



POLICY

Municipal Works

Policy #: 340.01

Issue Date: June 25, 2019

Revision Date: N/A

Asset Management Policy

1. PURPOSE

The City of Niagara Falls (hereinafter called the “City”) provides a wide range of services to the community that require the ownership and responsible operation, maintenance and rehabilitation of physical assets including land, land improvements, buildings, equipment, transportation, drainage, sewer and water infrastructure.

Asset Management (AM) is an integrated approach, involving all City departments, in delivering value to the community through the effective management of existing and new infrastructure assets. The intent is to maximize benefits, reduce risk and provide satisfactory levels of service to the community in a sustainable manner. Good asset management practices are fundamental to achieving sustainable and resilient communities, and implementing an asset management policy is a requirement of provincial legislation and regulation.

The purpose of the AM Policy is to affirm the City’s commitment to embrace sound AM practices and to align and integrate them into our strategic planning processes. This policy outlines the fundamental AM principles to be implemented across the City.

2. SCOPE

The City owns a wide range of asset types that deliver services to the community of Niagara Falls. Each year the City may receive, acquire or construct new assets. In addition, the City may rely on natural assets or other assets that the City does not own, in order to deliver services. This AM policy applies to the assets owned by the City. Where service provision is supported by other assets not owned by the City, we will work collaboratively with those assets owners (upper-tier or neighbouring municipalities, for example) and promote the principles outlined in this policy.

Appendix 1 summarizes the services that the City provides, and includes examples of the asset groups and asset types owned by the City that support the delivery of those services. The policy applies to all existing and new physical assets, including but not limited to: roads, sidewalks, bridges, transit, watermains, sanitary and combined sewers, storm drainage systems, fleet, technology systems, buildings, parks, recreation facilities, cemeteries, and street trees.

3. DEFINITIONS

Asset Management Strategy – defines how the municipality’s various strategic objectives translates to AM objectives and associated decision making criteria. The strategy also defines how the AM systems will implement the principles set out in the AM policy, including setting out AM objectives, levels of service, and performance metrics and targets.

Asset Management Plan – plan that documents management practices and processes that enable municipal infrastructure assets to provide safe and sustainable services delivered in a predictable, cost-effective manner to a specified level of service. The management of infrastructure assets includes all related lifecycle activities associated with these assets.

Capitalization Threshold – threshold at or above which a resource is considered an asset. It is also the value of a municipal infrastructure asset at or above which a municipality will capitalize the value of it and below which it will expense the value of it. The City’s capitalization threshold is defined in the Tangible Capital Asset Accounting Policy, latest revision.

Condition Assessments – updating current infrastructure age based asset data by investigating, inspecting, testing, and assessing assets in the field to rate their ability to deliver a specified level of service. These assessments can include, but are not necessary limited to: structural condition, operating performance, and service capacity.

Levels of Service – parameters, or a combination of parameters, that reflect the social, political, and environmental outcomes from services that the municipality provides to their community. These parameters can include, but are not necessarily limited to: safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost and availability.

Risk and Criticality Modelling – utilize best practices adopted in municipal AM plans in reference to climate change vulnerability, disaster and contingency planning throughout the expected life of the City’s assets. History of failures, breaks and reliability data will be utilized to ensure all risks are included. Risk assessment will include both the probability and consequences or harm of potential failures.

Lifecycle Activities and Financial Strategies – associated activities undertaken with respect to a municipal infrastructure asset over its service life, including investment, design, construction, acquisition, operation, maintenance, renewal, replacement and decommissioning.

4. PRINCIPLES

When making decisions respecting infrastructure, the City shall consider the following principles:

4.1 Service Delivery – Customer Service Focused

The City will clearly define level of service objectives that balance community expectations and regulatory requirements with risk, affordability and available resources, and will do the following:

- Manage assets appropriately in order to efficiently and effectively deliver the defined levels of service.
- Monitor and periodically review level of service objectives to ensure that they meet or support community, council and economic expectations and other strategic objectives and priorities.

The City will ensure transparency and accountability to the community on service delivery. This will include regular communications to council to share information on service performance as well as technical information such as asset condition.

The City commits to providing opportunities for municipal residents and other interested parties to provide input into the City's AM planning.

The City will implement an AM system that incorporates risk-based and information driven decision-making frameworks that appropriately consider the potential impacts of asset failure on ongoing service delivery. The City will adopt AM practices and procedures that identify opportunities to avoid or minimize impacts from potential asset failures. The City will prioritize and direct resources and expenditure in order to deliver levels of service and other community benefits at an acceptable level of risk.

The City will comply with all relevant legislative, regulatory and statutory requirements. In particular, the City will include AM planning principles as described in Section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015*.

The City will ensure that decisions regarding the need for new assets are made with appropriate due diligence; and that these needs are evaluated with a focus on service delivery to the community, and supported with a valid business case that articulates costs and benefits.

4.2 Long Term Sustainability, Resiliency and Adaptability

The City's AM decision-making will consider the needs of both current and future generations and the potential challenges associated with changing community demographics and expectations related to services delivery, as well as potential modifications to legislative requirements.

The City's AM decision-making will consider the potential effects of climate change and other environmental changes, and how the increased severity and frequency of climatic events may directly affect levels of service. Where appropriate, the City will adopt a proactive approach to:

- Identifying the vulnerabilities that may be caused by climate change to its existing and proposed infrastructure assets and their potential costs;
- Considering the means to address those vulnerabilities as they relate to operations and maintenance schedules, life cycle management activities, and levels of service;

- Considering the adaptation opportunities that may be undertaken to manage those vulnerabilities;
- Considering mitigation approaches to limit the magnitude or rate of long-term climate change (such as greenhouse gas emission reduction goals and targets); and
- Consider disaster planning and contingency funding.

The City will consider socio-cultural, environmental and economic factors and implications (triple bottom line considerations) when making and implementing asset management decisions.

4.3 Holistic “Big picture” approach

To support AM decision-making, the City will take steps to connect the appropriate departments, functions and support activities in order to build effective working relationships and encourage information sharing. These departments and functions include planning, building, development, engineering, transportation, operations, maintenance, finance, recreation and culture, information systems and other strategic planning functions such as sustainability.

AM decision-making will drive optimum value for the community by focusing on the “big picture”. The City will therefore ensure that decisions are made collaboratively and consider all life-cycle stages and the inter-relationships between asset performance, operational performance and overall service performance. Decision-making will also recognize the interconnected nature of asset systems and how decisions about one set of assets may potentially interact with or affect assets controlled by other departments or functions. In utilizing the guidelines provided by *Ontario Regulation 588/17* and the *Infrastructure for Jobs and Prosperity Act, 2015*, the City will ensure all requirements will be included in future management of all City assets, including Infrastructure planning and investment decision-making.

4.4 Strategic Alignment

The City’s AM Plan and practices will include special considerations to align with:

- City Council Strategic Priorities;
- Financial Plans relating to the City’s water and wastewater assets;
- Ontario’s land-use planning framework;
- Development Charges By-Laws;
- Master Plans for Municipal Infrastructure; and
- Capital forecast plans

4.5 Fiscal Responsibility and Asset Management Decision-making

The City will develop and maintain appropriate plans for infrastructure renewal, for the purchase and construction of new infrastructure and for the decommissioning of redundant infrastructure. This includes:

- Developing long term projections of investments needs.
- Applying rigorous analysis, including consideration of risk, to identify short term investment needs.
- Implementing processes to ensure that proposed investment plans address needs efficiently and effectively, and mechanisms to ensure long term financial sustainability.
- Implementing processes to address the operational budget implications of capital investments.
- Exploring efficiency opportunities where appropriate, including new technologies.
- Identifying mitigation strategies to address infrastructure deficits.

The City will evaluate relevant asset investment decisions based on consideration of the whole-life costs associated with managing those assets through their entire lifecycle.

The City will consider the AM Plan and related plans in its annual municipal budgeting and long-term financial planning by incorporating an analysis on the cost of asset preservation and renewal.

The City will develop prioritized capital investment plans that reflect community and stakeholder expectations with regard to levels of service and other strategic objectives. The City will evaluate the magnitude, nature and overall balance of investment plans considering the aggregate value derived for the community, affordability, willingness to pay and intergenerational equity.

4.6 Innovation and Continual Improvement

The City views continual improvement as a key part of our asset management approach and will focus on driving innovation in the development of tools, techniques and solutions.

The City will monitor and periodically review the effectiveness of AM processes and the wider AM system in supporting the delivery of strategic objectives and will make adjustments as required.

The City will assess the AM competencies required to implement the AM system and provide the necessary support, education and training to staff responsible for AM functions.

The City will review the AM policy in conjunction with its review of the AM strategies, at a minimum, every five years for Council consideration and approval.

5. ROLES AND RESPONSIBILITIES FOR IMPLEMENTATION

City Council's role and responsibilities:

- Approve the asset management policy and any future changes, as required.
- Articulate community values and define strategic priorities.
- Approve funding and resources to implement the AM policy and associated requirements.
- Approve asset funding through multi-year and long range financial plans.

City Lead: The Chief Administrative Officer (CAO) has overall responsibility for establishing, endorsing, and leading the implementation of the AM policy, strategy and plan across the City.

Directors of Finance and Municipal Works: Departmental Directors are responsible for leading or designating a departmental lead in the adoption of the AM policy, strategy and plan within their departments, and for allocating appropriate resources to its implementation, ongoing maintenance and upkeep of asset inventories, and associated requirements.

AM Working Group: Finance and Municipal Works staff appointed by the Directors, being involved in the application of AM practices. The group is to include AM representatives as designated by other Departmental Directors, on issues pertaining to their respective departments. The group is responsible for observing the requirements of the AM policy and to provide staff coordination on AM implementation progress and results. Also to ensure AM is aligned with financial plans, as required by *O. Reg. 588/17*.

Capital Accounting Staff: Assist in development and continuation of updating the AM policy, strategies and plans as required. Continue to analyze and track data of all City owned assets for future Asset Management Plans. Continue to work collaboratively with Infrastructure and other departmental AM leads and support staff, to ensure agreed upon guidelines are being followed.

Infrastructure Staff: Assist in development and continuation of updating the AM policy, strategies and plans as required. Continue to coordinate and assist with condition assessment reporting of various asset categories to obtain accurate levels of service and retention of data. Continue to keep asset inventory, including mapping, up to date and to maintain integrity of core Infrastructure data. Continue to work collaboratively with Capital Accounting and other departmental AM leads and support staff, to ensure agreed upon guidelines are being followed.

APPENDIX 1 – Scope of Services and Assets

Service Provided	Asset Group/Class	Asset Types
Potable Water Supply	Drinking water distribution infrastructure*	Watermains, valves, hydrants, water services
Wastewater Collection	Sanitary and Combined sewer collection infrastructure*	Sanitary and Combined sewer pipes, maintenance holes, sanitary laterals, pumping stations, forcemains, CSO storage tanks, HRT facility
Flood Protection	Stormwater Runoff Drainage Infrastructure*	Storm sewer pipes, maintenance holes, catchbasins and leads, storm laterals, stormwater management facilities (ponds, wetlands, chambers)
Transportation - Roadways	Roadways* Bridges and Culverts*	Roadway sub-base, base and top layers, curb & gutter, sidewalks, streetlights and poles, traffic signals, traffic signs, bridges, large span (greater than 0.6 m) culverts
Transportation – Transit	Transit infrastructure	Fleet, bus stops and shelters, equipment and transit buildings
Transportation - Fleet	Vehicles & Equipment	Vehicles & equipment
Transportation - Parking	Municipal Parking Lot and On Street Infrastructure	Parking lots, parking meters, light standards, signs, pay & display machines, electric vehicle charging stations
Parks & Cemeteries	Greenspace & dedicated burial sites	Land improvements, buildings, structures, playgrounds, service roads, parking lots
Recreation & Culture	Land Improvements	Trails and pathways, skate park, splash pads, athletic fields/facilities
Community Facilities	Facilities available to the public	Arenas, city market, museum, recreation centre, convention centre, public art, historical buildings/features
Emergency Services	Fire & Support Services	Fire rescue equipment, fleet, buildings, land improvements
Support Services	General Government Services	Technology equipment and services

* - Core Assets as per Ontario Regulation 588/17

Submitted By: Kent Schachowskoj, P. Eng., Infrastructure & Asset Manager
Recommended By: Erik Nickel, P. Eng., Director of Municipal Works
Approved By Council On: June 25, 2019
Report #: MW-2019-17