



Strategic Asset Management Policy

Policy No.

Topic:	Strategic Asset Management Policy	Affects:	
Section:		Replaces:	
Original Policy Date:		Revision Date:	
Effective Date:		Proposed Revision Date:	
Prepared By:		Approval Authority:	Council

1.0 Purpose

The purpose of this policy is to provide leadership in and commitment to the development and implementation of the Town of Aurora’s asset management program. It is intended to guide the consistent use of **asset management** across the organization, to facilitate logical and evidence-based decision making for the management of **municipal infrastructure assets** and to support the delivery of sustainable community services in the name of *“Today, tomorrow, our future together”*.

By using sound asset management practices, the Town will work to ensure that all municipal infrastructure assets meet expected performance levels and continue to provide desired service levels in the most efficient and effective manner. Linking service outcomes to infrastructure investment decisions will assist the Town in focusing on service, rather than budget driven asset management approaches.

This policy demonstrates an organization-wide commitment to the good stewardship of municipal infrastructure assets, and to improved accountability and transparency to the community through the adoption of best practices regarding asset management planning.

2.0 Background

The Town is responsible for providing a range of essential services to the community, including transportation networks, stormwater management, facilities and parks, and many more. To deliver these services, it owns and manages a diverse municipal infrastructure asset portfolio of roads, bridges, culverts, fleet, sewers, etc. As the social, economic, and environmental wellbeing of the community depends on the reliable performance of these municipal infrastructure assets it is critical to implement a systematic, sustainable approach to their management.

Asset management is such an approach, and refers to the set of policies, practices and procedures that allow an organization to realize maximum value from its municipal infrastructure assets. An asset management approach allows organizations to make informed decisions regarding the planning, building, operating, maintaining, renewing, replacing and disposing of municipal infrastructure assets through a wide range of **lifecycle activities**. Furthermore, it is an organization-wide process that involves the coordination of activities across multiple departments and service areas such as Operational Services, Engineering Services, Community Services, Finance, and Corporate Services. As such, it is useful to adopt a structured and coordinated approach to outlining the activities, roles and responsibilities required of organizational actors, as well as the key principles that should guide all asset management decision-making.

A comprehensive and holistic asset management approach will support efficient and effective delivery of expected **levels of service** and ensure that due regard and process are applied to the long-term management and stewardship of all municipal infrastructure assets. In addition, it will align the Town with provincial and national standards and regulations such as the Infrastructure for Jobs and Prosperity Act, 2015 and Ontario Regulation 588/17, enabling the organization to take full advantage of available grant funding opportunities.

The approval of this policy is an important step towards integrating the Town's strategic mission, vision and goals with its asset management program, and ensuring that critical municipal infrastructure assets and vital services are maintained and provided to the community in a reliable, sustainable manner.

3.0 Definitions

Unless otherwise noted, the definitions provided in this document align with those outlined in Ontario Regulation 588/17 (O. Reg. 588/17), Asset Management Planning for Municipal Infrastructure, under the *Infrastructure for Jobs and Prosperity Act, 2015*.

1. **Asset management (AM)** – the coordinated activity of an organization to realize value from assets. It considers all asset types, and includes all activities involved

in the asset's life cycle from planning and acquisition/creation; to operational and maintenance activities, rehabilitation, and renewal; to replacement or disposal and any remaining liabilities. Asset management is holistic and normally involves balancing costs, risks, opportunities and performance benefits to achieve the total lowest lifecycle cost for each asset (ISO 55000).

2. **Asset management plan (AMP)** – documented information that specifies the activities, resources, and timescales required for an individual asset, or a grouping of assets, to achieve the organization's asset management objectives (ISO 55000). Under O. Reg. 588/17, by 2023 AMPs for core municipal infrastructure assets will be required to include the current levels of service being provided; the current performance of each asset category; a summary of assets in each asset category, their replacement cost, average age, condition information, and condition assessment protocols; lifecycle activities required to maintain current levels of service; discussion of population and economic forecasts; and documentation of processes to make inventory- and condition-related background information available to the public.
3. **Capitalization threshold** – the value of a municipal infrastructure asset at or above which a Town will capitalize the value of it and below which it will expense the value of it.
4. **Green infrastructure asset** – an infrastructure asset consisting of natural or human-made elements that provide ecological and hydrological functions and processes and includes natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces and green roofs.
5. **Level of service** – parameters, or combination of parameters, which reflect social, political, environmental and economic outcomes that the organization delivers. Parameters can include, but are not necessarily limited to, safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost, and availability (ISO 55000).
6. **Lifecycle activities** – activities undertaken with respect to a municipal infrastructure asset over its service life, including constructing, maintaining, renewing, operating and decommissioning, and all engineering and design work associated with those activities.
7. **Municipal infrastructure asset** – an infrastructure asset, including a green infrastructure asset, directly owned by a Town or included on the consolidated financial statements of a Town, but does not include an infrastructure asset that is managed by a joint municipal board.

4.0 Alignment with the Town's Strategic Direction

This policy aligns with the Town of Aurora's Strategic Plan 2011-2031, Official Plan 2010, Corporate Environmental Action Plan 2018, Parks & Recreation Master Plan 2016, Transportation Master Plan 2013, IT Strategic Plan, and Cultural Master Plan 2014-2019. The following passages outline key strategic priorities listed within these documents that the development of an asset management program will support:

1. Strategic Plan 2011-2031

a. Vision

- i. An innovative and sustainable community where neighbours care and businesses thrive.
- ii. Broad community awareness of the town's cultural resources contributes to strong community support for cultural groups and activities.
- iii. A healthy, strong and complete community is designed for all stages of life and includes an array of jobs and investment opportunities, a full range of community services and amenities, opportunities for active and public transportation, and a broad mix of building and housing types. It also includes places to meet and build social connections and supports active and healthy lifestyle choices, while ensuring accessibility to all residents.

b. Goals

- i. Supporting an exceptional quality of life for all
- ii. Enabling a diverse, creative and resilient economy
- iii. Supporting environmental stewardship and sustainability

2. Town of Aurora Official Plan 2010

a. Principles

- i. Promoting Responsible Growth Management
 1. Plan and manage population and employment growth to the year of 2031 with a focus on shifting emphasis from lower density greenfield development to higher density forms of development in the appropriate areas.
- ii. Ensuring Design Excellence
 1. Promote efficient and fruitful land use and development decisions to improve quality of life for Aurora's residents and maintain high quality buildings and well-designed streetscapes.
- iii. Building a Greener Community
 1. Design sustainable communities that incorporate green building technologies and energy-efficient methodologies.
- iv. Providing a Range and Mix of Housing

1. Develop and provide a broad range of housing types, sizes and designs that meet resident's needs and expectations.
- v. Providing Appropriate Community Facilities
 1. Provide suitable community facilities and services that cater to a healthy and active lifestyle for Aurora's residents.
- vi. Providing Stable Neighbourhoods
 1. Protect Aurora's character and urban structure by managing existing and new neighbourhoods to maintain the stability and vibrancy of the community.
- vii. Advancing the Economy
 1. Promote economic development efforts to support a diversified economic base and competitive business environment to advance Aurora's economic long-term prosperity.
- viii. Building a Successful Downtown
 1. Build a successful and vibrant downtown environment that attracts tourists, cultural amenities, and investment attractors and shapes the image of the community.
- ix. Establishing a Linked Greenlands System
 1. Protect and enhance the natural environment and unique features of Aurora's green land for generations to come.
- x. Conserving Cultural Heritage Resources
 1. Conserve and enhance Aurora's cultural heritage resources that reveal the community's evolution and history.
- xi. Providing Sustainable Infrastructure
 1. Provide sustainable infrastructure that allows for the community's successful operation and ability to support development to meet the expectations and needs of all residents.

3. Corporate Environmental Action Plan 2018

a. Objectives

- i. Reduce Town-owned facility water consumption
- ii. Reduce the uncontrolled and inadequately controlled stormwater areas with respect to both quality and quantity
- iii. Foster a sustainable green development and alternate methods of transportation to improve the quality of life of Aurora's residents and Town staff.
- iv. Implement sustainable construction practices to reduce waste, incorporate sustainable design and reclaim or recycle materials.
- v. Reduce waste going to landfill disposal.
- vi. Enrich Aurora's ecology by protecting and preserving biodiversity.
- vii. Prepare a Climate Change Adaptation Plan

- viii. Implement the Provincial Climate Change Plan Actions
- ix. Reduce the town's greenhouse gas emissions by town staff and at town facilities.
- x. Encourage the stewardship of Aurora's natural resources and advance green initiatives by promoting community involvement

4. Parks & Recreation Master Plan 2016

- a. Objectives
 - i. Provide an overview of local demographics
 - ii. Identify relevant trends in sport and recreation
 - iii. Assess key municipal indoor and outdoor recreation facilities, and make recommendations to meet future needs
 - iv. Identify the types of municipal parkland required to meet active and passive recreational needs
 - v. Outline the priority, timing, and applicable costs associated with the Master Plan's recommendations
- b. Purpose
 - i. Increase personal health through providing opportunities to increase physical activity and reduce instances of chronic disease and associated costs borne through the health-care sector.
 - ii. Provide positive opportunities to pursue in light of people's limited disposable time and increasingly sedentary lifestyles (with major competition coming in the form of television, video games, etc.).
 - iii. Reduce anti-social behaviours by providing a positive outlet that can build self-esteem and provides an alternative to self-destructive activities which in turn can minimize costs borne through the social services sector and policing.
 - iv. Deliver economic benefits associated with sport tourism, attracting skilled or creative workers to choose a community as their desired place to live, and developing future leaders within the community.

5. Transportation Master Plan 2013

- a. Studies
 - i. Future Conditions Review
 - ii. Transportation Network Options
 - iii. Operations and Safety Review
 - iv. Traffic Signal Progression
 - v. Analysis of Traffic Signals
 - vi. Walking and Cycling Needs Assessment
 - vii. Bicycle Signage and Pavement Markings
 - viii. Sidewalk Priority Plan

6. Cultural Master Plan 2014-2019

a. Vision

- i. Broad community awareness of the town's cultural resources contributes to strong community support for cultural groups and activities
- ii. Aurora embraces a vision of a living heritage connecting past and present and encompassing the many diverse cultural traditions in the community
- iii. Aurora's vibrant downtown is the social and cultural hub of the community and a strong symbol of community identity
- iv. Cultural activities and amenities are magnets attracting talent and investment in a vibrant creative economy
- v. Aurora's creative cultural industries are major economic drivers in the local economy
- vi. A 'culture of design' infuses decisions, producing a town that boasts a vital downtown and beautiful place throughout the community
- vii. Aurora is a tourism destination based on its rich heritage and the vitality of its culture community
- viii. The Municipality of Aurora is recognized as a leading municipality integrating culture into all facets of planning and decision-making

b. Principles

- i. Adopt a collaborative approach to cultural development supported by sustained communication and collaboration between the Municipality and cultural groups, the public and voluntary sectors and other levels of government
- ii. Ensure cultural resources and opportunities are considered in all areas of planning and decision-making in the Municipality
- iii. Provide cultural opportunities, resources and activities that are accessible to resident of all ages, abilities, ethnicities, and economic circumstances and across all parts of the community
- iv. Make the most efficient and effective use of the Municipality's resources ensuring accountability and value for money
- v. Strive for continuous innovation in cultural planning and development involving all stakeholders

5.0 Policy Statement

To guide the Town, the following policy statements have been developed:

1. The Town will implement an enterprise-wide asset management program through all departments. The program will promote lifecycle and risk management of all municipal infrastructure assets, with the goal of achieving the lowest total cost of ownership while meeting desired levels of service.
2. The Town will develop and establish its asset investment and financial strategies with a focus on ensuring the lowest overall lifecycle (service life) cost of the asset rather than the lowest initial construction cost of building said assets.
3. The Town will implement continuous improvement protocols and adopt best practices regarding asset management planning, including:
 - i. Complete and Accurate Asset Data
 - ii. Condition Assessment Protocols
 - iii. Risk and Criticality Models
 - iv. Lifecycle Management
 - v. Financial Strategy Development
 - vi. Level of Service Framework
4. The Town will develop and maintain an asset inventory of all municipal infrastructure assets which includes, at a minimum, a unique ID, description, location information, value (both historical and replacement), performance characteristics and/or condition, estimated remaining life and estimated repair, rehabilitation or replacement date; and estimated cost repair, rehabilitation or replacement costs. Moving forward, the Town will strive to enhance their asset inventory by collecting more valuable asset attributes against their infrastructure assets.
5. The Town will develop an asset management plan (AMP) that incorporates all infrastructure categories and municipal infrastructure assets that are necessary to the provision of services. This may include assets that fall below their respective capitalization thresholds as outlined in the Town's Tangible Capital Asset Policy. The scope of these assets will be determined, according to relevance, based on the professional judgment of Town senior staff. The AMP will be reviewed annually to address the Town's progress in implementing its asset management plan and updated at least every five years in accordance with O. Reg. 588/17 requirements, to promote, document and communicate continuous improvement of the asset management program.

6. The Town will integrate asset management plans and practices with its long-term financial planning and budgeting strategies. This includes the development of financial plans that determine the level of funding required to achieve short-term operating and maintenance needs, in addition to long-term funding needs to replace and/or renew municipal infrastructure assets based on full lifecycle costing.
7. The Town will explore innovative funding and service delivery opportunities, including but not limited to grant programs, public-private partnerships (P3), alternative financing and procurement (AFP) approaches, and shared provision of services, as appropriate.
8. The Town will develop meaningful performance metrics and reporting tools to transparently communicate and display the current state of asset management practice to Council and the community.
9. The Town will consider the risks and vulnerabilities of municipal infrastructure assets to climate change and the actions that may be required including, but not limited to, anticipated costs that could arise from these impacts, adaptation opportunities, mitigation approaches, disaster planning and contingency funding. Impacts may include matters relating to operations, levels of service and lifecycle management.
10. The Town will ensure that all financial plans are coordinated and align with the established asset management plan and any other applicable legislation.
 - i. The Ten-Year Capital Plan details the financial plans related to the Town's water and wastewater assets, including those prepared under the Safe Drinking Water Act, 2002.
11. The Town will align all asset management planning with the Province of Ontario's land-use planning framework, including any relevant policy statements issued under section 3(1) of the *Planning Act*, shall conform with the provincial plans that are in effect on that date; and, shall be consistent with all municipal official plans.
12. The Town will coordinate planning for interrelated municipal infrastructure assets with separate ownership structures by pursuing collaborative opportunities with neighbouring municipalities and jointly-owned municipal bodies wherever viable and beneficial.
13. The Town will develop processes and provide opportunities for municipal residents and other interested parties to offer input into asset management planning wherever and whenever possible.

6.0 Roles and Responsibilities

The development and continuous support of the Town's asset management program requires a wide range of duties and responsibilities. The following passages outline the persons responsible for these tasks:

1. Council

- i. Approve the AM policy and direction of the AM program through its approval of the Town's asset management plan
- ii. Maintain adequate organizational capacity to support the core practices of the AM program
- iii. Prioritize effective stewardship of assets in adoption and ongoing review of policy and asset management plan
- iv. Approve capital and operating budgets delivered by Staff

2. Leadership Team

- i. Development of policy and policy updates
- ii. Provide corporate oversight to goals and directions and ensure the AM program aligns with the Town's strategic plan
- iii. Ensure that adequate resources are available to implement and maintain core AM practices
- iv. Develop and monitor levels of service and make recommendations to Council
- v. Track, analyze and report on AM program progress and results
- vi. Provide organization-wide leadership in AM practices and concepts

4. Departmental Staff

- i. Utilize the new business processes and technology tools developed as part of the AM program
- ii. Participate in implementation task teams to carry-out AM activities such as the Capital Asset Management Steering Committee (CAMSC)
- iii. Implement and maintain defined capital asset levels of service
- iv. Manage budgets based on lifecycle activities and financial management strategies

5. Public

- i. Engage and voice level of service expectations and concerns to Council and Staff through surveys and public engagement opportunities
- ii. Understand dynamic relationship between performance, cost, and risk of assets to deliver desired services
- iii. Engage in discussions about strategic priorities and target levels of service for next 10 years

7.0 Key Principles

The Town shall consider the following principles as outlined in section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015*, when making decisions regarding asset management:

1. Infrastructure planning and investment should take a long-term view, and decision-makers should consider the needs of citizens by being mindful of, among other things, demographic and economic trends.
2. Infrastructure planning and investment should consider any applicable budgets or fiscal plans.
3. Infrastructure priorities should be clearly identified in order to better inform investment decisions respecting infrastructure.
4. Infrastructure planning and investment should ensure the continued provision of core public services, such as safe drinking water and reliable transportation services.
5. Infrastructure planning and investment should promote economic competitiveness, productivity, job creation and training opportunities.
6. Infrastructure planning and investment should ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
7. Infrastructure planning and investment should foster innovation by creating opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques and practices developed in Ontario.
8. Infrastructure planning and investment should be evidence based and transparent, and, subject to any restrictions or prohibitions under an Act or otherwise by law on the collection, use or disclosure of information,
 - i. investment decisions respecting infrastructure should be made on the basis of information that is either publicly available or is made available to the public, and
 - ii. information with implications for infrastructure planning should be shared between the Town and broader public sector entities and should factor into investment decisions respecting infrastructure.

9. Where provincial or municipal plans or strategies have been established in Ontario, under an Act or otherwise, but do not bind or apply to the Town, as the case may be, the Town should nevertheless be mindful of those plans and strategies and make investment decisions respecting infrastructure that support them, to the extent that they are relevant.
10. Infrastructure planning and investment should promote accessibility for persons with disabilities.
11. Infrastructure planning and investment should minimize the impact of infrastructure on the environment and respect and help maintain ecological and biological diversity, and infrastructure should be designed to be resilient to the effects of climate change.
12. Infrastructure planning and investment should endeavour to make use of acceptable recycled aggregates.
13. Infrastructure planning and investment should promote community benefits, being the supplementary social and economic benefits arising from an infrastructure project that are intended to improve the well-being of a community affected by the project, such as local job creation and training opportunities, improvement of public space within the community, and any specific benefits identified by the community.