ASSET MANAGEMENT ROADMAP 2.0

Think you're finished your asset management plan? For most municipalities there is still a long way to go, and we are here to help. We have developed a multi-year, just-in-time Asset Management 'Roadmap' that will help municipalities with their training needs.

Asset Management Roadmap 2.0 – Overview

MFOA has developed a 'multi-year road map' that will help municipalities plan their training needs to better understand the key elements and best practices of implementing a comprehensive asset management system, and take the next step in becoming compliant with O. Reg 588/17: Asset Management Planning for Municipal Infrastructure ("the AM Regulation").

The 'roadmap' will deliver just-in-time training on relevant topics that will coincide with the phased-in approach of the AM Regulation. It will be delivered in this phased approach to allow learnings from the prior sessions to be absorbed and implemented before moving onto the next topic or concept. The roadmap plan is to ensure the training is 1) complete and comprehensive and not ad hoc, and 2) delivered in the right order and over time, to help the members better understand AM and manage the implementation and oversight of a circumstance appropriate asset management system.

The roadmap will follow MFOA's Asset Management Framework. This framework was developed in 2018 in partnership with the Province of Ontario. It was MFOA's intent for the framework to supplement Ontario's 'Building Together – Guide for Municipal Asset Management' (the Guide) and help municipalities progress in meeting the requirements of the AM Regulation. Like the Guide, it is broken into twelve components – five that comprise the technical components of the AMP and seven that comprise the supporting architecture of a fully functioning asset management system (see figure 1 below).

Each of the AM Roadmap 2.0 courses is designed around the more technical components of the AMP; however, each class will integrate some guidance about how to simultaneously build the supporting architecture of asset management, such as governance and ownership, approval and support, and public engagement. Where applicable each course will also discuss any relevant legislation, including the need to incorporate special considerations such as climate change and potential changes in demographics.
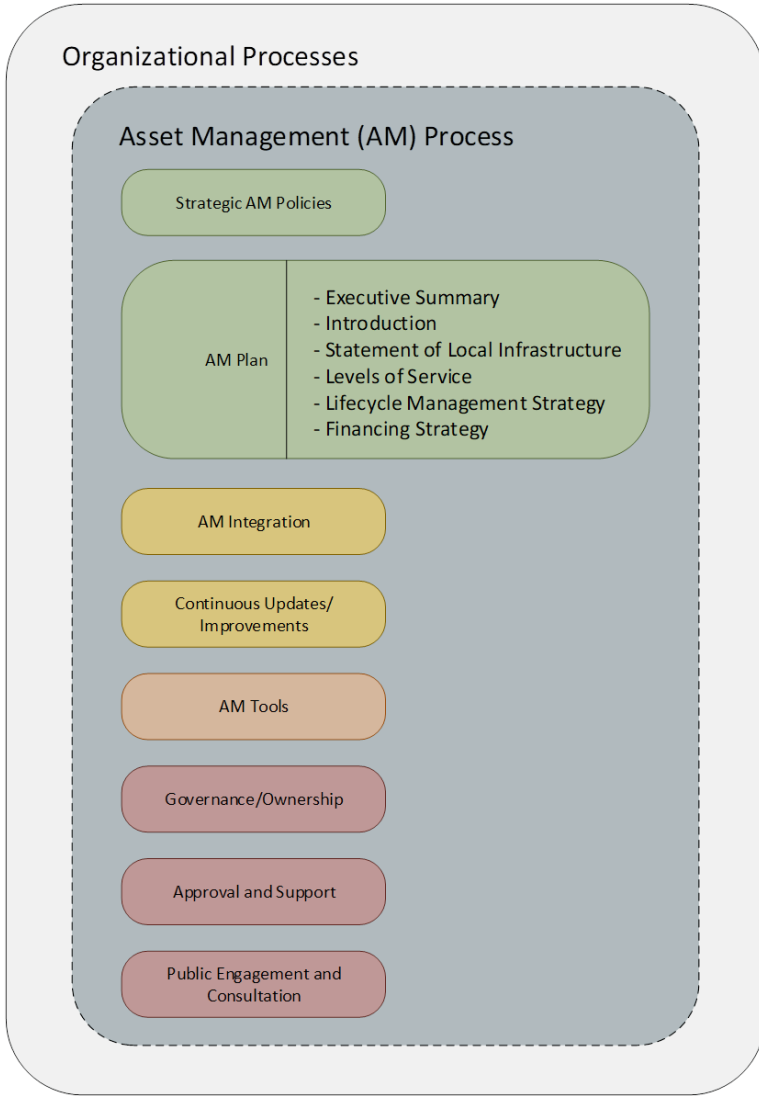
Organizational Processes

Asset Management (AM) Process

Strategic AM Policies

AM Plan
- Executive Summary
- Introduction
- Statement of Local Infrastructure
- Levels of Service
- Lifecycle Management Strategy
- Financing Strategy

AM Integration

Continuous Updates/ Improvements

AM Tools

Governance/Ownership

Approval and Support

Public Engagement and Consultation

Figure 1

The goal of the MFOA 'roadmap' is to help municipalities develop the internal resources to make asset management more meaningful. MFOA will work with sector experts to deliver timely training for both municipal finance staff, via various educational platforms. Some content will be included as part of broader workshops or training events.

This 'roadmap' is intended to be a dynamic document and will be updated and adapted to meet the needs of municipalities as they move through the process of building, implementing, evaluating, and adapting their asset management plans. Please check back often to ensure you have the latest version.

Your input is important to us! Please provide us your feedback at the email below and after each training session so we can ensure the content is delivered in the correct order, identify any gaps and continue delivering the most relevant content to you.

This roadmap document includes:

1) **Calendar-At-A-Glance:** a multi-year AM course calendar snapshot which lays out the sequencing of courses,
2) **Course Calendar:** includes the course descriptions, timing and training format for each of the courses outlined in the Calendar-At-A-Glance.
3) **Asset Management Roadmap 2.0 & Linkage to Provincial Regulation**

Asset Management Resources: click here to access other Asset Management resources on our website.

Are You Still Getting Up-To-Speed About Asset Management?

Contact Us: MFOA Krista Klesch krista@mfoa.on.ca

Asset Management Roadmap
Calendar-at-a-Glance

O. Reg 588/17 Phase	Phase 1: Core Assets, Foundations, Lifecycle and Levels of Service		Phase 2: Other Municipal Infrastructure, Foundations and Levels of Services			
Course Legend	**Spring/Summer 2021**	**Spring/Summer 2021 Cont'd**	**Fall/Winter 2021**	**Winter/Spring 2022**	**Summer/Fall 2022**	**Winter/ Spring 2023**
NEW TRAINING						
	(AM101) April 1 Municipal Asset Management in Ontario: A Brief Overview	**(AM102) May 12** Owning Your AM System	(AM108) Data Management Procedures	(AM302) Establishing Desired/Proposed Levels of Service: An Overview	(AM301.2) Developing a Finance Strategy – Part II: Source of Funding Analysis	(AM301.4) Developing a Finance Strategy – Part IV: Developing Financial Policies
	(AM103.1) April 8 AMP Foundations and Lifecycle Analysis for Core Assets – Part 1: Roads, Bridges, and Culverts	**(AM106) May 27** Case studies in Current Level of Service Analysis for Core Assets – Panel Discussion	(AM202.1) AMP Foundations and Lifecycle Analysis for Other Assets – Part 1: Facilities, and Vehicles	(AM203.1) Levels of Service for Other Assets for Other Assets – Part 1: Facilities, and Vehicles and Equipment	(AM301.3) Developing a Finance Strategy – Part III: Financing Scenario Analysis	(AM301.5) Developing a Finance Strategy – Part V: Financing Strategy Metrics
	(AM103.2) April 27 AMP Foundations and Lifecycle Analysis for Core Assets – Part 2: Water/Wastewater/ Stormwater	**(AM201) June 9** Building an AM Decision-Making Framework	(AM202.2) AMP Foundations and Lifecycle Analysis for Other Assets – Part 2: Recreation, Improvements to Land, and Natural Assets	(AM203.2) Levels of Service for Other Assets – Part 2: Recreation, Improvements to Land, and Natural Assets		
	~~**(AM105)**~~ **COMPLETE** ~~Levels of Service for Core Assets – Defining Current LOS~~	**(AM107) June 24 (NEW!)** Impacts of Growth & Climate Change on AM Planning	(AM202.3) AMP Foundations and Lifecycle Analysis for Other Assets – Part 3: Other	(AM203.3) Levels of Service for Other Assets – Part 3: Other		
			(AM301.1) Developing a Finance Strategy – Part I: Overview			

Asset Management Roadmap
Calendar-at-a-Glance

O. Reg 588/17 Phase	Phase 3: Proposed Levels of Service, Lifecycle Management, and Financial Strategies	
Course Legend	Summer/Fall 2023	Winter/Spring 2024
NEW TRAINING		
	(AM304) AM Communications and Public Engagement)	(AM401) Operationalizing and Integrating AM
		(AM402) Strategies for Continuous Improvement

Asset Management Course Calendar

Phase 1 Courses – Asset Management Foundations and Levels of Service for Core Infrastructure

(AM101) Municipal Asset Management in Ontario: A Brief Overview

Live Webinar: April 1 @ 12:00-1:30 pm
Available On-Demand: April 8
Click Here to Register

In 2018 MFOA, with support from the Province of Ontario, developed a guide on municipal asset management planning aligned with Ontario's Building Together: Guide on Municipal Asset Management and Ontario Regulation 588/17. This webinar will provide a high-level overview of the components of asset management covered in the guide and how they work together to form a comprehensive asset management system.

This 1.5-hour webinar is a foundational component of AM Roadmap 2.0. It is recommended that participants view this webinar (and read the foundational SAT Guide – Self Assessment Tool) prior to undertaking other future asset management training to understand how each of the individual training sessions work together.

(AM105) Levels of Service for Core Assets – Current LOS and Performance Parts I and II
COMPLETE - no longer available.

MFOA and MOI have provided funds to assist MFOA in delivering resources for expert assistance to aid Ontario municipalities **of all sizes** with asset management planning.

(AM 103.1) AMP Foundations and Lifecycle Analysis for Core Assets – Part I: Roads, Bridges, Culverts

Live Webinar: April 22 @ 12:00-1:30 pm
Available On-Demand: April 29
Click Here to Register

The initial stages of building an asset management plan are an extensive information and data gathering and analysis exercise. Topics covered will include:

- Basic Asset Inventory - Definitions and terminology
  - Replacement costs
  - Age
  - Condition
- Componentized Asset Inventory - The details of your assets; building the data
- Data Management and Accessibility - Software and tools; managing the data
- Lifecycle activities options and risk analysis

(AM103.2) AMP Foundations and Lifecycle Analysis for Core Assets - Part 2: Water/Wastewater/Stormwater

Live Webinar – April 27 @12:00-1:00 pm
On-Demand Webinar Available: May 4

Click Here to Register

Data is the foundation of good asset management practice. The initial stages of building an asset management plan include extensive information and data

(AM102) Owning Your Asset Management System

Live Webinar – May 12 @ 12:00 - 2:00 pm
On-Demand Webinar Available: May 19

Click Here to Register

Municipalities in Ontario were required to adopt a strategic asset management policy by July of 2019, to comply with Ontario Regulation 588/17. The policy designated a leader within the organization and identified a strategy to integrate asset management practices into municipal strategic planning. The policy therefore creates accountability and commitment from elected officials and municipal practitioners. However, working with external partners, such as consultants and engineering firms, is often necessary to gather the required information and analysis. Join us as we discuss how municipalities can ensure their asset management program works best for their needs, and hear the experiences and challenges of building a community of practice from a couple of Ontario municipalities of varying sizes or circumstances.

gathering followed by a detailed data analysis. Municipalities must be aware of what data is needed to build effective lifecycle strategies for water, wastewater, and stormwater networks. Ultimately, the goal of asset management is to minimize the lifecycle costs of delivering infrastructure services, manage the associated risks, while maximizing the value for ratepayers. How does good data make all of this possible?

(AM 106) Case Studies in Current Level of Service Analysis for Core Assets – Interactive Panel Discussion

Live Webinar: May 27 @ 12:00-1:30 pm
On-Demand Webinar: June 3
Click Here to Register

Join us for a panel discussion exploring case studies on one of the key elements of asset management planning – levels of service. This discussion, with a set of multi-disciplinary panelists from municipalities of various sizes, will explore the journeys that municipalities have gone through in identifying and establishing current levels of service for core assets.

(AM 201) Building an AM Decision-Making Framework

Live Webinar: June 9 @ 12:00-1:00 pm
On-Demand Webinar: June 16
Click Here to Register

This session will provide a high-level overview of how to develop an AM decision-making framework using the various components of the AMP. This session is designed to provide an overview of how level of service analysis, lifecycle activities options and financing strategy inputs can be used to develop the plan – where the challenges and opportunities identified through the AM inputs can be addressed or leveraged in a strategic manner.

(AM 107) Impacts of Growth & Climate Change on AM Planning (NEW!)

Live Webinar: June 24 @ 12:00-2:00 pm
On-Demand Webinar: July 2
[Click Here to Register!](#)

Climate change is one of the most complex challenges facing municipalities today. Average temperatures are increasing, there are shifting historical precipitation patterns, with increased intensity, duration, and frequency of storm events, increasing windstorms, increasing and decreasing lake levels, and many more events.

Climate change and extreme weather impact municipal operations and infrastructure in a number of ways. Understanding the probability of occurrence of extreme weather events is an important consideration for asset management frameworks. It is important to understand the impact of climate change on the performance of various infrastructure assets and ultimately the level of service received by the customer. By integrating climate change considerations into existing asset management frameworks, we are better able to inform decision making and resource allocation from an asset management perspective, and much of this can be done using the existing logic, data and systems in place.

(AM 108) Data Management Procedures

Live Webinar: Fall/Winter 2021 – date tbc
On-Demand Webinar: Fall/Winter 2021 – date tbc
Registration Available Soon!

This webinar will discuss how to integrate data management procedures into your asset management plan.

(AM 301.1) Developing a Financing Strategy: Overview

Live Webinar: Fall/Winter 2021 – date tbc
On-Demand Webinar: Fall/Winter 2021 – date tbc
Registration Available Soon!

This session will provide an overview of the components of a financing strategy and how it connects to other AM activities and municipal processes, such as:

- Levels of service
- Lifecycle strategy
- The budget process, and
- Long-term financial planning

The session will also provide an overview of regulatory requirements for a financing strategy.

(AM202) AMP Foundations and Lifecycle Analysis for Other Assets – Parts I, II, and III

Live Webinar: Fall/Winter 2021 – date tbc
On-Demand Webinar: Fall/Winter 2021 – date tbc
Registration Available Soon!

The initial stages of building an asset management plan are an extensive information and data gathering and analysis exercise. Topics covered will include:

- Basic Asset Inventory - Definitions and terminology
  - Replacement costs
  - Age
  - Condition
- Componentized Asset Inventory - The details of your assets; building the data
- Data Management and Accessibility - Software and tools; managing the data
- Lifecycle activities options and risk analysis

Part I will cover facilities, vehicles and equipment, Part II will cover recreation, improvements to land, and natural assets, and Part III will cover other assets.

(AM 302) Establishing Desired/Proposed Levels of Service

Live Webinar: Winter/Spring 2022 – date tbc
On-Demand Webinar: Winter/Spring 2022 – date tbc

This session will provide an overview in translating current level of service metrics into desired levels of service targets. It will include:
- an overview of the difference between desired and current LOS
- strategies for developing achievable and realistic desired LOS
- how to meet legislative requirements including an assessment of desired LOS affordability

(AM 203) Levels of Service for Other Assets – Parts I, II, and III

Live Webinar: Winter/Spring 2022 – date tbc
On-Demand Webinar: Winter/Spring 2022 – date tbc

Levels of Service Workshops include presentations and interactive discussions which are designed to help municipalities comply with O. Reg. 588/17 requirements

Part I will cover facilities, vehicles and equipment, Part II will cover recreation, improvements to land, and natural assets, and Part III will cover other assets.

(AM 301.2) Developing a Financing Strategy Part 2: Source of Funding Analysis

Live Webinar: Summer/Fall 2022 – date tbc
On-Demand Webinar: Summer/Fall 2022 – date tbc

This session will build on revenue generating strategies as part of the budget process and will discuss risk and prioritizing priorities, outline the benefits and challenges with each of the main revenue options: user fees, new fees, dedicated levies, build reserves, and Gas Tax funding.

(AM 301.3) Developing a Financing Strategy Part 3: Financing Scenario Analysis

Live Webinar: Summer/Fall 2022 – date tbc
On-Demand Webinar: Summer/Fall 2022 – date tbc

This session will pair the important role of Life Cycle Costing (LCC) as a factor in optimal long-term decision making.

Infrastructure requires financing that allows for the maintenance of and expansion of services in all municipalities. What are the key policies and strategies for financing infrastructure in Ontario? How can municipalities effectively use reserves and debt to manage needs? What are the risks, strategies and policies that are needed for debt management in the short and long-term?

(AM 301.4) Developing a Financing Strategy Part 4: Financial Policies

Live Webinar: Winter/Spring 2023 – date tbc
On-Demand Webinar: Winter/Spring 2023 – date tbc

To provide the necessary guidance and support in further developing funding strategies, it is recommended that financial policies be developed, implemented, and utilized both in the asset management process and budget process. Financial policies are uniquely crafted and aimed at detailing the principles that a municipality will follow in order to reach their funding strategy goals and objectives. Most importantly, funding strategy policies will detail all requirements that must be met throughout the financing strategy development process, whether related to legislated requirements, organizational mandates, or best practices.

This session will provide practical guidance for developing appropriate financial policies for AM, including an overview of commonly used policies and their purpose.

(AM 301.5) Developing a Financing Strategy Part 5: Financing Strategy Metrics

Live Webinar: Winter/Spring 2023 – date tbc
On-Demand Webinar: Winter/Spring 2023 – date tbc

Identifying and analyzing the various infrastructure funding gaps within an asset management process provides a significant performance/sustainability measure that can be used to measure the overall success of the recommendations within the entire AM process.

This session will provide an overview of commonly used financing strategy metrics. It will provide descriptions of the infrastructure funding gap, the purpose of the metric, and methods for calculation.

(AM 304) AM Communications and Public Engagement

Live Webinar: Summer/Fall 2023 – date tbc
On-Demand Webinar: Summer/Fall 2023 – date tbc

Municipalities can benefit from seeking the public's involvement in developing, reviewing, and approving various aspects of the asset management process. This session will focus on methods and strategies for engagement with Council and the public on the various components of asset management. This will include tips for:

- Communicating the technical components of asset management
- Seeking meaning input on community decision points such as desired levels of service

Overall, ensuring some level of public engagement throughout the asset management process not only assists in gaining a level of public acceptance on asset management, but also a level of public ownership in the process.

The session will also include two cases studies for communicating and engaging on asset management.

(AM 401) Operationalizing and Integrating Asset Management

Live Webinar: Winter/Spring 2024 – date tbc
On-Demand Webinar: Winter/Spring 2024 – date tbc

When considering integration, it is important to keep in mind that this could entail a two-way interaction between asset management and other related processes. The impacts of changes to any one process should automatically trigger consideration of making corresponding adjustments to related policies and/or procedures. This session focuses on the importance of and strategies for integrating asset management planning with:

- Capital budget;
- Operating budget;
- Strategic plan; and
- Other policies and processes.

(AM 402) Strategies for Continuous Improvement in Asset Management

Live Webinar: Winter/Spring 2024 – date tbc
On-Demand Webinar: Winter/Spring 2024 – date tbc

- Integration and implementation of all the data and reports and budgets;
- Change planning, transition management and organizational re-structuring
- Preparing your mission, vision, values and metrics in your plan
- Asset whole life plan
- Software and resources to put it all together
- Refining investment priorities
- Forecast adjustments
- Policy impact
- Performance metrics & benchmarks

Asset Management Roadmap 2.0 Linkage to Provincial Requirements

AM Courses	State of Local Infrastructure					Desired Levels of Service				AM Strategy							Financing Strategy			
	Asset Types	Asset Valuation	Age	Condition	Updates	DLS through Performance Measures	Actual Service Levels	Service Level Trends	Performance Relative to Targets	Non-infrastructure Solutions	Maintenance	Renewal/Rehab	Disposal	Expansion	Procurement	Risk Assessment	Expenditure Forecast	Revenue Forecast	Funding Shortfalls	Costing
CORE COURSES																				
(AM101) Municipal Asset Management in Ontario: Brief Overview	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
(AM103.1) – AMP Foundations and Lifecycle Analysis for Core Assets - Part 1: Roads, Bridges, Culverts	*	*	*	*	*					*	*	*	*	*	*	*				
(AM103.2) – AMP Foundations and Lifecycle Analysis for Core Assets - Part 2: Water/Wastewater/Stormwater	*	*	*	*	*					*	*	*	*	*	*	*				
(AM105) Levels of Service for Core Assets – Defining Current LOS COMPLETE - no longer available.	*	*	*	*	*															
(AM102) Owning Your AM System	*	*	*	*	*	*	*	*	*	*							*	*	*	*
(AM106) Case Studies in Current Level of Service of Core Assets						*	*	*												
(AM201) Building an AM Decision-making Framework					*			*	*						*				*	
(AM107) Impacts of Growth & Climate Change on AM Planning	*						*	*	*	*	*	*	*	*	*	*				
MORE TRAINING COMING SOON!																				
SUPPLEMENTARY COURSES																				