

For Information Only

Asset Management Program

Presented To: Finance and
Administration
Committee

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Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to the sustainable infrastructure priority as identified in the Strategic Plan.

Report Summary

The purpose of this report is to present the state of the City's Asset Management Program to Council by outlining the major steps and milestones to develop and implement the City's Asset Management Plan in accordance with the new provincial regulations.

Financial Implications

There are no financial implications associated with this report.

Signed By

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Asset Management Program

Background

The City is responsible for the maintenance and operation of assets valuing \$2.8 billion. These assets are critical for the delivery of service levels expected by the residents of the City of Greater Sudbury.

The City, like most Canadian municipalities, must overcome multiple challenges in managing assets including aging infrastructure; expectations of higher levels of service with minimal financial impact; increasingly demanding and complicated legislation with environmental requirements; and mitigation of the increased risk involved with the execution of service delivery. Due to these increasing pressures, the City will need to implement a focused and calculated approach to address these challenges through the development of a detailed asset management plan.

Asset management is the systematic and coordinated activities and practices of an organization to optimally and sustainably deliver on its objectives through cost-effective life-cycle management of assets. In June 2011, the province of Ontario released a long-term infrastructure plan for Ontario entitled *Building Together*. *Building Together* laid out a standardized and calculated approach to asset management planning. *Building Together* in conjunction with the *Infrastructure for Jobs and Prosperity Act, 2015* established a criteria and timeline for all municipalities to have an Asset Management Plan in place by December 31, 2016. An asset management plan was required by this date in order to be eligible for Federal and Provincial Government Funding. The City of Greater Sudbury's Asset Management Plan (2016), was produced by KPMG in conjunction with City staff. The plan reflects an approximate level of the financial requirements associated with maintaining City assets in a good state of repair.

On May 25, 2017 the Government of Ontario released a proposed Asset Management Regulation which they requested feedback from municipalities. Feedback was received, taken under consideration and on December 13, 2017 the province approved *O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure* under the *Infrastructure for Jobs and Prosperities Act, 2015*. The effective date of *O. Reg. 588/17* is January 1, 2018, however there are no requirements to be met for this date. The new Provincial Regulation alters the proposed phasing period reported to Finance and Administration on October 24, 2017.

The purpose of this report is to present the state of the City's Asset Management Program to Council by outlining the major steps and milestones to develop and implement the City's Asset Management Plan in accordance with the new provincial regulations. This report is a follow-up to the Asset Management Strategy report provided to Council in October 2017.

Asset Management Program Status Report

The next steps in the progression of the City's asset management plan are summarized in Table 1. Additional information for these milestones is also provided below Table 1.

Table 1: Steps and Milestones			
	Milestone	Date Required (Legislation)	Status
1	Asset Management Policy	July 1, 2019	Complete
2	Capital Prioritization Tool	-	In Progress
3	Asset Management Plan (Phase 1) for core infrastructure assets (roads, bridges and culverts, water, wastewater and stormwater management) that discusses current levels of service and the cost of maintaining those services.	July 1, 2021	In Progress
4	Asset Management Plan (Phase 2) for all municipal infrastructure assets that discusses current levels of service and the cost of maintaining those services.	July 1, 2023	Data collection underway; Phase 2 plan to commence following Phase 1 implementation
5	Asset Management Plan (Phase 3) for all municipal infrastructure assets that builds upon the requirements achieved in 2023. Additional requirements include proposed levels of service, the activities required to achieve the proposed levels of service and a financial plan to fund the activities.	July 1, 2024	Phase 3 plan to commence following Phase 2 implementation
6	Annual review of Asset Management Progress following implementation of the Phase 3 asset management plan.	July 1 (annually)	July 1 (annually)
7	Asset Management Policy and Plan updates.	Every 5 years	Every 5 years
8	Internal and External Transparency - Policies and Plans shall be provided to the ministry or any persons as requested and will be posted to the City's website.	Once Completed	Once Completed.

1. Attached as Appendix A is the City's Enterprise Asset Management Policy which has been created to meet the legislative requirements which are discussed below.
 - The purpose of the policy is to outline the City's municipal goals and plans for continuous improvement and adoption of best practices regarding asset management planning.
 - The policy provides a framework to achieve the City's goals and plans with the introduction of critical asset management guiding principles.
 - A citywide commitment and collaboration is required for the successful implementation of the asset management program. The asset management policy defines the roles and responsibilities of different groups such as Council, the City's Executive Leadership Team, the City's Asset Management Coordinator, Divisional and Sectional Leaders, Financial Services and Asset Users and Operators.
2. Currently in development is the Capital Prioritization Tool. This tool will provide a link to the Capital Budget Policy which will be provided under a separate report. The Capital Prioritization Tool is being developed in accordance with the asset management guiding principles outlined within the Enterprise Asset Management Policy with the objective of achieving the following:
 - The purpose of the Capital Prioritization Tool is to ensure a clear and calculated approach to capital funding allocation by assisting decision makers with strategically prioritizing what needs are most important and in understanding how they can be addressed.
 - The Capital Prioritization Tool will consider legislative requirements such as the Accessibility for Ontarians with Disabilities Act.
 - Risk management is a major component to support the life-cycle of an asset. The City's risk management goals involve identifying, understanding and mitigating the risks involved with owning and operating infrastructure assets. A risk exposure assessment will be incorporated into the Capital Prioritization Tool to ensure the City takes the best approach to manage and maintain assets within an acceptable level of risk.
3. The primary milestone of the asset management program is the Asset Management Plan. As a minimum the first iteration of the City's Asset Management Plan will include core infrastructure assets as per legislation.
4. Following the completion of the asset management plan for core infrastructure, the City will continue working on the asset management plan to incorporate all municipal infrastructure assets such as Fleet and Buildings and Facilities.

5. The Phase 3 asset management plan will include additional clarity on proposed levels of service, inventory/lifecycle management, as well as a financial strategy which incorporates solutions to address any funding shortfall, a financial strategy to service growth (ex. development changes) and a risk analysis.

Next Steps

1. The City is in the process of implementing an enterprise-wide method for capital prioritization. The prioritization process will differ from the envelop system from previous years and will support the key principles outlined in the Enterprise Asset Management Policy.

The proposed capital prioritization process will provide Council the opportunity to establish capital priorities through categories such as Public Safety, Environment, Transportation, Recreation, Land Use Planning, Corporate Support, Health and Economic Development. This process will be presented to the Finance and Administration Committee as a part of the Budget direction report scheduled for the May 15, 2018 meeting.

Technical experts within City departments will prioritize projects using an enterprise-wide tool being developed by City staff. The tool will be distributed with the 2019 Budget Call. A committee of peers will rank the projects using this tool and ELT will prepare the capital budget on the basis of this prioritization.

2. The Capital Budget Policy is being refined to reference the Long Term Financial Plan and consider the priorities outlined by the proposed capital prioritization process. The revised Capital Budget Policy will be provided in June.
3. Capital Budget Deliberations and Approval will occur in Early 2019.

Conclusion

This report provides information on the steps staff will be taking to implement an enterprise wide approach to evolving the City's asset management program and prioritizing capital investment.

The timeline for development and implementation of the City's asset management program has been outlined by the Province under the *Ontario Regulation 588/17*. The success of the City's asset management program relies on the collaboration of all City departments. Staff within Corporate Services will work with individual departments to ensure the City meets and achieves the steps and milestones as outlined.

Asset management will continue to provide the City with a framework for consistent, calculated, reliable and transparent decision making. Staff will update Council regularly on the status of the City's asset management plan.

References

1. Ministry of Infrastructure Ontario (2011) Building Together – Guide for municipal asset management plans. (Online: <https://www.ontario.ca/page/building-together-guide-municipal-asset-management-plans>). Queen's Printer for Ontario 2012.
2. Infrastructure for Jobs and Prosperity Act, 2015. (Online: <https://www.ontario.ca/laws/statute/15i15>). Queen's Printer for Ontario 2015.
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4. KPMG (2016) City of Greater Sudbury Municipal Asset Management Plan. KPMG, Sudbury, Ontario. (Online: <http://agendasonline.greatersudbury.ca/index.cfm?comid=58&year=2016&lang=en&browse=Search#browsebycommittee>). November 28th, 2016.

Enterprise Asset Management Policy

1. Introduction:

Asset management planning is the process of making the best possible decisions regarding the acquisition, operating, maintaining, renewing, replacing and disposing of infrastructure assets and is regarded as best practice for long-term financial planning. The objective of the City of Greater Sudbury Enterprise Asset Management Policy is long-term sustainability through principles which target a coordinated and consistent asset management approach for all asset classes in accordance with O. Reg. 588/17: *Asset Management Planning for Municipal Infrastructure*.

The City of Greater Sudbury (the City) strives to ensure a high quality of life is provided to the public through municipally funded services including water and wastewater services, storm water management, intricate transportation networks, public transit, emergency services, sport and recreation, cultural services and solid waste management.

Many of the assets belonging to the City have long-term lifecycles spanning over decades such as roads networks and buildings, while other asset lifecycles are short in comparison such as advancing technology and security or capacity requirements. Long-term lifecycles require operational maintenance and rehabilitation or renewal activities to ensure the established levels of service are delivered.

Over time the City has addressed the development and implementation of asset management strategies to manage asset lifecycles. The City has proactively examined and implemented long-term rehabilitation and replacement strategies through condition assessments and reporting on the state of the infrastructure.

During the year-end of December 31st, 2016, the City reported a total investment of \$2.826 billion in tangible capital assets (TCA) at historical cost; for which an estimated total replacement cost of over \$7 billion has been determined. These tangible capital assets contribute to the high quality of life enjoyed by city residents and are essential to deliver the necessary levels of service. The TCA included in this description are shown in Figure 1 below.

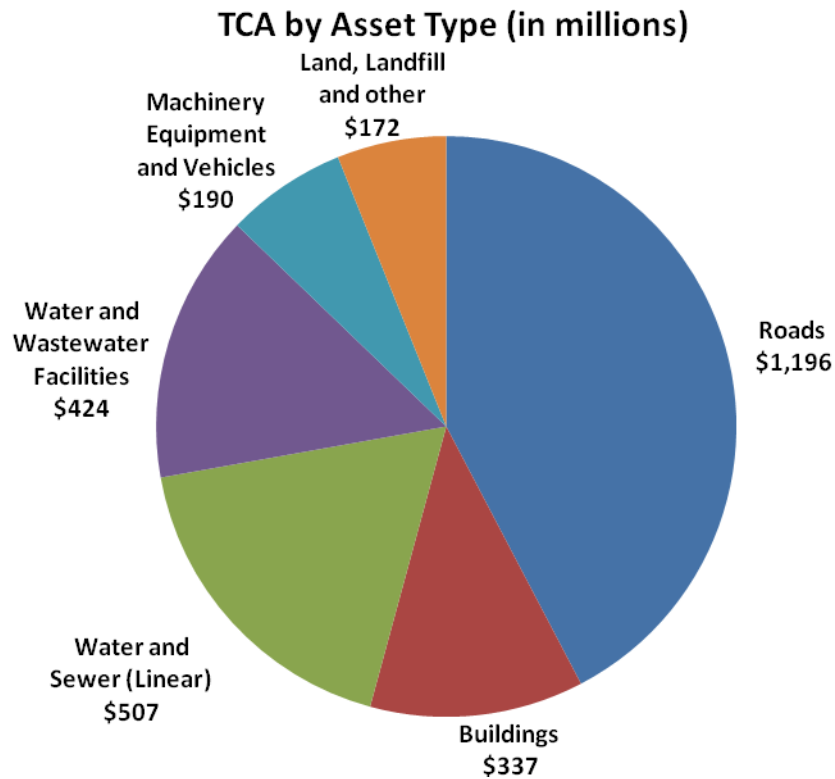


Figure 1: Tangible Capital Assets owned by the City to date. The term other represents assets under construction which includes roads, buildings, water and wastewater infrastructure, etc.

The Enterprise Asset Management program strives to achieve sustainability through established levels of service, asset level of service, cost effective life cycle management and risk assessment. This policy will play a critical role in guiding the development of consistent asset management practices across the City.

2. Policy Statement

The City of Greater Sudbury ensures its municipal infrastructure systems are supported by plans and financing decisions that demonstrate effective service support and appropriate regard for managing lifecycle costs.

3. Application

This policy applies to the lifecycle management activities of physical assets that are owned and operated by the City of Greater Sudbury. This policy sets out the organization's commitments and expectations for decisions and activities concerning asset management.

4. Purpose

This policy provides guidance applicable to the whole organization and all of its services to minimize the risk of service interruption or increased cost due to asset failure while supporting the consistent delivery of expected service levels.

5. Terms and Definitions

Asset: a) are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets;
b) have useful economic lives extending beyond an accounting period;
c) are used on a continuing basis; and
d) are not for resale in the ordinary course of operations.

Asset Level of Service (ALoS): The condition and performance expectation for a given asset in order to produce desired levels of service.

Asset Management: The systematic and coordinated activities and practices of an organization to optimally and sustainably deliver on its objectives through cost-effective life cycle management of assets.

Asset Management Plan: Long-term plans that outline the asset activities and programs for each service area and resources applied to provide a defined level of service in the most cost-effective way.

Enterprise Asset Management Program: The application of asset management principles and practices on an enterprise level to ensure a consistent, coordinated, cost effective and sustainable approach across all City departments to achieve the enterprise asset management goals.

Fiscal Stewardship: The representation of planning, attention, conservancy, care and management of the City's financial resources.

Life-Cycle: The time interval stages involved in the management of an asset beginning with the identification of the need for the asset, through design, construction and commissioning, maintenance and rehabilitation of the asset and concluding with the decommissioning and disposal of the asset.

Life-Cycle Costs: The total cost of an asset through its life including planning, design, construction, acquisition, operation, maintenance and rehabilitation and disposal costs.

Levels of Service (LoS): describes the outputs or objectives an organization or activity intends to deliver to customers via the respective asset class.

Risk Management: Coordinated activities to direct and control an organization with regard to risk.

Strategic Plan: A plan containing the long-term goals and strategies of an organization. Strategic plans have a strong external focus, cover major portions of the organization and identify major targets, actions and resource allocations relating to the long-term survival, value and growth of the organization.

6. Enterprise Asset Management Goals

To provide a framework and principles for asset management strategies that:

- Ensure legislative requirements are achieved;
- Create understanding about and optimize asset life-cycle costs while maintaining acceptable levels of service;
- Ensure existing and future asset needs are prioritized;
- Link investment decisions to service outcomes;
- Demonstrate financial sustainability through full life-cycle cost planning;
- Focus on long-term considerations and decision making.

7. Principles

The City owns, operates and maintains a wide variety of assets. The objective of the Enterprise Asset Management Policy is to ensure acceptable levels of service over the long term are satisfied by appropriate asset management practices throughout an asset's service life.

Asset Management guiding principles and practices will help to achieve the City's goals to provide the required services to support community needs by:

- Establishing full life-cycle costing principles aligned with asset management strategies that minimize ownership costs over the asset's service life;
- Maintaining assets in order to deliver defined levels of service that meet legislative requirements and customer expectations;
- Reducing reactive maintenance by emphasizing a planned asset maintenance approach;
- Risk management strategies to support service delivery at expected levels of service;
- Clear and continuous connections to the corporation's long-term financial plan and related financial policies;

- A system of performance monitoring and reporting on asset level of service and the impacts of potential changes in policy, levels of service or risk;
- Desired asset level of service will inform choices about appropriate maintenance strategies;
- Coordinate asset management planning to provide connection with multiple interrelated assets;
- Development and evolution of asset management knowledge, messaging and competencies across the corporation and with the public to ensure participation, feedback and appropriate use of the Enterprise Asset Management Program;
- Capital assets that the City does not require to meet its current or future program or operational needs are disposed;
- Align Infrastructure planning and priorities with the principles outlined in section 3 of the Infrastructure for Jobs and Prosperity Act, 2015 including:
 - alignment with Ontario's land-use planning framework;
 - promote economic competitiveness and innovation;
 - continued provision of core public services such as health care and education;
 - protect the health and safety of workers involved in the construction and maintenance of infrastructure assets.
- Minimize the impact of infrastructure on the environment and design infrastructure to be resilient to the effects of climate change. Monitor vulnerabilities caused by climate change and anticipate costs to manage vulnerabilities.
- Maintain assets to protect the safety of the public and health & safety of our employees.

8. Key Documents in Asset Management Framework

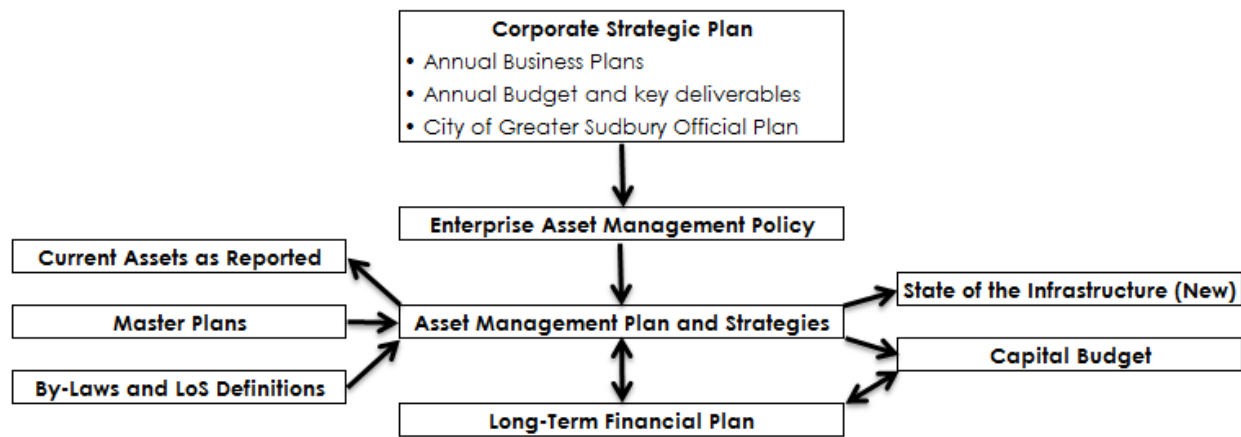


Figure 2: Key Documents in the City's Asset Management Framework.

1. Corporate Strategic Planning Documents

The mission of the City of Greater Sudbury as detailed in strategic planning documents provides the overall direction and requirement for Asset Management Policy and Planning. The annual work planning process drives the production of the budget which is the authoritative source of levels of service. These levels of service place a demand on assets.

2. Enterprise Asset Management Policy

The Asset Management Policy will establish the goals and outline the key principles for the enterprise asset management program. This policy is intended to provide clear asset management direction.

3. Asset Management Plan

The Asset Management Plan will be developed in accordance with Building Together – Guide for Municipal Asset Management Plans, the International Infrastructure Management Manual, 2015, O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure, 2017 and the principles included in Section 3 of the Infrastructure for Jobs and Prosperity Act, 2015. Information collected and analyzed shall include:

- Sustainable financial planning with an understanding of impacts on the level of service delivered;
- Changing demographics and economic trends;
- AODA accessibility standards, Water Opportunities Act, Safe Drinking Water Act, Occupational Health and Safety Act, Ontario's land-use planning framework, Planning Act, and other applicable legislation and standards;

- An understanding of current asset inventories and condition, as well as projected performance, remaining service life, future needs and costs;
- A clear understanding of risks related to assets and the City's ability to mitigate the risks including consequences of failure and contingency planning;
- The feasibility of acquiring or constructing new assets.

The capital threshold to determine which assets will be included within the asset management plan shall be in accordance with the City's Capitalization Threshold as outlined in the Tangible Capital Asset Policy.

3.1. Asset Management Strategy

The Asset Management Strategy requires collaboration between all personnel listed within section 9 Roles and Responsibilities.

The strategy will reflect levels of service expectations and the department's planned outcomes. Asset maintenance practices will continue to be developed and implemented with the objective of maximizing asset life-cycle and reliability by carrying out interventions at the right place and the right time considering budgetary and resource constraints.

The strategy will also include prioritization of required maintenance, rehabilitation and construction projects combined with budget requirements to be incorporated in the City's budget planning.

9. Roles and Responsibilities

Council

- Establish levels of service expectations.
- Approve the enterprise asset management plans.
- Approve asset investment and service delivery requirements for capital and operations through the annual budget process.

Executive Leadership Team

- Endorse asset management plans and strategies.
- Create an asset management governance structure.
- Develop administrative plans to address Council's level of service expectations.
- Demonstrate support for and encourage application of the Asset Management Principles.
- Produce a "State of the infrastructure" report to Council at least once per term.
- Ensure alignment of Asset Management Plans and Strategies with organizational objectives and strategies.
- Recommend asset investment and service delivery required for capital and operating through the annual budget process.

Asset Management Coordinator

- Establish policies and practices to ensure consistency across the corporation.
- Encourage information sharing throughout the departments.
- Provide input and guidance or assistance for development of divisional asset management plans following a standardized and consistent methodology.
- Provide support during the development of levels of service.
- Review, develop, recommend and implement asset management policies, guiding principles, plans and strategies.
- Review and monitor the performance of Asset Management Plan and Strategies for continuous improvement.
- Coordinate financial planning, strategic planning and information technology requirements.
- Produce reporting of asset class data.
- Ensure compliance with provincial asset management legislation and standards.
- Ensure accountability for implementation of goals and objectives.
- Lead the implementation of asset management initiatives.

Divisional and Sectional Leaders

- Ensure project, operations and maintenance work is consistent with enterprise asset management objectives.
- Liaise with all stakeholders with respect to asset management objectives and levels of service.
- Provide input and direction for development of divisional asset management plans.
- Responsible for the development and implementation of asset management plans and strategies.
- Coordinate sectional asset management reporting.
- Development of asset inventories, condition assessments and risk assessments.
- Develop and implement data collection requirements to meet asset management objectives.
- Lead the implementation of asset management initiatives.

Financial Services

- Provide financial business partnerships to departments.
- Ensure the financial stewardship of financial assets and records.
- Ensure consistent and pertinent financial reporting.

Asset Users and Operators

- Provide input on current levels of service.
- Provide input on current status of asset function and life-cycle.
- Provide input on asset needs to meet approved levels of service.
- Participate in the development and implementation of divisional asset management plans.
- Regularly review asset documentation, data collection requirements, data inputs/outputs and asset measurement tools for relevance with existing policies and practices.
- Respect assets under their care and responsibility including implementing any preventative maintenance programs, and operating in accordance with defined operating limits, guidelines, and regulatory limitations.

10. Reference Material

KPMG (2016) City of Greater Sudbury Municipal Asset Management Plan. KPMG, Sudbury, Ontario. (Online: <http://agendasonline.greatersudbury.ca/index.cfm?comid=58&year=2016&lang=en&rowse=Search#browsebycommittee>). November 28th, 2016.

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