

Report
Staff Report
The Corporation of the City of Brampton
6/19/2024

Date: 2024-06-03

Subject: 2024 Service Area Asset Management Plan

Contact: Vincent Rodo, Director, Organizational Performance and Equity,

Diversity, and Inclusion

Report number: Corporate Support Services-2024-446

RECOMMENDATIONS:

 That the report from Amit Gupta, Manager, Corporate Asset Management, to the Committee of Council Meeting of June 19, 2024, re: 2024 Service Area Asset Management Plan, be received;

- **2.** That Council approve the "2024 Service Area Asset Management Plan" attached as Appendix A;
- 3. That Council refer this report in its entirety to the 2025 Budget process as input; and
- **4.** That the "2024 Service Area Asset Management Plan" be posted on the City's website to comply with O. Reg. 588/17.

OVERVIEW:

- The Province of Ontario's O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure requires all municipalities to develop comprehensive Asset Management Plans in multiple phases (2022-2025).
- The City has met its all-previous legislated requirements which is essential to be eligible for funding from other levels of government and to support other City projects and initiatives. In 2019, Council approved the "Strategic Asset Management Policy" affirming its commitment to establishing sound Asset Management practices. In 2022, the City developed asset management plans for Transportation and Stormwater, focused on service area-level analysis and practices. The 2024 Service Area Asset Management Plan (Service Area AMP) not only meets but exceeds the requirements outlined in the O.Reg. 588/17 for all the remaining City assets.

- Based on 2022 State of Local Infrastructure (SOLI) report, which was approved by Council in November 2023, the City's assets total replacement cost is valued at approximately \$9.0 billion (\$2023). The overall condition of the City's assets is deemed 'Good', which is largely attributed to the relatively new age of the infrastructure and the effective asset management practices implemented by the City.
- Service Area AMP and the annual SOLI updates are an important input into the City's budgeting process.
- The report provides assessment of the asset condition and risk associated to not completely meeting the community's levels of service and strategies to mitigate those risks. Importantly, it affirms that assets deemed unsafe will never be put into service under any circumstances, thereby prioritizing public safety.
- City staff conducted a thorough analysis of financial needs for sustaining and achieving current service levels and identifies a gap between current financial allocations and projected capital investment needs for the next decade. The analysis identifies a \$334 million gap for existing assets, after accounting for additional revenues from new growth. Additionally, the report proposes funding options and strategies to address the funding gap. A key recommendation to close this gap is to seek funding supports from the upper levels of government to supplement municipal resources. Financial projections in the Long-Term Financial Master Plan and Service Area AMP are aligned and have used the same data sources.
- Asset Management Planning is a comprehensive, multi-year process that includes improving data, processes, systems, staff resources, capacity building and organizational culture over time. Understanding the complexities of this journey, the Province established a multi-phase timeline for municipalities to comply with the legislation. The overall current maturity score across all service areas indicates an "Intermediate" maturity level. We are committed to advancing to an "Advanced" stage on average within the next five years, in alignment with the phased approach outlined in O.Reg. 588/17. At the Advanced stage, we will be able to fully integrate the Asset Management Plan (AMP) process with financial planning.
- Staff will continue to engage and inform Council as part of the legislated requirements and will provide SOLI reports annually, and updated Transportation and Stormwater AMPs for approval by July 1^{st,} 2025.

Situated in Canada's largest urban region, the City of Brampton, Canada's 9th largest municipality, has experienced rapid growth in recent years, resulting in the addition of a large number of assets to its already extensive inventory.

In 2015, Ontario enacted the Infrastructure for Jobs and Prosperity Act to promote principled, evidence-based and strategic long-term infrastructure planning. Subsequently, in 2017, Ontario Regulation 588/17 (O. Reg 588/17) was passed which mandated municipalities to develop a Strategic Asset Management Policy to help document the relationship between Asset Management Plans and current policies, further guiding future capital investment decisions.

The City of Brampton developed its first Corporate Asset Management Plan (Corporate AMP) in 2016 and updated it in 2021. Serving as the primary strategic planning document, the 2021 Corporate AMP informs and guides asset management practices citywide, aligned with the Strategic Asset Management Policy. According to O.Reg. 588/17, municipalities were mandated to create comprehensive Asset Management Plans for their core assets by July 1st, 2022, and for all other assets by July 1st, 2024. In line with this regulation, the City formulated departmental Transportation AMP and Stormwater AMP in 2022, concentrating on analyzing and implementing practices at a service area level.

The Service Area Asset Management Plan (Service Area AMP) builds upon the Corporate AMP's objectives, offering specific analyses for remaining 10 service areas. It supports and advances the city's asset management practices, ensuring financial sustainability while delivering the expected Levels of Service for its community. Aligned with Ontario Regulation 588/17, the Service Area AMP surpasses requirements outlined in the Ontario Building Together Guide and encompasses ISO 55000 and International Infrastructure Management Manual components. It includes the Proposed Levels of Service requirement to meet the 2025 deadline for all 10 service areas. This Service Area AMP will continue to evolve over time alongside the Corporate, Transportation and Stormwater AMPs. A summary timeline of regulatory requirements is shown in Figure 1.



Figure 1: Regulatory O.Reg 588/17 Reguirements

CURRENT SITUATION:

The Service Area AMP aims to enhance the City's asset management practices by tailoring strategies for each service area, aligning with Corporate AMP objectives and complying with O. Reg 588/17. The detailed 2024 Service Area AMP report is attached in Appendix A, encompassing all key city services and recognizing interdependencies among service areas and other corporate functions.

The Service Area AMP meets the legislative requirement and comprises the following components:

State of the Local Infrastructure (SOLI)

The SOLI section aims to assess the current state of Brampton's infrastructure assets valued at approximately \$9.0 billion (\$2023), as detailed in the Council approved 2022 State of the Local Infrastructure Report. The valuation is based on an inventory of capital assets as of the end of 2022.

The Service Area AMP indicates that the overall condition of the City's assets is deemed **GOOD**, with over 95% rated as 'fair' or better, indicating a **"state of good repair".** This positive rating is largely attributed to the relatively new age of the infrastructure and the effective asset management practices implemented by the City.

Figure 2 provides an overview of the overall asset condition of all assets owned by the City. Please note that the condition for some assets are evaluated based on "age" relative to the useful life of the asset and does not necessarily reflect the actual asset condition. In most cases, very poor assets are either being renewed or will be addressed through the upcoming budget. The report affirms that the assets deemed unsafe will never be put into service under any circumstances, thereby prioritizing public safety.

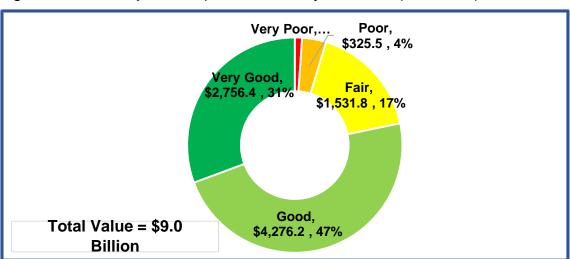


Figure 2 – Summary of Brampton's Assets by Condition (In Millions)

Maturity Assessment

As part of this Service Area AMP, individual maturity assessments were completed for each service area. These assessments involved workshops to gather data on assert information and overall asset management practices within each area. As shown in Figure 3, the overall current maturity score across all service areas (excluding Transportation and Stormwater) is 66, indicating an "Intermediate" maturity level. Our goal is to move to an "Advanced" stage on average within the next five years. At the Advanced stage, we will be able to fully integrate the Asset Management Plan (AMP) process with financial planning. The target identified in the Figure below is anticipated to be achieved after full implementation of the regulatory requirements in July 2025.



Management

Figure 1 – Overall Asset Management Maturity Score by Category (Across all Service Areas)

Levels of Service

Target Score

O. Reg. 588/17 mandates municipalities to establish and document their levels of service (LOS). Specifically for core assets, the regulation sets clear customer and technical metrics for LOS. While the same standards apply to other assets, tracking methods are determined by the community. The City has worked to create key service level measures for its service areas, enabling LOS monitoring. Staff discussions produced a Levels of Service table for each service area, available in the report's appendices. These tables provide the connection between the current levels of service with proposed levels, along with associated costs. This Service Area AMP meets the July 1st, 2025 regulatory requirement for proposed levels of service for all 10 service areas included in the report. The current levels of service (CLOS), initially outlined in

the 2021 Corporate AMP and updated in this Service Area AMP, form the basis for proposed LOS.

Asset Management Strategy

The Asset Management Strategy includes detailed planning for specific service areas, encompassing various functional components. This section fulfills requirements for asset management strategies, focusing on risk, climate change integration, and lifecycle management to uphold current service levels under O. Reg 588/17.

Through the Service Area AMP, the City has conducted a thorough evaluation of the asset management strategy and established overarching frameworks to direct ongoing departmental asset management plans in accordance with O. Reg 588/17.

These strategies align with Ontario's Building Together: Guide for Municipal Asset Management Plans and incorporate elements from the ISO 55000 Global Asset Management Standard, MFOA's foundational Asset Management framework, and the International Infrastructure Management Manual (IIMM). The following sections offer detailed insights into the strategies developed within the scope of this Service Area AMP.

Demand Management

Demand management in this Service Area AMP addresses potential future shifts in the City that could affect demand for municipal services. The purpose of this report section is to pinpoint factors influencing demand, propose management strategies, and estimate associated costs. As community priorities, technologies, and services evolve, demand on City services will also change. This section draws insights from analysis, surveys, and relevant master planning documents, and builds it further following a comprehensive approach.

Risk Management

Risk has always been integral to the City's daily operations, informing necessary lifecycle actions to maintain service level objectives. During the development of the Corporate AMP in 2022, the City observed that risk management practices varied across departments in terms of methodologies and strategies. Consequently, a Risk Management Strategy (RMS) was incorporated into the Corporate AMP to establish a consistent and standardized approach to asset risk management across all service areas. The RMS ensures a systematic process for prioritizing projects across asset classes, aligned with the globally recognized risk framework standards of ISO 31000.

Figure 4 provides an overview of Risk Analysis results for all service areas, totaling approximately \$3.4 billion in assessed assets across all categories, excluding transportation and stormwater assessed in departmental plans. Although most assets (about 96%) pose moderate risk or lower, the City still faces ongoing risk challenges.

It is important to note that risk is associated with the potential failure of assets to deliver the desired levels of service, rather than posing a risk to public safety. This distinction underscores our commitment to ensuring that assets are maintained and operated in a manner that prioritizes community service delivery while upholding stringent safety standards.

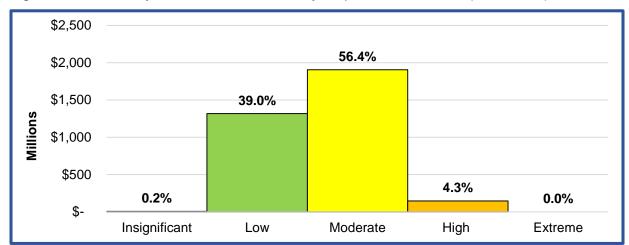


Figure 4 – Summary of Risk Assessment by Replacement Value (In Millions)

Climate Change

According to O.Reg.588/17, municipalities must commit to addressing climate change vulnerabilities in their asset management planning, covering operations, service levels, lifecycle management, anticipated costs, mitigation, adaptation, and disaster planning to meet regulatory requirements.

With a focus on environmental sustainability, Brampton City Council declared a climate emergency in 2019 with aims to reduce the city's greenhouse gas emissions by 80% by 2050. Additionally, Brampton has implemented various mitigation and adaptation strategies within its asset management framework.

This section discusses the framework to integrate climate change into asset management. Overall, the city's climate risk to service levels is mostly moderate, indicating limited exposure and adequate protection. Nonetheless, some high-level risks persist, and the city employs mitigation measures to minimize adverse weather impacts and reduce service disruptions.

Governance

Asset management governance refers to how the City assigns responsibilities and makes decisions regarding asset management activities. The City continually seeks to enhance its governance structure to efficiently execute its asset management program while ensuring sustainability and effectiveness throughout the organization. This section aims to delineate the current structures and teams engaged in the City's asset

management practices at the service area level. To accomplish this, various tools are employed, including a Responsible, Accountable, Consulted, and Informed matrix (RACI matrix) and an asset interdependency analysis, both integral to advance the City's asset management practices.

Asset Information

The City's asset management programs are always evolving. To address this, the City has developed an Asset Information Management Strategy (AIMS). AIMS guides the framework for identifying asset-specific data needs and achieving data objectives beyond 2025, aligning with regulatory requirements under O. Reg. 588/17. This section of the report sets the vision for asset data management and assesses current data systems. The AIMS framework helps City staff plan and track action items to improve asset information maturity and decision-making confidence.

Communication

The Corporate and Service Area AMPs aim to educate, inform, and engage stakeholders about the City's asset management program. Timely and accurate information supports decision-making at the service area level. Strategic communication aligns with the Service Area AMP to ensure understanding and participation in the program.

The O.Reg. 588/17 also stresses public engagement in asset management. The City's primary goal is to keep the public informed and maintain transparency as expected by taxpayers. The 2024 Service Area AMP outlines key objectives to achieve an "Advanced" maturity level, a process expected to span several years. A phased approach will ensure incremental improvements in meeting O.Reg. 588/17 requirements. Therefore, in line with the regulation and current practices outlined in the report, a tailored public engagement process will continue to be developed.

Lifecycle Management

The City of Brampton aims to deliver high-quality services while minimizing costs and managing risk effectively. To achieve this, the City implements various measures to ensure that its infrastructure assets maintain appropriate levels of service. Additionally, lifecycle activities and costs to uphold current service levels are determined in accordance with O.Reg.588/17.

As a multi-service delivery organization, the City manages assets across various service areas. Each service area employs specific lifecycle strategies, which may be formal or informal, to maintain services. These strategies align with the Building Together – Guide for Municipal Asset Management Plans and the MFOA Asset Management Framework outlined in this section of the report.

Financing Strategy

As per O. Reg 588/17, municipalities are required to develop a financial plan to maintain current levels of service. This section details the anticipated funding needs for asset management from 2023 to 2032 and outlines strategies to bridge the gap between current financial allocations and projected capital investment needs efficiently. A thorough analysis of the financial requirements for maintaining and enhancing service levels was conducted, emphasizing the financial commitments needed to optimize asset value and support the community's evolving needs through strategic financial planning

In Figure 5, the analysis identifies a notional infrastructure gap of about \$334 million for existing assets after accounting for additional revenues from new growth. These additional revenues are assumed to be prioritized for existing assets, although, the specific allocations will be determined though future budgets as growth occurs.

The 2024 Service Area AMP further develops and documents Asset Management practices the City employs to prioritize investments and manage its asset portfolio at the lowest cost while balancing risk. Various funding options and strategies have been proposed and analyzed in Table 26 of the report which will be further addressed through other future studies and proposals to Council.

Current legislation requires municipalities to develop and implement an asset management plan to ensure the City's eligibility and demonstrate its strength in competing for future funding support from other levels of governments. Furthermore, Service Area AMP and the annual SOLI updates are important inputs into the City's budgeting process.

Total Expenditures
\$5.27 Billion

Total Revenues
\$4.54 Billion

Figure 5 – Projected Infrastructure Gap to Maintain Current Levels of Service (10-Year Total)

Note: Values have been rounded

(1) Projected Growth Revenue from assessment growth, increases in Federal Gas Tax allocation with population change, increase in special purpose levies and stormwater fees. Excludes DC revenue to fund first round capital.

Additionally, this section examines and proposes funding options and strategies to address the funding gap. The expansion and asset upgrade requirements to meet the City's proposed levels of service are also documented in Table 25 of the report.

Monitoring & Improvement Plan

Continuous improvement is integral to municipal asset management. This entails identifying areas for improvement, implementing changes, monitoring outcomes, and adjusting strategies based on feedback and insights. The O. Reg. 588/17 encourages municipalities to incrementally maximize benefits, manage risks, and deliver satisfactory levels of service to the public in a cost-effective manner. This section reaffirms the City's dedication to continuous improvement, as outlined in the City's Strategic Asset Management Policy. It discusses methods for monitoring progress in asset management plans and outlines next steps for improvement.

Next Steps

Staff will continue to engage and inform Council as part of the legislated requirements and will provide SOLI reports annually, and updated Transportation and Stormwater AMPs for approval by July 1st, 2025.

CORPORATE IMPLICATIONS:

There is no financial impact resulting from the adoption of the recommendations in this report.

Other Implications:

The Province of Ontario's O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure mandates all municipalities to develop comprehensive Asset Management Plans for all City assets by July 1st, 2024. Council approval of this plan enables the City to fulfill the regulatory requirements for its assets.

STRATEGIC FOCUS AREA:

This report fulfills the Council Priority of a Well-Run City by adhering strictly to effective financial management policies and supports the Brampton 2040 Vision by ensuring sustainable financial operations.

CONCLUSION:

City staff are seeking approval for the 2024 Service Area Asset Management Plan, prepared in accordance with O.Reg. 588/17, and will post the plan on the City's website.

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Appendix:

• Appendix A – 2024 Service Area Asset Management Plan