportion of the City's land area are about 51%. Collector road lane kilometres as a proportion of the City's land area are about 30%. The number of lane kilometres of arterial roads as a proportion of the City's land area is 18%. The proposed level of service for these measures is to maintain the current level of service as the City does not expect to change these proportions in the foreseeable future.

- Paved roads in the City are on average in Poor condition with an average Surface Condition Rating of 54 out of 100. This includes both Asphalt and Surface Treated

Roads. Unpaved roads in the City are on average in Very Poor condition with an average Surface Condition Rating of 42 out of 100, and included all dirt, gravel, and unimproved roads. This information is based on the City's Roads Management System. The proposed level of service is to maintain the current average.

- City bridges are on average in Fair condition (63.8 BCI) with one pedestrian bridge currently having loading or dimensional restrictions. The City aims to increase the condition of it's bridges and culverts to Good condition or better as the recommended works from the OSIM Report are undertaken. The city will continue to perform legislated inspections every two years.

- For water infrastructure, 78% of properties are connected to the municipal water system. The number of connection days per year where a boil water advisory is in place compared to the total number of properties connected to the municipal water system is 0. The number of connection days due to a water main breaks compared to the total number of properties connected to the municipal water system is 0.23%. The target for these two levels of service measures is to keep the current performance over the 10-year period. The Water Loss calculation suggests that the City is currently not billing for 42% of the water produced. The target for this metric has been set to maintain the currently % of water unaccounted for.

- For wastewater infrastructure, 78% of properties are connected to the municipal wastewater system. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system is 12, and this has been set as the maximum over the next 10 years. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system is 0, and the proposed target was determined to be 0 over the next 10 years.

- The levels of service for the non-core asset categories, as outlined in Appendix B, were developed in collaboration with staff or are based on the average condition which was informed through consultation with City staff which developed high-level assessments for these assets. Where information was not available, the age of the assets was used. The proposed level of service is to either maintain or exceed the current level of service.

Table 7 – Customer Levels of Service

Asset Category	Customer LOS	Community Level of Service	
Roads	Maintain safe and reliable roads and to meet reporting requirements of O. Reg. 588/17.	Description, which may include maps, of the road network in the City and its level of connectivity.	The connectivity of roads can be found in the Appendix C of this report, taken from the City's 2024 Official Plan.
		Description or images that illustrate the different levels of road class pavement condition.	The Municipality maintains surface condition ratings of the road system condition by roads segments on a scale from 0-100. Descriptions of the condition of the road network can be found in Section 2 of this report, or the report cards in Appendix A.
Bridges and Culverts	Maintain safe and reliable culverts and to meet reporting requirements of O. Reg. 588/17	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Bridges and Culverts support all local traffic. Information about Load Restrictions can be found in the TLOS (Table 8).
		Description or images of the condition of bridges and how this would affect use of the bridges.	Details on engineered bridges and culverts conditions including images and technical specifications are included in the 2024 OSIM Report.
		Description or images of the condition of culverts and how this would affect use of the culverts.	

Asset Category	Customer LOS	Community Level of Service	
Storm Sewers	To provide reliable stormwater management services and meeting reporting requirements of O. Reg. 588/17.	Description, which may include maps, of the user groups or areas of the City that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	Storm sewers collect rain and run off from melting snow on properties to help prevent flooding and redirect this wastewater to nearby stormwater management ponds and waterways. Through a combination of landscape and structural features, stormwater management ponds allow sediment and contaminants to settle out of runoff before it is released into a natural watercourse. Stormwater ponds also hold back water in order to release it at a controlled rate during large storms. Controlling the flow of stormwater protects downstream lands from erosion and flooding.
Water Infrastructure	To provide safe drinking water to residents and to meet reporting requirements of O. Reg. 588/17	Description, which may include maps, of the user groups or areas of the City that are connected to the municipal water system.	The City of Dryden owns and maintains a water system that serve residents in the urban area. The City is committed to maintaining a safe supply of high-quality drinking water that meets all applicable regulations and legislation.
		Description, which may include maps, of the user groups or areas of the City that have fire flow.	Fire flow is available in the urban areas only.
		Description of boil water advisories and service interruptions.	The City did not have any boil water advisories or service interruptions due to water main breaks from 2023 and 2024.

Asset Category	Customer LOS	Community Level of Service	
Wastewater Infrastructure	To ensure the proper treatment of wastewater and to meet the reporting requirement of O. Reg. 588/17.	Description, which may include maps, of the user groups or areas of the City that are connected to the municipal wastewater system.	The City of Dryden's sewer system supplies wastewater services to roughly 2,500 homes and businesses. The system includes both a Wastewater Treatment Plant and several pumping stations which are funded through user rates. The Municipality is responsible for all monitoring, quality assurance, quality control, reporting, inspecting, collection and maintenance of the facility.
		Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes.	In municipalities with combined sewer systems, both sanitary sewage (from homes and businesses) and stormwater runoff (from streets and roofs) are carried in a single pipe. During dry weather and light rain, all flow is directed to the Wastewater Treatment Plant for proper treatment. During heavy rainfall or rapid snowmelt, the volume of water can exceed the combined system's capacity. To prevent sewage backups into homes and businesses, the system is designed with overflow structures. These structures act as relief points that allow excess flow to discharge directly into nearby water bodies, such as rivers or lakes, bypassing full treatment. While not ideal, this controlled overflow protects public health and property by reducing the risk of basement flooding and sewer system failure.
		Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	
		Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes.	

Asset Category	Customer LOS	Community Level of Service
Buildings	Maintain safe and functional buildings with sufficient capacity for residents and staff.	The City owns and operates 55 buildings and structures which includes an airport maintenance building, an airport terminal, an aquatic centre, an arena complex, City Hall, two fire stations, a former police building, a library, a museum, a public works yard, various wells, lift stations, and pump houses, pavilions, storage space, and public washrooms.
Equipment	Maintain safe and functional equipment that is reliable and available for use when needed.	The City uses a wide variety of equipment to facilitate the functions it provides, including IT hardware, computers, recreation equipment, furniture, fire rescue equipment, fire PPE, communication equipment, hoists, etc.
Land Improvements	Maintain the assets that compose outdoor amenities for use by residents.	The City maintains a set of assets that are categorized as “land improvements”. These include any outdoor amenities which require intervention from the City to maintain, such as parking lots, entrance signs, boat ramps, docks, a skating pad, a splash pad, fencing, etc.
Fleet and Machinery	Maintain safe and functional motor vehicles and machinery available to respond to service needs when required.	The Municipality currently owns and maintains 178 different fleet and machinery assets. The majority of the replacement value for these assets sits under Fire and Public Works, as the equipment tends to have a higher replacement cost than the fleet of the other City departments.

Table 8 – Technical Levels of Service

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
Roads	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the City (O. Reg. 588/17).	2025 AMP	18%	Maintain 18%
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the City (O. Reg. 588/17).	2025 AMP	30%	Maintain 30%
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the City (O. Reg. 588/17).	2025 AMP	51%	Maintain 51%
	For paved roads in the City, the average pavement condition index value (O. Reg. 588/17).	2025 AMP	54.3	Maintain Minimum of 54
	For unpaved roads in the City, the average surface condition (O. Reg. 588/17).	2025 AMP	42	Maintain Minimum of 42
	Linear KM of Ditching per Year	2025 Staff Consultation	1.8 km	Maintain Minimum of 1.8 km
	Amount Spent on Gravel Resurfacing per Year	2025 Staff Consultation	$56,000	Increase Spending with Inflation
	Linear KM of Roads meeting MMS	2025 Staff Consultation	100%	Maintain 100%
Bridges and Culverts	Percentage of bridges in the City with loading or dimensional restrictions (O. Reg. 588/17).	OSIM Report	13% (One pedestrian bridge)	Maintain 13%
	For bridges in the City, the average bridge condition index value (O. Reg. 588/17).	OSIM Report	63.8	Increase and Maintain Minimum of 65

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	**Fair**	Increase to Good Condition
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	90%	Maintain Minimum of 90%
	% of assets beyond their useful life	2025 AMP	0%	Maintain 0%
	% of bridges and structural culverts receiving regulated inspections	2025 AMP	100%	Maintain 100%
Stormwater Network	Percentage of properties in City resilient to a 100-year storm (O. Reg. 588/17).	2025 Staff Consultation	99%	Maintain 99%
	Percentage of the municipal stormwater management system resilient to a 5-year storm (O. Reg. 588/17)	2025 Staff Consultation	100%	Minimum of 95%
	Meters of linear infrastructure that are inspected annually	2025 Staff Consultation	2,244 M	Minimum of 2,244 M
	% of Catch Basins inspected annually	2025 Staff Consultation	100%	Maintain 100%
	% of streets with catch basins street swept twice annually	2025 Staff Consultation	100%	Maintain 100%
Water Infrastructure	Percentage of properties connected to the municipal water system (in the serviced area) (O. Reg. 588/17)	2025 Staff Consultation	100%	Minimum of 100%
	Percentage of properties where fire flow is available (O. Reg. 588/17)	2025 Staff Consultation	100%	Maintain 100%

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system (O. Reg. 588/17)	2025 Staff Consultation	0	Maintain 0
	Number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system (O. Reg. 588/17)	2025 Staff Consultation	0.23%	Maintain 0.23%
	% of unaccounted for Water (Water Produced/Water Billed)	2025 Staff Consultation	58%	Minimum of 55%
	Number of Resident Complaints related to Water Service	2025 Staff Consultation	16	Maximum of 20
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	26%	Maintain Minimum of 25%
Wastewater Infrastructure	Percentage of properties connected to the municipal wastewater system (O. Reg. 588/17)	2025 Staff Consultation	78%	Maintain Minimum of 78%
	The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system (O. Reg. 588/17)	2025 Staff Consultation	0%	Maintain 0%
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system (O. Reg. 588/17)	2025 Staff Consultation	12	Maximum of 12
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system (O. Reg. 588/17)	2025 Staff Consultation	0	Maintain 0
	Number of unplanned maintenance events over $10,000	2025 Staff Consultation	7	Maximum of 7

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	53%	Maintain Minimum of 50%
Buildings	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	**Fair**	Minimum of Fair
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	47%	Minimum of 45%
	% of assets beyond their useful life	2025 AMP	0%	Maximum of 20%
	% of Facilities in compliance with regulations (TSSA, ESA, Joint Health Safety, Committee, OHSA, Building Code)	2025 Staff Consultation	80%	Minimum of 80%
	Square Meters of Indoor Recreation Space per Capita	2025 Staff Consultation	0.76	Minimum of 0.70
	Square Meters of Library Space per Capita	2025 Staff Consultation	0.10	Minimum of 0.10
Equipment	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	**Poor**	Minimum of Poor
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	13%	Minimum of 15%
	% of assets beyond their useful life	2025 AMP	36%	Maximum of 35%
	% of regulated MTO maintenance inspections complete	2025 Staff Consultation	100%	Maintain 100%
	Planned vs. Unplanned Maintenance Costs	2025 Staff Consultation	60%	Maintain 60%
Land Improvements	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	**Fair**	Minimum of Fair
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	73%	Minimum of 70%
	% of assets beyond their useful life	2025 AMP	7%	Maximum of 10%

Asset Category	Technical Level of Service	Source	Current LOS	Proposed LOS
	Number of playgrounds that do not meet accessibility standards based on surface quality	2025 Staff Consultation	0%	Increase as replacements are needed
	Frequency of grass trims on parkland	2025 Staff Consultation	Once per Week	Maintain Weekly Trimmings
	% of sidewalks that comply with AODA minimum clearance width of 1.5m	2025 Staff Consultation	50%	Increase as replacements are needed
	KM of Active Transportation Trails	2025 Staff Consultation	11.4 km	Maintain 11,376 (Expansion is funding contingent)
Fleet and Machinery	Average weighted condition assessment ("Very Poor" to "Very good")	2025 AMP	**Fair**	Minimum of Fair
	% of assets at or above "Good" or "Very Good" condition	2025 AMP	25%	Minimum of 15%
	% of assets beyond their useful life	2025 AMP	43%	Maximum of 25%
	Unplanned Repairs (% of overall repair jobs for all equipment)	2025 Staff Consultation	60%	Minimum of 60%
	Preventative Maintenance Inspections (# due vs. # completed)	2025 Staff Consultation	100%	100%
	Charge-out for Equipment - % allocated vs. spent	2025 Staff Consultation	100%	100%

4. Asset Management Strategy

This section sets out an action plan that will assist the City in maintaining assets to meet proposed level of service objectives. The asset management strategy includes current practices and potential future practices related to non-infrastructure solutions, maintenance activities, renewal/rehabilitation, disposal, and expansion activities. It outlines the lifecycle costs needed to meet proposed levels of service over the next 10-years for each lifecycle activity and the methodology used to develop the costs. The final component of this section includes a risk analysis, which outlines a summary of assets that can be prioritized for repair/replacement if needed.

A. OVERVIEW OF FULL LIFECYCLE COST MODEL

As part of the Asset Management Plan, the City, along with Hemson, have identified the total full life cycle costs that corresponds to the requirements of the regulation. This would entail a cost estimation throughout the asset's life including planning, design, construction, acquisition, operation, maintenance, renewal (and disposal). In addition, the analysis also takes into consideration the inclusion of expansion related infrastructure into the lifecycle management strategy. This approach ensures that the additional lifecycle costs associated with newly constructed/acquired assets are accounted for in the long-term forecast, if any.

A "lifecycle management approach" in asset management planning not only includes estimating future lifecycle costs based on a set of lifecycle activities. These lifecycle activities can be segmented into six (6) categories: non-infrastructure solutions, operations/maintenance, renewal/rehabilitation, replacement, disposal, and expansion activities. Table 9 provides a description of each lifecycle category. The City undertakes all the activities described in Table 9, however, the City's budget generally accounts for these expenditures in different categories.

Table 9 - Overview of the Full Life Cycle Activities

Category	Description
Non-Infrastructure Solutions	Actions or policies that can lower costs or extend asset life (e.g., better integrated infrastructure planning and land use planning, demand management, insurance, process optimization, etc.). Associated to work needed to manage assets but not necessarily direct work on those assets.
Maintenance Activities	Servicing assets on a regular basis to fully realize the original service potential. Maintenance will not extend the life of an asset or add to its value. Not performing regular maintenance may reduce an asset's useful life.
Renewal/ Rehabilitation Activities	Mostly associated to significant repairs designed to extend the useful life of an asset. These types of activities are typically done at key points in the lifecycle of an asset to ensure the asset reaches it designed useful life.
Replacement Activities	Activities that are expected to occur once an asset has reached the end of its useful life and renewal/rehabilitation is no longer an option.
Disposal Activities	The activities associated with disposing of an asset once it has reached the end of its useful life or is otherwise no longer needed.
Expansion Activities	Planned activities required to extend or expand municipal services to accommodate the demands of growth.

As the City's infrastructure assets are long-lived, the starting point for the lifecycle costs analysis covers a 40-year planning period. However, consistent with *O. Reg. 588/17,* the planning period focuses on the first 10-years to meet proposed levels of service. In this period, various methodologies have been utilized to determine the long-term lifecycle costs to maintain, repair and replace assets under an "ideal" investment scenario. This means that the recommendations from all engineering reports are considered, and assets are replaced at the end of their useful life with no adjustments or considerations for existing municipal asset practices or relationship to the target level of service. These costs are referred to as the "benchmark" lifecycle costs.

B. LIFECYCLE COSTS FOR TAX FUNDED SERVICES

Table 11 outlines the methodologies and 10-year costs to meet this ideal scenario. Over the 10-year period, the total lifecycle costs needed to maintain the infrastructure is estimated at $184.9 million (an average of about $18.5 million per year). Of the total lifecycle costs, most costs can be attributed to saving for the renewal, rehabilitation or replacement of infrastructure, making up about 80%. The 10-year average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about $14.8 million per year (see Table 10).

To determine the total lifecycle costs to meet proposed levels of service over the next 10-years, consultations with Municipal staff were undertaken to determine the best approach. Table 11 outlines the 10-year lifecycle costs needed to meet the proposed level of service for tax-supported assets relative to the bechmark expenditure need. Over the 10-year period, a total need of about $105.0 million is identified (an average of about $10.5 million per year). Of the total lifecycle costs, most costs can be attributed to saving for the renewal, rehabilitation or replacement of infrastructure, making up about 66%. The 10-year average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about $0.7 million per year (see Table 10).

Table 10 – Average 10-Year Annual Renewal/Rehabilitation/ Replacement Need by Asset Category for Tax-Supported Assets

Asset Category	10-Year Benchmark Annual Average	10-Year PLOS Annual Average
Roads	$578,100	$289,100
Buildings (Tax)	$119,400	$119,400
Bridges	$122,900	$34,500
Traffic Signals	$5,300	$2,100
Streetlights	$15,900	$15,900
Sidewalks	$69,600	$41,800
Fleet and Machinery	$109,900	$77,000
Equipment	$79,000	$55,300
Land Improvements	$14,600	$7,300
Curbs	$125,900	$25,200
Stormwater Network	$239,600	$29,900
Total	**$1,480,200**	**$697,500**

Table 11 - Overview of the Full Life Cycle Activities and AMP Approach for Tax-Supported Assets

Category	Lifecycle Cost Approach to Meet PLOS	10-Year Cumulative Benchmark Lifecycle Costs	10-Year Cumulative Lifecycle Costs to Meet PLOS
Non-Infrastructure Solutions	• Provision of $50,000 per year starting in 2026 to undertake activities to manage assets.	$500,000	$500,000
Operations and Maintenance Activities	• Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific maintenance – estimated at $3.3 million on average per annum using the 2025 budget • In most instances, does not include general operating costs associated to staffing (ex. staff that carry out recreational programs).	$33.3 million	$33.3 million
Replacement Activities	• Need for Bridges has been reduced from the calculated annual provision of $12.3 million to 10-year recommendations from OSIM Report of about $3.4 million. o Provisions for the long-term replacement of bridges and culverts beyond the 10-year period are included in the benchmark lifecycle costs but excluded from the PLOS lifecycle costs. Future updates to lifecycle costs should be based on OSIM recommendations. • Risk-based replacement schedule for all other asset categories. o For the PLOS lifecycle costs for buildings, 100% the benchmark lifecycle costs has been used to remain consistent with the Facility Evaluation Report. o For fleet and machinery, as well as equipment, only 70% of the replacement value has been used to recognize repair activities rather than full replacement of some of the assets. o For sidewalks, only 60% of the replacement value has been used to recognize repair activities rather than full replacement of these assets. Traffic signals were set to 40% of the calculated need. Land improvements and curbs have been determined to require 50% and 20% of the calculated provision to reach the proposed levels of service, respectively. o For storm assets, only 13% of the replacement value has been used to recognize repair activities rather than full replacement. Many of the assets in these categories are long-lived	$90.2 million	$40.8 million

Category	Lifecycle Cost Approach to Meet PLOS	10-Year Cumulative Benchmark Lifecycle Costs	10-Year Cumulative Lifecycle Costs to Meet PLOS
	and are not management based on a set replacement schedule, rather on an "as needed" basis.		
Renewal (Roads)	• Renewal expenditures for roads are calculated based on the anticipated need from 2025-2034: o The Proposed Level of Service lifecycle costs consider 50% of the total calculated benchmark need for roads, recognizing that the City has many gravel roads which have a higher frequency of intervention, but rarely require full replacement to remain in good condition.	$57.8 million	$28.9 million
Expansion Activities	• Annual provisions for the future replacement of infrastructure related to expansion activities, as identified in the 2025 Budget. • No additional allocation has been made for contributed assets in this analysis. However, as infrastructure is emplaced through the subdivision agreement process, the City should calculate the long-term repair and replacement requirements of that infrastructure.	$3.1 million	$1.6 million
Cumulative Total		**$184.9 million**	**$105.0 million**
Average per Year		**$18.5 million**	**$10.5 million**
Average per Year (for Renewal/Replacement Activities)		**$14.8 million**	**$7.0 million**

Note: All costs expressed in constant 2025 dollars.

C. LIFECYCLE COSTS FOR RATE-SUPPORTED ASSETS

Table 13 outlines the methodologies and 10-year costs to meet the ideal benchmark scenario. Over the 10-year period, the total lifecycle costs needed to maintain the infrastructure is estimated at $206.6 million (an average of about $20.7 million per year). Of the total benchmark lifecycle costs, most costs can be attributed to saving for the renewal, rehabilitation or replacement of infrastructure, making up about 93%. The 10-year average annual need specifically for renewal, rehabilitation or replacement of infrastructure is about $1.8 million per year (see Table 12).

Table 12 – Average 10-Year Annual Renewal/Rehabilitation/ Replacement Need by Asset Category

Asset Category	10-Year Benchmark Annual Average	10-Year PLOS Annual Average
Buildings (Rate-Funded)	$154,300	$61,700
Water Infrastructure	$757,400	$378,300
Sewer Infrastructure	$906,100	$405,300
Total	**$1.8 million**	**$0.8 million**

Note: “Related” assets includes information technology, furniture and fixture, machinery and equipment, vehicles, land improvements, and buildings related to water and wastewater services.

Table 13 - Overview of the Full Life Cycle Activities and AMP Approach for Rate-Supported Assets

Category	Lifecycle Cost Approach to Meet PLOS	10-Year Cumulative Benchmark Lifecycle Costs	10-Year Cumulative Lifecycle Costs to Meet PLOS
Non-Infrastructure Solutions	• Provision of $50,000 per year starting in 2026 to undertake activities to manage assets.	$500,000	$500,000
Operations and Maintenance Activities	• Based on a review of recent budgets by service area. Includes costs that can be reasonably attributed to asset specific maintenance – estimated at $1.5 million on average per annum using the 2025 budget. • In most instances, does not include general operating costs associated to staffing.	$15.0 million	$15.0 million
Renewal/ Rehabilitation/ Replacement Activities	• For both water and wastewater infrastructure, the risk-based replacement schedule is utilized to calculate the benchmark lifecycle costs. o The annual need for Water and Sewer buildings has been reduced from $154,300 per year to $61,700, recognizing that the building envelopes will be renewed, rather than replaced over their lifecycles. o This amounts to $757,400 per year on average for water infrastructure and $906,100 per year on average for wastewater infrastructure. o These needs have been reduced to $378,300 per year on average for water infrastructure and $405,300 per year on average for wastewater infrastructure.	$181.8 million	$84.5 million
Expansion Activities	• Annual provisions for the future replacement of infrastructure related to expansion activities, as identified in the 2024 Development Charges Background Study, amounts to a total of $540,000 over the 10-year period. • No additional allocation has been made for contributed assets in this analysis. However, as infrastructure is emplaced through the subdivision agreement process, the City should calculate the long-term repair and replacement requirements of that infrastructure.	$9.4 million	$9.4 million
Cumulative Total		**$206.6 million**	**$109.4 million**
Average per Year		**$20.7 million**	**$10.9 million**
Average per Year (for Renewal/Replacement Activities)		**$18.2 million**	**$8.5 million**

D. RISK ANALYSIS

It is important to assess the risk associated with each asset and the likelihood of asset failure. Asset failure can occur as the asset reaches its limits and can affect the level of service. In addition, certain assets have a greater consequence of failure than others. A risk matrix can help prioritize which assets should be repaired/replaced, even those which the City has already identified to be in Poor or Very Poor condition. The evaluation rating is then linked to the condition assessment parameter discussed in Section 2. The formula to determine asset risk is as follows:

(Likelihood of Failure) X (Consequence of Failure) = (Risk Rating)

Each of the components of the Risk Rating methodology is defined as follows:

Likelihood of Failure: is directly linked to the condition of an asset. For example, an asset in Very Poor condition would have the probability of asset failure in the short-term be high. This type of asset may be near the end of its useful life or has deteriorated significantly. Conversely, it would be considered rare for an asset to fail in the short-term if it is in Good or Very Good condition. Table 14 outlines the definition of likelihood of failure used for the City's assets.

Table 14 - Probability of Failure

Condition	Probability of Failure	Description
Very Good	1	Rare
Good	2	Unlikely
Fair	3	Possible
Poor	4	Likely
Very Poor	5	Almost Certain

Note: Definitions are based on the MFOA Asset Management Framework.

Consequence of Failure: refers to the impact on the City if an asset were to fail to provide the desired level of service. The consequence of failure has been determined separately for each asset category, as the impact to the City differs greatly by asset type. For example, if a fire emergency vehicle was not available for service, the potential impact could be severe compared to a vehicle used for administrative purposes. For the purposes of this analysis, assets were assigned a consequence of failure based on a review of the assets and the service area they are attributed to. Table 15 below outlines the definition of consequence of failure used for the City's assets. The consequence of failure, rated on a 1-5 scale, was

weighted relative to each category in Table 15 depending on how impactful the consequence may be to the City.

Table 15 - Consequence of Failure

Consequence of Failure	Description
1 - Insignificant	No impact to operations.
2 - Minor	Minor impact to operations, all major operations can continue to function.
3 - Moderate	Moderate impact to operations some critical operations may need to stop functioning temporarily.
4 - Major	Major operations seize and some damage control necessary.
5 - Significant	All operations seize to function and major damage control is necessary.

Risk Rating: categorizes assets based on the level of risk to the City. The risk rating provides a guide to prioritize assets by determining which assets require attention first and which capital works can be deferred. Higher risk assets should be prioritized for attention in the short term by determining which of the lifecycle actions is required to be performed on the asset. Table 16 below provides a summary of the risk matrix.

Table 16 - Risk Matrix

Evaluation Rating		Consequence of failure					Color Code
		1	2	3	4	5	
Likelihood of Failure	1	1	2	3	4	5	Very Low Risk
	2	2	4	6	8	10	Low Risk
	3	3	6	9	12	15	Moderate Risk
	4	4	8	12	16	20	High Risk
	5	5	10	15	20	25	Very High Risk

Table 17 presents the findings of the risk analysis and illustrates the City's asset risk rating. Most of the City's assets continue to have relatively low risk, an indication of good maintenance practices overall.

The risk of each asset and asset category has been determined with reference to the parameters outlined in Table 16. It is important to note, that the City will need to continue regular maintenance activities and capital works to ensure that the proposed level of service can be met, or otherwise additional risk can be expected. Please note roads, bridges and culverts have been excluded from the risk analysis in Table 17 as the infrastructure needs and timing of repair and replacement has been informed based on detailed engineered assessments outlined through the City's Roads Management software and the OSIM reports.

Table 17 - Summary Risk Assessment (excluding Roads, Buildings, Bridges and Culverts)

Asset Type	Replacement Cost ($2025)	Risk (Weighted Average)
Sewer Infrastructure	$213,280,829	**Moderate**
Water Infrastructure	$151,570,957	**High**
Stormwater Network	$91,205,880	**Low**
Roadside Elements	$57,634,977	**Low**
Fleet and Machinery	$12,253,532	**Moderate**
Equipment	$6,882,194	**Moderate**
Land Improvements	$2,889,530	**Low**
Total	**$535,717,900**	**Moderate**

Note: Roads, Buildings, Bridges and Culverts are excluded from the risk analysis as risk factors and prioritization have been addressed through the City's Roads Management Software and OSIM reports respectively.

Further to Table 17, the 2025 AMP includes an estimate of the timing for replacement of all assets. Using the risk assessment, a schedule for the replacement of assets has been developed on an asset-by-asset basis. Assets with a higher risk rating are prioritized earlier in the schedule to reflect a higher priority, while assets with lower risk ratings are moved further out into the future forecast to reflect a more "smoothed" expenditure outlook. The timing is based on a percentage of the useful life of the asset. Table 18 below provides a summary of the risk thresholds used to calculate timing of replacement needs. Section 5 discusses the results of the lifecycle cost analysis and financing strategy.

Table 18 - Risk Threshold for Asset Life Extension

Percentage of Useful Life Added					Color Code
100%	80%	60%	40%	20%	Very Low Risk
80%	65%	50%	30%	16%	Low Risk
60%	50%	35%	25%	10%	Moderate Risk
40%	30%	25%	15%	2%	High Risk
20%	16%	10%	2%	0%	Very High Risk

E. MANAGING RISK

It is important to recognize the risk associated with the City's ability to deliver the plan while recognizing that any deviation may affect the overall ability to deliver service. Table 19 below provides a summary of the identified risks, potential impacts and mitigating actions associated with the asset management program. Table 19 is intended to provide the City with a framework that can be continually updated. This framework can be used to track potential asset related risks and document mitigation actions so that they can be implemented into the City's asset management practices.

Table 19 -Risk Associated to the Plan

Risk Associated to the Plan		
Identified Risk	**Potential Impact**	**Mitigating Action**
Failed Infrastructure *(Condition or Level of Service Needs)*	▪ Delivery of service ▪ Asset and equipment damage	▪ Repair and rehabilitate as necessary ▪ Increase investment
Inadequate Funding	▪ Delivery of service ▪ Increased risk of failure ▪ Shorten asset life ▪ Defer funding to future generations	▪ Reductions of service by reviewing the current level of service ▪ Find additional revenue sources
Regulatory Requirements	▪ Non-compliance ▪ Mandatory investments ▪ Increased costs	▪ Find additional revenue sources ▪ Lobby actions
Plan is not followed or not undertaking required lifecycle activities	▪ Shorten asset life ▪ Inefficient investments ▪ Prioritization process failure ▪ Failure to deliver service	▪ Monitor and review levels of service ▪ Implement process to implement AMP ▪ Investigate alternative lifecycle management options

F. FUTURE DEMAND

The 2025 Plan largely focuses on the assets that the City currently owns and operates. According to Statistics Canada census, over the last 5 years (2016-2021) the City's population has decreased slightly (from 7,749 in 2016 to 7,388 people in 2021). However, the City is expecting higher growth in the future which will create the need for additional infrastructure to service new development. Moving forward, by 2047, the City's population is expected to increase to about 11,760 people with occupied households increasing to 6,781 over the same period. For more information, see Section 1.3 of the City's Official Plan.

G. CLIMATE CHANGE INTEGRATION

The management of a municipal assets plays a fundamental role in the delivery of services, which depends on the infrastructure available to deliver the service. Corporate asset management in municipalities largely relates to the management of existing assets to keep them in a state of good repair while planning for future repair and/or replacement of their assets across all service areas. Impacts of climate change are already being experienced around the world, including Canada. It is important for municipalities to begin considering

and planning for future climates to ensure the delivery of services, especially as it pertains to the maintenance of key municipal infrastructure. As per *Ontario Regulation 588/17* s3(5), municipalities must include a commitment in their asset management planning to address the vulnerabilities of climate change with respect to operations, levels of service and lifecycle management. There must also be consideration for anticipated costs, mitigation and adaptation approaches and disaster planning to meet all regulatory requirements in Ontario municipal asset management. In response to the regulatory requirements, the City adopted its first Strategic Asset Management Policy in 2019 and committed to integrating climate change as part of its asset management planning.

Expected climate change impacts include hotter, drier summers, warmer winters with increased precipitation, increased frequency and intensity of storms and increased intensity of extreme winds. These changes in climate will likely lead to increased risks associated with flooding, heatwaves, risk of infrastructure damage, health and safety of residents, the alteration or loss of habitats, etc.

Many of these risks are associated with municipal assets and may impact the levels of service. Climate change mitigation and adaptation planning is an important step for municipalities to take to begin managing risks associated with climate change. Therefore, the City is taking steps towards the integration of climate change considerations into their asset management planning framework moving forward.

The table below considers municipal owned and operated assets, although, regional critical infrastructure related to roads or public health may also be impacted by the noted hazards. Table 20 provides a risk summary at this time for information purposes to help further propel climate change integration with asset management, although, recognizing the full utilization would still need to be applied and understood at the staff level. In asset management terms, this table shows the big picture effects that climate change hazards may have on the level of service for various service areas. The specific climate change impacts on levels of service could vary considerably and will need to be monitored over a longer time-period.

Through further understanding of the anticipated extent of climate change events, climate change adaptation projects at the City will provide additional parameters as to the likelihood and severity of events. At its most simplistic form, the table below provides a range from a “rare” occurrence to “almost certain.” A rare occurrence could be correlated to falling into the tenth percentile of probability, with an almost certain occurrence falling into the ninetieth percentile of probability.

Table 20 - Framework for Climate Change Integration with Risk

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Freezing Rain / Ice Storm	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Storm Sewer System ▪ Water and Wastewater	▪ Reduced road, bridge, and culvert conditions, potential for closures ▪ Potential impact to access to facilities or closures ▪ Strain on storm sewer capacity on thaw
Extreme Temperatures – Cold Wave	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Land Improvements	▪ Closures of outdoor amenities due to extreme weather conditions ▪ Increased strain on indoor heating systems leading to reduced service life and functionality of components and systems
Tornado	Rare to almost certain	▪ All Services	▪ Potential damage to various municipal assets due to high winds
Intense Rain	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Storm Sewer System ▪ Water and Wastewater	▪ Flooding of bridges, culverts and roadways leading to closures ▪ Disruptions to service due to flooding of roads, leading to decreased levels of service ▪ Potential impact to access to facilities or closures ▪ Strain on storm sewer capacity causing floods
Flood – Urban	Rare to almost certain	▪ Roads ▪ Bridges and Culverts ▪ Buildings ▪ Land Improvements ▪ Storm Sewer System ▪ Water and Wastewater	▪ Flooding of culverts and roadways leading to closures ▪ Disruptions to service due to flooding of roads, leading to decreased levels of service ▪ Potential impact to access to facilities or closures ▪ Flooding of parks leading to closures and reduced levels of service ▪ Strain on storm sewer capacity

Hazards/Risks	Likelihood	Consequence	
		Asset Category	Possible Service Impacts
Extreme Temperatures – Heat Wave	Rare to almost certain	▪ Buildings ▪ Land Improvements	▪ Potential closure/reduce used of outdoor amenities due to high temperatures (reduced levels of service). ▪ Lost habitats leading to reduced environmental diversity. ▪ Increased strain on indoor cooling systems leading to reduced service life and functionality of components and systems
Windstorm	Rare to almost certain	▪ Buildings ▪ Land Improvements	▪ Closure of outdoor assets due to potential hazards for residents ▪ Increased strain on facility assets leading to potential damages and reduced service life and functionality of components and systems

Source: https://www.assetmanagementbc.ca/wp-content/uploads/Climate-Change-and-Asset-Management.pdf

5. FINANCING STRATEGY

The City has continually undertaken both operating and capital expenditures necessary to maintain tax and rate funded services, however, the investments made fall short of the required need to meet the proposed levels of services. The City will need to monitor funding levels over the next few years in relationship to the levels of service. This section of the 2025 Plan is intended to help the City build on the existing asset management practices already in place. The financing strategies presented provide the City with feasible options to increase capital funding in a sustainable manner to meet proposed levels of service. It is noted that all values are presented in constant 2025 dollars.

A. ANALYSIS OF AVAILABLE REVENUES

The municipal revenue sources available to address the identified full lifecycle cost requirements outlined in Section 4 are limited. Generally, the type of capital project aligns to its funding source. In this regard, growth-related projects receive most of their funding through development charges in communities that impose DCs; replacement projects are predominantly funded through tax-based contributions for tax supported assets and water and wastewater rate revenues for rate-supported assets.

When assets require rehabilitation or are due for replacement, the source of funds are essentially limited to reserves or contributions from the operating budget regardless of how the initial first round capital asset was funded. Table 21 below provides a summary of the revenues assumed in this analysis for tax-supported assets and rate-supported assets.

Table 21 - Financing Strategy Key Assumptions for Tax and Rate Supported Assets

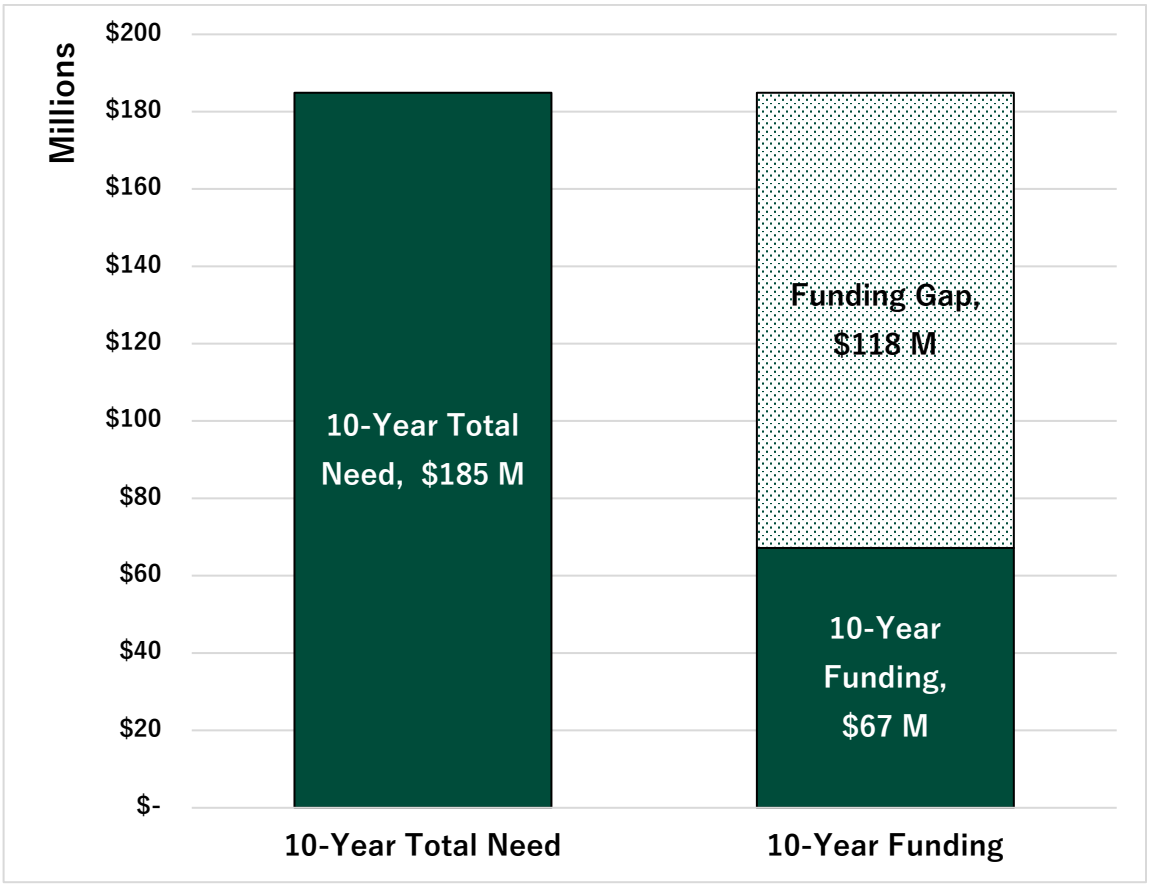
Category	Assumptions	10-Year Revenue for Tax-Funded Assets	10-Year Revenue for Rate-Funded Assets
Operations and Maintenance from Taxation/Rates	▪ The service areas provide ongoing maintenance and support activities that preserve the condition or performance of assets and ensures the longevity of assets in line with their design and operational requirements. ▪ These maintenance activities are funded through the City's regular operating budget	$33.3 million	$15.0 million

Category	Assumptions	10-Year Revenue for Tax-Funded Assets	10-Year Revenue for Rate-Funded Assets
	and it has been assumed that revenues from taxation/user fees will continue to fully fund existing asset maintenance needs.		
Capital from Taxation/Rates (including reserve contributions)	▪ Existing 2025 capital funding of about $1.9 million for tax supported assets and $1.6 million for rate supported assets is assumed to be the starting point and base case for increasing annual capital contributions. ▪ This includes the capital from operating funding and contributions to reserves net of transfers from reserves or capital related grant funding.	$18.5 million	$16.3 million
Grants	▪ Gas tax funding for 2025 is equal to approximately $296,000. This amount has been assumed in 2025 and 2026. For the remainder of the ten-year period, gas tax funding of about $308,000 is assumed annually. These values are informed based on the AMO allocations.	$10.7 million	$6.6 million
Capital from Operating	▪ Specific capital lifecycle activities that are completed through the operating budget have been assumed to be capital revenue for the purposes of this financing strategy.	$2.4 million	$1.5 million
Existing Reserves	▪ Existing asset management related reserve funds have been accounted for and are applied against the lifecycle cost expenditures over a 10-year period for the purposes of the analysis. ▪ The reserves included in the analysis only capture funds available for capital and generally exclude operating reserves.	$1.6 million	$1.6 million
Total		**$67.2 million**	**$55.6 million**

B. BENCHMARK INFRASTRUCTURE FUNDING GAP FOR TAX-SUPPORTED ASSETS

To implement sustainable asset management practices the City needs to understand the current "benchmark infrastructure funding gap" that would arise should the required full lifecycle costs related to capital be delayed. The funding gap shown in Figure 6 represents the difference between the benchmark lifecycle costs and the funding available for tax supported assets over the 10-year period from 2025 to 2034. The benchmark funding gap represents a measure of the "ideal" spending that would need to be undertaken if all assets were repaired or replaced as outlined in the engineered reports used to inform the 2025 AMP or on their design life, versus the case if funding levels were maintained at current levels (see Table 21). Figure 6 indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a notional gap of $118 million exists over the same period.

Figure 6 – 10-Year Need vs Funding (Benchmark Funding Gap for Tax Supported Assets)



If the City were to implement a funding strategy to eliminate the benchmark funding gap, the City would be required to increase capital contributions on an annual basis by an average of about $2.5 million for 10 years (plus annual inflation). For 2025, the increase would be in addition to the funding sources already identified in Table 21. The yearly revenue requirement is equivalent to about 15.4% of the City's 2025 tax levy revenues of about $16.3 million. A detailed table of this strategy can be found in Appendix C.

It is unrealistic to expect the City to address the total benchmark funding gap in the short-term. Eliminating the gap by 2034 is an aggressive objective - a few reasons include:

- The required capital contributions (to eliminate the gap) will necessitate an increase to property taxes beyond a reasonable measure;
- The City would need to decrease or limit funding of other key services or initiatives in lieu for capital repair and replacement activity;
- Importantly, closing the benchmark funding gap would ultimately result in a service level increase beyond those targeted in this report over the long-term;
- Assets can remain in use past their engineered design life and can perform to meet the City's level of service under these circumstances. Therefore, in such instances, the asset does not necessarily need to be replaced by virtue of exceeding their design life; and
- Prudent asset management strategies, which are currently employed by the City can often extend the requirement of major repair or replacement of capital assets and may prolong the life of the asset.

Therefore, a long-term lifecycle cost and funding strategy that reflects the proposed level of service shown in Section 4 would need to be developed.

C. PROPOSED LEVEL OF SERVICE INFRASTRUCTURE FUNDING GAP FOR TAX-SUPPORTED ASSETS

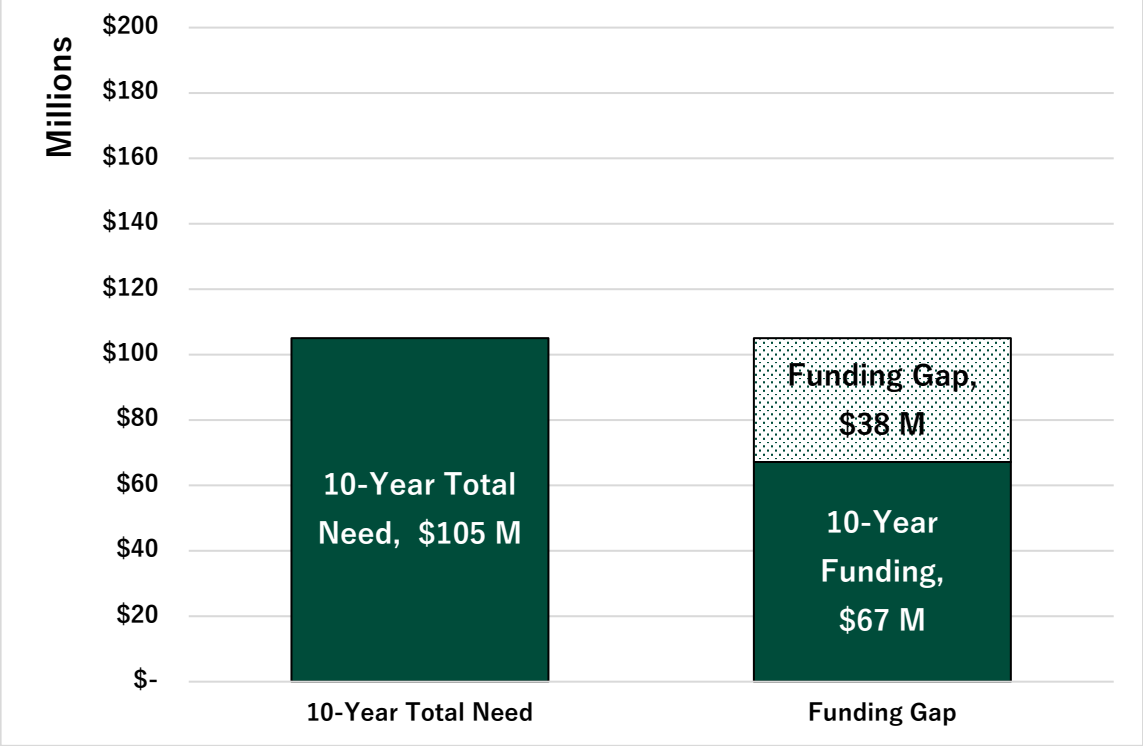
The 2025 AMP combines the analysis on proposed levels of service developed in Section 3 with the corresponding lifecycle costs in Section 4 to develop a 10-year adjusted funding gap analysis that considers a more manageable set of costs to meet proposed levels of service (PLOS funding gap). The funding gap shown in Figure 7 represents the difference between

the lifecycle costs needed to meet proposed levels of service and the funding available for tax supported assets over the 10-year period from 2025 to 2034.

The PLOS funding gap represents a measure of the spending that would need to be undertaken to meet proposed levels of service as shown in Section 4 versus the case if funding levels were maintained at current levels. Figure 7 still indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a funding gap of $38 million exists over the same period. Notably, the funding gap under the proposed level of service target is significantly reduced from the benchmark gap of $118 million over the planning period.

In order to fund this $38 million infrastructure funding gap over the 2025-2034 planning period, the City would be required to increase capital contributions by approximately $723,000 (4.5% of 2025 tax levy of $16.3 million) per year in each of the next ten years, plus inflation.

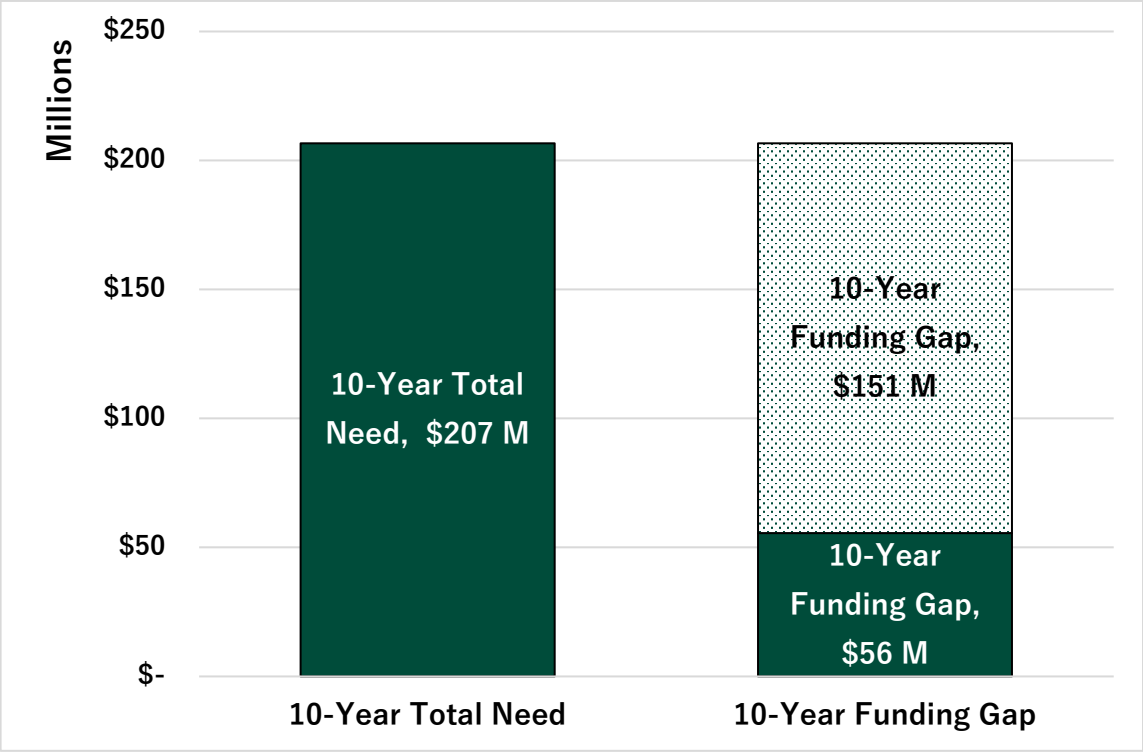
Figure 7 – 10-Year Need vs Funding (Proposed Level of Service Funding Gap for Tax Supported Assets)



D. BENCHMARK INFRASTRUCTURE FUNDING GAP FOR RATE-SUPPORTED ASSETS

To implement sustainable asset management practices the City needs to understand the current "benchmark infrastructure funding gap" that would arise should the required full lifecycle costs related to capital be delayed. The funding gap shown in 8 represents the difference between the benchmark lifecycle costs and the funding available for rate-supported assets over the 10-year period from 2025 to 2034. The benchmark funding gap represents a measure of the "ideal" spending that would need to be undertaken if all assets were repaired or replaced as outlined in the engineered reports used to inform the 2025 AMP or on their design life, versus the case if funding levels were maintained at current levels (see Table 21). Figure 8 indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a notional gap of $151 million exists over the same period.

Figure 8 - 10-Year Needs vs Funding (Benchmark Funding Gap for Rate Supported Assets)



If the City were to implement a funding strategy to eliminate the benchmark funding gap, the City would be required to increase capital contributions on an annual basis by an average of about $3.5 million for 10 years (plus annual inflation). For 2025, the increase would be in addition to the funding sources already identified in Table 21. The yearly revenue

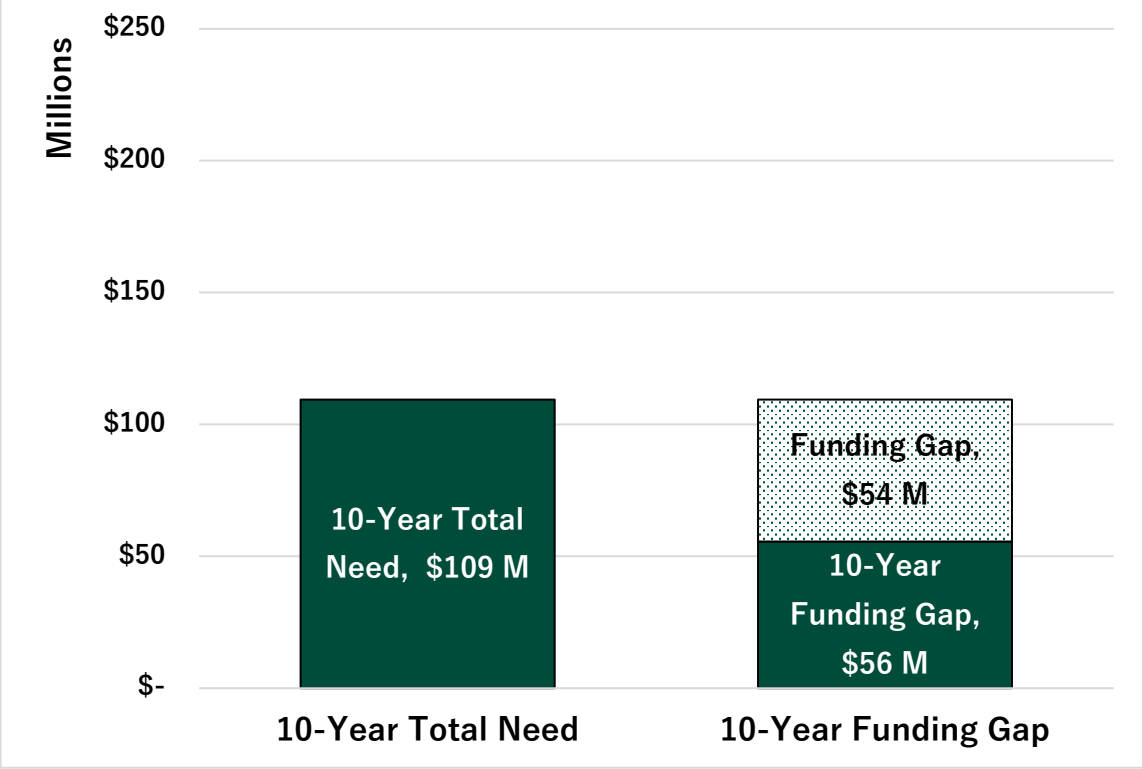
requirement is equivalent to about 61.4% of the City's 2025 rate revenues of about $5.7 million. A detailed table of this strategy can be found in Appendix C.

E. PROPOSED LEVEL OF SERVICE INFRASTRUCTURE FUNDING GAP FOR TAX-SUPPORTED ASSETS

The funding gap shown in Figure 9 represents the difference between the lifecycle costs needed to meet proposed levels of service and the funding available for rate supported assets over the 10-year period from 2025 to 2034.

Figure 9 still indicates that existing funding levels are insufficient to cover projected costs over the 10-year planning period, as a result, a funding gap of $54 million exists over the same period.

Figure 9 - 10-Year Needs vs Funding (Proposed Level of Service Funding Gap for Rate Supported Assets



In order to fund this $54 million infrastructure funding gap over the 2025-2034 planning period, the City would be required to increase capital contributions by approximately $1.3 million (23% of 2025 rate requirement of $5.7 million) per year in each of the next ten years, plus inflation.

F. FINANCING STRATEGIES AND THE RELATIONSHIP TO THE PROPOSED LEVEL OF SERVICE

The information illustrated previously emphasizes the need for the City to continue the utilization of these funding programs to meet service levels over the long-term. However, as the Municipal asset management program further advances, it can be expected that the cost analysis be improved to better reflect asset risks, levels of service and a better understanding of the condition of the infrastructure. Overall, the funding allocations in both Figure 7 and Figure 8 are required to ensure the City delivers the proposed levels of service identified in Section 3 of the AMP for its infrastructure assets which represent the lifecycle activities outlined in Section 4. Should an alternative strategy be adopted which does not align with the funding needed to meet the proposed level of services, other qualitative improvements and other financial solutions need to be explored. Table 22 outlines several approaches to closing the funding gap.

Table 22 - Approaches to Closing the Infrastructure Gap

Category	Description
Improved Data Quality	As the City matures its asset management practices, improving data quality across service areas will help to achieve a proper assessment of the condition of assets. Improved lifecycle cost data will facilitate evidence-based decision making and support in achieving lowest lifecycle costing through prioritization of repair and replacement activities.
Levels of Service Measures	As part of the 2025 AMP, levels of services measures by asset category have been established. Tracking LOS measures may identify areas where funding needs could be recalibrated based on performance.
Assessing Risk Tolerance	Further detailed risk analysis including defining risk tolerance level for individual asset classes will help to further refine prioritization of the investment needs and levels of service. Although not always desirable, it may be possible to accept a higher degree of asset risk to help lower ongoing asset costs.
Seek Funding Support from Upper Levels of Government	The City continues to demonstrate a significant commitment to asset management and developing a set of renewal practices to ensure that services are delivered in the most cost-efficient manner.

Category	Description
	Despite the efforts, upper level of government support is required to supplement the City's practices to balance affordability. For long-term financial planning and accurately assessing the infrastructure gap, it is equally important that upper-level government funding is stable and predictable.
Continued Project Co-ordination with the County Infrastructure Projects	In exploring opportunities with the Perth County, overall cost efficiencies may be achieved during linear asset rehabilitation and replacement (e.g. storm sewers, roads, bridges, culverts) by better aligning capital ventures (if applicable).

6. MONITORING AND IMPROVEMENT PLAN

The major premise of a comprehensive asset management plan is that a City will seldom have perfect processes and data to manage the asset portfolio. Instead, the underlying culture of continuous improvement and reliability is its key to success. The monitoring and improvement plan forms part of the City's evolving asset management planning moving forward. It has been developed using an asset management maturity scale to assess areas for improvement.

A. ASSET MANAGEMENT MATURITY ASSESSMENT

The purpose of an asset management maturity assessment is to identify a City's current maturity and to establish a target maturity that can be reasonably achieved in the near future. Using the International Infrastructure Management Manual (IIMM) tool, information on asset maturity was assessed under three categories:

1. Understanding and Defining the Requirements
2. Development of Asset Management Lifecycle Strategies
3. Asset Management Enablers

The three maturity categories are broken down into 16 elements that are assessed in the individual Asset Maturity Radar Graph in Figure 10. The elements in each maturity category are outlined in Table 23.

Table 23 – Asset Management Maturity Assessment Elements

Category	AM Element
Understanding and Defining the Requirements	Analysing the Strategic Initiatives (AM Policy and Objectives)
	Levels of Service Framework
	Demand Forecasting and Management
	Resilience to Climate Change
	Asset Condition and Performance
	The Strategic Asset Management Plan
Developing Asset Management Lifecycle Strategies	Managing Risk and Resilience
	Operational Planning
	Capital Works Planning
	Asset Financial Planning and Management

Category	AM Element
	AM Plans (for the Asset Portfolio Assets)
Asset Management Enablers	AM People and Leaders
	Asset Data and Information
	Asset Information Management Systems (AIMS)
	AM Process Management
	Outsourcing and Procurement
	Continual Improvement

Each element is assessed independently and assigned a score based on criteria outlined in Table 24 which scores each criteria between 0 and 100 for each element. In general, a City in the "Aware" category recognizes that there are regulatory or service requirements that need to be met to maintain levels of service. However, no formal plans are in place to meet these objectives and asset management planning may be done on an ad hoc basis. A City in the "Advanced" category has integrated the asset management plan into its budget process and budget planning is well informed by the asset management plan. In general, most municipalities would fall in the "Core" or better category, for this reason the target score would be to achieve an "Intermediate" score over the longer-term.

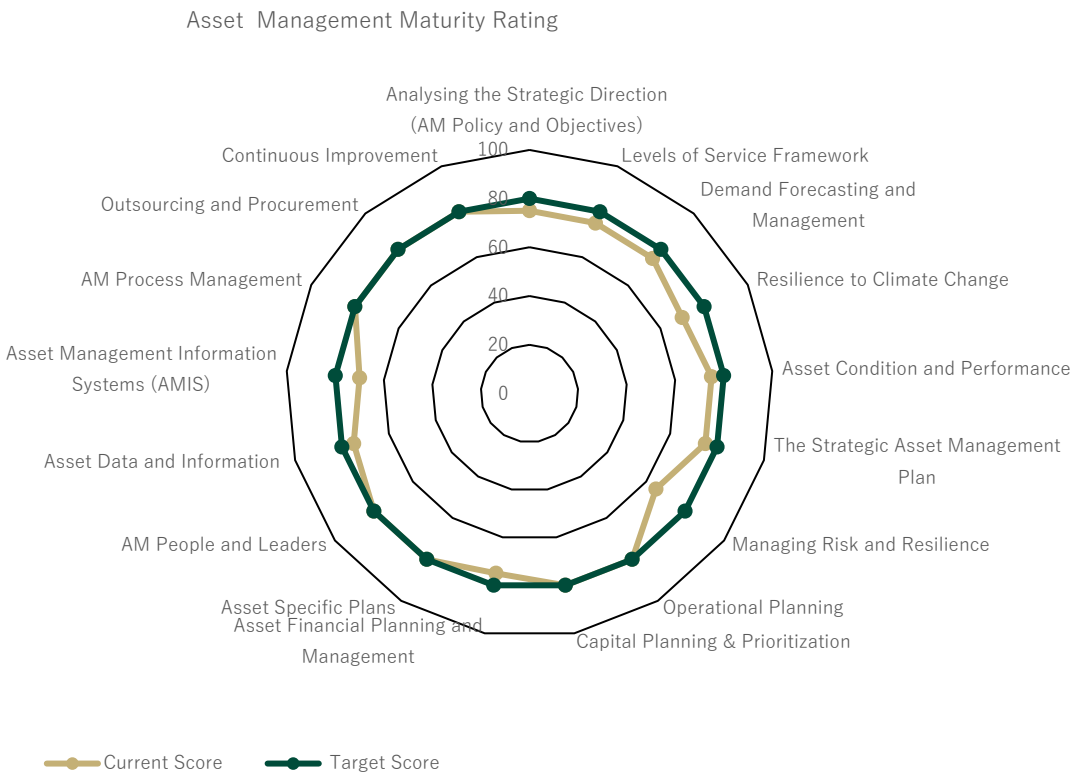
Table 24 – Maturity Assessment Scoring Scale

Maturity Level	Score
Aware	0-20
Basic	21-40
Core	41-60
Intermediate	61-80
Advanced	81-100

Figure 10 outlines the results of the Asset Maturity Rating. The Current Score accounts for all advancements in individual maturity as part of this 2025 AMP. Overall, the following were achieved:

- Understanding of levels of service focused on the condition of assets which is appropriate for the size and services provided by the City;
- Enhancement in understanding the City's asset management practices and general alignment with other key planning documents like the RNS and OSIM reports; and
- General understanding of the City's assets and the data available through consolidation of various data sources into the AMP financial model.

Figure 10 – Asset Maturity Rating



B. IMPROVEMENT PLAN

Continuous improvement is a fundamental aspect of municipal asset management. This process involves systematically identifying areas for enhancement, implementing changes, monitoring outcomes, and adjusting strategies based on feedback and new insights. The goal of the municipal asset management planning regulation (*O. Reg. 588/17*) is to promote municipalities to take incremental steps to maximize benefits, manage risk and provide satisfactory levels of service to the public in a cost-effective manner.

Improvement initiatives have been identified that will enhance the effectiveness of the City's asset management program. The following table provides recommended improvement initiatives with associated priorities and timelines. While some areas for improvement can be addressed more immediately, others could be undertaken over the long-term.

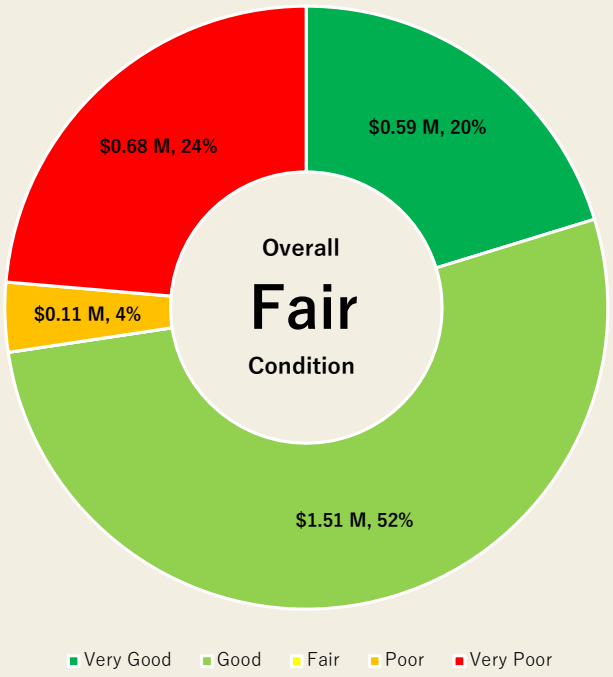
Table 25 – Improvement Plan Initiatives

Area of Improvement	Action	Outcome	Timeline	Priority	Comments
Levels of Service	Align AMP with budget process	Determine capital contributions	Medium	Medium	Ensuring that the AMP remains up today will help guide tax funded capital contributions needs to meet long-term asset management needs
Climate Change Integration	Further development of mitigation and adaptation strategies into asset management	Further understanding of climate change risks on City's delivery of services and support informed prioritization of strategies.	Long	Medium	The Strategic Asset Management Policy requires a commitment to integrate climate change considerations through capital planning.
Asset Data	Continually update the asset inventory	More informed decision making for capital budget purposes	Medium	Medium	The AMP needs to be updated every 5-years as per regulation after 2025, this is an opportunity to ensure asset data including conditions remains up to date.
Financing Strategy	Continue to monitor infrastructure gap	Continue to monitor funding needs to meet proposed level of service	Medium	Medium	While infrastructure gap has been monitored as part of this plan, it will need to be updated along with regular reviews of the AMP in the future.
	Seek funding support from upper levels of government	Continue bridging of funding gap for improved financial sustainability.	Long	High	The City expects to continue to rely on grant funding for capital projects.

APPENDIX A

STATE OF LOCAL INFRASTRUCTURE

Land Improvements



Current Replacement Value

$2.9 Million

Asset Inventory

22 Items

Average Remaining Useful Life

23 Years

Estimated Useful Life

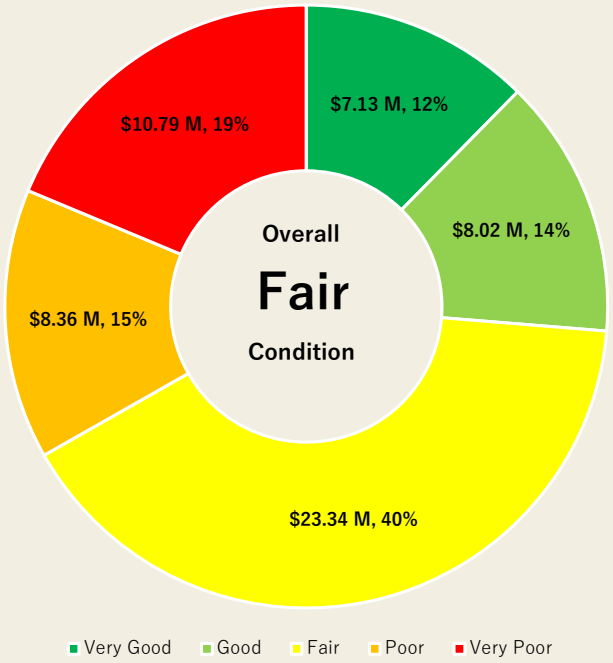
15-20 Years

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Roadside Elements



Current Replacement Value

$57.6

Million

Asset Inventory

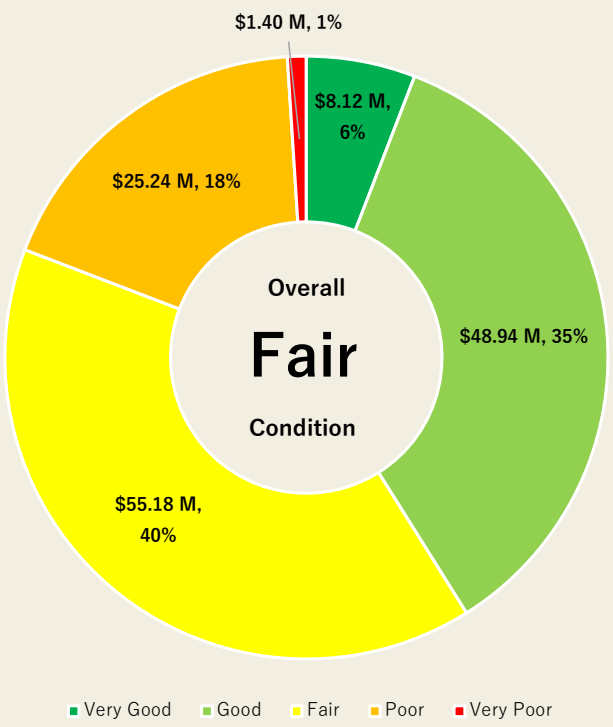
Pooled

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Buildings



Current Replacement Value

$138.9 Million

Asset Inventory

55 Facilities

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

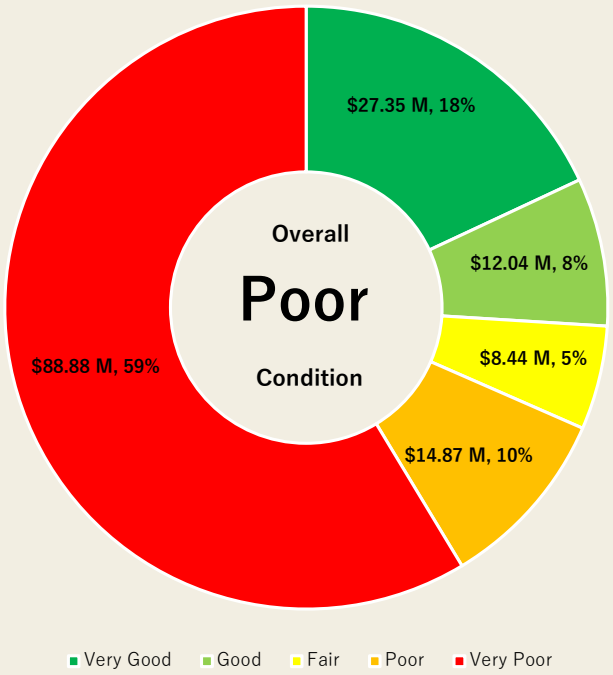
Average Remaining Useful Life

24 Years

Estimated Useful Life

50 Years

Water Infrastructure



Current Replacement Value

$151.6 Million

Asset Inventory

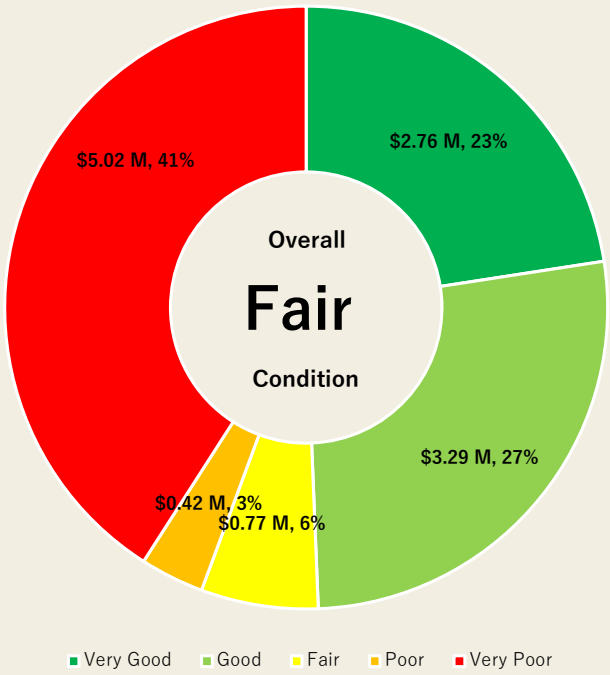
Pooled

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Fleet and Machinery



Current Replacement Value

$12.3 Million

Asset Inventory

178 Units

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

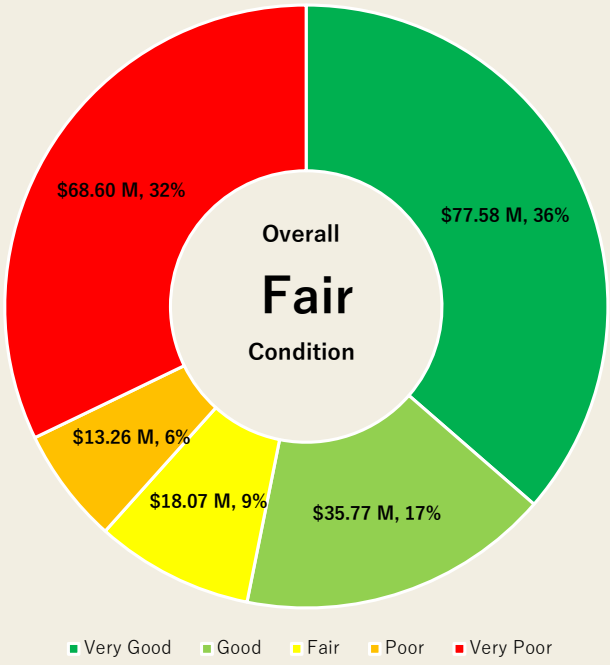
Average Remaining Useful Life

3 Years

Estimated Useful Life

7-20 Years

Sewer Infrastructure



Current Replacement Value

$213.3 Million

Asset Inventory

Pooled

Data Confidence & Reliability

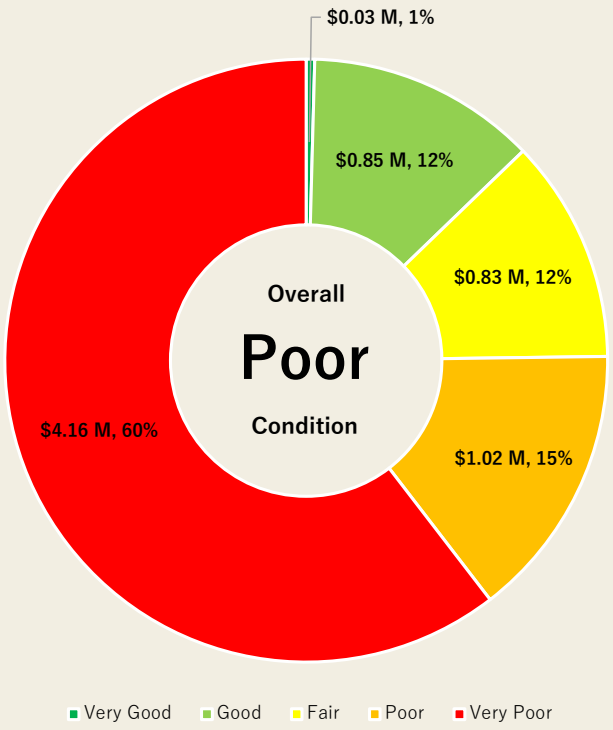
Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Estimated Useful Life

10-50 Years

Equipment



Current Replacement Value

$6.9 Million

Asset Inventory

Pooled

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

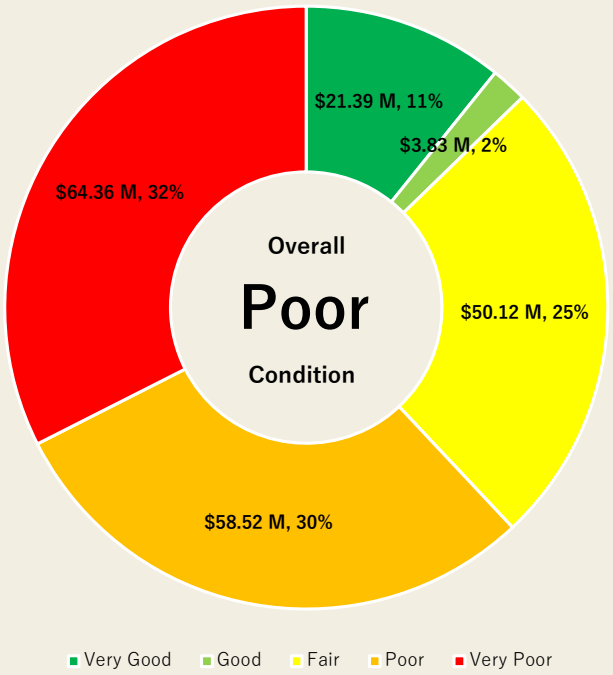
Average Remaining Useful Life

Overdue

Estimated Useful Life

10-30 Years

Roads



Current Replacement Value

$198.2 Million

Asset Inventory

98 KM

Paved Roads

Asset Inventory

19 KM

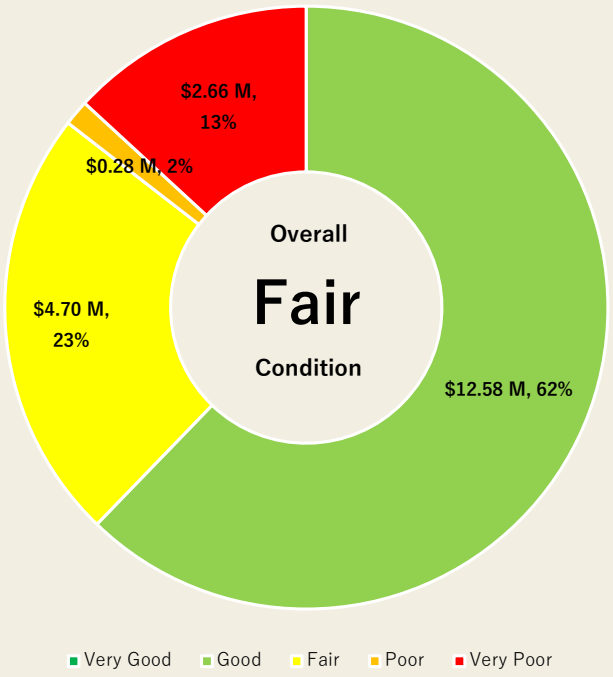
Unpaved Roads

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Bridges



Current Replacement Value

$20.2 Million

Asset Inventory

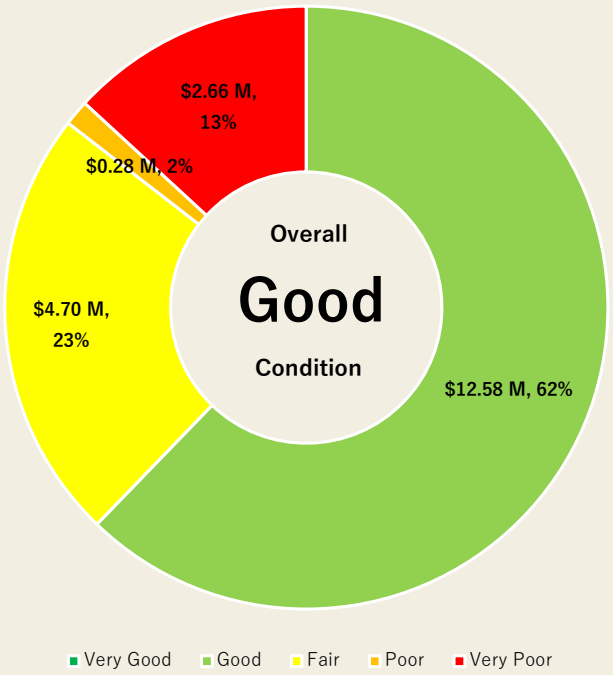
9 Bridges

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

Stormwater Network



Current Replacement Value

$91.2 Million

Asset Inventory

Pooled

Data Confidence & Reliability

Level 4 (Reliable)

Dataset is complete and estimated to be accurate +/- 10%

APPENDIX B

FINANCING STRATEGY

Appendix B: Table 1
City of Dryden
2025 AMP Update
Base Scenario: Close Cumulative Deficit by 2034

Year	Lifecycle Costs						Forecast of Revenues									Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Renewal (Roads)	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding ($)	Yearly Increase in Tax Funding (%)	Canada Community Building Fund (CCBF)	Other Grants (OCIF)	Capital from Operating	Debt Payments	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 1,851,432			$ 483,916	$ 1,278,951	$ 243,450	$ 108,555	$ 1,558,148	$ 8,850,061	$ (9,638,160)	$ (9,638,160)
2026	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 4,348,553	$ 2,497,121	135%	$ 483,916	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 9,553,437	$ (8,934,785)	$ (18,572,945)
2027	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 6,845,675	$ 2,497,121	57%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 12,069,915	$ (6,418,307)	$ (24,991,252)
2028	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 9,342,796	$ 2,497,121	36%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 14,567,036	$ (3,921,185)	$ (28,912,437)
2029	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 11,839,917	$ 2,497,121	27%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 17,064,157	$ (1,424,064)	$ (30,336,501)
2030	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 14,337,039	$ 2,497,121	21%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 19,561,279	$ 1,073,057	$ (29,263,444)
2031	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 16,834,160	$ 2,497,121	17%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 22,058,400	$ 3,570,179	$ (25,693,265)
2032	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 19,331,282	$ 2,497,121	15%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 24,555,522	$ 6,067,300	$ (19,625,965)
2033	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 21,828,403	$ 2,497,121	13%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 27,052,643	$ 8,564,422	$ (11,061,543)
2034	$ 50,000	$ 3,325,610	$ 9,020,917	$ 5,781,405	$ 310,290	$ 18,488,221	$ 3,325,610	$ 24,325,525	$ 2,497,121	11%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 29,549,765	$ 11,061,543	$ -
	$ 500,000	**$ 33,256,097**	**$ 90,209,166**	**$ 57,814,051**	**$ 3,102,900**	**$ 184,882,214**	**$ 33,256,097**	**$ 130,884,781**			**$ 4,994,012**	**$ 10,669,126**	**$ 2,434,501**	**$ 1,085,550**	**$ 1,558,148**	**$ 184,882,214**		

Appendix B: Table 2
City of Dryden
2025 AMP Update
PLOS Scenario: Close Cumulative Deficit by 2034

Year	Lifecycle Costs						Forecast of Revenues									Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Renewal (Roads)	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding ($)	Yearly Increase in Tax Funding (%)	Canada Community Building Fund (CCBF)	Other Grants (OCIF)	Capital from Operating	Debt Payments	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 1,851,432			$ 483,916	$ 1,278,951	$ 243,450	$ 108,555	$ 1,558,148	$ 8,850,061	$ (1,654,803)	$ (1,654,803)
2026	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 2,574,474	$ 723,042	39%	$ 483,916	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 7,779,357	$ (2,725,507)	$ (4,380,310)
2027	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 3,297,516	$ 723,042	28%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 8,521,756	$ (1,983,108)	$ (6,363,418)
2028	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 4,020,558	$ 723,042	22%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 9,244,798	$ (1,260,066)	$ (7,623,485)
2029	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 4,743,600	$ 723,042	18%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 9,967,840	$ (537,024)	$ (8,160,509)
2030	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 5,466,642	$ 723,042	15%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 10,690,882	$ 186,018	$ (7,974,491)
2031	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 6,189,684	$ 723,042	13%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 11,413,924	$ 909,060	$ (7,065,432)
2032	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 6,912,726	$ 723,042	12%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 12,136,966	$ 1,632,102	$ (5,433,330)
2033	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 7,635,768	$ 723,042	10%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 12,860,008	$ 2,355,144	$ (3,078,186)
2034	$ 50,000	$ 3,325,610	$ 4,083,407	$ 2,890,703	$ 155,145	$ 10,504,864	$ 3,325,610	$ 8,358,810	$ 723,042	9%	$ 503,272	$ 1,043,353	$ 243,450	$ 108,555	$ -	$ 13,583,050	$ 3,078,186	$ -
	$ 500,000	**$ 33,256,097**	**$ 40,834,070**	**$ 28,907,026**	**$ 1,551,450**	**$ 105,048,642**	**$ 33,256,097**	**$ 51,051,209**			**$ 4,994,012**	**$ 10,669,126**			**$ 1,558,148**	**$ 105,048,642**		

Appendix B: Table 3
City of Dryden
2025 AMP Update
Base Scenario: Close Cumulative Deficit by 2034

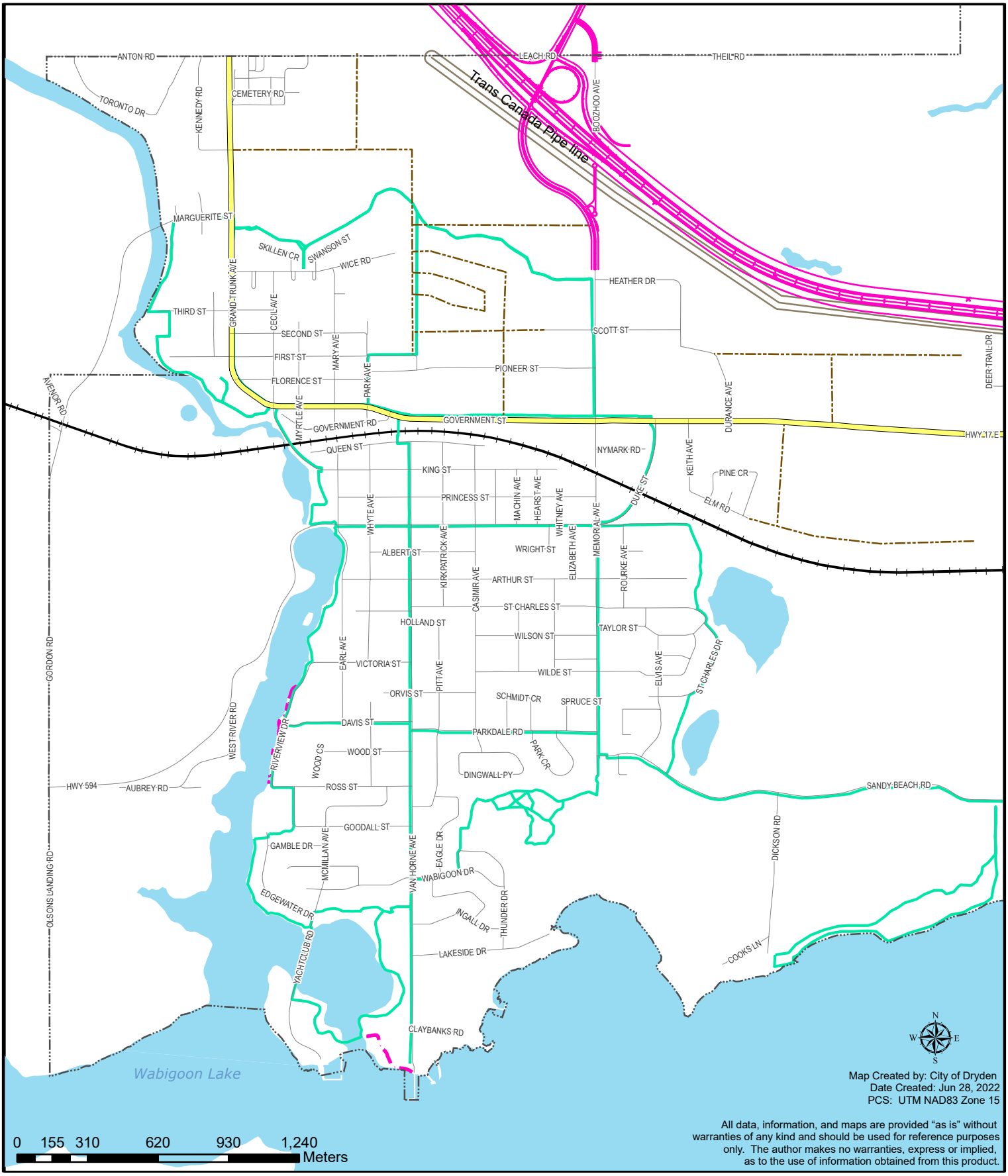
Year	Lifecycle Costs					Forecast of Revenues								Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding ($)	Yearly Increase in Tax Funding (%)	Grants	Capital from Operating	Capital Debt Payments	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	$ 50,000	$ 1,498,250	$ 18,177,943	$ 3,993,840	$ 23,720,034	$ 1,498,250	$ 1,625,842			$ 3,493,840	$ 148,120	$ 928,166	$ 1,584,194	$ 9,278,413	$ (14,441,620)	$ (14,441,620)
2026	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 5,102,188	$ 3,476,346	214%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 8,024,509	$ (12,300,760)	$ (26,742,381)
2027	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 8,578,535	$ 3,476,346	68%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 11,500,856	$ (8,824,414)	$ (35,566,795)
2028	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 12,054,881	$ 3,476,346	41%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 14,977,202	$ (5,348,068)	$ (40,914,862)
2029	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 15,531,227	$ 3,476,346	29%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 18,453,548	$ (1,871,722)	$ (42,786,584)
2030	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 19,007,573	$ 3,476,346	22%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 21,929,894	$ 1,604,624	$ (41,181,960)
2031	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 22,483,919	$ 3,476,346	18%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 25,406,240	$ 5,080,971	$ (36,100,989)
2032	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 25,960,266	$ 3,476,346	15%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 28,882,586	$ 8,557,317	$ (27,543,672)
2033	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 29,436,612	$ 3,476,346	13%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 32,358,933	$ 12,033,663	$ (15,510,009)
2034	$ 50,000	$ 1,498,250	$ 18,177,943	$ 599,076	$ 20,325,270	$ 1,498,250	$ 32,912,958	$ 3,476,346	12%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 35,835,279	$ 15,510,009	$ (0)
	$ 500,000	**$ 14,982,504**	**$ 181,779,432**	**$ 9,385,524**	**$ 206,647,460**	**$ 14,982,504**	**$ 172,694,001**			**$ 6,623,898**	**$ 1,481,202**	**$ 9,281,660**	**$ 1,584,194**	**$ 206,647,460**		

Appendix B: Table 4
City of Dryden
2025 AMP Update
PLOS Scenario: Close Cumulative Deficit by 2034

Year	Lifecycle Costs					Forecast of Revenues								Funding Gap Calculation		
	Non-Infrastructure Solutions	Operations and Maintenance	Replacement	Expansion	Total Lifecycle Costs	O&M from Taxation	Capital from Taxation (Including Transfers to Reserves)	Yearly Increase in Tax Funding ($)	Yearly Increase in Tax Funding (%)	Other Grants (OCIF)	Capital from Operating	Capital Debt Payments	Existing Reserves	Total Funding	Annual Funding Gap	Cumulative Infrastructure Deficit
2025	$ 50,000	$ 1,498,250	$ 8,452,516	$ 3,993,840	$ 13,994,606	$ 1,498,250	$ 1,625,842			$ 3,493,840	$ 148,120	$ 928,166	$ 1,584,194	$ 9,278,413	$ (4,716,193)	$ (4,716,193)
2026	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 2,927,748	$ 1,301,906	80%	$ 943,337	$ 148,120	$ 928,166	$ -	$ 6,445,622	$ (4,154,221)	$ (8,870,414)
2027	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 4,229,653	$ 1,301,906	44%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 7,151,974	$ (3,447,868)	$ (12,318,281)
2028	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 5,531,559	$ 1,301,906	31%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 8,453,880	$ (2,145,962)	$ (14,464,244)
2029	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 6,833,465	$ 1,301,906	24%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 9,755,786	$ (844,057)	$ (15,308,300)
2030	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 8,135,370	$ 1,301,906	19%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 11,057,691	$ 457,849	$ (14,850,451)
2031	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 9,437,276	$ 1,301,906	16%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 12,359,597	$ 1,759,754	$ (13,090,697)
2032	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 10,739,181	$ 1,301,906	14%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 13,661,502	$ 3,061,660	$ (10,029,037)
2033	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 12,041,087	$ 1,301,906	12%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 14,963,408	$ 4,363,566	$ (5,665,471)
2034	$ 50,000	$ 1,498,250	$ 8,452,516	$ 599,076	$ 10,599,842	$ 1,498,250	$ 13,342,993	$ 1,301,906	11%	$ 347,784	$ 148,120	$ 928,166	$ -	$ 16,265,313	$ 5,665,471	$ 0
	$ 500,000	**$ 14,982,504**	**$ 84,525,158**	**$ 9,385,524**	**$ 109,393,186**	**$ 14,982,504**	**$ 74,844,174**			**$ 7,219,451**		**$ 9,281,660**	**$ 1,584,194**	**$ 109,393,186**		

APPENDIX C

ROADS CONNECTIVITY



City of Dryden

DRYDEN

HEMSON

Legend

- Dryden Municipal Boundary
- Proposed Highway ByPass
- Highway
- Proposed Local Roads
- Local Roads
- Trans Canada Pipe Line
- Trails
- Proposed Trails
- Rail
- Water Bodies