

Title: Asset Management Policy

Subject: Asset Management	Category: Finance and Administrative Services (FAS)
Policy No.: FAS-001	M&C Report No.: 2018-68
Effective Date: April 27, 2018	Next Review Date: (3 years)
Area(s) this policy applies to: Cross Corporate	Office Responsible for review of this Policy:
	Finance and Administrative Services
Related Instruments:	Policy Sponsor: Commissioner Finance and
FAS-005 Operating Budget	Administrative Services
M&C 2017-301 Grant Agreement with FCM	
	Document Pages: This document consists of 16
	pages.

Revision History:

This revises the March 6th, 2017 Asset Management Policy Statement in order to meet the Federation of Canadian Municipalities Funding Agreement for Climate and Asset Management Network (CAMN).

Common Clerk's Annotation for Official Record

I certify that the Asset Management Policy Statement was adopted by Common Council on March 12, 2018

I certify the Asset Management Policy was approved by the City Manager on April 27, 2018

April 27, 2018

Common Clerk Date

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ASSET MANAGEMENT

CITY OF SAINT JOHN POLICY STATEMENT

POLICY SECTION: ASSET AND ENERGY DIVISION OF FINANCE AND ADMINISTRATIVE SERVICES

1. POLICY STATEMENT

To confirm the City of Saint John's (City's) support for implementing asset management practices to ensure sustainable delivery of services, the City adopts the following statement.

The City of Saint John shall adopt and apply recognized asset management practices in support of delivering services to its customers reflecting the vision presented in the City's Municipal Plan, PlanSJ, and related strategic plans.

Specific objectives of the Asset Management (AM) policy are to:

- Improve the reliability of customer service by maintaining clearly defined levels of service.
- Improve the decisions related to the management of the City's assets.
- Improve the transparency and accountability of community investments in the management of the City's assets.
- Improve the management of the City's exposure to risks of reduced service delivery.
- Facilitate the leveraging of partnerships and infrastructure funding from external sources.

The City shall maintain a strategy for the implementation of asset management practices across the organization. The strategy will incorporate the following asset management principles:

- Incorporating industry recognized asset management protocols.
- Defining levels of service.
- Applying risk-based decision-making processes.
- Utilizing lifecycle costing principles.
- Incorporating continuous improvement practices.
- Considering the effects of climate change.

Asset management will be considered and integrated in the development of all other organizational plans, including capital and operating budgets.

2. SCOPE

This policy applies to all City of Saint John activities related to all assets of the City.

3. LEGISLATION AND STANDARDS

Province of New Brunswick Local Governance Act

4. ROLES AND RESPONSIBILITES

Refer to the Governance Structure outlined in the AM strategy (Appendix A - 3.1) for a hierarchical representation of the following roles.

4.1 City Council

- Adopt AM policy.
- Ensure sufficient resources are available to manage the City's assets.
- Revise and update the AM policy as required.

4.2 Finance Committee

• Coordinate interaction between Council and the Senior Leadership Team

4.3 Senior Leadership Team

- Establish and maintain an AM strategy to implement the AM policy.
- Report to Council on the progress of meeting the AM policy objectives.
- Direct the AM Steering Group to develop and maintain an AM work plan to complete the AM strategies.

4.4 AM Coordination Team (part of AM Steering Group)

- Prepare annual asset management plan (AMP).
- Submit AMP to the provincial government to satisfy regulatory and funding requirements.
- Establish and direct AM Support Groups as required.
- Report to the Senior Leadership Team on the implementation of the of the AM strategy.

4.5 AM Steering Group

- Establish and maintain an AM work plan to implement the AM strategy.
- Coordinate AM activities across the organization.
- Coordinate with AM Support Groups to develop the AM work plan.

4.6 AM Operation Teams

- Execute the AM work plan.
- Report to the AM Steering Group on the results of AM work plan.
- Coordinate with AM Support Groups to execute the AM work plan.

4.7 AM Support Groups

- Provide specialized expertise to support AM Steering Group to establish and maintain the AM work plan.
- Provide specialized expertise to support the AM Operation Teams to execute the AM work plan.

5. MONITOR AND REVIEW

This Policy will be reviewed every 3 years, and as determined by the City Manager.

6. IMPLEMENTATION

This Policy will be implemented under the authority of the City Manager by the Asset & Energy Management Division of Finance and Administrative Services.

7. AUTHORIZATION

This Policy shall be authorized by the City Manager pursuant to a resolution of Common Council approving the associated "Asset Management" Policy Statement.

8. RESOURCES

The City recognizes that a successful asset management program depends upon the employees of the City of Saint John along with Common Council.

9. STRATEGIES

The following represent the current asset management strategies to set the direction from Senior Management to Department staff for improving and sustaining asset management practices and to ensure these practices are applied consistently across the organization. These current strategies are presented to illustrate the continuity from the Asset Management Policy to the Asset Management Strategies, and it should be noted that staff will adjust these strategies as asset management practices evolve.

4.1. Improve Departmental Interaction

Improve the work flow business processes between departments to increase the integration of asset lifecycle activities (operations, maintenance, refurbishments, renewals and replacements)

between both different hard-asset departments as well as between these departments and finance.

4.2. Improve Data Sharing

Improve the asset management tools that integrate data sources and systems to increase the availability and sharing of asset data within the entire organization.

4.3. Improve Data Software

Improve the asset management tools to facilitate the generation and extraction of asset management information from stored asset management data.

4.4. Define Asset Risks

Improve/increase the asset management activities and resources needed to prioritize asset refurbishments, renewals and replacements based on defined and quantified asset risks, including the risks and vulnerabilities associated with climate change.

4.5. Define Performance Metrics

Implement/refine asset management activities to define levels of service and monitor and report on the effectiveness of asset management.

4.6. Define Asset Lifecycle Needs

Implement asset management activities to define and quantify asset lifecycle needs based on risk, lifecycle cost (including the cost of greenhouse gas emissions) and service provision.

4.7. Lengthen Planning Horizon

Implement asset management activities to increase the depth (duration) of asset management and financial plans.

10. GLOSSARY

None.

11. INQUIRIES

Inquiries regarding this Policy can be addressed to the City of Saint John's Asset & Energy Management Division of Finance and Administrative Services.

12. APPENDICES

Appendix A - City of Saint John Asset Management Strategy

APPENDIX A

Saint John Asset Management Strategy

Date: February 28, 2018

Version: 3.0

1. PURPOSE

The purpose of the Saint John Asset Management Strategy is to set out the long-term approach to the management of the City's Assets and the development of the City's Asset Management practices. The Strategy sets the direction from Senior Management to Departmental staff for improving and sustaining asset management practices and ensuring these practices are applied consistently across the organization. In its simplest form, the improvement of asset management practices relates to the City's ability to answer the six questions of asset management ... What have you got? What is it worth? What is its condition/performance? What needs to be done to it? When does it need to be done? How much will it cost?

This strategy will be reviewed annually and updated to reflect progress in the implementation of asset management practices.

2. CONTEXT

The Asset Management Strategy is not a standalone document but is part of a document hierarchy and a broader context for the overall management of the City's assets, as noted in Figure 1 and detailed below.

2.1. Plan SJ (approved 2011)

Plan SJ is Saint John's Municipal Plan. It establishes a community vision to guide the development and investment in the City of Saint John over the course of the Plan's 25-year planning period. Importantly, Plan SJ incorporates guidance and strategies for municipal services and infrastructure. Prepared through a significant public consultation engagement process, Plan SJ is an over-arching guidance document for the development and growth of the City and management of the City's assets.

Responsibility: Council and Public

2.2. AM Policy

The Asset Management Policy articulates Council's commitment to asset management and Council's direction to guide staff in improving AM practices in the organization. It is a document approved by City Council supporting the implementation of the community vision represented in Plan SJ specific to infrastructure in delivering services to the public.

Responsibility: Council

2.3. AM Strategy

The Asset Management Strategy articulates senior management's commitment to implementing the City's Asset Management Policy. The document sets the direction from Senior Management to Departmental staff for improving and sustaining asset management practices and to ensure these practices are applied consistently across the organization.

Responsibility: Senior Management team

2.4. AM Work Plan (Roadmap)

The Asset Management Work Plan is a set of activities to be implemented by Departmental staff in accordance with the Strategic directions established by the Senior

Management Team and includes required resources and timing details to complete the plan. The Roadmap activities developed in this hierarchy of linked asset management documents ensures a connectivity between Council priorities and the day-to-day activities and resources required to improve the asset management processes supporting the City's delivery of services.

3. STRUCTURES

There are several "structures" on which an asset management program is founded. These include a organization, and an activities structure represented in a framework that includes asset management activities and the work flows, resources and tools required to ensure these activities are integrated and coordinated across the City

Figure 1 **Document Hierarchy for AM**

1. "Plan SJ" (Council / Public)



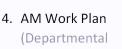
2. AM Policy (Council)



J







Staff)



governance structure required to establish a hierarchy of corporate responsibilities within the

3.1. Governance Structure

The governance structure is a foundational component of the asset management program. It provides an organizational structure for the development of asset management tools, guidelines and processes, as well as oversight for their application across the organization. The Saint John governance structure is shown in Figure 2, below, while the roles and responsibilities within the governance structure are as follows.

3.1.1. City Council

- Adopt AM policy.
- Ensure sufficient resources are available to manage the City's assets.
- Revise and update the AM policy as required.

3.1.2. Finance Committee

• Coordinate interaction between Council and the Senior Leadership Team

3.1.3. Senior Leadership Team

- Establish and maintain an AM strategy to implement the AM policy.
- Report to Council on the progress of meeting the AM policy objectives.
- Direct the AM Steering Group to develop and maintain an AM work plan to complete the AM strategies.

3.1.4. AM Coordination Team (part of AM Steering Group)

- Prepare annual asset management plan (AMP).
- Submit AMP to the provincial government to satisfy regulatory and funding requirements.
- Establish and direct AM Support Groups as required.
- Report to the Senior Leadership Team on the implementation of the of the AM strategy.

3.1.5. AM Steering Group

- Establish and maintain an AM work plan to implement the AM strategy.
- Coordinate AM activities across the organization.
- Coordinate with AM Support Groups to develop the AM work plan.

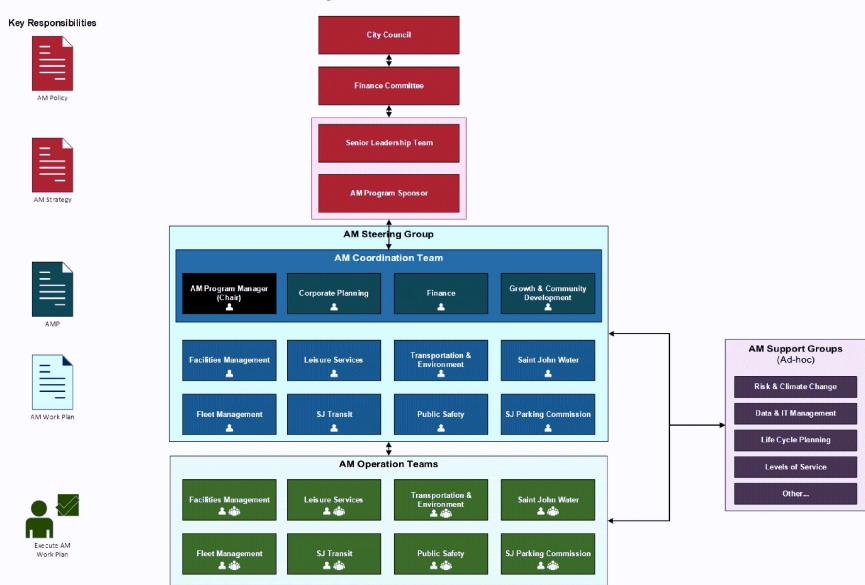
3.1.6. AM Operation Teams

- Execute the AM work plan.
- Report to the AM Steering Group on the results of AM work plan.
- Coordinate with AM Support Groups to execute the AM work plan.

3.1.7. AM Support Groups

- Provide specialized expertise to support AM Steering Group to establish and maintain the AM work plan.
- Provide specialized expertise to support the AM Operation Teams to execute the AM work plan.

Figure 2 – AM Governance Structure



3.2. Activities Structure - Asset Management Framework

The Asset Management Framework (Figure 3) is a structure representing asset management activities. The activities in this framework have been developed based on the simple process of asset management defined by answering the 6 basic questions of asset management. The six questions represent the core Lifecycle Management activities and are listed below.

- 1. What do you have?
- 2. What is it worth?
- 3. What is its condition/performance?
- 4. What do you need to do to it?
- 5. When do you need to do it?
- 6. How much money do you need?

Corporate Vision / Strategic Goals Levels of Customer Regulatory Sustainability Growth Service **Expectations** Requirements **Demand** Life-Cycle Financial Management Management Management **Asset Portfolio Financial Future** Historical Reporting Inventory/ **Demands** Performance Valuation Attributes Data (TCA) Life-Cycle Analysis **Financial** Master **Analysis** Capacity Remaining Cost/Benefit **Planning** Cash Flow Forecast Analysis Life Analysis **Analysis** Life-Cycle Management Plans Long-Term Demand Management Financial Plan Risk Additions Replacement O&M **Plans** Funding/Revenue Management Monitoring and Reporting **Customer and Public** State of the Infrastructure **Performance Measures** Reports **Feedback** and Risk Ratings

Figure 3 – Asset Management Framework

^{* -} Risk Analysis will consider the risks and vulnerabilities contributed by climate change.

^{** -} Cost/Benefit Analysis will consider the social cost of carbon.

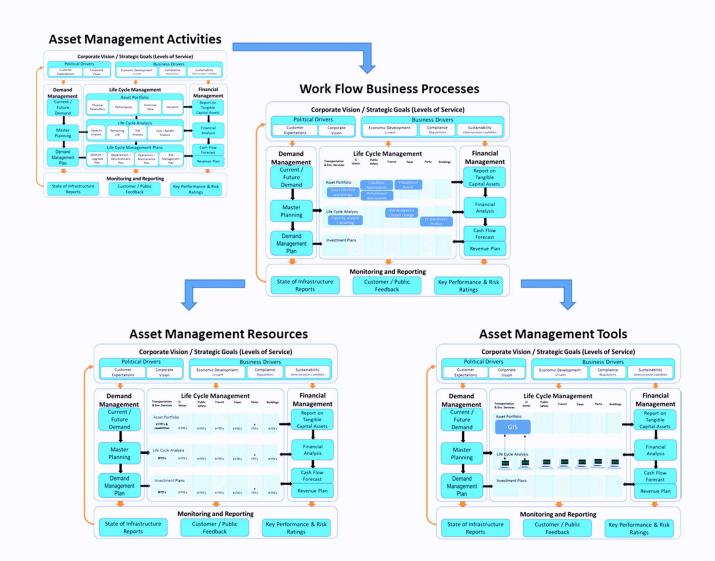
Figure 3, above, represents the asset management activities as a framework for continuous improvement in the delivery of services to the public utilizing infrastructure systems (assets).

There are several other important aspects of the asset management process associated with the execution of the life cycle management activities:

- the work flow business processes that describe how the City of Saint John undertakes the AM activities,
- the resources (staff) with AM capabilities / training to undertake the activities described in the work flow processes, and
- the tools (particularly information technology tools, i.e. data storage, data transfer and analytical systems) that support the City Departments in their application of asset management activities.

Figure 4, below, represents these other components required to implement the asset management activities.

Figure 4 – Work flow Processes, Resources and AM Tools



Based on the representations of the Asset Management Framework above, the key components of the AM Framework used to evaluate the City's current asset management practices includes the following:

- 1. The six questions of Asset Management:
 - a) What do you have?
 - b) What is it worth?
 - c) What is its condition/performance?
 - d) What do you need to do to it?
 - e) When do you need to do it?
 - f) How much money do you need?
- 2. The four dimensions of the AM Framework including:
 - a) AM activities

- b) AM work flow business processes
- c) AM resources
- d) AM tools

4. Strategies

The asset management improvement strategies presented below were formulated by identifying which of the six questions of asset management could not be answered due to the recurring and organization-wide issues, and which of the four dimensions of the asset management framework were the root causes of this.

4.1. Improve Departmental Interaction

The fragmentation of the organization (limited interaction between service groups/departments) interferes with answering the following asset management questions in an integrated manner (i.e. between different departments owning assets that affect each other, as well as between finance and other departments): what is its condition/performance, what do you need to do to it, when do you need to do is, and how much money do you need? The root cause of this is a lack of work flow business processes, while the fragmentation of data (issue 2) and the difficulties in extracting information from the data systems (issue 3) are related and aggravate the organizational fragmentation.

Strategy: Improve the work flow business processes between departments to increase the integration of asset lifecycle activities (operations, maintenance, refurbishments, renewals and replacements) between both different hard-asset departments as well as between these departments and finance.

4.2. Improve Data Sharing

The fragmentation of data both between different departments and within individual departments interferes with answering all six asset management questions. The root cause for this is a lack of asset management tools, while the organizational fragmentation (issue 1) and the difficulties in extracting information from the data systems (issue 3) are related and aggravate the data fragmentation.

Strategy: Improve the asset management tools that integrate data sources and systems to increase the availability and sharing of asset data within the entire organization.

4.3. Improve Data Software

The difficulty in extracting information from the current software packages used to collect and store data interferes with answering all six asset management questions. The root cause for this is a lack of asset management tools, while the organizational fragmentation (issue 1) and the

data fragmentation (issue 2) are related and aggravate the difficulties in extracting asset management information from the data systems.

Strategy: Improve the asset management tools to facilitate the generation and extraction of asset management information from stored asset management data.

4.4. Define Asset Risks

The lack of priority/risk ratings for all the assets being managed interferes with answering the following asset management questions: what is its condition/performance, what do you need to do it, and when do you need to do it? The root causes for this are deficiencies within the asset management activities (condition assessments and risk quantification) and resources.

The City's location on the Bay of Fundy, the St. John River, and the Kennebecasis River makes the community particularly susceptible and vulnerable to the effects of climate change and rising water levels. As a result, climate change impacts shall be included in the development of risk ratings.

Strategy: Improve/increase the asset management activities and resources needed to prioritize asset refurbishments, renewals and replacements based on defined and quantified asset risks, including the risks and vulnerabilities associated with climate change.

4.5. Define Performance Metrics

The lack of defined levels of service and key performance indicators interferes with answering the following asset management questions: what do you need to do to it, and how much money do you need? The root cause for this is a deficiency within the asset management activities.

Strategy: Implement/refine asset management activities to define levels of service and monitor and report on the effectiveness of asset management.

4.6. Define Asset Lifecycle Needs

The lack of well-defined asset lifecycle needs (operations, maintenance, refurbishments, renewals and replacements) interferes with answering the following asset management questions: what do you need to do to it, when do you need to do it, and how much money do you need? The root cause for this is a deficiency within the asset management activities.

In order to account for the potential environmental, social and economic consequences of greenhouse gas emissions, asset lifecycle needs shall consider the social cost of carbon and climate change mitigation opportunities.

Strategy: Implement asset management activities to define and quantify asset lifecycle needs which consider risk, lifecycle cost (including the cost of greenhouse gas emissions) and service provision.

4.7. Lengthen Planning Horizon

The lack of planning horizon depth (currently a single year) interferes with the following asset management questions: what do you need to do to it, when do you need to do it, and how much money do you need? The root cause for this is a deficiency within the asset management activities, while the lack of well-defined asset renewal and replacement needs is related and aggravates the lack of planning horizon depth.

Strategy: Implement asset management activities to increase the depth (duration) of asset management and financial plans.

The reactive (rather than pro-active) nature of asset management activities in the City of Saint John is a direct result of the short planning horizon and the lack of well-defined asset renewal and replacement needs. Implementing the two strategies presented above to address these two issues will also make the asset management activities more pro-active.