



MUNICIPAL FINANCE
OFFICERS' ASSOCIATION
OF ONTARIO



A guide to asset
management for
municipalities in
Ontario

ASSET MANAGEMENT FRAMEWORK

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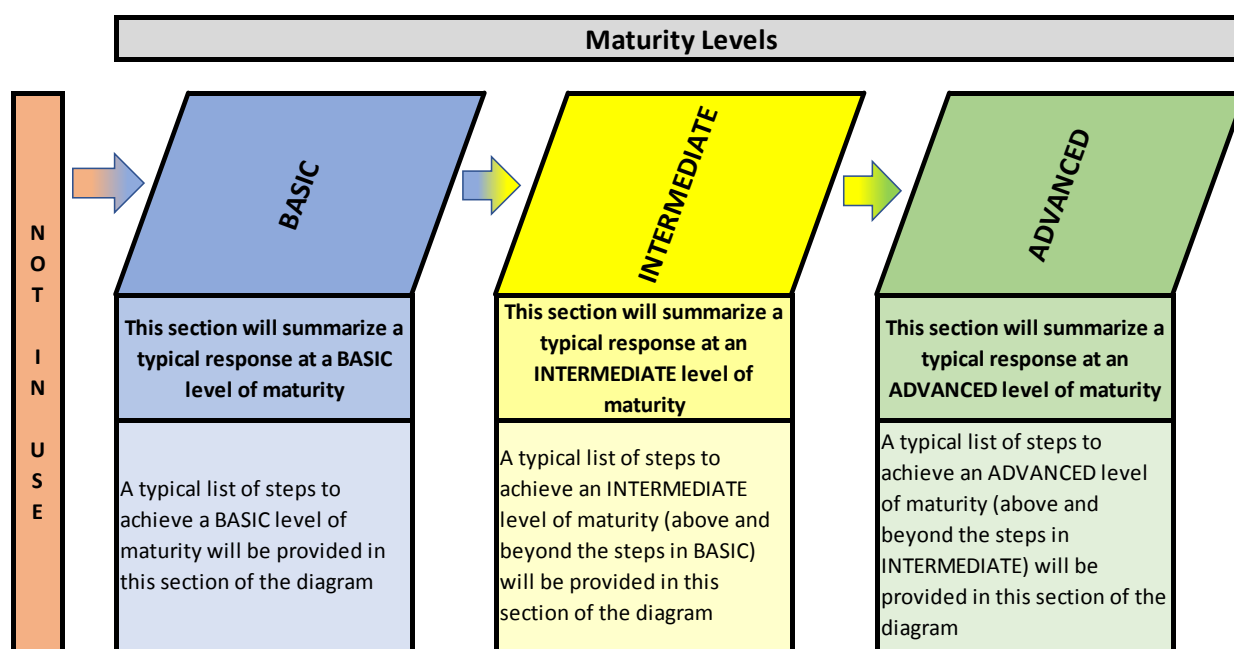
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10 Internal Governance and Ownership

10.1 Using this Framework

This framework is intended for municipalities of all sizes and maturity levels. The use of the maturity diagrams within this framework can help municipalities identify their current levels of maturity for each AM area. In addition, the diagrams provide possible approaches for municipalities to undertake to move to a higher level of maturity over time. Adaptations of the following diagram are used throughout this document to summarize maturity levels according to the themes and questions explored in each chapter:



This document is intended to help municipalities make progress on their asset management planning. By enhancing the readers' understanding of asset management maturity, they can more accurately determine their current, and work toward achieving the desired or appropriate, level of maturity for their municipality.

The asset management framework can be likened to a continuum, whereby municipalities should aim to implement the components described in a subsequent maturity level. For example, municipalities that are not practicing asset management

should strive to meet components at the *basic level*, and likewise, municipalities that currently meet the *basic* or *intermediate* levels should strive to advance their practices to meet the components of the next level. However, it should be noted that during this self-assessment process a municipality may decide to skip over maturity levels (i.e. move from basic to advanced, skipping intermediate). This is perfectly acceptable. Further, not every municipality will need to strive for the highest level of maturity in every area. For example, it may not make sense for a small municipality to meet certain advanced level components.

Readers can use the following descriptions of the maturity levels to guide their assessment throughout the various sections of this framework:

Municipalities that are not undertaking the components described in a particular section of this framework should focus on meeting the *basic level* requirements outlined in the maturity level diagram.

At the **basic level of maturity**, a municipality is undertaking the components of asset management shown in blue and will take steps to advance their asset management by implementing the components described under the *intermediate level* heading.

At the **intermediate level of maturity**, a municipality is currently meeting the requirements shown in yellow and to advance their asset management will take steps to implement the components described under the *advanced level* heading.

At the **advanced level of maturity**, a municipality is currently meeting the requirements shown in green.

These maturity framework visuals are found throughout this document. Preceding all maturity level diagrams is a self-assessment question for the reader to consider to help determine where their municipality best fits within the framework.

10.2 Overview

A key element of a successful asset management planning process is the effective assignment of roles and responsibilities to ensure that the process is being properly followed and maintained, once in place. To take this one step further, staff need to embrace their own specific roles and responsibilities within the asset management process and take ownership.

Municipalities should consider developing a strong framework for leadership and staff support within the asset management process. The design of this framework will vary from municipality to municipality because they differ in size, staff complement, available skill sets, and organizational structure, and, as a result, the design of this framework will need to be dependent.

In larger municipalities, an asset management department or steering committee may be formed to provide leadership and decision-making capabilities, with dedicated asset management staff to carry out the day-to-day duties. In small to medium municipalities, existing management and/or support staff might be called upon to incorporate asset management responsibilities into their other job duties (with the ability to create a multi-departmental asset management committee). In either case, there are strategies and actions available that can enhance the foundation for success.

Infrastructure for Jobs and Prosperity (IJPA) Act and O. Reg 588/17 Requirements

O.Reg 588/17 outlines the following requirements with respect to AM Internal Governance:

A Strategic Asset Management Policy (SAMP) must be developed and adopted by *July 1, 2019* and reviewed and updated at least every 5 years. The SAMP outlines a requirement to include:

1. A commitment to coordinate planning between interrelated infrastructure assets with separate ownership structures by pursuing collaborative opportunities with upper-tier municipalities, neighbouring municipalities, and jointly-owned municipal bodies; and
2. Identification of who would be responsible for AM planning, including an executive lead.

In addition, a municipality's AM plan must adhere to the following:

1. Review and update the asset management plan at least every 5 years.
2. The asset management plan (or update) must be endorsed by the executive lead of the municipality and approved by Council resolution.
3. Municipalities are required to provide Council with an annual update on asset management planning progress, by *July 1st of each year*.

4. Municipalities are required to post their strategic asset management policy and asset management plan on the municipality's website, if one exists, and make copies of these documents available to the public, if requested.

10.3 Organizational Awareness of Asset Management

Using a corporate perspective to asset management ensures that specific departmental expertise is embedded into the decision making process.

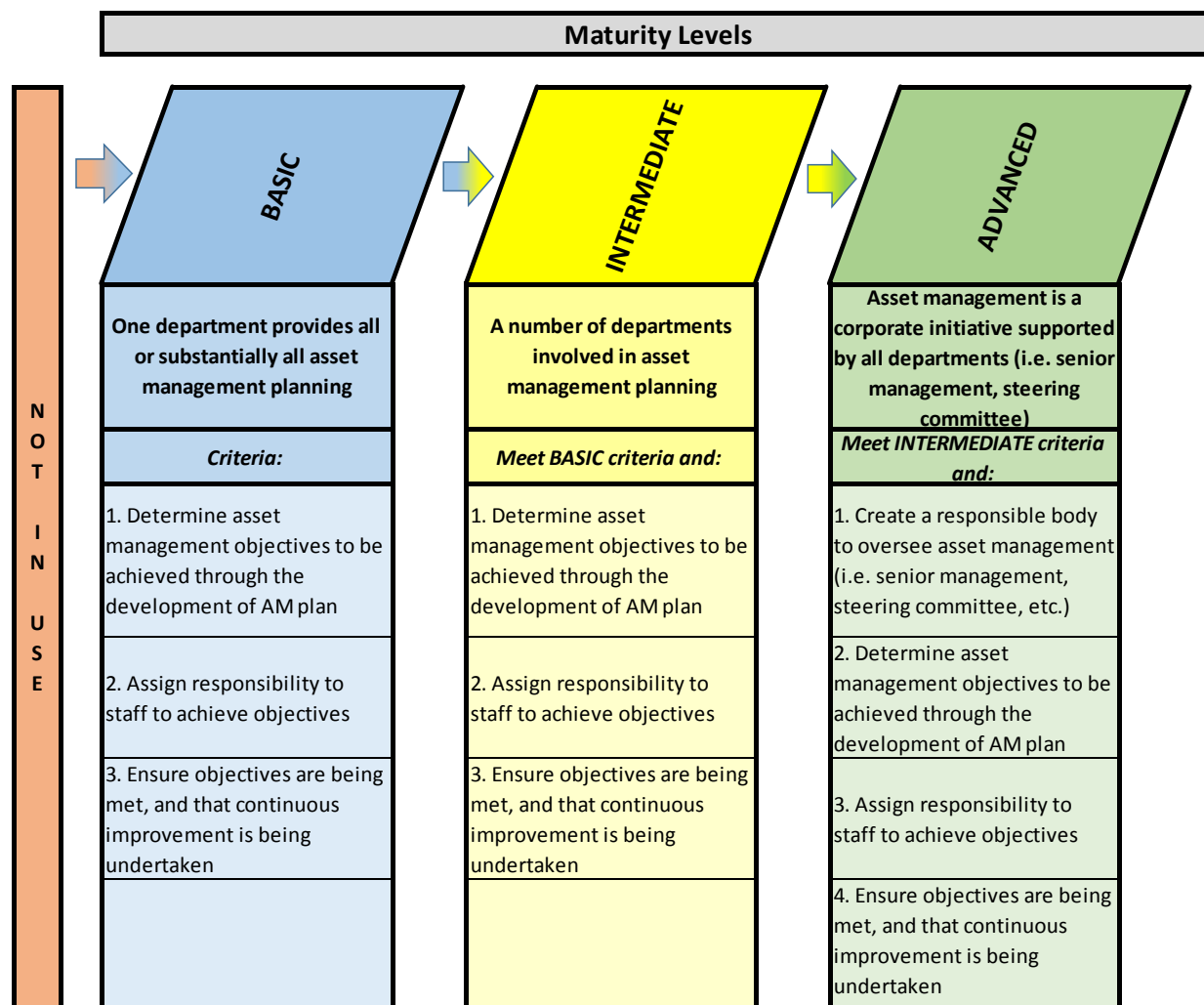
To what extent is the asset management planning process embedded within the organizational structure?

Background

Organizational awareness in the context of asset management planning relates to whether this process is managed and updated by one department, several departments, or corporately. Ideally, asset management planning should be considered a corporate initiative.

Levels of Maturity Asset Management Planning and Organization Structure

To what extent is the asset management planning process embedded within the organizational structure?



At the **basic level of maturity**, municipalities typically have all, or almost all, of their asset management planning undertaken by one department (with very little assistance from other departments). The department will determine the objectives to be achieved through the development and maintenance of the asset management process, assign responsibility to staff within the department for achieving these objectives, ensure the objectives are being met, and ensure that continuous improvement is being undertaken.

At the **intermediate level of maturity**, municipalities undergo the same steps as those at the *basic level* of maturity, however, multiple departments will be involved in asset management planning. At this level, there are still some departments that manage assets that are largely excluded from the asset management development process.

At the **advanced level of maturity**, municipalities establish the asset management planning process as a corporate initiative and have support from all departments. A

responsible body, such as the senior management team or an asset management steering committee, oversees asset management activities by:

- Establishing the objectives to be achieved through the development and maintenance of the asset management planning process;
- Assigning responsibility to staff across multiple departments for achieving these objectives;
- Ensuring the asset management objectives are being met: and
- Ensuring that continuous improvements are being undertaken.

Organizational Awareness of Asset Management

Senior management should be responsible for providing the leadership and commitment necessary for a municipality to effectively manage the asset management process. Senior management here also includes Council (which will be discussed in the next chapter). This leadership structure helps ensure that the objectives of asset management planning, including strategies and risk management, are consistent with those of the municipality as a whole. Also, it is the responsibility of senior management to get buy-in and stress the importance of asset management to other staff and take ownership of the process. There are several ways to undertake this responsibility, including:

- Develop a corporate asset management strategy that assigns roles and responsibilities from an asset management perspective;
- Assign more specific roles and responsibilities for asset management functions to staff across functional areas;
- Ensure the availability of sufficient and effectively deployed resources to asset management;
- Communicate to staff and stakeholders the objectives of the asset management process and the importance of effective asset management;
- Ensure asset management objectives are being met, and that continuous improvement is being undertaken; and
- Ensure departments are making optimal use of the asset management process internally, and are effectively co-ordinating their asset management activities with each other.

There are numerous methods to promote awareness of the asset management process with all staff and other stakeholders. Some examples include:

- Internal municipal newsletters and/or website posts;
- Internal corporate asset management workshops, lectures, and meetings (i.e. education process);
- Incorporation of staff into the implementation of asset management activities, or changes/reviews to these activities; and
- Advising suppliers through the tender/ RFP process.

Departmental Involvement

The involvement of all departments in creating and updating the asset management process can support enhanced accuracy and completeness. Departments should already have detailed knowledge of the assets they maintain and operate in providing services to the community. Using this knowledge in the asset management process ensures more realistic asset data, levels of service analysis, and lifecycle management strategies. An additional advantage of this approach is that if departments are involved in the creation and updates to the asset management process, they are more likely to use the asset management process to make decisions within each department.

10.4 Asset Management Use

Having all departments use the AM process for asset-based decisions ensures consistency in achieving organizational and departmental goals and objectives.

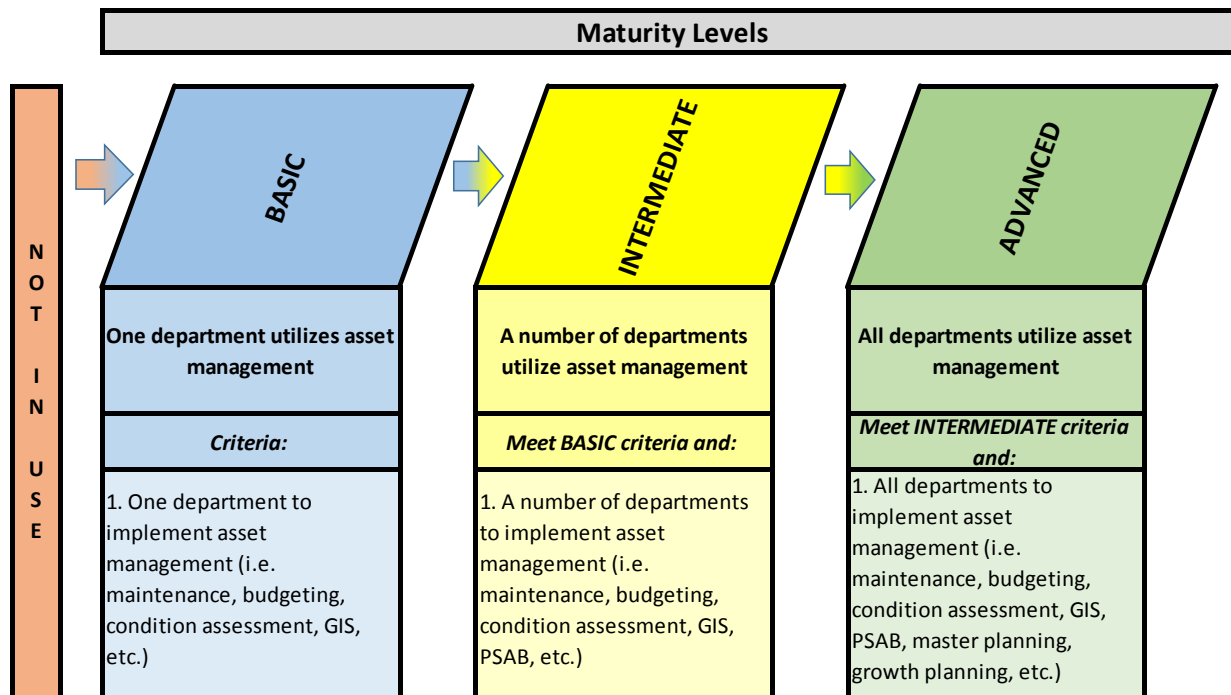
What is the level of use of asset management within all applicable municipal departments?

Background

There are many asset-based decisions that municipal departments make on a day-to-day basis in order to provide services to the community. Effective asset management can significantly assist each department in making these decisions.

Levels of Maturity Departmental Use of Asset Management

What is the level of use of asset management within all applicable municipal departments?



At the **basic level of maturity**, municipalities typically have one department using asset management. This type of use may include: planning all maintenance programs, performing condition assessments, maintaining the GIS, and preparing the budget requirements for managing the assets.

At the **intermediate level of maturity**, municipalities have a number of departments using asset management. In addition to the actions noted under the basic level of maturity, it would be expected that the asset data be used for PSAB 3150-related purposes within the Finance department.

At the **advanced level of maturity**, municipalities have all departments using asset management. In addition to the actions included under the intermediate level of maturity, advanced municipalities would be expected to integrate the asset management process with its master planning and growth planning.

Asset Management Use

Examples of the asset-based decisions that departments already make on a day-to-day basis include:

- Public Works and/or Engineering departments have the responsibility of constructing/rehabilitating capital assets such as roads, storm water, water, wastewater, solid waste, and facilities;

- Other service delivery departments also construct facility-related assets (e.g. Parks and Recreation, Fire, Police, etc.).
- All service delivery departments (e.g. Public Works, Parks and Recreation, Fire, Police, etc.) perform maintenance on assets and purchase more minor assets such as vehicles, equipment, and land improvements;
- Information Technology departments purchase and maintain assets (e.g. hardware and software) directly, and in some cases, in more of a support function to other departments;
- Finance departments may use asset management data for financial planning, budgeting, and/or accounting requirements; and
- Planning departments may incorporate growth planning into asset management planning.

The following are examples of departmental activities or processes that could already be in place that can be integrated into the corporation's asset management process:

- Performing visual inspections on assets (e.g. playground equipment, vehicles/equipment);
- Conducting condition assessments on assets (e.g. roads and bridges);
- CCTV inspections (e.g. wastewater mains and storm mains);
- Responding to community complaints (e.g. potholes);
- Mapping assets spatially in a GIS system;
- Calculating user fee rates (e.g. water, wastewater, storm water, parks and recreation);
- Preparing a DC Background Study, Master Plan or Strategic Plan; and
- Preparing the annual budget and long-term capital forecast.

Please see Chapter 7 for more discussions on integration.

The breadth of involvement of asset-related activities across an organization underscores the need for departments to use an asset management planning process to assist in making asset-based decisions. Communication by senior management to outline the importance and benefits of the asset management planning process to all staff, and how staff's work contributes to its effectiveness, can assist in promoting adoption. In addition, it can be useful to regularly communicate how the municipality is doing in relation to its asset management objectives for the purpose of facilitating organization-wide interest in the results.

10.5 Asset Management Resourcing

Allocating the right resources to AM planning ensures accountability and ownership of the AM process.

What resourcing is dedicated to asset management planning?

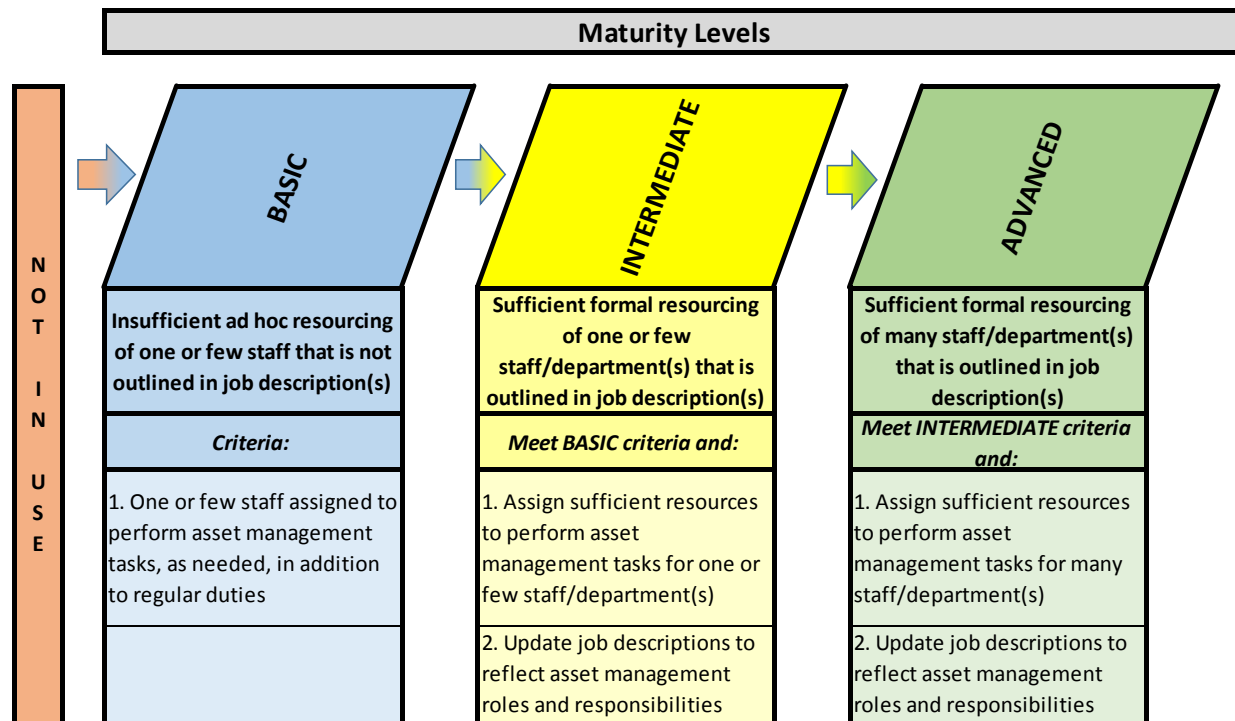
Background

As noted in the previous section, many departments can potentially be impacted by the asset management process, which highlights the importance of assigning resources to asset management and clearly defining roles and responsibilities. Additionally, co-ordination of the asset management resources/activities carried out in many departments should be a priority in order to promote efficiency, ensure adequate resourcing dedicated to asset management, and enhance clarity of responsibilities.

The first step to carry out the roles and responsibilities inherent in asset management planning is to ensure that sufficient staff resources have been allocated and assigned. This does not necessarily mean the assignment of full-time equivalents, but minimum means including asset management duties in staff job description(s).

Levels of Maturity Resourcing

What resourcing is dedicated to asset management planning?



At the **basic level of maturity**, municipalities typically perform asset management work on an ad hoc basis. The staff assigned to perform the work (i.e. municipal staff, not hired consultants) generally do not have these duties specified in their job descriptions. However, some form of asset management work constitutes part of their annual duties. As a result, the amount of resourcing at the basic level of maturity could be classified as minimal and insufficient.

At the **intermediate level of maturity**, one or more staff member(s) are formally assigned to carry out asset management duties. Asset management roles and responsibilities are outlined within the job description of the identified employee(s), in many cases along with other assigned duties (i.e. staff can be dedicated to asset management or do asset management in addition to other responsibilities). Sufficient staff resources are made available for performing asset management duties -- but typically one for several departments.

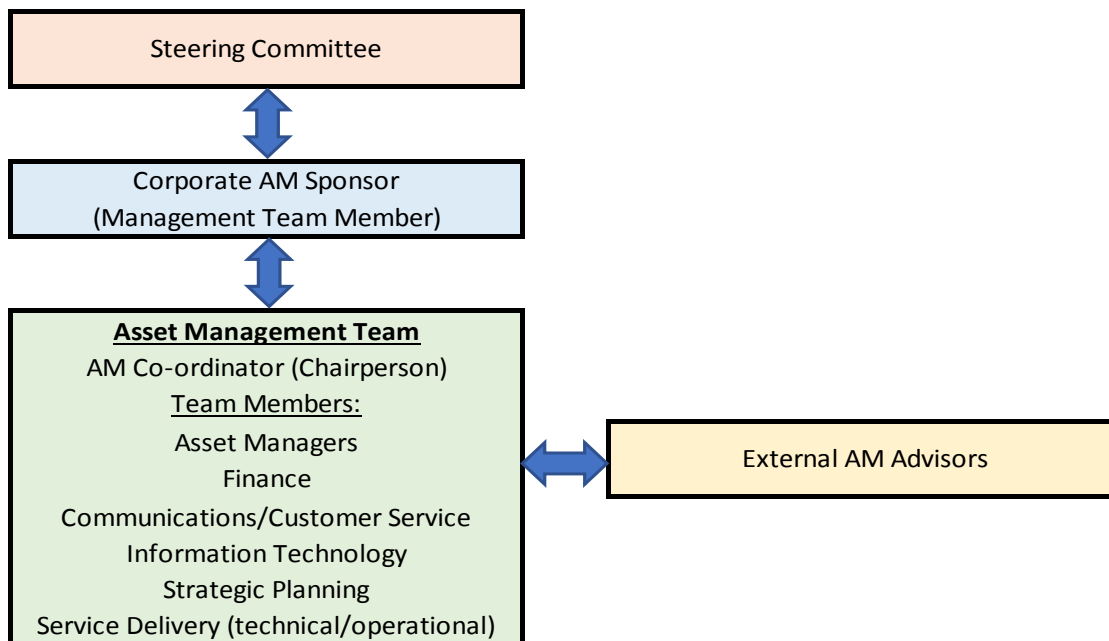
At the **advanced level of maturity**, asset management duties are formally assigned to many staff in applicable departments. The asset management roles and responsibilities are outlined in the job description of the identified employees. Sufficient staff resources are made available for performing asset management duties.

Asset Management Resourcing

Asset management resourcing requires an asset management project “champion” or “sponsor” to effectively gain resources and buy-in from the organization. The sponsor or champion should already be a leader within the municipality, such as the entire senior management, one (or a few) senior managers, or an asset management committee. The champion or sponsor helps ensure that communication, planning, and assessment of outcomes are being undertaken and that a manager(s) or committee is accountable for its success. In a committee setting, it would be beneficial to include representation from all applicable departments.

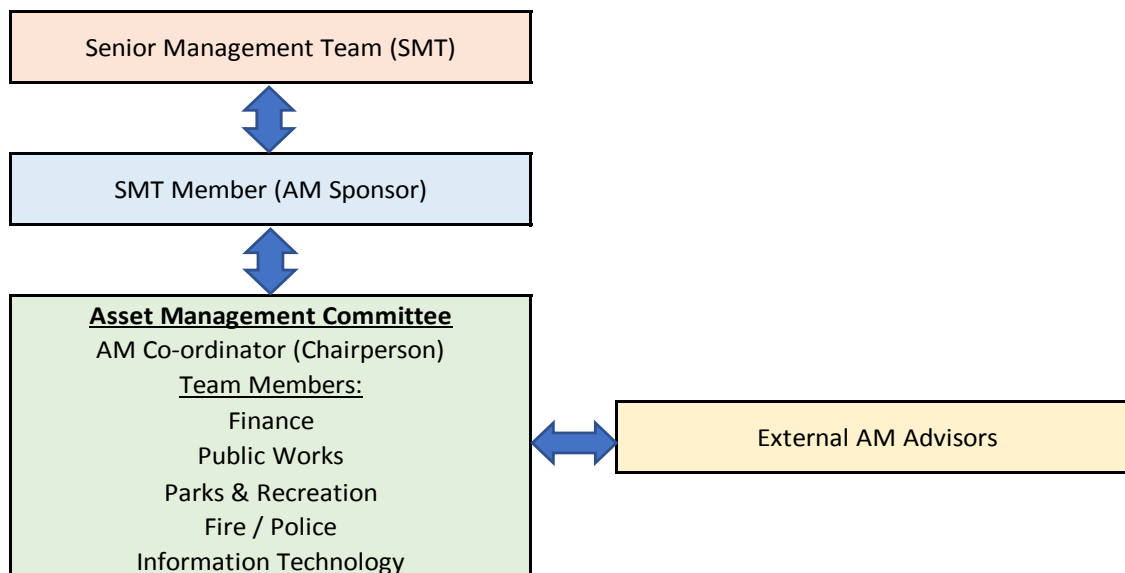
Depending on the complexity of the municipality, it may also be beneficial to assign the responsibility for facilitating the asset management process to an *Asset Management Coordinator* who reports to the manager(s) or committee representing the corporate asset management sponsor. The Asset Management Coordinator can lead the staff members who have been tasked with asset management (i.e. the asset management team), ensure that asset management is an integrated part of relevant municipal processes, and assist in promoting best practices. This position should also be responsible for liaising with external advisors, communicating asset management issues to affected departments, developing asset management plans and strategies, and ensuring sufficient staff and technology are available to meet goals. Figure 10-1 (below) provides a sample Asset Management Team structure:

Figure 10-1
Sample AM Project Team Hierarchy Large/Medium Municipalities



This team structure can also work in smaller municipalities with fewer departments and stakeholders involved. Figure 10-2 (below) shows a modified team structure to demonstrate how a smaller municipality can implement an Asset Management Team with representatives from all departments working on asset management on a part-time basis:

Figure 10-2
Sample AM Project Team Hierarchy Small Municipalities



An important role of the Asset Management Committee and the Asset Management Coordinator is to assess the amount of effort and resources needed to carry out asset management responsibilities within the municipality. Often, the ultimate success or failure of the asset management process hinges on the allocation of staff resources and the continued attention to staff skill levels.

International standards on asset management also stress the need for adequate asset management resources. According to ISO 55001:2014 (E) S.7.1:

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the asset management system.

The organization shall provide the resources required for meeting the asset management objectives and for implementing the activities specified in the asset management plan(s).

Each municipality needs to determine how best to incorporate asset management roles and responsibilities into their organization structure. This decision often shaped by the size of the municipality. For example, although more easily instituted in larger municipalities, a separate asset management department, or asset management staff within an existing department, can bring benefits to a municipality. These benefits

include the provision of specialized asset management expertise, clarity of reporting lines for asset management responsibility, ease of communication, and focused attention on meeting asset management objectives. While in smaller municipalities, asset management responsibilities are often integrated into existing job responsibilities of asset managers, engineering, and/or finance staff. In this case, it is important to ensure that the staff impacted by the additional duties have the necessary asset management competencies and time available to meet asset management objectives. An additional or supplementary approach might be to engage an external source of expertise (i.e. consultant) to provide guidance where necessary. However, it should be noted that it is important to ensure that the scope of work/responsibilities and expectations of outcomes are clearly defined and communicated when external consultants are used.

10.6 Staff Asset Management Capabilities

Given the evolution of AM best practices in Ontario, municipalities should encourage staff involved in the AM process to enhance their competencies through ongoing participation in educational opportunities.

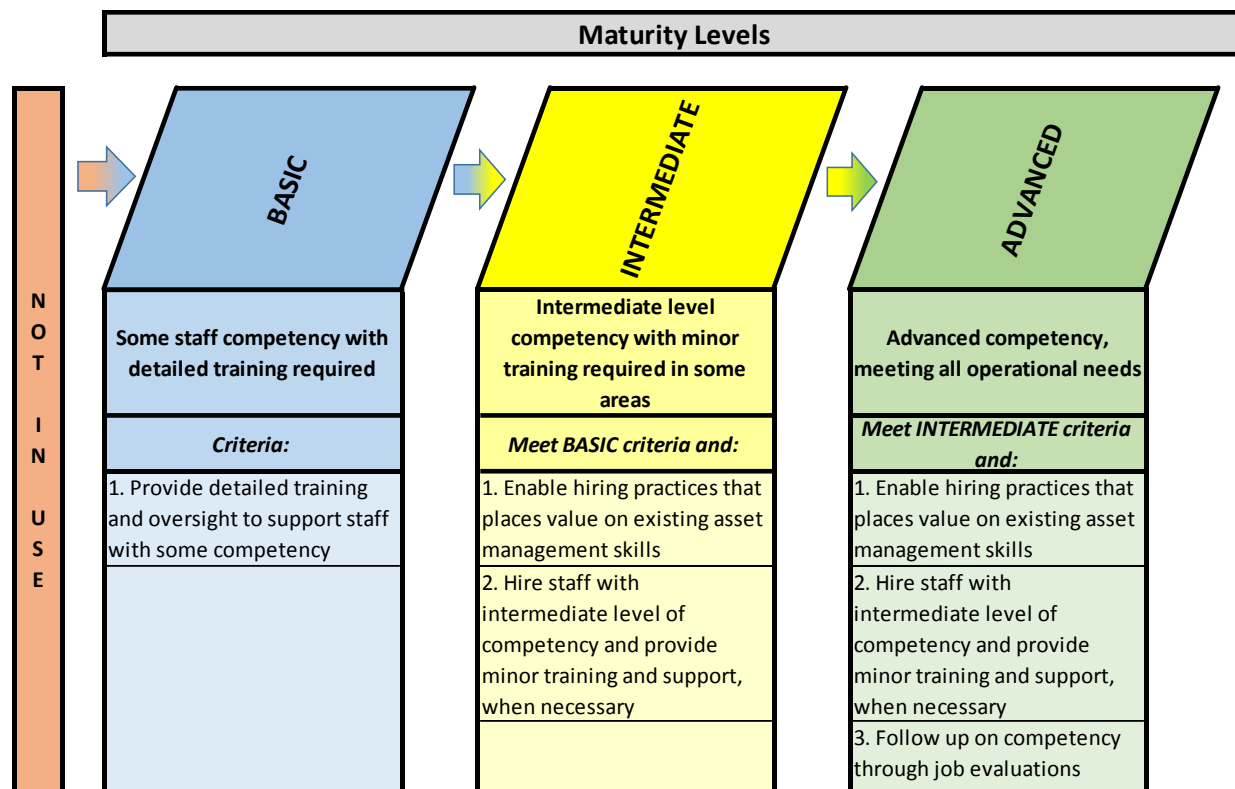
Are there sufficient staff with core competency skills in key operational activities with respect to asset management planning?

Background

Soft skills are important for asset management, regardless of the number of staff involved in asset management or the organizational structure in place. Job descriptions and job postings should be developed with asset management duties and both hard and soft skills clearly outlined. Once hired, it is important to create a framework for staff success in meeting asset management objectives. Training and mentoring of staff involved in asset management activities should be encouraged.

Levels of Maturity Core Competencies

Do staff possess or have sufficient opportunity to gain core competency skills in key operational activities with respect to asset management planning?



At the **basic level of maturity**, municipalities have some staff with competencies to carry-out asset management activities (i.e. maintenance, condition assessment, valuation, financial, etc.). However, the staff require detailed training and regular oversight to support them in these (as well as other) asset management duties.

At the **intermediate level of maturity**, municipalities employ staff with mid-level core competencies in operational asset management duties. Hiring practices should place value on candidates with existing asset management skills. This HR practice should create an environment where staff have sufficient ability to perform their duties with minor training and ongoing support, where needed.

At the **advanced level of maturity**, staff with high-level competencies are assigned to asset management duties. Appropriate hiring practices should be in place to fulfill this level of staffing, which should mean that employees only require training to keep up with the continuous evolution of asset management practices. As an additional step, employees should be provided with regular job evaluations to ensure competency levels and job goals are being met on an ongoing basis.

Asset Management Operational Capabilities

With asset management becoming an emerging topic in the municipal sector, it is likely that existing staff will require education and training on the subject through training courses, seminars, conferences, and webinars. In addition, a significant amount of training will occur during the development of a municipality's asset management process and asset management plan (i.e. learn through actual implementation). Some suggested approaches are:

- Establish a process for municipal staff to shadow external consultants (if used/hired), to assist in the implementation of asset management. Also have staff take on specific roles and responsibilities during the implementation process;
- Take advantage of available asset management courses, lectures/seminars, conferences, and webinars;
- Become familiar with online resources that provide tools and tips with respect to asset management;
- When hiring staff, pay attention to specific asset management expertise of the candidates;
- Conduct internal workshops on asset management to review both asset management concepts and approaches, and the internal workings of asset management within the organization. If one or many staff have asset management expertise, use them as a resource to train other staff; and
- Involve all applicable staff in the processes of ongoing asset management updates and improvements so they can learn while implementing asset management.

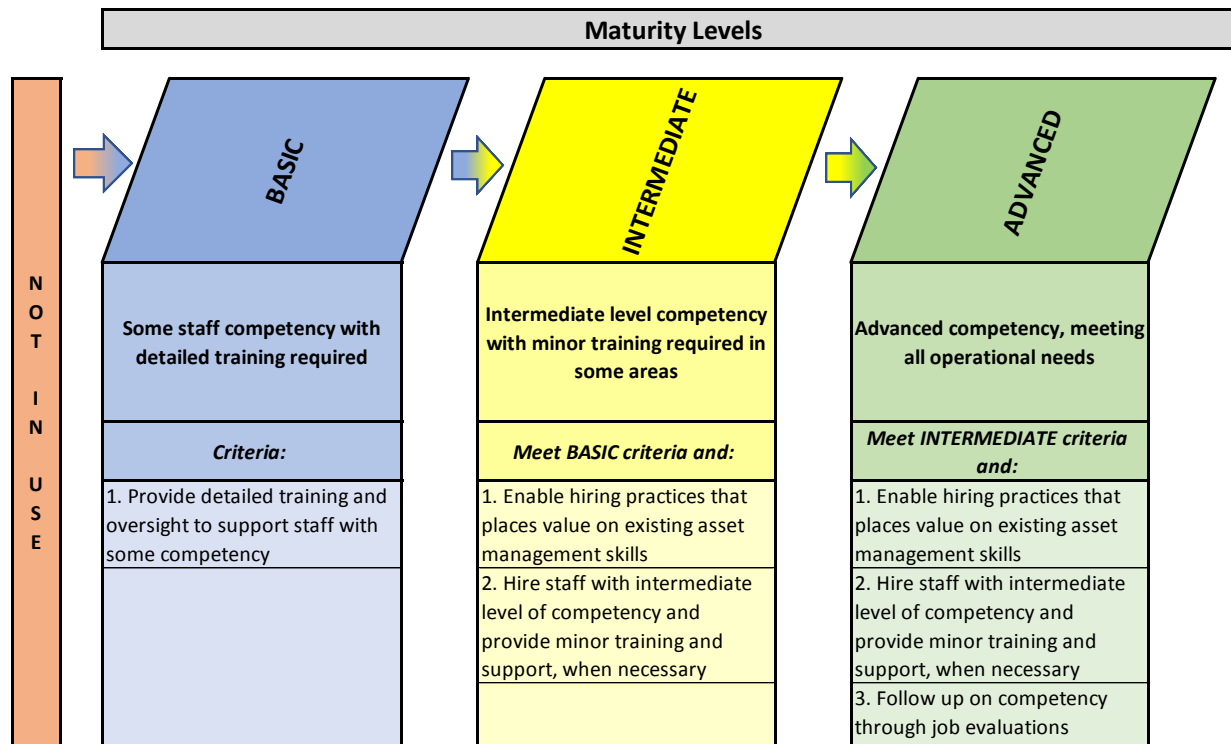
Are there sufficient staff with core competency skills in key financial activities with respect to asset management planning?

Background

Financial skills are required to conduct complete AM planning. Job descriptions and job postings should be developed with asset management financial duties and skills clearly outlined. Training and mentoring of staff involved in financial asset management activities should be encouraged, and it is important to create a framework for staff success in meeting asset management objectives.

Levels of Maturity Core Competencies

Do staff possess or have sufficient opportunity to gain core competency skills in key financial activities with respect to asset management planning?



At the **basic level of maturity**, municipalities have some staff with asset management competencies, but on a whole require further detailed training. To advance from the basic level, municipalities will need to provide detailed training and oversight to staff.

At the **intermediate level of maturity**, municipalities have staff with moderate asset management competencies, but still require some minor training in certain areas. Municipalities at this level have hiring practices that place value on candidate's existing asset management skills, and engage new staff in minor training and support, when necessary.

At the **advanced level of maturity**, municipalities have staff with proficient asset management competencies. Municipalities at this level have hiring practices that place value on candidates existing asset management skills, and engage new staff in minor training and support, when necessary. Competencies should be consistently assessed through on-going job evaluations.

Asset Management Financial Capabilities

As with soft skills (discussed above), it is likely that existing staff will require education and training from a financial perspective related to asset management through training courses, seminars, conferences, and webinars. In addition, a significant amount of training will likely occur during the development of a municipality's asset management process and asset management plan (i.e. learn through actual implementation). Some suggested approaches include:

- Establish a process for municipal staff to shadow external consultants (if used/hired) to assist in the implementation of asset management. Also have staff take on specific roles and responsibilities during the implementation process;
- Take advantage of available asset management courses, lectures/seminars, conferences, and webinars (with a financial focus);
- Become familiar with online resources that provide tools and tips with respect to asset management from a financial perspective, such as the Municipal Finance Officers' Association of Ontario (MFOA) website;
- Pay attention to specific asset management expertise of candidates when hiring staff;
- Conduct internal workshops on asset management to review both asset management concepts and approaches, and the internal workings of asset management within the organization. If one or many staff have asset management expertise, use them as a resource to train other staff; and
- Involve all applicable staff in asset management updates and improvements so they can learn from the process while implementing asset management.

10.7 Resources and References

Institute of Public Works Engineering Australasia, 2015, International Infrastructure Management Manual,

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International Organization for Standardization (ISO), 2014, ISO 55000:2014, Asset management – Overview, principles and terminology,

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