

A. Appendix A: Enterprise Asset Management Policy

A.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*.

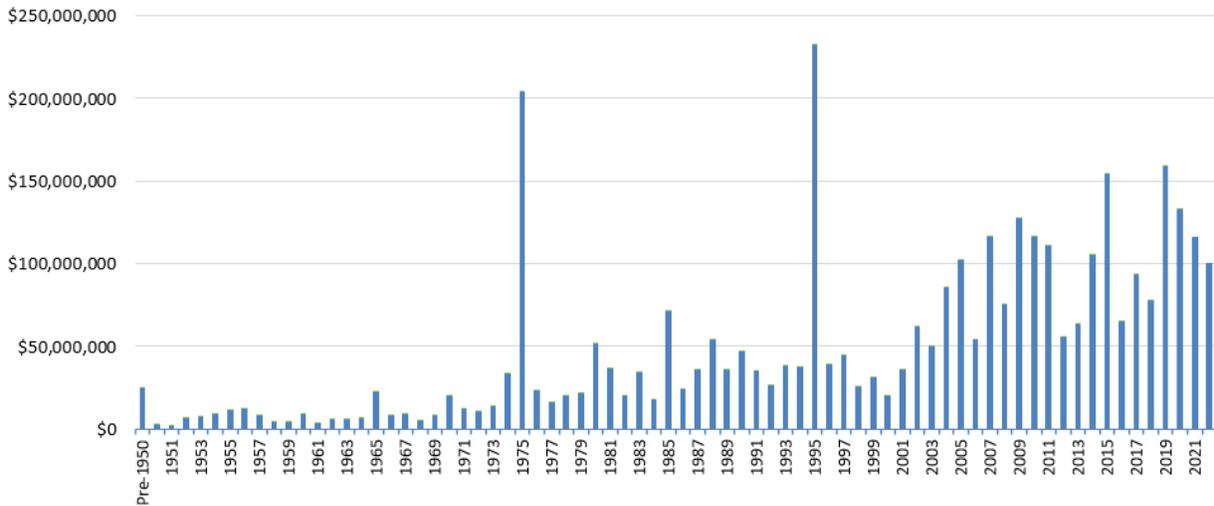
The City of Greater Sudbury (the City) strives to ensure a high quality of life is provided to the public through municipally funded services including water and wastewater services, stormwater management, intricate transportation networks, public transit, emergency services, sport and recreation, cultural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

As of the year end 2022, the City has a total historical infrastructure investment of \$3.568 billion; for which an estimated total replacement cost of over \$11.06 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 total historical infrastructure investment detailed by year of expenditure is detailed below.

Figure 1: Asset Investment History for ALL Infrastructure (2022)



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.

A.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.

A.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.

A.4. Purpose

This policy provides guidance applicable to the whole organization and all 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.

A.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 to produce desired levels of service.

Asset Management: The systematic and coordinated activities and practices of an organization to deliver on its objectives optimally and sustainably 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.

Lifecycle: 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 regarding 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.

A.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.

A.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 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.

A.8. Key Documents in the Asset Management Framework

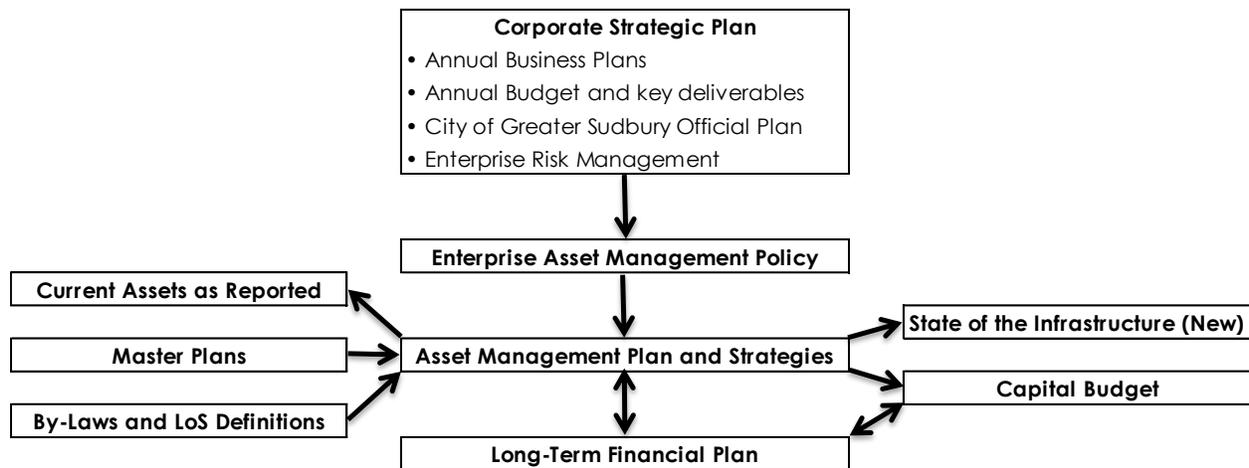


Figure 2: Key Documents in the City's Asset Management Framework

A.8.1 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.

A.8.2 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.

A.8.3 Enterprise 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 service rendered will be the determining factor of whether to include an asset in asset management plans. An asset with a role in service delivery that requires deliberate management will be included. The capital threshold outlined in the Tangible Capital Asset Policy and professional judgment will be used to determine which assets are to be included in the asset management plans.

A.8.4 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.

A.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

- The General Manager of Corporate Services is the executive lead for the Asset Management Program.
- 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 asset class specific 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 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.

A.10. Legislation and Reference Materials

KPMG (2016) City of Greater Sudbury Municipal Asset Management Plan. KPMG, Sudbury, Ontario. (Online: <https://agendasonline.greatersudbury.ca/?pg=agenda&action=navigator&lang=en&id=1034&itemid=11966>). November 28th, 2016.

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.

Infrastructure for Jobs and Prosperity Act, 2015. (Online: <https://www.ontario.ca/laws/statute/15i15>). Queen’s Printer for Ontario, 2015.

Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure. (Online: <https://www.ontario.ca/laws/regulation/r17588>). Queen’s Printer for Ontario, 2017.

City of Greater Sudbury Strategic Plan, 2019 - 2027. (Online: <https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/>)

The City of Greater Sudbury Official Plan, 2019. (Online: <https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/official-plan/>)

The City of Greater Sudbury 2021 Budget. (Online: <https://www.greatersudbury.ca/city-hall/budget-and-finance/2021-budget/>)

KPMG (2017) City of Greater Sudbury Municipal Long-Term Financial Plan. KPMG, Sudbury, Ontario. April 13, 2017. (Online: <https://www.greatersudbury.ca/city-hall/budget-and-finance/financial-reports-and-plans/>)

BMA (2019) City of Greater Sudbury Water and Wastewater Long-Range Financial Plan. BMA, Sudbury, Ontario. April 2019. (Online: <https://www.greatersudbury.ca/live/water-and-wastewater-services/projects-plans-reports-and-presentations/water-wastewater-financial-plan/wwwgreater-sudbury-final-report-april-2019-v2-pdf/>)

Various City of Greater Sudbury Plans for example the Transportation and Water and Wastewater Master Plans. (Online: <https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/>)

City of Greater Sudbury By-Laws. (Online: <https://www.greatersudbury.ca/city-hall/by-laws/>)

Fiscal Transparency and Accountability Act, 2004. (Online: <https://www.ontario.ca/laws/statute/04f27>). Queens Printer for Ontario, 2012 – 18.

Municipal Act, 2001. (Online: <https://www.ontario.ca/laws/statute/01m25>). Queen's Printer for Ontario, 2012 – 18.

Water Opportunities Act, 2010. (Online: <https://www.ontario.ca/laws/statute/10w19>). Queen's Printer for Ontario, 2012 – 18.

Accessibility for Ontarians with Disabilities Act, 2005. (Online: <https://www.ontario.ca/laws/statute/05a11>). Queen's Printer for Ontario, 2012 – 18.

Safe Drinking Water Act, 2002. (Online: <https://www.ontario.ca/laws/statute/02s32>). Queen's Printer for Ontario, 2012 – 18.

Occupational Health and Safety Act, 1990. (Online: <https://www.ontario.ca/laws/statute/90o01>). Queen's Printer for Ontario, 2012 – 18.

Purchasing By-Law 2014-01 and amendment 2017-158. (Online: <https://www.greatersudbury.ca/city-hall/open-government/statutes-and-policies/>)

Greater Sudbury Community Energy and Emissions Plan (Online: <https://www.greatersudbury.ca/live/environment-and-sustainability1/net-zero-2050/>)