A GUIDE TO DEVELOPING A MUNICIPAL ASSET MANAGEMENT POLICY

The Local Government Asset Management Working Group of British Columbia Asset Management Policy Sub-committee
**Introduction and background**

All municipalities in British Columbia own, operate and maintain a wide array of infrastructure assets. These assets include, but are not limited to transportation networks, water distribution networks, sewage collection systems, reliable information technology systems, vehicle and equipment fleets, parks, and civic facilities. These assets are expected to function efficiently and effectively for many years.

All of these infrastructures have a defined service life. As these assets age and deteriorate the issue that municipalities are grappling with is how to manage them in such a way to ensure that the full service life is reached and to have in place a mechanism to enable their replacement.

The term asset management, as used in this guide, is defined as “the application of sound technical, social and economic principles that considers present and future needs of users, and the service from the asset”.

To move municipal asset management forward in British Columbia, in 2009, the Local Government Asset Management Working Group of BC identified the need for an asset management policy that can be adopted by municipal councils, and used to guide the development and use of organizational asset management.

This guide outlines the principles and components of an asset management policy and contains an example policy that can be easily adapted and used by municipalities.

**What is an Asset Management Policy?**

An asset management policy articulates a council’s commitment to asset management and provides policy statements to guide staff in carrying out the organization’s business strategies, plans and activities.

While asset management policies usually are general in nature and contain broad principles, they should identify the parts of the organization that will implement the policy. The policy also should clearly outline how asset management is to be integrated within the organization in order that it is coordinated, cost effective and organizationally sustainable.

Once an asset management policy is adopted by a council, it is expected that staff implements the policy through the development and use of guidelines and practices. However, a policy should also include a schedule for reviewing the implementation, the success of the work to that point in time and the relevancy of the policy.
An asset management policy should establish that the organization:

- Maintain and manage infrastructure assets at defined levels
- Monitor standards and service levels to ensure that they meet/support community and the council’s goals and objectives.
- Develop and maintain asset inventories of all its infrastructures.
- Establish infrastructure replacement strategies through the use of full life cycle costing principles.
- Plan financially for the appropriate level of maintenance of assets to deliver service levels and extend the useful life of assets.
- Plan for and provide stable long term funding to replace and/or renew and/or decommission infrastructure assets.
- Consider and incorporate asset management in its other corporate plans.
- Report to citizens regularly on the status and performance of work related to the implementation of this asset management policy.

Key principles for an asset management policy

- The key principles contained in any asset management policy should include as a minimum, directing the organization to:
  - make informed decisions, identifying all revenues and costs (including operation, maintenance, replacement and decommission) associated with infrastructure asset decisions, including additions and deletions. Tradeoffs should be articulated and evaluated, and the basis for the decision recorded.
  - integrate corporate, financial, business, technical and budgetary planning for infrastructure assets.
  - establish organizational accountability and responsibility for asset inventory, condition, use and performance.
  - consult with stakeholders where appropriate.
  - define and articulate service, maintenance and replacement levels and outcomes.
  - manage assets to be sustainable.
  - minimize total life cycle costs of assets.
  - consider environmental goals.
  - consider social and sustainability goals.
  - minimize risks to users and risks associated with failure.
  - pursue best practices where available.
  - report the performance of its asset management program.

Guidelines and practices

Since the performance of asset management is organization specific, reflective of knowledge, technologies and available tools, and will evolve over time, it is appropriate that the responsibility for guidelines and practices should be delegated to staff. However, it is important that a policy outline long term goals with processes and steps on how these goals will be achieved.
An asset management policy should also include some direction for staff to develop guidelines and practices in managing, financing, operating current assets and planning for future assets and the delivery of services. The development of these asset management strategies and plans are essential to accomplishing the long-term goals.

Finally, the policy should require operational plans to reflect the asset management plans.

**Context and integration of asset management within organization**

An asset management policy should outline the context and how asset management is to be integrated throughout the organization’s lines of business. This is typically formalized through references and linkages between corporate documents and activities listed in the policy.

**Key roles for managing the asset management policy**

Finally, an asset management policy should identify the key roles for managing the policy. For example, Council’s role and authority for approving, updating, amending or rescinding the policy should be established, and the staff functional units (and their implementation responsibilities) clearly identified in the policy.

**Why adopt an asset management policy?**

Municipal policies are meant to express Council’s direction for guiding staff in decision making when carrying out the organization’s business strategies, plans and activities. Good policies articulate clear directions, identifies accountabilities and can be consistently applied. These enhance public confidence and improves customer service and the organization’s efficiency and effectiveness.

When a municipality adopts an asset management policy, it also demonstrates to the community that it is exercising good stewardship, and is delivering affordable services while considering its legacy to future residents.

What are the consequences of not adopting a proactive asset management policy? As a municipality’s assets deteriorate, meeting performance levels becomes more difficult. When this happens, organizations may make short-term financial and technical decisions in an effort to curb this trend or ignore the deterioration. By not setting aside sufficient funds to operate, maintain and replace their assets, this deterioration will accelerate and ultimately result in asset failure. This will erode public confidence, threaten community values and goals and impact the community’s economic development.

**How does a municipality develop and adopt an asset management policy?**

Developing an asset management policy involves research, analysis, consultation and synthesis of information to provide recommendations. There are many
approaches a municipality can take to develop and adopt an asset management policy.

One process is for municipal staff to identify the organization’s asset management issues. Then, together with its council and community, they should explore, develop and evaluate alternatives that can be used to achieve acceptable or desired solutions. Staff can then recommend the appropriate policy to their Council for adoption and then implement it.

It is important to maintain dialogue with between staff and Council and to consult with the public and those with interests in the issue throughout any policy development process.

**Example asset management policy**

Another approach for municipalities to develop an asset management policy is to adapt and use the example specific corporate asset management policy as presented in Appendix A. An electronic version of the example policy is also available.

Adapting the policy can be done simply by:
- inserting the municipality’s community vision,
- selecting the corporate documents to be linked with the policy, and
- identifying the functional responsibilities for the organization.

With this approach, the municipality has a specific corporate asset management policy that captures the importance of asset management to the organization and is easily referenced. However, it is important that consultation still occur when this approach is used.

Another approach for municipalities to use is to not have a stand alone asset management policy but rather include asset management principles (or portions of policy principles or guidelines) into other corporate policies (such as an Official Community Plan, Budget or Financial Plan). While this approach is not recommended because it may not adequately emphasize the importance or integration of asset management, the policy statements contained in section 1.0 of the example policy can be separated and inserted into those corporate policies.

**Each municipality is different**
The approach taken by every municipality has to reflect its organization, community and council uniqueness, and consideration should be given to these dynamics.

Regardless of the approach, the process to recommend an asset management policy to a council should always incorporate input from staff, the council, community stakeholders and the public. The process and methods used are typically community specific but may be accomplished using advisory committees, direct consultation and other channels.
One opportunity for municipalities to incorporate public consultation and education is to advance and adopt an asset management policy as part of its annual financial planning and budgeting process.

**What does a municipality do after it adopts an asset management policy?**

After an asset management policy is adopted, the real work begins in the development of an asset management strategy. Because asset management affects everything a municipality does, the development of this strategy and the practice of asset management is a team effort.

The strategy should examine and document the status of asset management in the organization, and identify a future vision and the key objectives for the organization. The formulation of the strategy should include the review of processes, systems, and available data; and based on these findings, determine the required resources and develop a schedule to address the gaps.

After an asset management strategy is developed, municipalities should then develop asset management plans. Asset management plans should be based on current inventories and condition (acquired or derived), projected performance and remaining service life and consequences of losses (e.g., vulnerability assessments, Emergency Management BC Critical Infrastructure assessments). These should be for specific assets and should also consider: levels of service, demand forecasts, asset portfolios, asset management activities (including operations, maintenance, renewal/replacement, and disposals). The plans should also include long term financial forecasts and consider alternative scenarios and risks. It is recommended that public be consulted during the development of the plans.

Once asset management plans are developed, the organization’s operation plans should be adjusted for the asset management work, such as data collection, rehabilitation priorities, deterioration forecasts, resourcing requirements to reflect greater maintenance, and monitoring performance indicators.

There are many tools, guidelines and practices for organizations to use to implement an asset management policy. The Federation of Canadian Municipalities has resources such as InfraGuide: The National Guide to Sustainable Infrastructure that are useful. Some of the useful best practice report from InfraGuide include: Planning and Defining Municipal Infrastructure Needs, Developing Levels of Service, Investment Parameters for Municipal Infrastructure, Managing Infrastructure Assets, Public Consultation for Infrastructure Renewal, and Managing Risk (see http://gmf.fcm.ca/InfraGuide/ Best_Practice_Reports.asp for more information).

Reviewing and reporting on the implementation of the policy
As discussed earlier, an asset management policy should outline the implementation, review and reporting back of the work. For practical considerations, the asset management program should be reported annually to the community, and
a council should review the policy and its implementation at the mid-point of their term.

**When should a municipality develop and adopt an asset management policy?**

The need for an asset management policy has been identified as a priority by the Local Government Asset Management Working Group of BC. There are currently no such policies in British Columbia but there is strong desire by a number of municipalities to have such a policy.

Because the process of developing and adopting a municipal policy may take time, municipalities are encouraged to start their process as soon as possible and look for opportunities to discuss the replacement or rehabilitation of assets among staff, the council and the public. As noted previously, for many municipalities, a great time to advance an asset management policy is during the annual budgeting process.

**Conclusion**

An asset management policy is a useful tool to institutionalize asset management within a municipality. A good policy can clearly articulate a council’s commitment to asset management and be used to guide staff in integrating and coordinating the work of asset management to improve its effectiveness.

More importantly, by using sound asset management practices that results from a good asset management policy, councils and communities can be assured that the assets meet performance levels, are used to deliver the desired service in the long term and are managed for present and future users.

**Acknowledgements**

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APPENDIX A

EXAMPLE MUNICIPAL ASSET MANAGEMENT POLICY
MUNICIPALITY OF ______________

MUNICIPAL ASSET MANAGEMENT POLICY

Policy Number: Supercedes Numbers:

Authority: Council

Approval date:

Effective date:

1.0 COUNCIL ASSET MANAGEMENT POLICY STATEMENTS

Asset management is a broad strategic framework that encompasses many disciplines and involves the entire organization. The term asset management, as used in this document, is defined as “the application of sound technical, social and economic principles that considers present and future needs of users, and the service from the asset”. To guide the organization, the following policy statements have been developed:

a) ____________ will maintain and manage infrastructure assets at defined levels to support public safety, community well-being and community goals.

b) ____________ will monitor standards and service levels to ensure that they meet/support community and Council goals and objectives.

c) ____________ will develop and maintain asset inventories of all its infrastructures.

d) ____________ will establish infrastructure replacement strategies through the use of full life cycle costing principles.

e) ____________ will plan financially for the appropriate level of maintenance of assets to deliver service levels and extend the useful life of assets.

f) ____________ will plan for and provide stable long term funding to replace and/or renew and/or decommission infrastructure assets.

g) Where appropriate, ____________ will consider and incorporate asset management in its other corporate plans.

h) ____________ will report to citizens regularly on the status and performance of work related to the implementation of this asset management policy.
2.0 BACKGROUND AND PURPOSE OF COUNCIL POLICY

Council has a mandate to provide a wide range of services. In order to guide staff with the effective implementation of those services, Council typically adopts policies for important issues that can be used by staff to support Council’s vision, goals and objectives.

Council vision and goals for infrastructure assets

Council’s vision and goal for the community is a safe, livable, sustainable and economically vibrant community underpinned by well managed and maintained infrastructure assets. [insert community specific vision] These assets include but are not limited to efficient transportation networks, economical and reliable water distribution networks, safe and reliable sewage collection systems, reliable information technology systems, productive fleets, and accessible parks, recreation and civic facilities.

Though these assets age and deteriorate, by using sound asset management practices, Council and the community can be assured that the assets meet performance levels, are used to deliver the desired service in the long term and are managed for present and future users.

This policy is to articulate Council’s commitment to asset management, and guides staff using the policy statements. In doing so, this policy also outlines how it is to be integrated within the organization in such a way that it is coordinated, cost effective and organizationally sustainable. This policy also demonstrates to the community that Council is exercising good stewardship, and is delivering affordable services while considering its legacy to future residents.

Staff will implement the policy through the development and use of asset management guidelines and practices. Since the performance of asset management is organization specific, reflective of knowledge, technologies and available tools, and will evolve over time, the responsibility for guidelines and practices are delegated to staff.

3.0 POLICY PRINCIPLES, GUIDELINES AND INTEGRATION

The key principles of the asset management policy are outlined in the following list.

The organization shall:

- make informed decisions, identifying all revenues and costs (including operation, maintenance, replacement and decommission) associated with infrastructure asset decisions, including additions and deletions. Tradeoffs should be articulated and evaluated, and the basis for the decision recorded.
• integrate corporate, financial, business, technical and budgetary planning for infrastructure assets.
• establish organizational accountability and responsibility for asset inventory, condition, use and performance.
• consult with stakeholders where appropriate.
• define and articulate service, maintenance and replacement levels and outcomes.
• use available resources effectively.
• manage assets to be sustainable.
• minimize total life cycle costs of assets.
• consider environmental goals.
• consider social and sustainability goals.
• minimize risks to users and risks associated with failure.
• pursue best practices where available.
• report the performance of its asset management program.

Guidelines and practices

This policy shall be implemented by staff using accepted industry guidelines and practices (such as those recommended by the Federation of Canadian Municipalities, e.g., InfraGuide) and staff shall consider the use of an asset management strategy and asset management plans.

The organization will also comply with required capital asset reporting requirements, and integrate the asset management program into operational plans throughout the organization.

Strategic asset management plans may be developed for a specific class of assets, or be generic for all assets, and should outline long term goals, processes and steps toward how they will be achieved. The asset management plans should be based on current inventories and condition (acquired or derived), projected performance and remaining service life and consequences of losses (e.g., vulnerability assessments, Emergency Management BC Critical Infrastructure Consequence of Loss Assessment). Operational plans should reflect these details. Replacement portfolios and associated financial plans should consider alternative scenarios and risks, as well as include public consultation.

Context and integration of Asset Management within organization (organization specific)

The context and integration of asset management throughout the organization’s lines of business is typically formalized through references and linkages between corporate documents. Where possible and appropriate, Council and staff will consider this policy and integrate it in the development of corporate documents such as:

• Official Community Plan
• Business plans
• Corporate strategic plan
• Corporate financial plan
• Capital Budget plan
• Operational plans and budgets (including vehicle and fleet plans and budgets)
• Neighbourhood plans
• Annual reports
• Design criteria and specifications
• Infrastructure servicing, management and replacement plans, e.g., transportation plans
• Community social plans
• Parks and recreation plans
• Facility plans

4.0 KEY ROLES FOR MANAGING THE ASSET MANAGEMENT POLICY

City policies are approved by Council. While staff, public and other agencies may provide input on the nature and text of the policy, Council retains the authority to approve, update, amend or rescind policies.

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>Identification of issues, and development of policy updates</td>
<td>Council and staff</td>
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<tr>
<td>Establish levels of service</td>
<td>Council, staff and public</td>
</tr>
<tr>
<td>Exercise stewardship of assets, adopt policy and budgets</td>
<td>Council</td>
</tr>
<tr>
<td>Implementation of policy</td>
<td>Chief Administrative Officer and staff</td>
</tr>
<tr>
<td>Development of guidelines and practices</td>
<td>Chief Administrative Officer and staff</td>
</tr>
<tr>
<td>On-going review of policies</td>
<td>Council and staff</td>
</tr>
</tbody>
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Implementation, review and reporting of asset management work

The implementation, review and reporting back regarding this policy shall be integrated within the organization. Due to the importance of this policy, the organization’s asset management program shall be reported annually to the community, and implementation of this policy reviewed by Council at the mid-point of its term.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility (suggested functions only—organizations to use those specific to their organization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt Asset Management Policy</td>
<td>Council and Chief Administrative Officer</td>
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<td>Monitor and review infrastructure standards and service levels at established</td>
<td>Council and Chief Administrative Officer</td>
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<td>intervals</td>
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<tr>
<td>Develop and maintain infrastructure strategies including development and</td>
<td>Planning, Public Works, other asset operation and maintenance</td>
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<td>service plans</td>
<td>departments, Finance</td>
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<tr>
<td>Develop and maintain asset inventories</td>
<td>Public Works, other asset operation and maintenance departments</td>
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<tr>
<td>Assess infrastructure condition and service levels</td>
<td>Public Works and other asset operation and maintenance departments</td>
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<tr>
<td>Establish and monitor infrastructure replacement levels through the use of</td>
<td>Public Works and other asset operation and maintenance departments</td>
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<td>full life cycle costing principles</td>
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<tr>
<td>Develop and maintain financial plans for the appropriate level of</td>
<td>Public Works, other asset operation and maintenance departments</td>
</tr>
<tr>
<td>maintenance, rehabilitation, extension and decommission of assets</td>
<td></td>
</tr>
<tr>
<td>Report to citizens on status of the community’s infrastructure assets</td>
<td>Council, Chief Administrative Officer, Corporate Communications</td>
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<tr>
<td>and asset management program. The channels may include annual citizen</td>
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<td>reports, business plans, etc.</td>
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