# Enterprise Asset Management Plan Update (2025)

| | |
|---|---|
| Presented To: | City Council |
| Meeting Date: | June 10, 2025 |
| Type: | Presentations |
| Prepared by: | Miranda Edwards<br>Infrastructure Capital Planning |
| Recommended by: | General Manager of Growth and Infrastructure |

## Report Summary

This report and presentation provides a recommendation regarding the Enterprise Asset Management Plan Update (2025) in compliance with the July 1, 2025, requirements contained in Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure.

## Resolution

THAT the City of Greater Sudbury approves the Enterprise Asset Management Plan Update (2025), as outlined in the report entitled “Enterprise Asset Management Plan Update (2025)”, from the General Manager of Growth and Infrastructure, presented at the City Council meeting on June 10, 2025.

AND THAT the information be used to inform long term financial planning, future capital projects and asset life-cycle interventions.

## Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report supports the objectives as laid out in the City of Greater Sudbury’s Strategic Plan for 2019-2027 Asset Management and Service Excellence by establishing a systematic and strategic approach to evaluating infrastructure needs, prioritizing investments, and allocating resources in alignment with both immediate and long-term municipal objectives.

## Financial Implications

There are no financial implications associated with this report.

## Executive Summary

The Enterprise Asset Management Plan Update (2025) will fulfill the final phase of Ontario Regulation 588/17, requiring municipalities to maintain comprehensive, Council-approved asset management plans by July 1, 2025. This update builds on the Enterprise Asset Management Plan (2023) and integrates updated

asset-specific condition data, proposed levels of service, and lifecycle strategies for over $17 billion in municipal infrastructure with over 85% of the asset value coming from core assets being water, wastewater, storm, bridges and roads. It supports the City's Strategic Plan (2019–2027), aligns with the multi-year capital budget (2024–2027), and incorporates climate resilience, risk management, and community service expectations.

A key focus of the update is the financial strategy, which compares the average annual cost to achieve the proposed levels of service with the City's forecasted capital budgets. This analysis identifies an infrastructure funding gap of $619M over a ten-year period and emphasizes the importance of early, cost-effective interventions to extend asset life and reduce long-term costs. The plan recommends scenario-based planning, bundling of capital projects, and exploration of diverse funding sources to improve efficiency and sustainability. Council approval of the Enterprise Asset Management Plan Update (2025) will guide long-term infrastructure investment and support reliable, fiscally responsible service delivery.

## Background

Ontario Regulation 588/17: *Asset Management Planning for Municipal Infrastructure* requires that all municipalities formally plan how they manage infrastructure assets like roads, water systems, and public buildings. The goal of the regulation is to ensure consistency across Ontario municipalities in managing infrastructure assets.

The regulation was implemented with a phased approach beginning with the requirement to develop an asset management policy. In 2018, Council met this important milestone, approving the Enterprise Asset Management Policy. In 2021, Council met Phase One of the regulatory requirements, approving asset management plans for all identified core assets. These assets include roads, bridges and large culverts, stormwater systems, water systems and wastewater systems. In 2023, Council met Phase Two of the regulatory requirements by approving the Enterprise Asset Management Plan (2023) that included detailed asset management plans for all assets, including non-core assets. Non-core assets include buildings and facilities, solid waste, parks and recreation, fleet and equipment and municipal parking. These detailed asset management plans were designed to meet the objectives of each assets class shown below.


This update report will satisfy Phase Three, the final phase of the regulatory requirements, and shall be read in combination with the Enterprise Asset Management Plan (2023) and asset specific management plans.

## Legislative Requirements

As of July 1, 2025, Ontario municipalities are required to comply with the final phase of Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure. This regulation mandates that municipalities develop and maintain comprehensive asset management plans to ensure sustainable infrastructure management.

Key requirements effective July 1, 2025, include:

1. Comprehensive Asset Management Plan: Municipalities must have a Council-approved asset management plan that encompasses all municipal infrastructure assets.
2. Proposed Levels of Service: The plan should outline proposed levels of service for each asset class, detailing the performance targets and the strategies to achieve them.
3. Lifecycle Management and Financial Strategy: The plan must include a lifecycle management strategy that identifies the activities required to maintain assets over their lifecycle, along with a financial strategy that estimates the costs and potential funding sources to support these activities.
4. Regular Updates: Municipalities are obligated to review and update their asset management plans at least every five years to reflect changes in asset conditions, service levels, and financial planning. As well, annual updates will identify how the assets are performing within the plan.

These requirements aim to enhance the long-term sustainability and efficiency of municipal infrastructure by promoting proactive planning and informed decision-making as well as allowing for adaptation to changing demands, enhancing service delivery to the community.

## Asset Management Planning at the City of Greater Sudbury

The goal of asset management planning is to provide reliable services in a way that balances cost, risk, and community expectations—both now and in the future. The City's Enterprise Asset Management Plan is a strategic document that informs how the municipality plans on taking care of its infrastructure—like roads, water systems, buildings, and parks—so it can continue to deliver essential services to the community reliably and cost-effectively over the long term.

A successful asset management plan includes lifecycle management strategies that have evaluated the best possible decisions regarding construction, operation, maintenance, renewal, replacement, expansion, and disposal of infrastructure assets.

Risk management is an essential component to evaluating appropriate lifecycle strategies by providing a structured approach to identifying, assessing, and mitigating risks associated with the lifecycle of the assets. This allows for a proactive approach, increasing operational resiliency and adaptation to changing demands, enhancing service delivery to the community.

The plan integrates several individual plans by asset class including Water and Wastewater, Storm Water Management, Roads and Transportation, Bridges and Large Culverts, Fleet and Equipment, Municipal Parking, Solid Waste, Parks and Recreation, and Buildings and Facilities.

## Alignment with Strategic Plan

In 2023, City Council reaffirmed the City of Greater Sudbury Strategic Plan 2019-2027 to define the City's strategic direction. There are six pillars that are defined within the strategic plan, the first being Asset Management and Service Excellence.

This strategic pillar identifies that asset management and renewal includes initiatives designed to maximize the City's value from investments in physical infrastructure. Effective asset management and renewal relies on an organization that demonstrates a willingness to plan, implement, and innovate in accordance with short- and long-term priorities and in a transparent, accessible manner. It is part of a complex, comprehensive system of attitudes, policies and processes that reflects a commitment to produce effective results while making the best use of limited resources.

The strategic plan is supported by several key documents including the City's annual budget and annual business plans, the City of Greater Sudbury Official Plan, enterprise risk management, master plans, by-laws, the core service review, state of the infrastructure reports, long-term financial plans and various policies and procedures.

## Supporting the City's Capital Budget Process

In 2024, Council approved a multi-year budget covering the years 2024 to 2027. This approach enhances long-term planning and enables more efficient execution of projects across multiple years. It also provides residents and businesses with greater transparency about upcoming improvements in their community.

Additionally, a multi-year budget can lead to cost and staffing efficiencies by allowing similar purchases or construction projects to be bundled into fewer, larger tenders—rather than issuing new tenders annually.

The City's asset management plans help to guide asset investment decisions.


The capital prioritization process recommends an annual plan to address the City's highest priority investment needs. This is based on criteria that include an enterprise-wide review of risk, service priorities, spending choices and financing options. Capital budget priorities reflect the best available and still-evolving data about asset condition, service performance, strategic objectives, and financing choices. The result is a recommended capital plan with the appropriate resources needed to complete projects

To achieve this objective, staff developed criteria in alignment with the principles in the Enterprise Asset Management Plan. These include:

- Pursuing priorities linked to the Strategic Plan, system integration and the qualitative return on investment.
- Estimating the likelihood of obtaining external funding and prioritizing projects likely to receive outside funding.
- Assessing capital projects for risk, such as legislative requirements, health and safety, and probability and consequences of failure.
- Considering asset renewal/restoration needs, including lifecycle costs, environmental return and link to the Community Energy and Emissions Plan (CEEP).

## State of Infrastructure

The state of infrastructure refers to the current condition, performance, and capability of the City's infrastructure assets. Understanding the state of infrastructure is crucial for planning, budgeting, and prioritizing investments in maintenance, upgrades, or expansion to sustain effective service delivery. It ensures that infrastructure remains safe, reliable, and capable of meeting community needs efficiently.

A condition rating is used to assess and document the physical state and performance of an asset and gives an indication of the asset's current health along with the potential lifecycle activities that may be required. This rating may incorporate data from visual inspections, age of an asset, testing or predictive modeling. General lifecycle activities for assets are further described in Table 1 of this report.

The following is the scale used describe the condition of assets in this report.

Table 1 – Condition Rating Scale

| | |
|---|---|
| Very Good  | Asset is new, like new, or recently rehabilitated. There are no visible signs of deterioration, and the asset does not require repairs. |
| Good  | Asset shows minor wear but is functioning as intended. There may be signs of minor defects or deterioration. Preventive maintenance strategies can be applied. Rehabilitation is not required. |
| Fair  | Asset has moderate deterioration; aging is evident, and performance may start to decline. Minor maintenance or rehabilitation is required. |
| Poor  | Asset is significantly deteriorated and approaching the end of its useful life. Moderate rehabilitation or reactive maintenance is required. |
| Very Poor  | Asset is at end of its useful life and structural defects and/or failures are evident. Major rehabilitation, replacement or renewal is required. |

The following describes the City's approach to assessing the condition of its assets to determine the condition rating.

Table 2 – Approach to Assessing Condition

| | |
|---|---|
| Remaining Service Life | This describes the assets remaining service life based on condition or performance. |
| Asset Specific Condition Rating | This is a metric that follows industry best practice or a standardized system. Some examples include a facility condition index (FCI) for buildings and a pavement condition index (PCI) for roads. |
| Useful Life Consumed | This describes the portion of the total expected useful life of an asset that has been utilized or consumed |

Appendix A included in this report describes a summary of assets, their current replacement cost, average age, and condition as well as the City's approach to assessing the condition of the asset. These values are updates to the Enterprise Asset Management Plan (2023).

## Levels of Service and Performance

The City assesses the effectiveness of service delivery by establishing defined levels of service and evaluating performance relative to these benchmarks. These levels are influenced by the users' expectations and requirements and may also be dictated by legal mandates or industry standards.

There are two service levels that are discussed in asset management planning, namely:

- Community: Qualitative descriptions that define the community, stakeholder, and individual expectations.
- Technical: Quantitative measure that defines the performance expectation for an asset to produce the desired levels of service. These services are measurable and can include asset condition, performance indicators, responsiveness, expenditure, and asset value.

Levels of service are vital to asset management planning because they define what the asset should deliver.

## Proposed Levels of Service

A proposed level of service represents a strategic balance between the community's expectations and the municipality's available resources, operational capacity, and regulatory obligations. It defines the quality, reliability, and accessibility of services—such as roads, water, transit, or parks—that residents can expect.

This approach ensures that service delivery aligns with what is achievable and sustainable over time, considering financial constraints, infrastructure condition, and environmental factors. By clearly outlining these service levels, municipalities can prioritize investments, manage risks, and communicate transparently with the public about what can realistically be delivered and maintained.

## Factors That Affect Levels of Service

1. Climate Change: The City monitors the effects of climate change on its infrastructure assets. For example, increased freeze thaw cycles and precipitation will affect roadways and storm systems and may require increase maintenance activities. These impacts are reviewed through risk assessments and mitigation strategies.
2. Future Demand: The most significant future demand drivers are growth, the aging population and population health. Greater Sudbury has implemented preventative measures in anticipation of the demand drivers. In some cases, the preventative measures are linked through accompanying documents; for example, the Transportation Master Plan, the Water/Wastewater Master Plan, and policy initiatives that have been initiated by various departments.
3. Changing Technology: New technology or improvements in data quality may impact service delivery methods, requiring investments in replacement or upgrades. Technology may become obsolete, requiring upgrades to systems.
4. External Influences: External factors beyond the City's control—such as international trade tariffs, global health emergencies, natural disasters, and shifts in senior government policy—can impact both the cost and continuity of municipal service delivery by increasing expenditures, delaying procurement, disrupting supply chains, and requiring resource reallocation. To address these challenges, the City incorporates flexibility and risk mitigation strategies into its planning and budgeting processes to ensure the ongoing delivery of core services to the community.

Current and Proposed levels of service for all assets classes can be found in Appendix C for core assets and Appendix D for non-core assets included in this report.

## Lifecycle Management

Lifecycle activities are a set of planned activities or interventions completed on an asset, throughout its lifecycle, to maintain or enhance the asset's performance and extend its useful life. The following table describes general lifecycle activities of an asset.

Table 3 – Lifecycle Activities

| | |
|---|---|
| Non-Infrastructure Solutions | Actions or policies that provide additional information or direction to effectively maintain assets that can lower costs or extend asset life. This includes planning studies and policies as well as demand and failure management studies. |
| Operations and Maintenance | Maintenance activities such as scheduled inspections, preventive maintenance programs and reactive maintenance. |
| Rehabilitation and Renewal | Rehabilitation of asset to extend the service life. Can include replacing or reconstructing elements of an asset. |
| Disposal | Disposal of an asset due to reduction in service delivery or elimination of demand. |

| | |
|---|---|
| Replacement | Replacement of the asset at the end of its service life. |
| Decommission | Removal of an asset from service. |
| Growth or Expansion | New asset to meet increased demand based on growth. |

Investing early in an asset's lifecycle can help avoid more expensive interventions in the future. Delaying maintenance often results in significantly higher repair or replacement costs. In contrast, early investment enables proactive, preventative maintenance, which is far more cost-effective than emergency repairs or reactive maintenance. Figure 1 - Asset Lifecycle Deterioration below illustrates the proactive approach to lifecycle management.

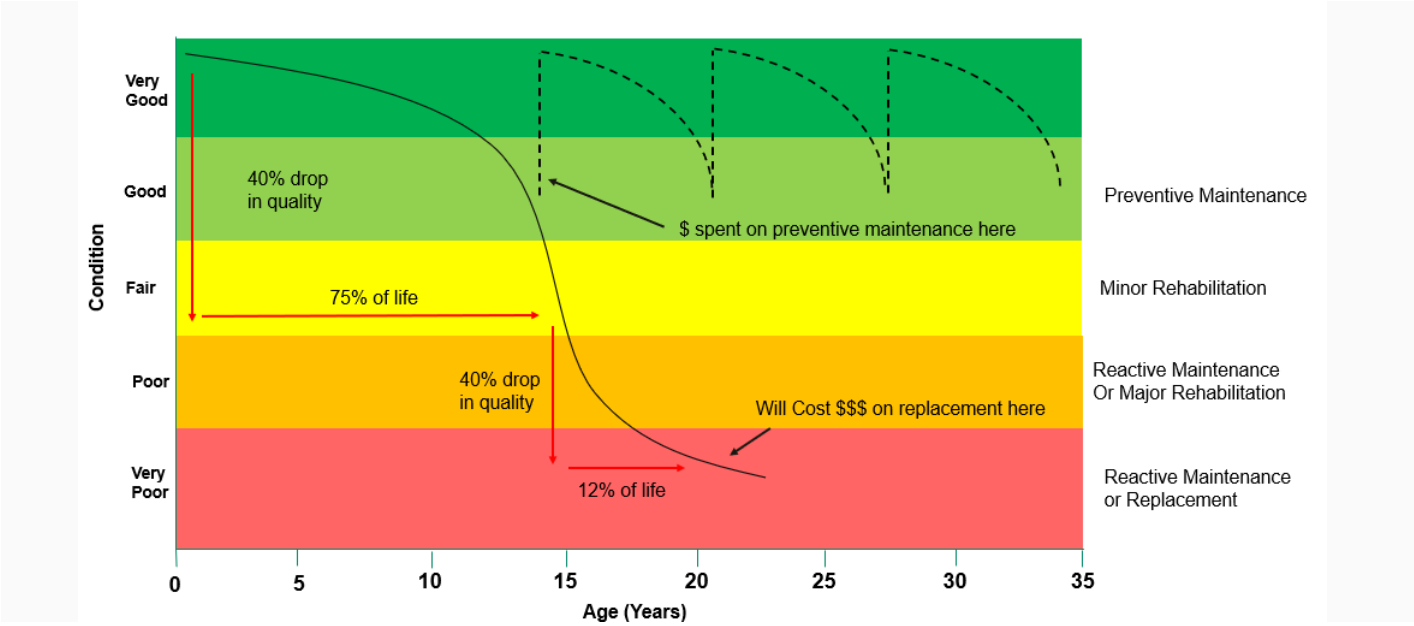


Figure 1.0 - Asset Lifecycle Deterioration

A lifecycle strategy integrates lifecycle activities with risk assessment and cost evaluation to ensure optimal value and sustainable service delivery over the asset's lifecycle.

The lifecycle strategy, detailing asset specific lifecycle activities for the proposed levels of service are described further in Appendix B.

## Financial Strategy

The Enterprise Asset Management Plan Update (2025) provides a structured approach to identifying and forecasting infrastructure investment needs over a 10-year period, using data-driven analysis of asset condition. In addition to capital renewal requirements, the plan evaluates all stages of the asset lifecycle to assess whether projected funding levels are sufficient to support the proposed levels of service.

These financial projections are based on data from the City's 2024–2027 Capital Budget and the 2025 Long-Term Financial Plan, ensuring alignment with Council-approved financial strategies.

The summary charts below outline projected expenditures across a range of asset lifecycle activities. These figures are based on information from the City's budget documentation and incorporate the results of two financial scenarios. The difference between these scenarios is referred to as the "infrastructure gap," representing the variance between the average planned investment and the estimated funding required to achieve the preferred level of service.

The total infrastructure gap over the 10-year period for assets funded from property tax is $486M, while the total infrastructure gap for assets funded through the current water and wastewater rates is $134M.

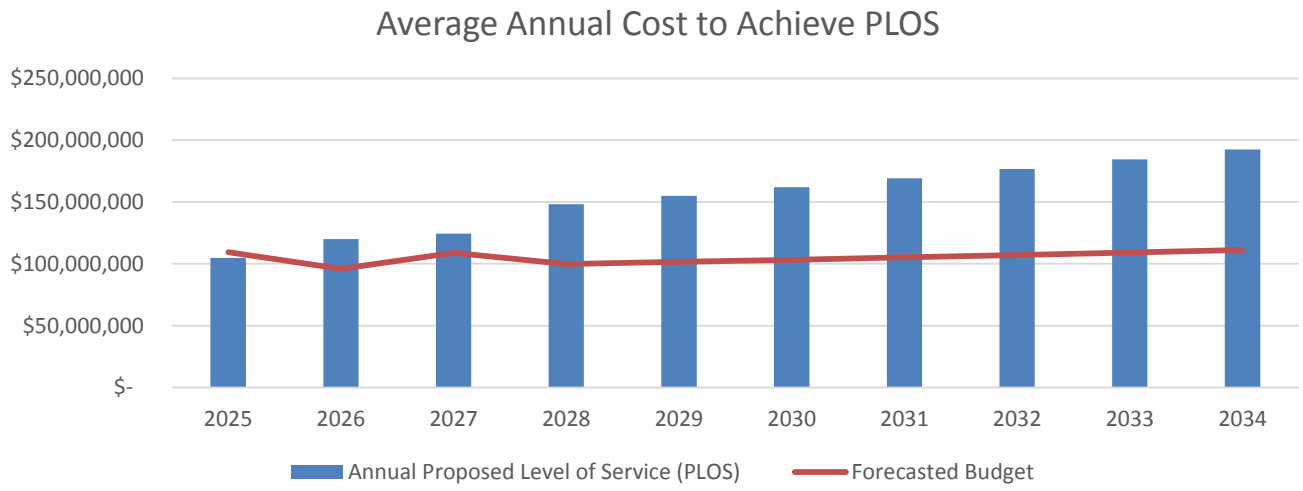


Chart 1 – Property Tax Funded Assets

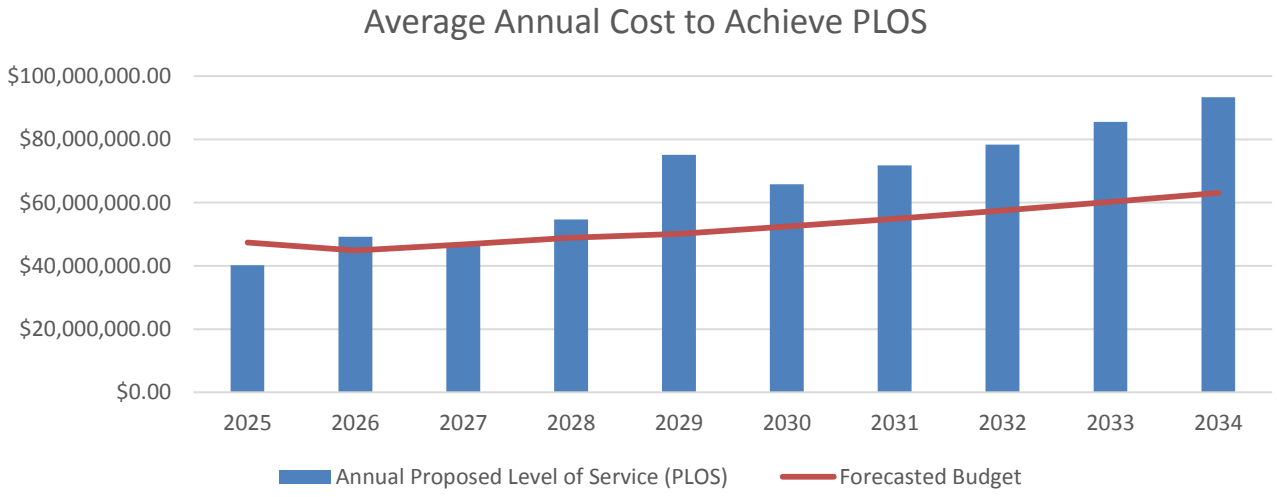


Chart 2 – Water and Wastewater Rates Based Assets

## Continuous Improvement

In asset management planning, continuous improvement refers to the structured, ongoing process of enhancing how assets are managed to deliver better value, performance, and sustainability over time. It ensures that asset management practices evolve in response to new data, changing conditions, and lessons learned.

In alignment with the City's ongoing commitment to asset management planning and continuous improvement, the following initiatives are underway or planned.


- Enhance existing data collection and continue to expand asset inventory.
- Further integrate performance indicators to improve evaluation of asset condition.
- Continue to evaluate risk and impact of climate change and develop risk mitigation strategies and contingency plans.
- Enhance or expand use of asset management software and tools to support data analysis.
- Enhance structured approaches for managing asset interventions throughout the asset lifecycle.

In accordance with Ontario Regulation 588/17, the City is required to conduct an annual review of asset management progress by July 1 each year, with a full review and update every five years. The required annual review will include asset management status reports to Council that provide an overview of asset management planning activities, progress, and information on the performance of asset classes.

The City remains committed to enhancing its asset management practices to ensure that infrastructure investments continue to support safe, reliable, and high-quality services that directly benefit the community. Through continuous improvement and evidence-based planning, the City can maximize the value of its assets, improve service delivery, and meet the evolving needs of residents both now and in the future.

## Resources Cited

1. O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure https://www.ontario.ca/laws/regulation/170588
2. City of Greater Sudbury Strategic Plan 2019-2027 (Revised 2023) https://www.greatersudbury.ca/sites/sudburyen/includes/themes/MuraBootstrap3/js/pdfjs-2.8.335/web/viewer_even_spreads.html?file=https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/report-pdfs/revised-strategic-plan-2023/#zoom=page-width
3. City of Greater Sudbury Approved 2024 - 2025 Budget https://www.greatersudbury.ca/city-hall/budget-and-finance/2024-2025-budget/proposed-budget1/proposed-2024-2025-budget/
4. Enterprise Asset Management Plan (2023) Report https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/enterprise-asset-management-plan/
5. Road Structure Asset Management Plan https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c1-road-structure/
6. Roads and Transportation Asset Management Plan https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c2-roads-transportation/
7. Stormwater Asset Management Plan https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c3-stormwater/
8. Asset Management Plan Water Wastewater https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c4-water-wastewater/

9. Fleet and Equipment Asset Management Plan
   https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c5-fleet-and-equipment/
10. Municipal Parking Asset Management Plan
    https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/pdf-documents/appendix-c6-municipal-parking/
11. Buildings and Facilities Asset Management Plan
    https://www.greatersudbury.ca/city-hall/budget-and-finance/pdf-documents/appendix-c7-buildings-and-facilities-asset-management-plan/
12. Parks and Recreation Asset Management Plan
    https://www.greatersudbury.ca/city-hall/budget-and-finance/pdf-documents/appendix-c8-parks-and-recreation-asset-management-plan/
13. Solid Waste Asset Management Plan
    https://www.greatersudbury.ca/city-hall/budget-and-finance/pdf-documents/appendix-c9-solid-waste-asset-management-plan/
14. Finance and Administration Committee – Enterprise Asset Management Plan (2023)
    https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51989
15. Finance and Administration Committee – Enterprise Asset Management Plan (2023) Presentation
    https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=52114&utm_source=sudbury.com&utm_campaign=sudbury.com%3A%20outbound&utm_medium=referral

## Appendices

Appendix A: Summary of State of the Infrastructure
Appendix B: Summary of Lifecycle Activities for Proposed Levels of Service
Appendix C: Summary of Proposed Levels of Service – Core Assets
Appendix D: Summary of Proposed Levels of Service – Non-Core Assets

## Appendix A – Summary of State of Infrastructure

| Asset Class | Summary of Assets | Replacement Value | Average Age (years) | Average Condition | Approach to Assessing Condition |
|---|---|---|---|---|---|
| **Water** | • Watermains<br>• Fire Hydrants<br>• Valves<br>• Valve Chambers<br>• Service Connections<br>• Meter Stations<br>• Treatment Facilities<br>• Water Wells<br>• Pumping Stations<br>• Storage Tanks | $3,505M | 40 | Fair | • Useful Life Consumed,<br>• Remaining Service Life |
| **Wastewater** | • Gravity Sewer Mains<br>• Lateral Connections<br>• Forcemains<br>• Maintenance Holes<br>• Valves<br>• Drop Shafts<br>• Treatment Facilities<br>• Lift Stations | $3,490M | 50 | Good | • Useful Life Consumed,<br>• Remaining Service Life |
| **Stormwater** | • Stormwater Mains<br>• Ditches<br>• Catchbasins<br>• Stormwater Maintenance Holes<br>• Culverts<br>• Outlets<br>• Inlets<br>• Ponds<br>• Oil and Grit Separators | $645M | 36 | Good | • Useful Life Consumed<br>• Remaining Service Life<br>• Asset-specific condition rating |
| **Roads** | • Arterial Roads<br>• Collector Roads<br>• Local Roads | $7,271M | 24 | Fair | • Asset-specific condition rating, Pavement Condition Index (PCI) |
| **Bridges & Large Culverts** | • Solid Slab Bridges<br>• I-Beam or Girders<br>• Rectangular Culvert<br>• Rigid Frame<br>• Vertical Legs<br>• Through Truss | $568M | 32 | Good | • Asset-specific condition rating, Bridge Condition Index (BCI) |

| Asset Class | Summary of Assets | Replacement Value | Average Age (years) | Average Condition | Approach to Assessing Condition |
|---|---|---|---|---|---|
| | • Arch Culvert | | | | |
|  **Fleet & Equipment** | • Corporate Fleet<br>• Paramedic Vehicles and Equipment<br>• Fire Trucks and Equipment<br>• Transit<br>• Parks & Recreation<br>• Machinery and Equipment | $161M | 10 | Fair  | • Remaining Service Life |
|  **Municipal Parking** | • Paved Parking Lots<br>• Gravel Parking Lots<br>• Pay Stations<br>• Parking Meters<br>• Kiosks and Gates<br>• Light Standards | $8.3M | 25 | Good  | • Asset-specific Condition Rating<br>• Remaining Service Life |
|  **Solid Waste** | • Active Landfills<br>• Leachate Gas Detection Systems<br>• Signs<br>• Culverts<br>• Fencing & Gates<br>• Concrete Pads<br>• Access Roads<br>• Metal Bins | $58.9M | 11 | Good  | • Useful Life Consumed<br>• Asset-Specific Condition Rating |
|  **Buildings & Facilities** | • Arenas<br>• Libraries<br>• Long-Term Care<br>• Museums<br>• Pools<br>• Ski-Hills<br>• Firehalls<br>• Administration<br>• Fleet & Transit<br>• Public Works<br>• Environmental Services | $2,009M | 41 | Fair  | • Asset-Specific Condition Rating |

| Asset Class | Summary of Assets | Replacement Value | Average Age (years) | Average Condition | Approach to Assessing Condition |
|---|---|---|---|---|---|
|  **Parks & Recreation** | • Splash Parks<br>• BMX & Tracks<br>• Playing Surfaces<br>• Skateparks<br>• Playground and Trails | $84.3M | 13 | Fair | • Remaining Service Life |

## Appendix B – Summary of Lifecycle Activities for Proposed Levels of Service

| Asset Class | Lifecycle Activities |
|---|---|
|  Water | • Condition assessments<br>• Cathodic protection<br>• Swabbing<br>• Pipe lining<br>• Equipment/asset renewal or repair, ensuring energy efficiency |
|  Wastewater | • Condition assessments<br>• Flushing<br>• CCTV inspection<br>• Pipe lining<br>• Equipment/asset renewal or repair, ensuring energy efficiency |
|  Stormwater | • Annual street sweeping program<br>• Catchbasin cleanout<br>• Culvert inspection and replacement<br>• Storm sewer camera inspection<br>• Inspection and cleanout of oil and grit separators<br>• Ditch cleanout and repair<br>• Municipal drain maintenance and repair<br>• Inspection and dredging of stormwater management ponds |
|  Roads | • Crack sealing<br>• Preventive maintenance (e.g., Fog Seal)<br>• Minor rehabilitation (e.g., Mill & Overlay)<br>• Major rehabilitation (e.g., Pulverize and Overlay)<br>• Reconstruction |
|  Bridges & Large Culverts | • Asphalt surface repair<br>• Bridge cleaning<br>• Bridge deck drainage<br>• Concrete spot repairs<br>• Erosion control<br>• Flow obstruction removal<br>• Vegetation/debris removal<br>• Re-grade approaches |
|  Municipal Parking | • Cleaning and sealcoating, crack sealing paved parking lots<br>• Preventative maintenance<br>• Repair, resurfacing, reconstruction or replacement<br>• Consider various paving materials and designs |
|  Solid Waste | • Visual inspections and condition assessments<br>• Reactive maintenance activities based on inspections and assessments<br>• Annual monitoring and sampling reports submitted to the Ministry of Environment (MOE) for reviews<br>• MOE conducts periodic site visits to ensure compliance<br>• Maximize diversion efforts to conserve landfill space |

| Asset Class | Lifecycle Activities |
|---|---|
|  **Buildings & Facilities** | • Regular scheduled preventative maintenance as per manufacturer recommendations, industry standards and best practices such as ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers).<br>• Maintenance work order system to prioritize critical assets<br>• Visual inspections and condition assessments<br>• Legislated and safety inspections and certifications |
|  **Parks & Recreation** | • Regular scheduled preventative maintenance as per manufacturer recommendations, industry standards and best practices<br>• Maintenance work order system to prioritize critical assets<br>• Visual inspections and condition assessments as well as legislated and safety inspections and certifications are performed annually<br>• Reactive maintenance activities based on assessments and feedback from users |
|  **Fleet & Equipment** | • Regular scheduled preventative maintenance as per manufacturer recommendations, industry standards and best practices<br>• Visual inspections prior to use<br>• Legislated safety inspections and certifications<br>• Conformance with fire underwriters survey frequency of fire apparatus acceptance and service tests<br>• Reactive maintenance activities based on assessments and feedback from users<br>• Leverage Data from Vehicle Tracking Systems and Maintenance Records |

## Appendix C – Summary of the Proposed Levels of Services – Core Assets

| Asset Class | Community Level of Service | Current Technical Level of Service | Proposed Technical Level of Service | 10-Year Average Annual Investment Need |
|---|---|---|---|---|
|  Water | Ensure safe drinking water with adequate fire flow | Fair  • Maintain number of properties connected to the municipal systems<br>• Maintain current levels of fire protection<br>• Maintain average number of service interruption days per year | Fair  • Maintain number of properties connected to the municipal systems<br>• Evaluate opportunities to improve fire protection<br>• Evaluate opportunities to reduce number of service interruption days per year | $35.3M |
|  Wastewater | Ensure adequate and environmentally sustainable treatment of wastewater | Good  • Maintain current number of events, including backups and effluent violations per year | Good  • Evaluate opportunities to reduce number of events, including backups and effluent violations per year | $45.0M |
|  Stormwater | Ensure adequate capacity to protect the environment | Good  • Source Protection Plans developed and maintained.<br>• Source control program in place with a supporting By-Law<br>• Riparian areas are maintained in a natural state or are being addressed by subwatershed studies.<br>• Flow rates are controlled within | Good  • Review and implement all quality, volume, and flow rate modifications and monitoring requirements based on subwatershed studies.<br>• Sewers, catch basins, OGS units, and stormwater management ponds are inspected and | $9.11M |

| Asset Class | Community Level of Service | Current Technical Level of Service | Proposed Technical Level of Service | 10-Year Average Annual Investment Need |
|---|---|---|---|---|
| | | developments where design permits.<br>• Discharge volumes are not limited.<br>• Enhanced protection is provided by developments with stormwater management ponds. | cleaned at an optimal frequency. | |
| | Ensure adequate capacity to protect property | • A limited number of properties are impacted by minor storm events.<br>• Update storm design standards for consistency<br>• New developments are designed for a 100-year event (5 year in the minor system, 100 year in the major system).<br>• Existing developments are to be modified as funds are available. | • Design criteria for all developments are defined and achieved.<br>• Modelling is used to review and update design criteria<br>• Private damage caused by stormwater is limited to properties located within the flood plain.<br>• Existing developments are modified with available funds. | |
|  <br>**Roads** | Ensure safe, reliable roads, and with adequate capacity to support essential services and various modes of transportation. | Arterial Roads<br>Good, Avg. PCI = 65 | Arterial Roads<br>Good, Avg. PCI = 68 | Arterial Roads<br>$35.6M |
| | | Collector Roads<br>Fair, Avg. PCI = 51 | Collector Roads<br>Fair, Avg. PCI = 48 | Collector Roads<br>$15.0M |
| | | Local Roads<br>Fair, Avg. PCI = 52 | Local Roads<br>Fair, Avg. PCI = 49 | Local Roads<br>$22.5M |

| Asset Class | Community Level of Service | Current Technical Level of Service | Proposed Technical Level of Service | 10-Year Average Annual Investment Need |
|---|---|---|---|---|
|  <br>Bridges & Large Culverts | Ensure safe and reliable bridges, with adequate capacity to support essential services and various modes of transportation. | Good, Avg. BCI = 79<br>  <br>% of bridges by BCI<br>BCI < 40 = 0.52%<br>BCI 40-50 = 0.00%<br>BCI 50-60 = 1.04%<br>BCI 60-70 = 5.18%<br>BCI 70-80 = 51.81%<br>BCI >80 = 39.38% | Good<br>  <br>BCI >70 = 80% of Bridges,<br>BCI >60 = 95% of Bridges | $8.85M |

# Appendix D – Summary of the Proposed Levels of Services – Non-Core Assets

| Asset Class | Community Level of Service | Current Level of Service | Proposed Level of Service | 10-Year Average Annual Investment Need |
|---|---|---|---|---|
|  Municipal Parking | Ensure accessibility and availability to all users, year-round, in all weather conditions. | Good | Good | $0.117M |
|  Solid Waste | Ensures facilities are accessible, efficiently operated with minimal downtime, environmentally compliant, and responsive to the needs of residents. | Good | Good | $0.658M |
|  Buildings & Facilities | Provide a safe, secure, and accessible environment, equipped to meet the diverse needs of all users. | Fair | Fair | $42.9M |
|  Parks & Recreation | Ensure that all residents have equitable access to safe, well-maintained, and diverse recreational spaces that support physical activity, social engagement, and environmental stewardship. | Fair | Fair | $0.923M |
|  Fleet & Equipment | Ensure reliability, safety, efficiency, sustainability, and cost-effectiveness to meet community and customer needs. | Fair | Fair | $13.9M |