GHD
Advisory

Asset Management Governance

Change Management, Communications & Training Plan

The Regional Municipality of Niagara

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GHD

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1. Executive Summary

The first part of the Asset Management (AM) Governance initiative has recommended creating a formal AM Governance Model with a clear organizational structure and appropriate authority, roles and responsibilities to support the development and implementation of leading asset management practices. The AM Governance Model recommendations include a three step implementation plan, as shown below (with timing).

Table 1.1   Recommended AM Governance Model Implementation

1. Corporate (Immediate)	2. Department (Short Term)	3. Department (Medium Term)
1.1 Create a Corporate AM Steering Team		
1.2 Create (new) a formal Corporate AM Office (AMO): • Director of AMO • AM Manager & Analyst: Strategy & Integrated Planning • AM Manager & Analyst: Asset Integrity & Productivity • AM Manager & Analyst: Asset Performance & Asset Knowledge **(1)**	**2.1 Create (rebrand and augment) formal Departmental AM Responsibilities:** • Dept AM Managers **2.2 Establish AM Practice Networks across the Departments:** • AM Planning Network • AM Productivity Network • Asset Knowledge & Performance Management Network	**3.1 Create (rebrand and augment) formal Departmental AM Responsibilities:** • Dept Planner Schedulers • Dept Technology Analysts • Dept Reliability Analysts • Dept Process Analysts

(1)   **Note** that the AM Manager: Asset Performance & Asset Knowledge has the responsibility to lead the development of the AM Communication and Training programs.

With the implementation of the recommended AM Governance Model, many Region staff members will be required to adopt some form of change to their day-to-day work. Effective communication will be critical to successfully manage the change related to implementing the AM Governance Model.

In this part of the AM Governance initiative, a Change Management and Communications Plan has been developed to assist in the implementation of the AM Governance Model and, more broadly, the AM Strategy. This Leading Change Plan is comprised of four steps to support the change process through communications, as shown in the following table:

Table 1.2   Communication in Support of Change

Step	Change Process	Communications Plan
1: Prepare	• Create the Governance structure to guide the change (Completed) • Develop the vision and the culture change required (Completed) • Ensure all stakeholders understand the need and urgency for making the change • Identify and manage resistance	• Communicate details of the change • Communicate the vision and the culture change required • Communicate the need and urgency for making the change • Communicate to address resistance to change
2: Plan	• Develop the strategy and plan for implementation (Completed) • Form the working groups required for implementation • Continue to communicate on a regular basis	• Communicate the Leading Change Plan • Communicate signing the Charter and presenting the benefits • Communicate the Governance Model and accountabilities
3: Implement	• Identify where staff are in the change transition process • Enable people to take action • Create short term wins • Continue to communicate for buy-in • Don't let up	• Communicate the Leading Change Plan status updates • Communicate through meetings and workshops • Communicate and celebrate Leading Change Plan wins • Communicate for obtaining support for buy-in
4: Coach	• Ensure the new ways of behaving and work processes succeed, until they become a part of the culture of the Region	• Communicate to celebrate the New Beginnings • Communicate to reinforce the New World

An AM Training Plan is also provided to enhance AM technical skills of staff to support AM Strategy implementation, the broader AM Program and compliance with *O.Reg. 588/17 AM Planning for Municipal Infrastructure*. The general approach for the AM Curriculum is to provide three categories or levels of training: AM Policy and Framework Orientation, AM Framework Overview Training, and AM Practices Training.

This Change Management, Communications and Training Plan is a "living document" in that the contents of the Plan will be modified as feedback is obtained by the organization on past effectiveness, current concerns, and potential future concerns. It should also be operationalised into the overall corporate training plan for the Region.

2. Introduction

2.1 Background

The Region of Niagara has embarked on a multi-year phased Asset Management (AM) Program that is focused on improving the Region's overall efficiencies and effectiveness in delivering sustainable services through the development and implementation of leading asset management practices.

The first phase of the Region's Asset Management Program, which was completed in 2017, included the development of an Asset Management Strategy that measured the Region's asset management system maturity and outlined an AM Roadmap of initiatives to achieve efficiency and effectiveness in service delivery across the Region. The supporting services recommendations in the AM Strategy included initiative SS1: Develop and Implement an AM Governance Model.

The first part of the AM Governance initiative has reviewed various AM governance models and identified a clear structure with appropriate authority, roles and responsibilities to support the development and implementation of leading asset management practices at the Region. The organizational structure considers the needs for corporate standardization and consistency in asset management and also provides the flexibility for implementation unique to the asset class and operating environment.

In this next part of the AM Governance initiative, a Change Management and Communications Plan has been developed to assist in the implementation of the identified AM Governance Model. This document will identify key obstacles that could hinder the implementation of the AM Governance Model and other AM practice enhancements and barriers or organizational elements that are not congruent with the AM Governance Model vision and strategy (e.g. gaps in skills, training requirements). It will then define communication and training requirements and responsibilities for Region stakeholders to help overcome key identified obstacles.

Although this Change Management and Communications Plan is written specifically for the implementation of the AM Governance Model, it is also intended to be used as a platform to facilitate the implementation of other AM Strategy initiatives.

The proposed structure for AM Governance must be flexible to grow and change in an appropriate manner while ensuring strong leadership at the Niagara Region as it progresses and develops on the asset management maturity scale detailed in the AM Strategy Roadmap. This Change Management and Communications Plan will be a "living" document that is updated over time as required to support the growth and change in the AM Governance Model.

The recommended strategy for implementing the AM Strategy Roadmap is a hybrid of practice-based and departmental implementation. The recommended strategy focuses on implementation for one asset type, with AM preparation teams established for all other asset types that can start some of the preparatory work while major implementation is occurring at other asset types.

2.2 Methodology for Communicating During Change

This Leading Change Plan was developed to enable effective communications related to the AM Governance Model and follows the Five P's of communication, as shown in the following table.

The Leading Change Plan is also based on the Four-Cs: Clear, Constant, Consistent, and Caring. Caring means that each audience is thought about individually and the message targeted to their needs and concerns. During implementation, it is important to set up regular delivery channels and processes for on-going communication. Even communicating "we don't know" or "there is nothing new to communicate since last time" is important.

Table 2.1   Communication in Support of Change

Step	Change Process	Communications Plan	Five Ps of Communication
1: Prepare	- Create the Governance structure to guide the change (Completed) - Develop the vision and the culture change required (Completed) - Ensure all stakeholders understand the need and urgency for making the change - Identify and manage resistance	- Communicate details of the change - Communicate the vision and the culture change required - Communicate the need and urgency for making the change - Communicate to address resistance to change	**PROBLEM:** What is the problem that the change is trying to solve? Why is not changing not an option? What has changed in our environment that makes change essential? What is the purpose of this change? **PICTURE:** What is the big picture? What will things look like when change is fully implemented? What will we stop doing? Start doing? Keep doing? If you could fast forward to 12 months from now – when the change is fully implemented – what would be the picture that you would see in the workplace?
2: Plan	- Develop the strategy and plan for implementation (Completed) - Form the working groups required for implementation - Continue to communicate on a regular basis	- Communicate the Leading Change Plan - Communicate signing the Charter and presenting the benefits - Communicate the Governance Model and accountabilities	**PLAN:** What is going to be happening this month? Next month? The month afterwards? What are all the steps that are being taken to ensure change is fully implemented? What is the change plan?

Step	Change Process	Communications Plan	Five Ps of Communication
3: Implement	• Identify where staff are in the change transition process • Enable people to take action • Create short term wins • Continue to communicate for buy-in • Monitor and report on implementation successes • Don't let up	• Communicate the Leading Change Plan status updates • Communicate through meetings and workshops • Communicate and celebrate Leading Change Plan wins • Communicate for obtaining support for buy-in	• **PART:** Who is responsible for doing what by when to ensure this change is fully implemented? What is your part? What is the part that you need your direct reports to play in implementing this change? How can others get involved in defining parts of the picture? Parts of the plan?
4: Coach	• Ensure the new ways of behaving and work processes succeed, until they become a part of the culture of the Region	• Communicate to celebrate the New Beginnings • Communicate to reinforce the New World	• **PROGRESS:** How will you know if the change has been successfully implemented? How will we know if the change was effective in solving the problem in the first place? What will be monitored? Who will do the monitoring? How often will we receive a progress update to let us know how well we are doing implementing the change? Making the change work?

2.3   Stakeholders

The Region's internal and pollical stakeholders are listed in the table below together with their interest in Asset Management (taken from the AM Governance Model report).

Table 2.2   Asset Management Stakeholders

Type	Stakeholder	Interest in Asset Management
Internal	Staff	- Adequate resources to manage assets (do the right thing) - Adequate processes to manage projects (do things right) - Improved collaboration & coordination - Reduced risk taking - Quality service delivery - Customer satisfaction
	Middle Management	- Effective planning (growth, renewal/replacement & maintenance) - Adequate resources to manage assets (do the right thing) - Improved collaboration & coordination - Regulatory compliance - Reduced risk taking - Quality service delivery - Customer satisfaction
	Senior Leadership	- Confidence that budget requests are realistic - Fiscal responsibility in delivery of service - Minimum cost of asset ownership - Managed risk - Quality service delivery - Regulatory compliance - Customer satisfaction
Political	Regional Council	- Confidence that budget requests are realistic - Minimum cost of asset ownership - Managed risk - Quality service delivery - Customer satisfaction

Note that each stakeholder identified in this Plan should be an enabler of change. Obtaining the sponsorship and commitment from management and staff alike is critical to the successful implementation of the AM Governance Model. Implementation success will be commensurate with the Region's willingness to embrace change.

2.4 Conflict Resolution

To assist the Region in managing conflict that may arise during the implementation of the AM Governance Model, the following information is provided. As conflict is usually customised to specific issues and individuals, this information highlights underlying sources of conflict and potential resolution strategies to apply. These strategies will need to be tailored to specific conflict issues and individuals.

Table 2.3 Potential Sources of Conflict and Resolution Strategies

Conflict Source	Resolution Strategies
Fear	Fear is about the future, the unknown. • Messages must be openly communicated to illustrate a clear direction. • If the direction is driving the fear, benefits specific to individuals must be clearly demonstrated and documented. • Fear fades when faced with facts.
Force	Force refers to doing something you may not want to do. • To overcome this type of conflict, building trust is crucial. • Do not rush the process or the participants. • Provide advanced warning of the change to facilitate communication between participants prior to commencement. • Present a strong case for the change, i.e. the benefits.
Fair	• Demonstrate fairness throughout the implementation process, i.e. let individual staff members know that they are not the only ones being affected. • Communicate and collaborate to build a sense of ownership of the change and reinforce that staff are part of the solution.
Funds	In the context of the AM Governance Model, funds refer to the cost of implementation and resultant outputs. • Transparently communicate to all staff the operational cost benefits of implementing the identified AM Governance Model and leading AM practices. • Demonstrating tangible cost benefits will assist in reducing conflict in other areas.

3. Change Process

3.1 Step 1: Prepare

3.1.1 Overview

This section of the communication plan is to address:

- Why undertake the AM Strategy and the AM Governance initiative?

- What does success look like for the Region?

- What has been completed in Phase 1 of the AM Program with the gap analysis and AM Plan?

- The establishment of the governance structure and their accountabilities.

The change tasks include:

- Ensure all stakeholders understand the need and urgency for making the change

- Communicate the Governance structure to guide the change

- Develop the vision

- Identify the culture change required

- Identify potential resistance and develop strategies to manage any resistance.

During this step of the change process, communications will focus on the following:

- Problem

  – What is the problem that the change is trying to solve?

  – Why is no change not an option?

  – What has changed in our environment that makes change essential now?

  – What is the purpose of this change?

- Picture

  – What is the big picture?

  – What will things look like when change is fully implemented?

  – What will we stop doing? Start doing? Keep doing?

  – If you could fast forward to 12 months from now – when the change was fully implemented – what would be the picture that you would see in the workplace?

3.1.2 Communication Plan Specifics

The following communications will be required to support this step of the change process:

- Communicate details of the change

- Communicate the vision and the culture change required

- Communicate the need and urgency for making the change

- Communicate to address resistance to change.

3.1.3 Communicate to Address Resistance to Change

There are three main reasons that people resist change, they include:

- Intellectual Resistance: "I don't get it!"

- Cultural/Personal Resistance: "I don't like it!"

- Core Resistance: "I don't agree."

The chart below illustrates what each of these resistances might look like along with strategies to overcome the resistance.

Table 3.1 Addressing Resistance to Change

Conflict Source	INTELLECTUAL I don't get it!	CULTURAL / PERSONAL I don't like it!	CORE I don't agree!
Signs of Resistance	• No strong need or urgency • People don't see the purpose/benefits to change • Question or oppose the idea • Are satisfied with the status quo • Not clear how the change is supposed to work or the desired future state • Too many unanswered questions	• Previous organizational change efforts failed • Norms, values, reward and punishments favor status quo • Loss of status, respect, position, relationships, competence • Prevailing attitudes of distrust, fear or rigidity • People don't see management "walking the talk"	• People are experiencing major loss and don't see what's in it for them • Distrust is deeply entrenched • Change violates individual values, beliefs, visions • People are feeling outside their comfort and competence zones
Strategies to Reduce Resistance	• Create opportunities to communicate regularly about the changes • Increase your efforts to create sufficient understanding of why the change is necessary, what the desired change goals are and what the plan is for moving forward	• Involve staff in deciding matters that concern them • Build trust by informing them about who will be involved in making decisions, the principles being used to guide decision making and how they will be informed, consulted and involved • Provide opportunities for them to express their feelings of loss • Listen respectfully, stay flexible and adapt your plans to the full extent possible • Identify competencies and behaviors required in the new environment	• Develop a plan to show that the change is happening • Identify the influential change leaders, build their support and commitment, and identify what behaviors and actions they must role model to support the change (do things dramatically differently) • Support all efforts by removing barriers and rewarding those who exemplify the new behaviors • Provide forums to bring together groups and individuals who are leading the way to share ideas and learning • Implement pilot projects and develop plans to get all relevant stakeholders involved

Conflict Source	INTELLECTUAL I don't get it!	CULTURAL / PERSONAL I don't like it!	CORE I don't agree!
			• Use multiple leverage points – leadership, teamwork, decision making, rewards
Communication Should Include	• Why is there a need for this change? • What is our vision and strategy for moving forward? • What is the roadmap for change and how will I be involved? • What do you like about the change? • What is missing? • What change supports do you need?	• How will I be involved in deciding matters that concern me personally? • What are the avenues I can use to express my opinions and share my needs? • Who is representing the interests of my unit and/or professional group? • What new competencies will be required?	• Who is running this change initiative? • Why are they credible and deserving of my trust? • Do they have the best interests of the organization in mind? • Have they done their homework? Do they have the right strategy? • Are they honoring our past, our values, and our culture?

3.2 Step 2: Plan

3.2.1 Overview

This section of the communication plan is to address:

- The detailed plan for implementation of the AM Governance Model, with key milestones and includes a high level view of the AM Strategy, asset management planning and business frameworks, data registry and standards, and asset management plans

- This will include an explanation of how, when and who will be involved in the working groups required for the implementation of the AM Governance Model.

The change tasks include:

- Develop the strategy and plan for change
- Identify all the stakeholders impacted by the change
- Communicate on a regular basis.

During this step of the change process, communications will focus on the following:

- Plan (Initiative Updates)
  - What is going to be happening this month? Next month? The month afterwards?
  - What are all the steps that are being taken to ensure change is fully implemented?
  - What is the change plan?
- Part (Roles)
  - Who is responsible for doing what by when to ensure this change is fully implemented?
  - What is your part?
  - What is the part that you need your direct reports to play in implementing this change?
  - How can others get involved in defining parts of the picture? Parts of the plan?

3.2.2 Communication Plan Specifics

The following communications will be required to support this step of the change process.

- Communicate the Leading Change Plan
- Communicate signing the Charter and presenting the benefits
- Communicate the Governance Model and accountabilities.

3.3 Step 3: Implement

3.3.1 Overview

This section of the communication plan is to address:

- The development of the organization as recommended in the AM Governance Model to support the development and implementation of leading asset management practices.

- This is a multi-step implementation.

The change tasks include:

- Identify where staff are in the transition process

- Identify the current tasks that staff complete relating to asset management, the time commitments and the work flow of these tasks to establish a current state picture of the work performed relating to asset management, and validate the current state picture with staff

- Enable people to take action

- Create short term wins

- Continue to communicate for buy-in

- Communicate the approved organizational model

- Develop and implement new competencies for asset management

- Develop and implement training programs to support staff with their competency development

- Provide details of implementation timelines

- Get feedback on impacts (this is the fifth P: Progress)

  - How will you know if the change has been successfully implemented?
  - How will we know if the change was effective in solving the problem in the first place?
  - What will be monitored? Who will do the monitoring?
  - How often will we receive a progress update to let us know how well we are doing implementing the change? Making the change work?

- Make adjustments and readjustments.

3.3.2 Communication Plan Specifics

The following communications will be required to support this step of the change process:

- Communicate the Leading Change Plan status updates

- Communicate through meetings and workshops

- Communicate and celebrate Leading Change Plan wins

- Communicate for obtaining support for buy-in.

3.4 Step 4: Coach

3.4.1 Overview

The change tasks include ensuring that the new ways of behaving and work processes succeed, until they become a part of the culture of the group.

During this step of the change process, communications will focus on establishing guiding principles for how work is performed in the "new world".

3.4.2 Communication Plan Specifics

The following communications will be required to support this step of the change process:

- Communicate to Reinforce the New World

- Communicate to Celebrate the New Beginnings.

3.5 Communication Reporting

Information exchange is crucial for successful communication. Information exchange through communication reporting not only formalizes communication protocols, but also provides a vehicle for all internal stakeholders to document their say (both positive and negative) as well as monitor and report on implementation successes.

The use of the following communication reporting tools and processes are recommended to facilitate the communication and implementation of the AM Governance Model outcomes.

3.5.1 Niagara Region Communication Systems

To enable exchange of information and to communicate implementation success, existing Niagara Region communication systems should also be used. Specifically:

- **Internal Intranet:** The Intranet can be used to report on project information such as implementation progress, successes, and success indicators. This responsibility should lie with the Director of the AMO.

- **eDoc Electronic Filing System :** The Vine filing system can be used to centrally store all project communication information such as meeting minutes, progress reports, Communication Plans, Training Strategy, consultant deliverables etc. Information relating to the AM Governance Model implementation should be made available to all internal stakeholders.

3.5.2 Departmental/Management Meetings

Departmental and Management Meetings are crucial to communicating important project information. The implementation of the AM Governance Model initiative outcomes should be a standing item on all future Departmental and Management Meeting agendas. Appropriate actions and outcomes of these meetings should be clearly and transparently communicated to staff via the Region's communication systems.

4. Communications Plan

Implementing the identified AM Governance Model will mean more than a change in organizational structure. This Communications Plan aims to identify and address key stakeholder issues that could hinder the implementation of the identified AM Governance Model. It identifies stakeholders, the benefits expected from implementation of the AM Strategy and AM Governance Model, potential concerns, as well as communication needs and communications responsibilities.

The Region should view the identified concerns as improvement opportunities. Acting on these opportunities will ultimately improve service delivery for the Region's customers. This Communications Plan is a "living document" in that the contents will be modified to support the four steps in the change process and the feedback obtained on effectiveness of past communication, current concerns, and potential future concerns.

Table 5.1   Communications Plan

Who?	Benefits of AM We can expect:	Potential Concerns However, we may also be:	Communications Needs Therefore, we should:	Communications Responsibilities By Whom, How, When?
Regional Council and Committees	• Confidence that budget requests are realistic • Minimum cost of asset ownership • Managed risk • Quality service delivery • Customer satisfaction	• Uncertain of the short, medium and long term benefits of the AM Program as it is a significant initiative with no "concrete" assets created or new services provided	• Explain the need for change and tangible future benefits of the AM Program and supporting AM Governance Model in a clear and simple way • Demonstrate that public funds are being spent wisely	• By Senior Leadership • Through the use of interim success factors that demonstrate progress • AM Program and AM Governance updates at regular intervals throughout the term of Council
Senior Leadership	• Confidence that budget requests are realistic • Fiscal responsibility in delivery of service • Minimum cost of asset ownership • Managed risk • Quality service delivery • Regulatory compliance • Customer satisfaction	• Uncertain of the required changes and associated risks and costs to implement AM practices, including work processes and supporting technology and human resources enablers (I.e. the AM Governance Model initiative) • Uncertain of the human resources impacts related to the AM Governance Model including organization structure changes, job description changes, job classification changes, union implications, and retraining needs • Uncertain of Council's acceptance of adding extra FTE's	• Explain the need for change and tangible future benefits of the AM Program and supporting AM Governance Model in a clear and simple way • Demonstrate that public funds are being spent wisely • Assess and address the impact of the AM Governance initiative on people across the organization (e.g., excessive workloads may dictate the need for additional resources, change in responsibilities may necessitate training)	• By AMO through the AM Steering Committee • Through short, medium and long term success factors for both efficiency (on scope, on time, on budget) and effectiveness to demonstrate that the AM Strategy and AM Governance initiative deliverables are being met • AM Program and AM Governance updates at regular intervals
Corporate Asset Management Office (AMO)	• Effective planning (optimization of decision making, quantification of the impact of work not done) • Confidence that budget requests are realistic and support affordable and achievable levels of service	• Uncertain that the Departments will fully cooperate with the centralized AMO • Uncertain that the AM Governance Model initiative will be fully funded and achieve its potential	• Lead and facilitate top down involvement and instill the notion that the AM Governance Model is critical to success of the AM Strategy implementation at the Region • Facilitate top down involvement and support for the AM	• By Senior Leadership through the AM Steering Committee • Through demonstrated leadership throughout the organization and provision of appropriate funding of the AM Governance initiative

Who?	Benefits of AM We can expect:	Potential Concerns However, we may also be:	Communications Needs Therefore, we should:	Communications Responsibilities By Whom, How, When?
	• Improved collaboration and coordination • Regulatory compliance of the AM Plan		Governance Model through the implementation of the Steering Committee Team Charter • Stimulate participation in the AM Governance initiative by engaging personnel from all levels within the Departments and communicating the benefits of the AM Governance Model to Managers and Staff specific to their day to day tasks • Ensure AMO is adequately trained in technical and cultural requirements enabling them to lead	• Continue the communications process on an ongoing basis
Middle Managers	• Effective planning (growth, renewal/replacement and maintenance) • Adequate resources to manage assets (do the right thing) • Improved collaboration & coordination • Regulatory compliance • Reduced risk taking • Quality service delivery • Customer satisfaction	• Uncertain of how Departmental staff will react to integration of common Corporate asset management leading practices with current Department practices • Uncertain of the human resources impacts related to the AM Governance Model including organization structure changes, job description changes, job classification changes, union implications, and retraining needs • Uncertain that the AM Governance Model initiative will be fully funded and achieve its potential (i.e. existing staff will be expected to take on more volume of work) • Uncertain how Departmental staff and/or the union will react to the need to develop additional skills or knowledge, including those required	• Stimulate participation in the AM Governance initiative by ensuring that Manager know they are key to the successful implementation of the AM Governance Model • Explain the need for change and tangible future benefits of the AM Program and supporting AM Governance Model in a clear and simple way • Provide feedback on AM Governance Model successes and areas for improvement so that they may be addressed through the departments • Provide awareness training and messaging that focuses on the non-technical components of the implementation such as responsibilities, communication and departmental culture	• By Senior Leadership through the AM Steering Committee, AMO and HR • Through demonstrated leadership throughout the organization, provision of appropriate messaging for the AM Governance initiative, and feedback on areas for improvement • Continue the communications process on an ongoing basis

Who?	Benefits of AM We can expect:	Potential Concerns However, we may also be:	Communications Needs Therefore, we should:	Communications Responsibilities By Whom, How, When?
		to help subordinates adapt to the new practices		
Staff	• Adequate resources to manage assets (do the right thing) • Adequate processes to manage projects (do things right) • Improved collaboration & coordination • Reduced risk taking • Quality service delivery • Customer satisfaction	• Uncertain of the impact of the recommended AM Governance Model on work life including organization structure changes, job description changes, job classification changes, union implications, and retraining needs • Overwhelmed by the capacity to complete the current workload and anxious about taking on more work • Fearful of new asset management practices including what is done and/or the way it is done – including the tasks themselves, means of communication with others, and the data and systems used to support work • Resentful of centralization of AM practices and unwilling to integrate common Corporate asset management best practices with current Department practices • Lacking in skills and/or knowledge to take on new responsibilities • Frustrated by the amount and rate of change	• Explain the need for change and tangible future benefits of the AM Program and supporting AM Governance Model in a clear and simple way • Clarify the implementation plan and impact of the recommended AM Governance initiative on the specific roles, responsibilities and day to day tasks of departmental staff • Identify credible champions within each business unit, brief them on the importance of their support, and enroll them in delivering messages • Identify implementation issues/risks as they surface and address them proactively in an open and accountable manner • Provide feedback on AM Governance Model successes and areas for improvement to Managers	• By Middle Managers with support from Senior Management and AMO • Through individual reach outs, Emails highlighting benefits of change, and Intranet posts • Continue the two-way communications process on an ongoing basis

5. Training Plan

5.1 Overview

Based on the recommended AM Governance Model, the following roles are to be created over a period of time:

- A new Corporate AM Office (AMO) that consists of a Director, and three AM Managers and three AM Analysts: one each for Asset Performance and Asset Knowledge [1], Strategy and Integrated Planning, and Asset Integrity and Productivity

- Rebranding of existing roles to create formal Departmental AM Managers

- Rebranding or augmentation of existing roles to create formal Departmental Planner Schedulers, Technology Analysts, Reliability Analysts and Process Analysts

  [1] *Note that the AM Manager: Asset Performance & Asset Knowledge has the responsibility to lead the development of the AM Communication and Training programs.*

In addition, to facilitate cooperation and consistency across the Region, the recommended AM Governance Model also includes AM Practice Networks across the Departments for AM Planning, AM Productivity, and Asset Knowledge & Performance Management.

Critical to the successful implementation of the AM Governance Model is the Region's willingness to embrace change. The initial step in establishing this willingness is ensuring all stakeholders are committed to the implementation requirements.

To instil this commitment, it is recommended the Region complete awareness training sessions with internal stakeholders including Senior Leadership, Middle Management and Staff. The training should focus on the non technical components of the implementation, such as responsibilities, communication and departmental culture.

The intent of the awareness training is to bring clarity to Middle Management and Staff on what they are meant to be doing on a day to day basis, and to communicate the importance and resultant benefits of the changes.

To avoid any perception of bias, an independent external facilitator should be engaged to complete the training. However the Awareness Training needs to be imparted by a senior manager at the beginning of the training sessions to instil the top down involvement to staff.

This training is part of the communication strategy and includes communication of the following messages:

- Building trust within all levels of the Region to overcome the fear of change.

- Department staff are part of the solution.

- Benefits of change (e.g. improved decision making, reduced frustrations, and improved business culture).

- Demonstration of strong leadership.

5.2 Training Approaches

There are many different ways to conduct job training. The most appropriate methods depend upon the needs of the organization and the trainee, and on the complexity of the tasks being performed. The method(s) selected should suit the audience, the content, the business environment and the learning objective. The following training approaches were considered:

- **Classroom Lecture:** A classroom lecture is the method learners most commonly associate with college and secondary education. Communication is primarily one-way: from the instructor to the learner. The instructor may use handouts, visual aids, question / answer, or posters to support the lecture.

  – Pros: Less time is needed for the instructor to prepare than other methods. It provides a lot of information quickly when it is less important that the trainees retain a lot of details.

  – Cons: Does not actively involve trainees in the training process. The trainees forget much information if it is presented only orally.

- **On-The-Job Training:** The manager shows the staff member how to do the job tasks using real on-the-job circumstances. To be successful, the training should be done according to a structured program that uses task lists, job breakdowns and performance standards as a lesson plan.

  – Pros: The training can be made extremely specific to the staff member's needs. It is highly practical and reality-based, and engages several senses: seeing, hearing, feeling, touching. This approach enables the manager to customize training to the staff member's needs.

  – Cons: Training is not standardized and therefore requires the manager to prepare and plan. If the manager is not skilled in how to coach or the task being taught, poor retention or work habits can result.

- **Computer-Based Training:** Content for the training experience comes primarily from a videotape or computer-based program.

  – Pros: It is easy to provide this training and the trainer can follow-up with questions and discussion. It is also easy to assure that the same information is presented to each trainee.

– Cons: It is expensive to develop. Most trainers choosing this option must purchase the training from an outside vendor, making the content less specific to their needs.

The recommended training method is a combination of classroom lecture to present technical information quickly and cost-effectively, and on-the-job training to provide individual or small group coaching. This training approach should be supported by a knowledge management database that provides ready reference to information on the AM Framework and associated processes and systems.

Manager-led training capitalizes on the positive influences that leadership has on the development of the attitudes and behaviours of staff during the implementation of new processes and practices. Manager-led training is an effective way to engage staff, while retaining control of the curriculum in-house. Managers leading these on-the-job training sessions will require support initially until they are familiar with the AM processes and concepts. The AMO Director and Managers will provide the training content and AM Manager: Asset Performance and Asset Knowledge and Corporate Human Resources will advise on training methodologies.

5.3 Training Processes

The following sections provide a description of training processes that should be considered prior to, during and after completing any training and is intended to assist in the implementation of the AM Governance Model.

Training consists of development, course preparation, creation, implementation and evaluation; each of which are described in the following sections.

5.3.1 Training Development

To decide whether training is the answer to improve performance, one basic question needs to be asked, "Does the team member know how to meet the required performance standards for an accountable task?" If the answer is "No", then training is needed. If the answer is "Yes", then the team member may not perform to standards due to time factors, quality of procedures, working conditions or a misunderstanding of the required standards, and a different action is needed. Some of these other actions might be counselling, job redesign, process improvement, or organizational development.

The following questions form the foundation of a checklist prior to developing or implementing a training course.

• What business need(s) will be met by this training course?

• What is the current standard of meeting this business need(s) from the participant(s)?

• What will the participant(s) do differently and better after attending the training course?

- How will you measure and document the changes and results of the training course?

- What is the participant(s) currently doing that they shouldn't be doing?

- What currently prevents you and/or the participant(s) from performing the prescribed task/job to standards?

- What job aids and resources are available for the completion of the job/task(s) and are they accurate? Are they being used correctly?

- What are the anticipated number of participants in this training course?

- What is the general education and direct experience of the participant(s)? How will this impact your training?

- Are there any language or cultural requirements for the participant(s)? If so, what are they and their possible impacts to the training course?

5.3.2 Training Course Preparation

The purpose of a training needs assessment is to identify performance requirements or needs within an organization to help direct resources to the areas of greatest need – those that closely relate to fulfilling the organisational goals and objectives, improving productivity, and providing quality products and services.

The needs assessment is the first step in the establishment of a training and development program. It is used as the foundation for determining instructional objectives, the selection and design of instructional programs, the implementation of the programs and the evaluation of the training provided. These processes form a continuous cycle which always begins with a needs assessment.

The following questions can be used to direct discussions regarding training or it can form the foundations of a checklist prior to preparing the training course.

- What are the core competencies and/or experiences of the participant(s) you wish to provide the training course for?

- What additional competencies and/or experiences would benefit the participant(s) and performance levels?

- What are the current competencies and/or experience levels of the participant(s) you wish to provide the training course for?

- What systems are available and/or will be used to assess current competency and skill levels for this role?

- Which resources and/or external elements will impact the performance of the participant(s) you wish to provide training for?

- What internal training and development support is already available to the participant(s)? How successful is this support?

- What access do you have to a training budget?

- Who are the current champions and/or subject matter specialists in your team or the organization?

5.3.3 Training Course Creation

Once the course plan is confirmed including outcomes/objectives, information/knowledge elements, activities (table group discussions, case studies, demonstrations etc.) and breaks, the next step is to write the content and gather all relevant resources.

The following questions can be used to direct discussions regarding training or it can form the foundations of a checklist prior to creating the training course.

- Who is best equipped to provide the information for this training course?

- Who is best equipped to develop and design the training course?

- What is this training course going to do for the participant(s), the organization, or other stakeholders?

- What are the legal and organizational procedures and protocols to consider when developing and designing the training course?

- Are there similar courses (past and present) available?

- Which other departments and groups within the organisation may benefit from this training course? What are the similarities between the groups, their competencies and skills, level of experience and expected output?

- What are the time frames around this training course? Duration of the course? Training to commence by? Training to be completed by?

- What resources and aids are required to successfully achieve the training course objectives?

5.3.4 Training Course Implementation

There are three factors for a successful learning experience to take place:

- **Knowledge:** The trainer must know the subject matter. The trainer also provides the leadership, models behaviour, and adapts to learning preferences.

- **Environment:** The trainer must have the tools to transfer the subject matter to the learners, i.e. computers and software for computer classes, adequate classroom space, courseware such as lesson plans and training aids, etc. The trainer must fuse these training tools with the learning preferences of the learners.

- **Involvement Skills:** The trainer must know the learners. What are their real goals for being in the classroom? What are their learning styles? What tools do they need

to help them succeed? What are some of the affective-tools that will help you to help your learners succeed in the learning environment you have been charged with? You must also coach the learners to become self-directed, intrinsically motivated, goal oriented, and open to learning.

The following questions can be used to direct discussions regarding training or it can form the foundations of a checklist prior to implementing the training course.

- Other than the actual course participant(s), who else should be fully informed about this training? Think of other team members and/or departments this training course will impact.

- What is the impact to client services and business outcomes while the participant(s) attends this training course?

- What are the differences and similarities in experience and professional background of the participant(s). How will this impact the training course?

- Who is going to manage the training administration of the course (including invitations, RSVP, catering, travel and accommodation, material production, attendance list, evaluations and feedback reports, etc)

- What type of environment will best suit the participant(s) in the training course?

- How do you expect the participant(s) to behave and respond during the training course?

- What information, materials, aids and/or equipment will be included in the course to support and promote these behaviour(s) and response(s)?

- What will be the overall style of the training course? Structured and formal? Structured and informal? Lecture style? Workshop style? Seminar style? Describe the style.

- What are the benefits to the participant(s) by choosing this style for the training course?

5.3.5 Training Course Evaluation

The final phase in the training and development program is evaluation of the program to determine whether the training objectives were met. The evaluation process includes determining participant reaction to the training program, how much participants learned and how well the participants transfer the training back on the job.

The following questions can be used to direct discussions regarding training or it can form the foundations of a checklist prior to evaluating the training course.

- Is this course going to be piloted within the business prior to the official launch? If so, who will be the best team/department to pilot this course?

- Who will be leading, collating and communicating the results of the evaluations to all stakeholders?

- What is your expectation or definition of a successful training course?

- How will you differentiate 'specific/high-priority' feedback ("the course activities were too long and complicated...") over 'general/low-priority' feedback ("the coffee was cold...."). How will this differentiation assist you in properly evaluating the course?

- How will you promote and set the expectation for honest, professional and high-priority feedback in the evaluations of the training course?

- What are the current protocols for professional feedback, course evaluations and confidentiality in your workplace?

5.4   Training Curriculum

5.4.1   Overview of AM Curriculum

The outcome of the AM Training plan will be enhanced AM technical skills of staff in support of the AM Framework. The general approach for the AM Curriculum is to provide three categories or levels of training, as outlined in the following table. All categories of training are to include requirements for compliance with O.Reg. 588/17 AM Planning for Municipal Infrastructure.

Table 3.1   AM Training Categories

Course Category	Description	Attendees	Training Intensity*
AM Policy and Framework Orientation	• To provide staff with an introduction to AM principles and the AM Policy and Framework; and to prepare staff for more advanced training • To bring all staff to a basic level of understanding of AM practices and establish a common AM language	All staff	Low
AM Framework Overview Training	• Develop knowledge of AM principles, processes, and the AM Policy and Framework • Designed to provide staff with an introduction to a specific AM competency and its associated AM processes; and to prepare staff for more advanced training	Relevant managers and staff involved in the AM processes	Medium
AM Practices Training	• Training focused on developing skills and knowledge required to successfully carry out AM activities • Designed to develop skills and knowledge of workflows and technical practices	All staff involved in the AM Activity	High

Training Intensity

*Training intensity refers to the time commitment required by participants, the level of difficulty and detail of the training materials

- Low intensity is categorized as orientation and provides an introduction to key subjects, it does not require prerequisite training, and represents a minimal time commitment (less than 2 hours)

- Medium intensity training provides focused training to enhance knowledge of AM concepts and required skills, these may require prerequisite training and will likely represent more than 4 hour time commitment by participants

- High intensity training requires a more significant commitment (full day, 8 hours) to cover in-depth skill development and detailed task oriented training. These sessions will require prerequisite training.

The following AM Training Curriculum provides a description of training modules that are required to support the AM Strategy implementation, the broader AM Program, and the AM training approach described above. The curriculum consists of training modules for each of the three categories of training, including the orientation module. The curriculum must also include requirements for compliance with O.Reg. 588/17 AM Planning for Municipal Infrastructure. It would be advantageous to track individual staff training needs and accomplishments in completing the AM Training curriculum.

Table 3.2   AM Training Curriculum

AM Framework Component			Module		Objective (also: compliance with O.Reg. 588 AM Planning for Municipal Infrastructure)	Intensity	Prequal	Attendees
AM Policy & Framework (orientation)			AM 001	AM Framework Overview	Develop knowledge of AM concepts, principles and benefits Establish a common AM language Prepare staff for more advanced AM training	Low	None	All Staff
Planning			AM 101	AM Planning Overview	Develop an understanding of AM planning, its associated AM processes, and interface with other activities Learn how strategic planning, performance planning, master planning, renewal planning, maintenance planning, AM planning, capital programming, and operations planning contribute to enhanced AM Prepare staff for more advanced AM Planning training	Medium	AM 001	All Staff involved in AM Planning
Service Delivery			AM 102	Service Delivery Overview	Develop an understanding of AM service delivery, its associated AM processes, and interface with other activities Learn how asset acquisition, maintenance and operations contribute to and benefit from enhanced AM Prepare staff for more advanced AM Service Delivery training	Medium	AM 001	All Staff involved in AM Service Delivery
Performance Management			AM 103	Performance Management Overview	Develop an understanding of AM performance management, its associated AM processes, and interface with other activities Learn about Performance Management and the various inputs and outputs of a performance management program Learn how to develop asset service standards (or levels) Learn about reviewing service standards (or levels) to reflect changes in business drivers, programs or assets, and to improve effectiveness of performance management	Medium	AM 001	All Staff involved in AM Performance Mgmt
Delivery Support			AM 104	Support Services Overview	Develop an understanding of the role of delivery support in enhanced AM including financial management, human resources management, and data and systems management	Medium	AM 001	Staff involved with supporting HR, Finance, Data and Technology
Planning	Medium Term Plans	Performance Management Planning	AM 201	Performance Management Planning	Learn to develop service standards and performance indicators for key programs and assets that link all business drivers over the hierarchy of stakeholder needs Learn to review and update service standards and performance indicators to reflect changes in all business drivers	High	AM 001 AM 101	All Staff involved in Performance Mgmt Planning

AM Framework Component			Module		Objective (also: compliance with O.Reg. 588 AM Planning for Municipal Infrastructure)	Intensity	Prequal	Attendees
		Master Planning	AM 202	Master Planning	Learn how to review and update the supply and demand of services NOT REQUIRED	High	AM 001 AM 101	All Staff involved in Master Planning
		Renewal Planning	AM 203	Renewal Planning	Learn to identify failure modes, assess asset risk and identify end of life strategies for all asset types (i.e., (i) operate to failure or (ii) renew prior to failure) Learn to project end of life timing for assets using the Decision Support System (DSS) Learn to analyze all renewal options using benefit / cost analyses and document solutions including associated timing and cost	High	AM 001 AM 101	All Staff involved in Renewal Planning
		Asset Management Planning	AM 204	Asset Management Planning	Learn to develop AM Plans that meet O.Reg. 588/17 AM Planning for Municipal Infrastructure	High	AM 001 AM 101	All Staff involved AM Planning
		Maintenance Strategic Planning	AM 205	Maintenance Strategic Planning	Learn to develop and document maintenance strategies based on formal Failure Mode Effects and Criticality Analysis (FMECA) to optimize the blend of planned and unplanned maintenance	High	AM 001 AM 101	All Staff involved in Mtce Strategic Planning
		Consumables & Spares Management Planning	AM 206	Consumables & Spares Management Planning	Learn to develop a risk-based Consumables and Spares Management Strategy including business case by which the decision whether an item is held in stock is determined on the basis of a business case comparing the cost of holding the item and the risk negated by its immediate availability	High	AM 001 AM 101 AM 206	All Staff involved in Consumables & Spares Mgmt Planning
		Info Systems & Data Policy & Planning	AM 207	Info Systems & Data Policy & Planning	Learn the information technology, standards and policies, and data models to achieve enhanced AM	High	AM 001 AM 101	IT staff who support information systems and data
	Short Term Plans	10-Yr Capital Programming	AM 208	10-Yr Capital Programming	Learn to develop the 10-Year Capital Program based on a corporate capital programming framework and processes, including formal risk assessment, economic evaluation, and a confidence level approach To be delivered by Finance	High	AM 001 AM 101	All Staff involved in 10-Yr Capital Programming
		Annual Operating Planning & Budgeting	AM 209	Annual Operating Planning & Budgeting	Learn to develop the short term operating investment plans based on defined levels of service, failure mode analysis and risk analysis, and which are responsive to the prioritized needs of the Region and funding availability	High	AM 001 AM 101	All Staff involved in the development of operating and mtce budgets

AM Framework Component			Module		Objective (also: compliance with O.Reg. 588 AM Planning for Municipal Infrastructure)	Intensity	Prequal	Attendees
		Operational Standards & Specifications	AM 210	Operational Standards & Specifications	Learn to develop Operational Standards & Specifications based on the principles of formal risk assessment and economic evaluation	High	AM 001 AM 101	All Staff involved in setting Operational Stds & Specs
Service Delivery	Asset Creation & Renewal		AM 301	Asset Creation & Renewal	Learn the formal project delivery processes including how to manage projects, select consultants, administer consultant contracts, manage preliminary design, environmental assessments, detailed design, construction tendering, construction administration & inspection, commissioning, and asset handover To be delivered with / by the PMO	High	AM 001 AM 102	All Staff involved in Asset Creation and Renewal
	Asset Maintenance		AM 302	Asset Maintenance	Learn the CMMS information requirements and procedures necessary to support Maintenance Learn to plan, schedule, execute and complete the maintenance work using updated maintenance strategies and new / more robust CMMS	High	AM 001 AM 102	All Staff involved in Asset Maintenance and use of CMMS
	Operations		AM 303	Operations	Learn the CMMS information requirements and procedures necessary to support Operations Learn to plan, schedule and complete the operations work using new / more robust CMMS	High	AM 001 AM 102	All Staff involved in Operations and use of CMMS
	Work & Resource Management		AM 304	Work and Resource Management	Learn the CMMS information requirements and procedures necessary to support Work and Resource Management Learn to manage work and other resources using new / more robust CMMS	High	AM 001 AM 102	All Staff involved in Work & Resource Management and the use of CMMS
Performance Management	Monitoring & Reporting		AM 401	Monitoring & Reporting	Learn to monitor performance including capturing, entering and verifying data, and identifying gaps between actual and target, actual and benchmarks and actual over time Learn to report performance to meet the needs of all stakeholders including reporting for accountability/ legislative compliance and to focus continuous improvement by identifying performance gaps	High	AM 001 AM 103	All Staff involved in Performance Monitoring and Reporting
	Continuous Improvement		AM 402	Continuous Improvement	Learn the processes of programming and implementing continuous improvement projects to support enhanced AM	Medium	AM 401	All Staff involved in Continuous Improvement

AM Framework Component				Module		Objective (also: compliance with O.Reg. 588 AM Planning for Municipal Infrastructure)	Intensity	Prequal	Attendees
						Learn to program improvements including identifying improvement opportunities, defining and validating projects from the identified opportunities, prioritizing validated projects, and funding prioritized projects			Programming and Implementation
						Learn to implement the approved and funded program, including best practice program implementation and project delivery including tracking projects within the program, and initiating, planning, executing, monitoring and closing out each project in the program			

5.5 Training Implementation Strategy

5.5.1 Introduction

Employee training and job preparedness are critically important to the successful implementation of enhanced AM. Optimal outcomes will be achieved with staff being supported with their learning when they commence new tasks until the processes are embedded into practice.

The recommended AM Training Implementation Strategy consists of the following activities:

- Communications & Change Management (provided by the Region)

- Training Module Delivery

- The general introductory modules are described as orientation to AM, not formal training. For completeness they have been included in the AM Training Curriculum. Training will be a mixture of formal learning such as in the classroom or a workshop environment and then applying this learning in a supported environment on the job, with monitoring and continuous improvement required to continue to enhance the content.

Important considerations include:

- The scope of work for each of the AM Training Implementation activities, the schedule for implementation and resources for delivery.

- Governance for AM training is to be integrated with other Region training and human resources development noting that this is technical training with the AMO Director and Managers having key roles to provide the content.

The following table provides an overview of the scope of work for each of the AM Training Implementation activities, the schedule for implementation and resources for delivery.

Table 3.3   AM Training Implementation Strategy Summary

Activity	Scope	Schedule	Resources
Communications & Change Management	• Effective communication and coaching will be critical to successfully manage the change related to implementing AM best practices • Prepare: Plan communications related to training • Implement: Deliver communication prior to and during training and create	• Ongoing	• Commissioners • AMO Director and Managers

Activity	Scope	Schedule	Resources
	and communicate short term wins • Coach: Reinforce the benefits of training and enhanced AM practices		
Training Module Delivery: AM Enhancement	• Staff will need to understand enhanced AM processes and how to apply supporting tools / systems • Assess AM enhancement training needs of each group of learners • Prepare and deliver training for each course category (i.e., AM Policy & Framework Training, AM Framework Overview Training, and AM Practices Training (emphasis on medium and short term planning and performance management in the near term)) • Evaluate learning and re-train, as required	• Ongoing in the following order: • AM Policy & Framework Training • AM Framework Overview Training • AM Practices Training	• AMO Director and Managers • External AM Consultant
On-the-Job Training	• Staff will need to trial and practice enhanced AM processes and supporting tools / systems • Assess AM enhancement on-the-job training needs • Prepare and deliver on-the-job training • Evaluate learning and retrain, as required	• Ongoing, but after AM Enhancement Module Delivery	• AMO Director and Managers
Monitoring & Continuous Improvement	• Monitoring and continuous improvement will be important to ensure that the AM Training program reflects the needs of AM Strategy implementation and the broader AM Program • Monitor the needs of the AM training approach and curriculum over time to support continuous improvement of the AM practice • Monitor the success of the AM Training Implementation Strategy in achieving the learning objectives	• Ongoing	• AMO Director and Managers • External AM Consultant

Activity	Scope	Schedule	Resources
	• Modify the AM training approach and curriculum and implementation strategy, as required		

The AM Training Implementation Strategy will likely extend over a **five year timeline** to match the AM Strategy implementation timeline and the needs for meeting the requirements of O.Reg. 588/17 AM Planning for Municipal Infrastructure. The table below describes the training plan continuous improvement process, including dependencies.

Table 3.4   Training Plan Implementation

Task	Description	Interdependencies	Source Document
1	Update the AM skills needs, curriculum and training plan	New processes and practices to be reflected in the skills and training plan	AM Strategy
2	Confirm roles with AM as part of the accountabilities	AM current state role conclusions	Job Descriptions
3	Develop AM competencies	HR policies and practice	
4	Complete a training needs analysis	HR policies and practice	
5	Prioritize the delivery of training to meet skill development needs of staff	AM Strategy	AM Strategy
6	Delivery of training program	AMO (content), Corporate HR (training methodology)	
7	Complete post training assessment of skill development	AM Strategy	
8	Update AM curriculum to meet ongoing needs	AM Strategy	Training Plan

To support the training development it is recommended that an AM competency matrix is developed, this competency framework is then applied as part of determining the priorities for AM training.

Post training assessments are to be completed to ensure the learning program is meeting the needs of the staff and their continual development of AM competence.

5.5.2   Delivery of AM training

Delivery of AM training will be facilitated and provided by the AMO Director and Managers to oversee the planning, delivery and evaluation of training modules and the on-the-job application of the learning.

- **Communications:** Manage the Communications & Change Management activity

- **Commissioners, Department Directors, AMO Director:** Deliver communications prior to and during training and reinforce benefits of training and achieving enhanced AM practices

- **AMO Director and Managers:** Assess AM enhancement on-the-job training needs, prepare and deliver on-the-job training, evaluate learning, and provide retraining as required

- **External AM Consultant:** Work with AMO Director and Managers to assess AM training needs of each group of learners, prepare and deliver training for each course category (i.e., AM Policy & Framework Training, AM Framework Overview Training, and AM Practices Training), evaluate learning and provide retraining as required.

AM training and professional development courses are available through several organizations, including the following:

- **The Institute of Asset Management (the IAM)** develops asset management knowledge and best practice, and generates awareness of the benefits of the asset management discipline for the individual, organisations and wider society. The IAM provides a knowledge base that includes ISO 55000 and PAS 55, and professional development training and certification.

- **Plant Engineering and Maintenance Association of Canada (PEMAC):** Provides education programs in both Maintenance Management and Asset Management that are offered in partnership with public, post-secondary institutions (e.g. Humber College). Also provides opportunities to connect with Maintenance, Reliability and Asset Management Professionals through a number of channels: conferences, chapter events, courses, and webcasts.

- **National Asset Management Strategy (NAMS) Canada** is a not-for-profit service arm of the Institute of Public Works Engineering Association (IPWEA) Australasia to provide access to IPWEA's asset management tools, publications and training. NAMS.PLUS is a subscription service providing a suite of tools, templates and other resources as a guided pathway to asset management planning. Provides IPWEA Professional Certificate in AM Planning through courses based on the International Infrastructure Management Manual (IIMM) and aligned with the ISO 55000 global AM standards. This initiative is delivered through the Municipal Asset Management Program, which is delivered by the Federation of Canadian Municipalities and funded by the Government of Canada.

- **Canadian Network of Asset Managers (CNAM)** is the association of public infrastructure asset management in Canada. Government and private sector members develop policy, tools and technologies which improve the level of service for public infrastructure assets in every province and territory. CNAM shares that knowledge with other members and stakeholders through a CNAMpedia online resource, an annual conference and various committees and events.

5.5.3 Governance & Integration

The establishment of a governance structure for AM training and its integration with other regional training and human resources development programs are important considerations. The AM training plan has a technical focus with the content being provided by the AMO Directors and Managers and Human Resources advising on training methodology.

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