



# Corporate Asset Management Program Update May 2023

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## CAM Program Update

The Corporate Asset Management (CAM) Division strives to provide Council with regular updates on program development. As such, Appendix B provides Council with an update on the following:

- Corporate Asset Management Steering Committee;
- CAM Program Development (CAM Strategy, Governance Strategy & Communications Strategy);
- Asset Management Training;
- Standard Operating Procedures;
- Asset Management Readiness Scale;
- Asset Management Plans – Master Schedule;
- Resourcing Plan;
- Challenges & Successes; and,
- Continuous Improvement.

Previous Reports pertinent to this Appendix:

- (a) Core Asset Management Plan Recommendation Report PW22048 June 15, 2022;
- (b) Corporate Asset Management Information Report PW22037 May 18, 2022;
- (c) Strategic Asset Management Policy PW19053 June 17, 2019; and,
- (d) Public Works Asset Management Plan - Provincial Requirement PW14035 April 7, 2014.

## Corporate Asset Management Steering Committee

The Corporate Asset Management Steering (CAMS) Committee guides development and implementation of each phase of the City’s asset management journey, ensuring that at all times the Asset Management vision, policy and strategy remain in the forefront of planning and decision making. This includes the development and implementation of policies, procedures, systems, and a strategic/operational framework from which appropriate decisions are made and implementation plans executed.

The CAMS Committee consists of the following members:

Position
General Manager, Public Works (Co-chair)
General Manager, Finance and Corporate Services (Co-chair)
Director, Financial Planning Administration and Policy
Director, Corporate Asset Management



Position
Director, Transportation, Operation & Maintenance and Chief Road Official
Director, Hamilton Water
Director & Senior Advisor Strategic Growth
Director, Recreation

To date, the CAMS Committee has met five times with plans for regular monthly meetings at the discretion of the Co-Chairs.

The CAMS Committee reports to the City’s Senior Leadership Team as outlined in the Hamilton Corporate Asset Management Strategy - Governance document.

The Terms of Reference (TOR) for the CAMS Committee was approved by the City’s Senior Leadership Team on November 29, 2022. The TOR provides details on the Committee’s mandate, scope, and responsibilities.

### **CAM Program Development**

#### CAM Strategy

The strategy document is in the process of being developed and will be the high level, long-term action plan for the delivery of the Asset Management Policy. The strategy will document how organizational objectives are converted into asset management objectives and plans.

Elements of the Asset Management Strategy will include:

- Governance (more detail provided below);
- Communication (more detail provided below);
- Risk Management;
- Level of Service;
- Lifecycle Management;
- Finance;
- Data Management; and,
- Integration.

## **Governance Strategy**

In order to implement Corporate Asset Management, the City needs to put in place an appropriate corporate governance strategy. This strategy includes a combination of, systems and structures built upon a strategic/operational framework, which together will ensure that appropriate decisions are made, and actions carried out.

The Governance Strategy defines asset management roles and responsibilities and enables participants to manage assets in an informed manner using reliable and consistent practices. Proper governance of the Corporate Asset Management Program ensures efficiency in asset management practices across the City.

The key objectives for a Corporate Asset Management Governance Strategy can best be described as follows:

- Provide an organization design to ensure successful implementation of all phases of the City’s corporate asset management program;
- Provide an organization design that operationalizes integrated and comprehensive asset management across the City’s Service Areas;
- Provide clear roles and responsibilities for staff to enable changes needed for the program to progress;
- Ensure consistency in asset management concepts and practices at a corporate level but also provide service area flexibility for implementation and management at the tactical and operations levels, and;
- Allow for strategic planning and understanding of future challenges and business drivers that may require changes to existing asset management concepts and practices to ensure effectiveness and sustainability.

The Governance Strategy was approved by the City’s Senior Leadership Team on November 29, 2022.

## **Communications Strategy**

Strong communication is critical for the success of the Corporate Asset Management program. Given the program impacts a sizable and diverse audience, this Communications Strategy will be essential to ensuring key audiences are informed and engaged, are confident in the City’s program and have a good understanding of the different facets of Corporate Asset Management in Hamilton.

The Corporate Asset Management Communication Strategy will be phased in over time, moving from a campaign approach to a way of doing business approach. The plan will help to develop a structure for ongoing communications and updates to key stakeholders that support the immediate business needs and functions of the Corporate Asset Management program.

The Communication Strategy was approved by the CAM Steering Committee in April 2023 and approved by the Senior Leadership Team on May 2023.

### **Asset Management Training**

Since the last CAM Information Report (PW22037) was presented to Council on May 18, 2022, the Corporate Asset Management Office has made great strides in providing City Staff with asset management training including the development of in-house training utilizing the SharePoint platform. SharePoint provides City staff with access to 8 training modules developed by internal Senior Program Analyst staff. The goal of developing this internal training was to provide City staff with a greater understanding of the sections of an Asset Management Plan and to allow them to apply their learnings to their specific service areas.

The modules created include:

- Background and Inventory;
- Lifecycle Management;
- Levels of Service;
- Demand Management;
- Risk Management;
- Climate Change;
- Financial Management; and,
- Continuous Improvement.

In addition, City Staff have made the most of a partnership between the Federation of Canadian Municipalities and National Asset Management System (NAMS) Canada through which they were offering an asset management training program to municipal staff over the past few years at a significantly reduced cost. The course required participants to work on a specific set of asset management competencies and to develop an Asset Management Plan for their selected asset. Upon successful completion, participants were awarded an Institute of Public Works Engineering Australasia (IPWEA) Professional Certification in Asset Management Planning. To date, there have been 24 participants from various service areas across the City including from the Corporate Asset Management Division, Corporate Finance Division, Environmental Services Division, Paramedics Services, Transit Division and Planning and Economic Development Department.

### **Standard Operating Procedures**

A key element of the development of a Corporate Asset Management Program is the development of Standard Operating Procedures (SOP) to ensure consistent asset management methodologies and approaches are applied across the organization.

As such, Corporate Asset Management Division staff completed an analysis of ISO 9001:2015; Quality Management Systems and ISO 55000:2014; Asset Management-Management Systems to determine SOP requirements.

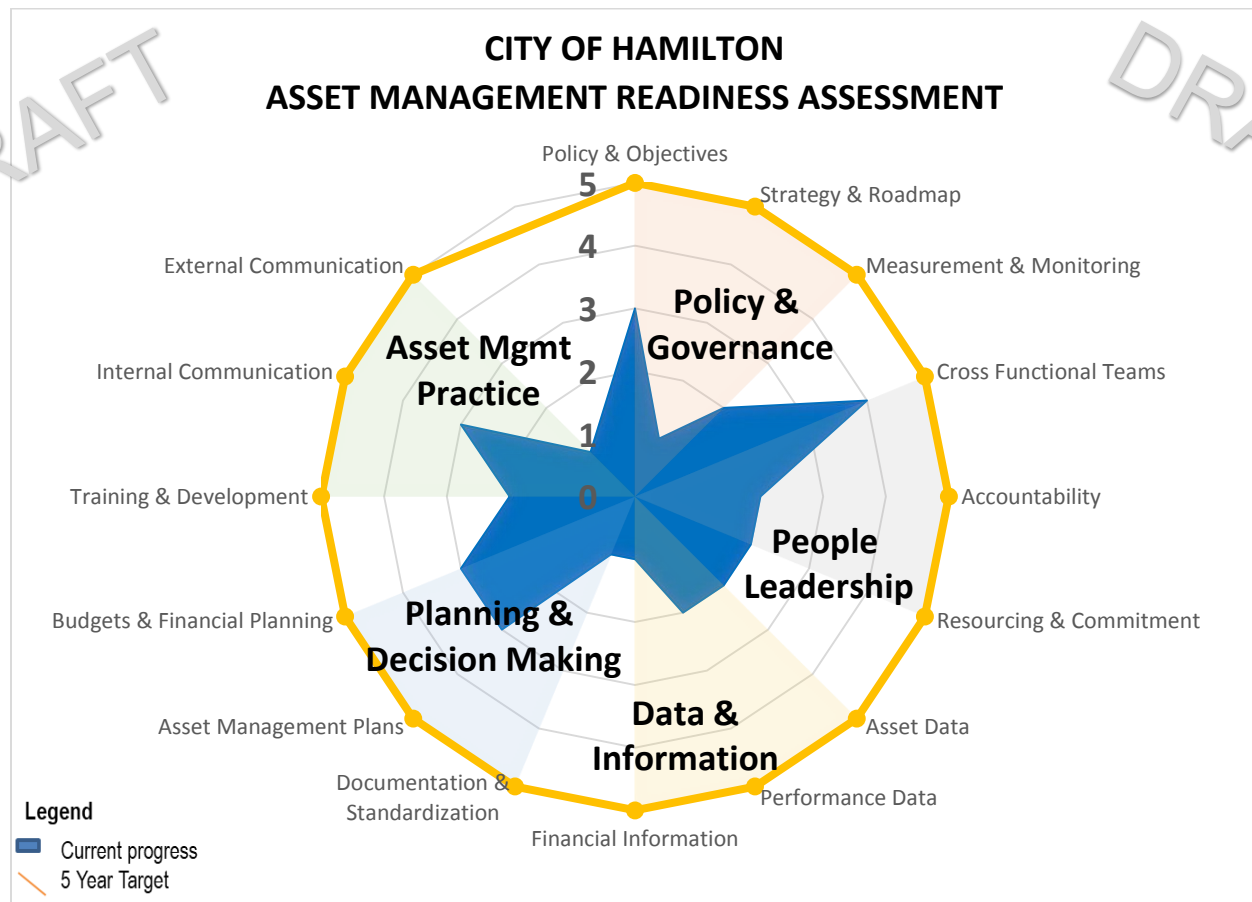
Below is a listing of the required SOP’s and their respective expected completion dates:

SOP TITLE	ESTIMATED COMPLETION DATE
Nonconformance SOP Level II (Section 10 - Improvement)	COMPLETE Q3 2022
Levels of Service SOP Level I (Section 9 - Performance)	Q2 2023
Risk Management SOP Level I (Section 6 - Planning)	COMPLETE Q4 2022
Review of the Management System SOP Level II (Section 9 - Performance)	Q3 2023
Communication SOP Level I (Section 7 - Support)	Q3 2023
Condition Assessment and Asset Performance SOP Level I (Predicting for the future) (Section 9 - Performance)	Q1 2024
Capital Planning Process SOP Level I (Section 8 - Operation)	Q4 2023
Capital Prioritization Process SOP Level I (Section 8 - Operation)	Q4 2023
Asset condition SOP Level I (Section 7 - Support)	Q3 2024
Lifecycle Management SOP Level I (Acquisition, Renewal, Operations and Maintenance, Disposal, Decision techniques, operational planning) (Section 8 - Operation)	Q4 2023
Demand Management SOP Level I (Section 8 - Operation)	Q3 2024
Financial Management SOP Level I (Lifecycle costing, Replacement Cost / Asset Valuation, Long Term Financial Forecast) (Section 8 - Operation)	Q3 2024
Change Management SOP Level I (Section 6 - Planning)	Q4 2023
Leadership SOP Level II (Section 5 - Leadership)	Q1 2024
Renewal Forecast SOP Level I (Modelling and development of the plan) (Section 8 - Operation)	Q1 2024
Data Management SOP Level I (Asset Registry) (Section 7 - Support)	Q4 2023
Preventive Action SOP Level I (Section 10 - Improvement)	Q1 2024

## Asset Management Readiness Scale

The Federation of Canadian Municipalities developed this tool to help municipalities assess their current asset management practices, identify opportunities to adopt new practices, formalize asset management activities and to measure and track progress.

This scale is designed for a municipality to use as a framework to guide actions to improve asset management practices across the organization. Below is a draft readiness assessment for the City of Hamilton. The Corporate Asset Management Steering Committee will be completing a full assessment using this tool in 2023.



## Asset Management Plans

Further to the update that was provided to Council during the 2023 Tax Supported Capital Budget Presentation (FCS00281) on November 25, 2022, there are 33 Asset Management Plans that are required to be written to current levels of service and approved by Council by the O.Reg. 588/17 due date of July 1, 2024. The Core Asset Management Plans (Water, Wastewater, Stormwater, Roads and Engineered Structures) were required to be written to current levels of service by July 1, 2022; this requirement was fulfilled on June 15, 2022 (PW22048).



The next requirement of July 1, 2025 under the regulation is to update all Asset Management Plans to include proposed levels of service. Due to the limited time between the two deadlines, the Corporate Asset Management team is striving to include proposed levels of service in the 2024 deadline where appropriate.

As such, Corporate Asset Management staff have developed an implementation plan with the goal of meeting this regulatory requirement. Progress made to date and the full implementation plan is shown below:

AM Plan #	Proposed Start Month	AMP Section	Planned Completion Month
1	Q3 2022	Police	Q3 2023
2	Q1 2023	Fire	Q4 2023
3	Q3 2022	Paramedics	Q4 2023
4	Q4 2022	Parking	Q2 2023
5	Q4 2022	Transit	Q3 2023
6	Q4 2022	Waste Management	Q3 2023
7	Q2 2023	City Housing Hamilton	Q2 2024
8	Q2 2023	Computer Hardware and Software	Q1 2024
9	Q3 2023	Homes for the Aged (Long Term Care)	Q2 2024
10	Q2 2023	Land Banking	Q4 2023
11	Q2 2023	Industrial Business Parks	Q4 2023
12	Q2 2023	Capital Leases	Q4 2023
13	Q2 2023	Airport	Q4 2023
14	Q2 2023	Libraries	Q1 2024
15	Q2 2023	Public Health	Q4 2023
16	Q2 2023	Social & Family Services (Ontario Works)	Q4 2023
17	Q2 2023	Social & Family Services (Children's Services)	Q4 2023
18	Q3 2023	Parks & Trails including Confederation & Waterfront	Q2 2024
19		Confederation Park	Q2 2024
20	Q3 2023	Cemeteries	Q2 2024
21	Q3 2023	Recreation & Community Centres	Q2 2024
22	Q3 2023	Golf Courses	Q2 2024
23	Q3 2023	Corporate Facilities	Q2 2024
24	Q3 2023	Tim Hortons Field	Q2 2024
25	Q3 2023	POA	Q2 2024
26	Q3 2023	Central Fleet	Q2 2024
27	Q3 2023	Museums	Q2 2024
28	Q3 2023	Cultural (Art, Public Art)	Q2 2024
29	Q3 2023	Animal Services	Q1 2024
30	Q3 2023	Bylaw Services	Q1 2024
31	Q3 2023	Forestry	Q2 2024
32	Q3 2023	Horticulture	Q2 2024
33	Q3 2023	Natural Assets	Q2 2024

## Resourcing Plan

The Implementation Plan above and associated completion dates are highly dependent upon the City obtaining the qualified resources needed to develop these Asset Management Plans by the regulatory required dates. When the CAM Office was first formed in July 2021, the resource needs were not fully understood. An in-depth analysis was conducted to allow for data driven decision making as it relates to resource requirements. A Council Referred Item related to making the Corporate Asset Management Office permanent from PW 22048 on June 15, 2022 was presented to Council on February 21, 2023 (Item number 6.2 – 2023 Tax-Operating Budget Deliberations – Council Referred Item #3.1) and was approved. At this time, the following permanent roles support this implementation plan:

Role Title	Number of FTE
Director, Corporate Asset Management	1
Administrative Assistant	1
Senior Project Manager	1
Project Manager	1
Senior Program Analyst	2
Program Analyst	4

Additional temporary FTE are being recruited to support our goal of meeting both the July 1, 2024 regulatory requirement and the July 1, 2025 date.

## Challenges and Successes

The Corporate Asset Management team has made great strides with establishing asset management methodologies, training and education material and overall Asset owner engagement across the organization. Successes include:

- Completion of the CAMS Committee Terms of Reference;
- Approval of the CAM Governance Strategy & Communication Strategy;
- Completed initial engagement with all 33 Asset Owner Groups;
- On track to present 6 Asset Management Plans to Council in 2023, 11 in Q1 2024 and the remaining 16 plans in Q2 2024;
- In house development of 8 SharePoint Training Modules completed;
- Continued work with Core Asset Owners on Continuous Improvement items identified in their Plans;
- SOP and Standard Template Development is well under way;
- 3 Customer Engagement Surveys launched so far in 2023; and,
- Multi-year project plan developed.

Successes never come without some challenges along the way, especially when you are building new processes. Below are some challenges that the CAM Division has experienced:

- Asset Owner availability and capacity to participate;
- Lack of Asset Management knowledge across the organization;
- Recruitment of Asset Management Professionals;
- Conflicting priorities; and,
- Change Management.

Through these challenges the CAM Division has adjusted approach with Asset Owners by developing the training modules, working with Asset owners to define project timelines to ensure they have capacity and continuing to send the message that asset management is a journey.

### **Continuous Improvement**

The CAM Division recognizes the importance of continuous improvement as an essential part of the asset management journey. As the City begins to embrace improved practices, it is important to recognize that the City is early in this journey and will acknowledge findings through the Improvement Plan and future iterations of the AM Plans.

As presented to Council on June 15, 2022 (PW22048 Core Asset Management Plan), there were continuous improvement items identified through the development of these plans. There were 8 key themes associated with these continuous improvement items.

Based on these 8 key themes, the CAM Division is pleased to share with Council some updates on progress made on these 8 key theme areas:

#### **Asset Information (Data)**

- Data found to be missing, old, incomplete, and duplicated.

Updates on progress made:

- Data confidence scale developed to quantify concerns;
- A data standards document is near completion and will assist asset owners with assessing data quality and collection;
- Working with Municipal Assets Initiative (MNAI) to develop a road map for natural asset management; and,
- Improvement to data collection for Water and Wastewater Treatment Plants.

#### **Asset Condition**

- No condition process for many assets or assessments (CA's); and,
- Use of Estimated Service Life (ESL) and age to approximate condition.

Updates on progress made:

- Condition assessment output requirements document is currently under development;
- Condition assessment study for traffic signals and metal poles is underway; expected completion Q3 2023;
- Other Transportation asset condition assessments (traffic signs, sidewalks and bicycle lanes) are planned for 2024; and,
- Utilizing condition assessment data to improve design, planning and budgeting process.

### **Lifecycle Management**

- Not all assets are properly programmed; and,
- Impact of acquired assets not fully understood.

Updates on progress made:

- Standard lifecycle model templates have been developed and workshops are being completed through the AM planning process to train staff on how to apply the model across all asset types;
- Project is currently underway to quantify lifecycle costs for new subdivision corridor assets;
- Lifecycle Management standard operating procedure is under development; and,
- In 2023 Pavement Markings Program has begun utilizing GIS technology to improve data quality and lifecycle management.

### **Levels of Service**

- Owners are learning about and starting to embrace LOS; and,
- Community engagement is paramount and will be ongoing.

Updates on progress made:

- A continuous improvement project is underway to enhance our customer engagement strategies;
- A survey development standard operating procedure (SOP) and Levels of Service SOP are under development;
- Asset Management Training program developed in house to better support asset owners across the organization;
- In Q3 2023 the Transportation Division will be retaining a consultant to determine service level requirements for roadway maintenance assets, expected completion date is Q2 2024; and,
- Route optimization for winter control ongoing project with a target of Q4 2024 completion.



## **Replacement Cost**

- Variations exist in current data; and,
- Need to apply a robust process across all asset classes.

Updates on progress made:

- Continuous improvement items have been identified across all core assets.

## **Demand, Climate Change & Risk Management Improvements**

- Extensive requirements not yet identified in O. Reg 588/17; and,
- Plans to be updated by 2025; currently in development.

Updates on progress made:

- Risk SOP approved and released;
- Master Planning Alignment meetings as part of the Development Charges Bylaw coordination process are ongoing with Director and Senior Advisor, Strategic Growth and Director, Financial Planning Administration and Policy;
- Asset Management Climate Change Framework/training module has been developed which builds on existing climate change documentation; and,
- Utilizing PW Climate Lens during project initiation to better understand impacts of climate change.

## **Financial Management Improvements**

- Planning horizon expanded from 10 to 30 years;
- Infrastructure gap at low-med confidence; and,
- Future Long-Term Financial Plan will connect the budget to AM Plans.

Updates on progress made:

- Continued engagement with Corporate Finance to align AM Plans with the budget process; and,
- Piloting the alignment and combined Long-Term Financial Plan with Finance and Hamilton Water.

## **Governance**

- Need for standard processes evident; currently in development; and,
- Clearly defined asset ownership apparent yet still some gray areas.

Updates on progress made:

- CAM Governance Strategy has been approved by the City’s Senior Leadership Team and released.

## Summary

The CAM Division along with Asset Owners and Stakeholders associated with the City’s Assets across the organization, have begun this Asset Management Journey. 13 plans are currently scheduled to be completed in 2023 and other asset groups beginning in 2023 with completion targeted for 2024.

Asset Management provides Council with the data it needs to make great infrastructure decisions. Therefore, it is critical that staff have the resources and support they need to gather this information. While Council sets direction and allocates resources, it is the role of municipal staff to manage risk and maintain the expected level of service to residents. This goes beyond simply preventing service failures — it is also about managing risks to public health and safety. In order to continue delivering safe and sustainable services in a predictable and cost-effective manner, staff need to be able to provide Council with solid information on our assets. Without this information, we are unlikely to be able to identify possible service disruptions, expected levels of service and risk related to condition and performance of our assets. This is why asset management is a team sport.

Once a desired level of service and the risks associated with an asset have been determined, Council and staff can work together to establish the cost so that residents can receive the full value of the service provided. Data and field data in particular is critical to accurately understanding the performance, risks and costs associated with assets. For example, the Association of Municipalities of Ontario commissioned a study in 2015, that found the condition of roads, culverts and bridges, when calculated using age data alone, was up to 30% poorer than when the condition of the same assets was assessed using field data.

In summary, the Corporate Asset Management Division has made good progress in the finalization of the Core Asset Management Plans, beginning to build the Asset Management Plans for all other asset groups across the organization and the development of the Corporate Asset Management Program. Asset Management is a journey. Some great first steps have been taken in not only meeting the requirements under O.Reg. 588/17 but also in developing a corporate wide asset management program that will support the City in making better informed decisions about our assets and the services that it provides.