

Policy: Strategic Asset Management Policy for Municipal Infrastructure Policy Number: CP-I-1.3 Effective Date: July 1, 2019 Revised Date:

POLICY STATEMENT:

The Municipality of Thames Centre assets will be managed through a coordinated approach that ensures financial sustainability following recognized asset management principles guided by the municipality and the Province.

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

- a) The Municipality of Thames Centre will develop and maintain asset inventories of all its infrastructure.
- b) The Municipality of Thames Centre will plan for and provide stable longterm funding to replace and/or renew and/or decommission infrastructure assets.
- c) The Municipality of Thames Centre will plan financially for the appropriate level of maintenance of assets to deliver service levels and extend the useful life of assets, where possible and safe to do so.
- d) The Municipality of Thames Centre will maintain and manage infrastructure assets to support public safety, community well-being and community goals.
- e) The Municipality of Thames Centre will monitor standards and service levels to ensure that they support community and Council goals and objectives.
- f) Where appropriate, the Municipality of Thames Centre will consider and incorporate asset management in its other municipal plans.
- g) The Asset Management Committee will update Council annually on its asset management plan.

APPLICATION:

This policy applies to all Municipality of Thames Centre staff involved in asset life cycle management, which includes planning, design/construction/acquisition, operation and maintenance, rehabilitation, renewal/disposal, and monitoring/reporting of owned (in whole or in part) or operated Municipality assets.

POLICY GOALS

The Municipality of Thames Centre's asset management policy aims to:

- (1) Provide a framework for implementing asset management to enable a consistent approach at all department levels within the Municipality of Thames Centre
- (2) Provide guidance to staff responsible for asset management
- (3) Communicate asset management principles endorsed by the Municipality of Thames Centre
- (4) Provide transparency, accountability and demonstrate the decisionmaking process which combines municipal plans and policies, budgets, service levels and risk

DEFINITIONS

Asset: An item that has potential or actual value to the municipality. Value can be tangible or intangible, financial or non-financial, and includes consideration of risks and liabilities.

Asset Lifecycle: Period of time from asset creation to asset end-of-life

Asset Management: Coordinated activity of the municipality to realize value from assets. Realization of value will normally involve an appropriate balancing of costs, performance and risks, opportunities and performance benefits.

Asset Management Plan: Documented information that specifies the activities, resources and timescales required for an individual asset or grouping of assets to achieve the municipality's asset management principles.

Asset Management System: The people, processes, tools and other resources involved in the delivery of asset management.

Asset Portfolio: Assets that are within the scope of the asset management system.

Asset Type: Grouping of assets having common characteristics or attributes that distinguish those assets as a group or class.

Community Service Level: a service level provided to customers but also relating to how the municipality and Council describe these services (qualitative descriptions).

Depreciation: reduction in the value of an asset due to usage, passage of time, environmental factors, wear and tear, depletion or inadequacy.

Disposal: the act of removing an asset from the asset inventory that has been depreciated over its useful life. Disposal of an asset can also occur if the asset has been sold, donated, stolen, retired, destroyed, demolished or relocated.

Intangible Assets: Non-physical assets, such as leases, brands, digital assets, use rights, licenses, intellectual property rights or agreements.

Level of Service: parameters, or a combination of parameters, which reflect social, political, environmental and economic outcomes that the asset or municipality delivers.

Life Cycle: Phases involved in the management of an asset.

Life Cycle Data: Includes cost, performance and risk data collected and managed through business processes required to help make well-informed, evidence-based decisions in all phases of an asset's life cycle.

Maintenance: any activity performed on an asset to ensure that it is able to deliver an expected level of service until it is scheduled to be renewed, replaced or disposed of.

Net Book Value: The original cost of an asset, less any accumulated depreciation.

Operation: the act of utilizing an asset. Asset operation will typically consume materials and energy.

Performance: can relate to quantitative or qualitative findings and is usually expressed as a measurable result (i.e., performance measures). Performance can relate to the management of activities, processes, products (including services), or systems. For the purposes of asset management, performance of assets relate to their ability to fulfill service level requirements or objectives.

Predictive Action: action to monitor the condition of an asset and predict the need for preventive action or corrective action.

Preventive Action: action to eliminate the cause of a potential nonconformity or other undesirable potential situation.

Rehabilitation: work carried out to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, which may incorporate some modification.

Renewal: the replacement or refurbishment of an existing asset (or component) with a new asset (or component) capable of delivering the same level of service as the existing asset.

Replacement: the complete disposal of an asset that has reached the end of its life, followed by purchase of a new acquisition capable of delivering the same level of service as the disposed asset.

Replacement Cost: the cost of replacing an existing asset with a substantially identical new asset or a modern equivalent.

Risk: effect of uncertainty on objectives. Risk is often expressed in terms of a combination of consequences resulting from an event (consequence of failure) and the associated likelihood of occurrence (probability of failure).

Technical Service Level: a service level associated with the physical characteristics of an asset.

Tangible Capital Asset: Physical asset, typically equipment, inventory and property, owned by the municipality.

ASSET MANAGEMENT PRINCIPLES

Municipal Asset Management Principles

The Municipality of Thames Centre's Asset Management Policy shall be implemented by staff using accepted industry guidelines and practices. The Municipality of Thames Centre will comply with the principles set out in Section 3 of the *Infrastructure for Jobs and Prosperity Act*, 2015 and any amendment thereof. In addition, the Municipality will fulfil the required capital asset reporting requirements, required asset management planning requirements, and integrate the asset management program into operational plans throughout the municipality.

The Municipality of Thames Centre shall adopt the following principles of the asset management policy when managing the municipality's infrastructure assets:

- (1) The Municipality of Thames Centre will consider all the assets in a service context and take into account their interrelationships as opposed to optimizing individual assets in isolation
- (2) The Municipality of Thames Centre will follow the levels of service outlined in the Municipality's asset management plans and apply asset management practices to maintain the confidence of customers and stakeholders in how Municipality of Thames Centre assets are managed
- (3) The Municipality of Thames Centre will choose practices, interventions and operations that aim at reducing the lifecycle cost of asset ownership, while satisfying levels of service. Decisions are based on balancing service levels, risks and costs
- (4) The Municipality of Thames Centre will manage the asset risk associated with levels of service by focusing resources, expenditures and priorities based upon risk assessments and the corresponding cost-benefit, recognizing that public safety is the priority
- (5) The Municipality of Thames Centre will integrate financial, business, technical and budgetary planning for all infrastructure assets and pursue best practices where available. In all instances, the Municipality of Thames Centre will consider social, environmental and sustainability goals
- (6) The Municipality of Thames Centre will use available resources effectively, manage assets to be sustainable, as well as minimize total life cycle costs of assets where possible

- (7) The Municipality of Thames Centre will make informed decisions, identifying all revenues and costs (including operations, maintenance, replacement and disposal) associated with infrastructure asset decisions. The Municipality will also work towards minimizing risk to users and any risks associated with asset failure
- (8) The Municipality of Thames Centre will review provincial, federal or other funding opportunities relating to asset management to further progress the Municipality's asset management plan and help offset costs of specific asset management requirements.
- (9) The Municipality of Thames Centre will establish organizational accountability and responsibility for asset inventory, condition, use and performance. In addition, the Municipality will consult with stakeholders where appropriate and report the performance of its asset management program on a regular basis to Council

Provincial Asset Management Principles

The Municipality of Thames Centre will also adopt the required principles from the *Infrastructure for Jobs and Prosperity Act, 2015* and any amendment thereof:

- (1) The Municipality of Thames Centre shall take a long-term view while considering demographic and economic trends in the region
- (2) The Municipality of Thames Centre shall take into account any applicable budgets or fiscal plans, such as fiscal plans released under the following:
 - a. Fiscal Transparency and Accountability Act, 2004
 - b. Budgets adopted under Part VII of the Municipal Act, 2001
- (3) The Municipality of Thames Centre shall clearly identify infrastructure priorities which will drive investment decisions
- (4) The Municipality of Thames Centre shall promote economic competitiveness, productivity, job creation and training opportunities
- (5) The Municipality of Thames Centre shall be evidence-based and transparent. Additionally, subject to any prohibitions under an Act or otherwise by law on the collection, use or disclosure of information, the municipality shall:
 - Make decisions with respect to infrastructure based on information that is publicly available or made available to the public
 - Share information with implications on infrastructure and investment decisions with the Government and broader public sector entities
- (6) The Municipality of Thames Centre shall ensure the continued provision of core public services.
- (7) The Municipality of Thames Centre shall minimize the impact of

infrastructure on the environment by:

- a. Respecting and helping maintain ecological and biological diversity
- b. Augmenting resilience to the effects of climate change
- c. Endeavoring to make use of acceptable recycled aggregates
- (8) The Municipality of Thames Centre shall ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets are protected
- (9) The Municipality of Thames Centre shall 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:
 - a. Local job creation and training opportunities
 - b. Improvement of public space within the community
 - c. Promoting accessibility for persons with disabilities
- (10) The Municipality of Thames Centre shall create opportunities to make use of innovative technologies, services and practices
- (11)Where relevant and appropriate, The Municipality of Thames Centre shall be mindful and consider the principles and content of non-binding provincial or municipal plans and strategies established under an Act or otherwise, in planning and making decisions surrounding the infrastructure that supports them

ALIGNMENT WITH MUNICIPAL PLANS AND POLICY

The Municipality of Thames Centre strives to maintain a safe community with sustainable growth, which requires alignment of many initiatives underway within our municipality at any given time. This alignment is necessary to properly consider whether the service level provided by the municipality's existing and planned assets are aligned with the Municipality's asset management goals.

Asset management planning will not occur in isolation from other municipal plans and policies. Rather, an integrated approach will be followed to successfully develop practical asset management plans that align with the overarching accountabilities and aspirations of the community.

Council and senior management will incorporate this policy into the asset management planning approach that fosters the integration of municipal documents, such as:

- Municipality of Thames Centre Official Plan
- Municipality of Thames Centre Strategic Plan
- Municipality of Thames Centre Water and Wastewater Masterplan
- Municipality of Thames Centre Asset Management Plan
- Municipality of Thames Centre Tangible Capital Asset Policy

- Municipality of Thames Centre Emergency Management Plan
- Municipality of Thames Centre Energy Conservation and Demand Management Plan

ASSET CAPITALIZATION THRESHOLD

The Municipality of Thames Centre uses capitalization thresholds to determine which assets are to be included in the municipality's asset management plan.

There are two perspectives when defining an asset in financial reporting versus asset management planning:

- The financial perspective focuses on the monetary value of an asset. The Municipality of Thames Centre uses various cost thresholds ranging from \$10,000 to \$25,000 across asset classes (stated in Table D-1 of the Municipality's Tangible Capital Asset Policy) as a guide to identify assets that must be accounted for in the financial statements. The original purchase price, or historical cost, is the basis for depreciating the value of the assets and reporting
- The asset management perspective focuses on the service provided by the asset. It assesses the role of the asset and plans for inspections, maintenance and replacement. Using a forward looking view, the cost of owning the asset over its service life is the basis for short- and long-term financial planning

The asset management policy applies to all assets whose role in service delivery requires deliberate management by the Municipality of Thames Centre. Current and proposed levels of service, at the community and technical level, will be outlined for each asset category within the Municipality's asset management plans. The service-focus intent of this policy serves as the requirement for identifying the assets to be included in the Municipality's asset management plan, which is different from the capitalization threshold which has been developed for the purpose of financial reporting. This qualitative approach is unlike the quantitative, dollar value-based methodology prescribed in the tangible capital asset policy. Therefore, quantitative capitalization thresholds will be used for financial reporting, while qualitative, service-driven thresholds will be used for asset management planning and forecasting.

BUDGETING

Annual Municipal Budget

The value of asset management planning is achieved when it impacts the overall budget and specific investment decisions. Asset management plans will be produced every five years and monitored annually by the Asset Management Committee. Therefore, they are well suited to inform existing budget inputs used by the municipality and water/wastewater financial plans. The involvement of finance in the asset management planning process will bring consistency to financial

forecasting and will ensure asset management is included in the budgeting process, specifically by

- Assessing what the Municipality is able to afford
- Assessing the projected annual funding available
- Maintaining alignment with other financial plans

The Municipality of Thames Centre will integrate findings from its asset management plan into its budgeting process. Sound financial analysis will be encompassed in asset management planning in order for the asset management plan to act as a guide for employees when budgeting and financial planning. The financial strategy to prepare the annual municipal budget (with integration of the asset management plan) will be completed by a multi-disciplinary team that will include the Director of Financial Services and the Directors from each municipal service area.

The asset management plan and progress made on the plan will be considered annually in the creation of the municipality's capital and operating budget in order to help:

- Identify all potential revenues and costs (i.e., operating, maintenance, replacement and disposal) associated with forthcoming infrastructure asset decisions
- (2) Evaluate the validity and need of each significant new capital asset, including considering the impact on future operating costs
- (3) Incorporate new revenue tools and alternative funding strategies (including applications for asset management grant opportunities) where possible
- (4) Prioritize spending needs based on gaps and risks identified in the asset management plan

Water and Wastewater

Municipality staff, water/wastewater personnel and the Director of Environmental Services will work together to align the financial strategy developed in the asset management plan with the Municipality's water and wastewater budget. The water and wastewater budget submission will be evaluated by the Director of Environmental Services, Director of Financial Services and the CAO in preparation of the municipality's annual budget.

CLIMATE CHANGE

Climate change is already a consideration in the design and operational planning of drainage, water supply, transportation systems and storm management. Mitigation approaches, such as reduced energy consumption, can be significant decision drivers when purchasing or replacing new assets. In addition, wherever weather is a factor in design and operational planning of municipal services, the potential risks and vulnerabilities caused by climate change will need to be considered.

Emergency preparedness is a collaborative process in which many municipal departments contribute to develop business continuity solutions that reestablish a level of service after a significant disaster event. The Municipality of Thames Centre updates its emergency preparedness plan and participates in emergency exercises (live or table-top) on an annual basis.

The Municipality of Thames Centre commits to using resources effectively and efficiently to mitigate and adapt to climate change. Strengthening resilience to climate change in the Municipality of Thames Centre means modifying the scope of current operations and maintenance, anticipating possible costs to support contingency funds, leveraging alternative funding mechanisms, integration and annual updates of the emergency preparedness plan, and revising levels of service.

The Municipality of Thames Centre's contribution to climate change through greenhouse gas emissions will be mitigated in accordance with local reduction targets, financial capacity, and stakeholder support. In addition, climate change will be considered as part of the Municipality's risk analysis within its asset management plan. Being aware of infrastructure risks will enable the municipality to balance the potential cost of climate change vulnerabilities with the cost of proactively reducing or eliminating these vulnerabilities before they occur.

COMMUNITY PLANNING

To have an asset management plan with a complete forward looking view, the focus cannot just be aging infrastructure. It must also consider how the community is changing. This is not only reflected in the provincial asset management regulation but also in the 2014 Provincial Policy Statement of the *Planning Act* and any amendment thereof. Mentions of long-term financial viability that are parallel to core asset management principles in the Policy Statement include:

- promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term
- promoting cost-effective development patterns and standards to minimize land consumption and servicing costs
- the infrastructure and public service facilities which are planned or available are suitable for the development over the long-term, are financially viable over their lifecycle, and protect public health and safety and the natural environment

Asset management planning will be aligned with the Municipality of Thames Centre Official Plan. The asset management plans will reflect how the community is projected to change and the related asset impacts. The Municipality of Thames Centre will achieve this with the following:

Those responsible for managing services impacted by development or redevelopment will:

• Be consulted while the development or project plan is being prepared

- Provide input to the analysis of future servicing costs
- Provide written comment about the financial viability of development as it pertains to the service they manage

The combination of lifecycle analysis and financial sustainability principles will be the driver in the design and selection of community development or redevelopment that requires new assets, or existing asset enhancements, to take place. Parties involved in the development of the asset management plans will reference the direction established in the Official Plan as well as the methods, assumptions, and data used during Official Plan development. The aim of cross- referencing these plans is to ensure that development and redevelopment occur within the Municipality's means through an understanding of current and future asset needs.

The Municipality's Official Plan includes goals related to asset management in the Municipality. Specifically, it identifies the quality and quantity of water, sewage capacity and the system of parks and natural areas as assets to help support economic development and improve quality of life for residents. The Plan also directs efficient use of existing infrastructure including locating and designing development and redevelopment near existing assets, and efficient development of new assets. When new development is proposed, studies including servicing options, stormwater management, and traffic impact may be required.

GOVERNANCE AND CONTINUOUS IMPROVEMENT

The policy requires the commitment of key stakeholders within the Municipality of Thames Centre's organizational structure. The list below details the responsibilities of the key stakeholders within the Municipality of Thames Centre who are responsible for the municipality's asset management planning.

Council vision and goals for infrastructure assets:

Council's goal for the Municipality of Thames Centre is to promote well managed and maintained infrastructure assets. These assets include, but are not limited to, economical and reliable water distribution networks, safe and reliable sanitary sewage collection systems, safe and maintained road distribution networks, productive fleets, as well as accessible parks, recreation and other municipal facilities.

The Municipality of Thames Centre's Asset Management Policy is used 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.

Municipality 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, tools and technologies available, and will

evolve over time, the responsibility for guidelines and practices are delegated to staff.

Asset Management responsibilities of Council:

- Approve by resolution the asset management plan and its updates every five years
- Staff to provide a progress update to Council on its asset management plan on or before July 1 of every year. This includes:
 - Progress on ongoing efforts to implement the asset management plan
 - Consideration of the asset management policy
 - Any factors affecting the ability of the municipality to implement its asset management plan
 - A strategy to address these factors including the adoption of appropriate practices
 - Support ongoing efforts to continuously improve and implement the asset management plans
 - Serve as representatives of citizens' needs
 - Approve asset funding to ensure required financial sustainability for asset management through the annual budget process

Chief Administrative Officer

• Maintain compliance with the asset management policy and provincial asset management regulation

Executive Lead - Asset Management Committee

- Compromised of the CAO, Director of Financial Services, Director of Environmental Services and Director of Transportation
- All versions and revisions of the Municipality's asset management plan must be endorsed by the executive lead of the municipality
- Holds accountability for ensuring compliance with the Municipality's Asset Management Policy and follows the directive of the asset management plan
- Should be included in senior level cross-departmental collaboration on initiatives or projects related to asset management

Department Managers

- Ensure that employees adhere to the approved Asset Management Policy
- Oversee asset management planning activities that fall within their municipal service area
- Provide support regarding asset management to other departments within the municipality
- Ensure that all information needed by the Finance Department to compile and update the asset register is circulated to the said Department
- Ensure that the Finance Department is notified of any changes in status of the assets under the department's control. This includes reporting any

enhancement/improvement, transfer or disposal

• Guarantee that the inventory and/or asset items of the Municipality of Thames Centre are not used for private enterprise by any employee

STAKEHOLDER ENGAGEMENT

The Municipality of Thames Centre recognizes that the purpose of asset management is to enable municipalities to achieve their objective through a proactive approach to managing infrastructure. Therefore, the primary goal of the Municipality of Thames Centre is to efficiently provide its residents, businesses, institutions, community groups, stakeholders, neighboring municipal bodies and provincial agencies with the municipal services they need. In order to achieve this goal, it is necessary that the Municipality understand the needs of current stakeholders, consider the needs of future generations, and incorporate these perspectives into its asset management plans. In addition, the Municipality of Thames Centre recognizes these needs to be an integral part of the municipality's asset management approach in order to make informed decisions regarding its infrastructure. Accordingly, the Municipality of Thames Centre will consider:

• Coordinating asset management planning with other infrastructure asset owning agencies such as municipal bodies and regulated utilities

Users of municipal services are not the only stakeholders to bear in mind when managing Municipality assets. The municipality's infrastructure is rarely isolated from other agency's assets (i.e., hydro utilities, provincial roadways) and can intersect within the Municipality's boundary. Consideration of coordinating projects between agencies with interconnected assets is an important form of stakeholder engagement. Therefore, both forms of stakeholders (users of municipal services and external users) are an integral part of the Municipality's complete asset management approach.

APPENDIX A: Asset Management Conceptual Models

A1- Conceptual model of the integration of how organization and asset management planning relates to asset inventory and asset management implementation. This model is adapted from the Institute of Asset Management (IAM):

