

City of Mississauga

# Corporate Report



10.11

Date: April 11, 2022

To: Chair and Members of General Committee

From: Shari Lichterman, CPA, CMA, Commissioner of  
Corporate Services and Chief Financial Officer

Originator's files:

Meeting date:  
April 27, 2022

## Subject

**Corporate Asset Management Program 2022 Report**

## Recommendation

That the report dated April 11, 2022 entitled "Corporate Asset Management Program 2022 Report" from the Commissioner of Corporate Services and Chief Financial Officer be received.

## Executive Summary

- In accordance with the City's Strategic Asset Management Policy (03-13-01), an annual report is required to update Council on the status of improvements made in the Asset Management Program.
- The level of maturity for the City's core assets is increasing through the completion of initiatives, training and on-going work being performed by City staff.
- This report provides an update on the improvements outlined in the City's 2021 Corporate Asset Management Plan for core infrastructure (roads, bridges [culverts] and stormwater).
- The City's Asset Management Plan is living document that is regularly under review and updated to utilize and optimize the assets required to deliver services to residents and businesses.

## Background

One of the requirements in the City's Strategic Asset Management Policy (03-13-01) is to provide an annual update to Council on the Asset Management (AM) System. The report must include the "*City's progress in implementing its Asset Management Plan(s) and any protocols to achieve compliance with Provincial legislation and regulation timelines*" by July 1<sup>st</sup> each year.

The City's Detailed AM Plans provides asset information on:

- The state of the infrastructure
- Current levels of service
- Future demand
- Lifecycle management strategies
- Infrastructure gap and challenges, and
- Continuous improvement activities

This report provides highlights on the progress made for notable continuous improvement activities identified in the 2021 Corporate AM Plan. Appendices 1 to 3 contain a status update and priority ranking for each improvement identified in the AM Plan(s).

## Comments

Council approved the City's 2021 Corporate AM Plan including Detailed AM Plans on the City's core infrastructure assets (roads, bridges [culverts] and stormwater) in September 2021. This report is the first annual AM Program update to Council on advancements made in the Asset Management Program since its approval.

One of the main components in gauging progress being made in achieving predictable asset management practices is conducting an asset maturity assessment on a regular basis. The Corporate Asset Management Office has implemented a standardized asset maturity assessment using eight criteria (Table 1). The criteria includes a series of statements that is evaluated and illustrates asset maturity progress at a Level 1 through Level 4 (Figure 1).

**Table 1 – Maturity Level Assessment Criteria**

1. Leadership and commitment	5. Understand decision-making
2. Know your financial capacity	6. Manage asset lifecycle
3. Know your assets	7. Know the rules
4. Know your financial situation	8. Monitor sustainability



**Figure 1: Maturity Level Rating Scale**

Building towards asset maturity, the 2021 Corporate AM Plan identifies several continuous improvement activities to be delivered over the short, medium and long-term time frame. These activities are identified as either corporate-wide initiatives or specific activities related to core assets contained in the detailed AM Plans. As improvement activities are completed an increased level of asset maturity is achieved.

The 2021 Corporate AM Plan provides recommended corporate-wide continuous improvement activities. Highlights of advancements made in the last year include:

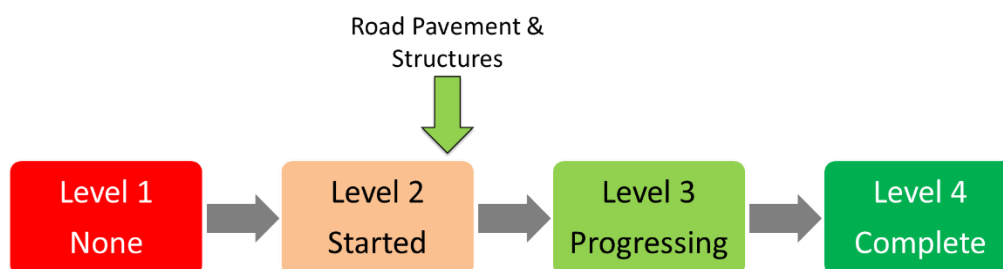
### **Corporate-Wide AM Plan initiatives**

- Council approval of the 2021 Corporate Asset Management Plan –Core Infrastructure
- Approval of BR8565 –Asset Management Program in 2021
  - Increased departmental capacity to prepare 2024 AM Plan(s) incorporating all City assets
  - Funding capacity to engage vendor to collect inventory information contained within the road right-of-way, spatially map and provide asset condition assessments.
- Asset Management Maturity Assessments for core infrastructure have been completed in early 2022
  - Asset management maturity progress is reported in each of the core asset sections below
- Alignment of AM Plan templates with City's budgeting system
  - Additional field added to budgeting system to capture lifecycle costs by activity in 2022-2031 capital budget
- Asset Responsibility Review
  - Majority of asset ownership, budgeting, maintenance responsibilities have been confirmed with service areas
- Procurement of an Enterprise Asset Management System (EAM)
  - A request for information was released in 2022 to determine if EAM technology is currently available to the City to automate existing manual processes that meet provincial regulatory requirements for preparing future City AM Plans

Additional information for each recommendation including a status update is contained in Appendix 1.

### **Road Pavement & Structures**

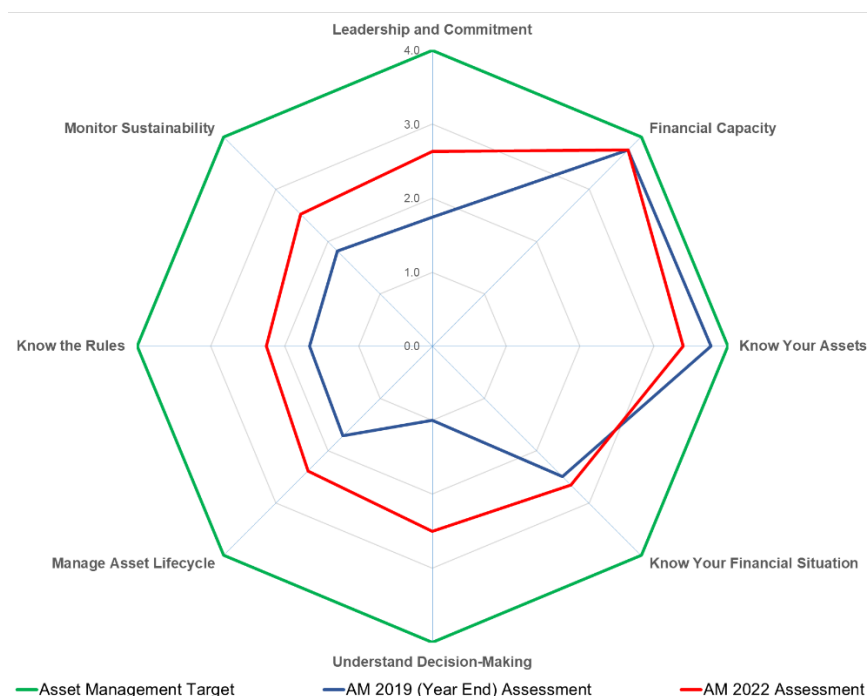
An AM maturity assessment for road pavement and structures has been completed during the first quarter of 2022. As illustrated below in Figure 2, the road pavement and structures AM maturity is at the higher end of Level 2 –Started and close to moving into Level 3 -Progressing.



**Figure 2: 2022 Road Pavement and Structures Maturity Level**

Results of the AM assessment indicate, improvements being made six of the eight criteria, with a small regression observed in the area concerning knowledge of assets. The change in the knowledge of asset(s) criteria is due to more scrutiny of existing asset system data sets and their alignment with criteria statements. Additional work will be under taken by the Service Area to determine if specific asset sub-components such as curbs, should be included in the system tool for the pavement structure profile. Road pavement and structures knowledge of financial capacity remains consistently strong since 2019.

The following asset maturity assessment radar graph illustrates AM maturity progress made between 2019 and 2022 in each of the eight criteria.



**Figure 3: –Road Pavement and Structure Criteria Radar Graph**

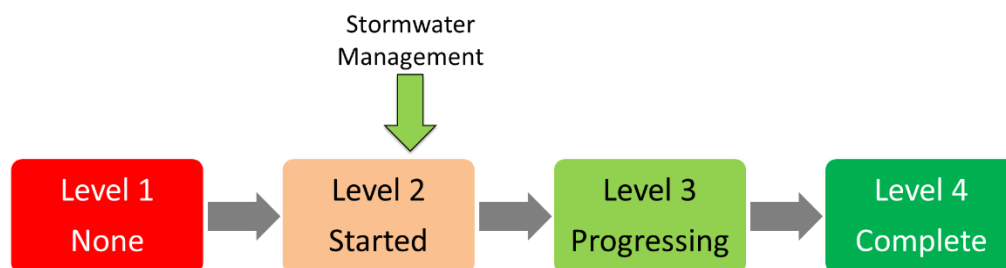
### **Road Pavement & Structures Highlights**

- 2021 Structure inspections have been completed in accordance with the Ontario Structure Inspection Manual (OSIM)
- 2021 Road pavement condition data has been collected and will be uploaded into the roads system in 2022
- An interim prioritization model taking into account elements of asset risk to prioritize funding in capital plans has been implemented
- Roads Service Area working with Community Services Environment section to develop a request for proposal to conducting a Climate Change Vulnerability Assessment for municipal assets
- Request for a negotiated proposal (RFNP) released to engage a vendor to collect high priority road right-of-way assets using mobile Light detection and Ranging (LiDAR) technology. RFNP has been evaluated and vendor to begin collecting asset information during Q2 of 2022
- Noise wall and retaining wall condition assessments have been completed

Appendix 2 contains the status of continuous improvement activities contained in the 2021 Detailed AM Plan -Roads and Structures. This table includes both core and non-core assets in the Roads Service Area.

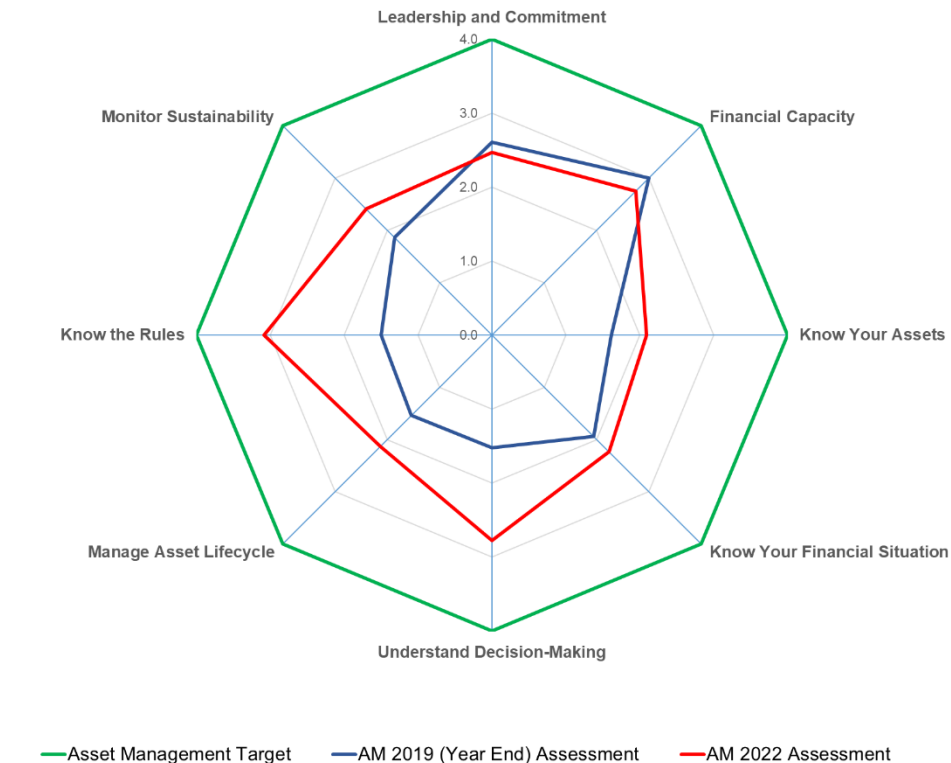
### **Stormwater Management System**

The AM maturity assessment for the stormwater management system has been completed during the first quarter of 2022. As illustrated below in Figure 4, the stormwater management AM maturity is above the mid-point in Level 2 –Started. Significant work is currently underway to improve AM information that will increase the maturity for this Service Area.



**Figure 4: 2022 Stormwater Management Maturity Level**

Results of the AM assessment indicate, improvements being made in six of the eight criteria, with a small change observed in two of the criteria. The slight regression in the financial capacity is the result of the need to develop a comprehensive inventory for watercourse assets with financial information. The existing long-term financial plan estimates will become more robust when this information is contained within the plan.



**Figure 5: Stormwater Management Criteria Radar Graph**

### **Stormwater Management Highlights**

- A Steering Committee and Working Group has been established for the Stormwater Asset Management Project. Both teams consist of cross-functional team members.
- Initiated steps to improve current cost tracking and recording to the different stormwater asset types
- Engaged consultant to build on existing asset risk framework to a more advanced risk model for watercourses and stormwater management facilities.
- Annual review of level of service statements, performance indicators and performance targets have been incorporated into business as usual processes
- Developed business as usual processes to communicate stormwater management business goals that align with the City's Strategic goals including, the Climate Change Action Plan, Stormwater Master Plan and the Strategic Asset Management Policy for Service Area staff

- The stormwater group has been working closely with IT to develop technical and functional requirements for the future automation of stormwater management asset reporting in later AM Plans

More detailed information on stormwater management advancements in AM practices is contained in Appendix 3.

## Financial Impact

There is no direct financial impact from the information contained in this report. Approved funding available through an existing capital project ensures that AM maturity and practices will continue to evolve throughout the organization.

## Conclusion

In accordance with the City's Strategic Asset Management Policy (03-13-01), an annual update to Council on the Asset Management (AM) System is required. This report provides highlights of some of the advancements made to improve AM practices across the organization for core infrastructure classes (roads, bridges [culverts] and stormwater) since Council's approval of the 2021 Corporate AM Plan. City staff have always been engaged in managing its core assets that deliver the necessary services to residents and businesses expect every day.

## Attachments

Appendix 1: Corporate Asset Management Office Improvement Status

Appendix 2: Road Pavement and Structures Improvement Status

Appendix 3: Stormwater Management System Improvement Status



Shari Lichterman, CPA, CMA, Commissioner of Corporate Services and Chief Financial Officer

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