

Procedure Title: Asset Management Procedure

Procedure Number: F 480-001

Reference: Strategic Asset Management Policy CA 250 and O.Reg 588/17

Date Approved: May 9, 2019

Date Revised: Not applicable

Approval: Chief Administrative Officer

Point of Contact: Asset Management Supervisor

Purpose

The purpose of this procedure is to identify specific objectives of the Town of Whitby's Asset Management Plan and to outline the responsibilities for all Town Staff involved in the management (planning, construction, maintenance, rehabilitation and reconstruction) of municipal infrastructure assets and services. This procedure will help to ensure decisions related to infrastructure assets and services are executed in a consistent and effective manner.

Scope

This procedure expands upon the Strategic Asset Management Policy which governs the seven (7) service areas reported within their respective Service Area Asset Management Plans (SAAMPs) and summarized in the Municipal Asset Management Plan (MAMP). This procedure applies to all Town staff responsible for municipal Infrastructure assets and services.

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1. Definitions

- 1.1. Asset Management (AM) is an integrated business approach that an organization employs to minimize the lifecycle costs of owning, operating, and maintaining assets at an acceptable level of risk, while continuously delivering expected levels of service for present and future customers. AM includes the planning, design, construction, operation, and maintenance of infrastructure used to provide services. Infrastructure needs can be prioritized over time by utilizing AM process, while also ensuring timely investments to minimize repair and rehabilitation costs and maintain municipal assets. Key questions municipalities must ask themselves today as they develop their Asset Management Plans (AMPs) and programs are the following:
 - What is the asset worth?
 - What is the asset's condition and expected remaining service life?
 - What is the level of service expectation, and what needs to be done?
 - When do you need to do the preventative maintenance, rehabilitation, or replacement?
 - How much will the remedial works cost and what is the acceptable level of risk(s)?
 - What are the overall life cycle needs and costs?
 - What are the long-term sustainable financing needs?
- 1.2. **Capitalization Threshold** is the minimum construction/purchase cost used to determine if assets are to be captured in the PSAB reporting.
- 1.3. **Climate Change** refers to the rapid change in global long-term weather patterns that are caused by increased global temperatures due to increased atmospheric concentrations of greenhouse gases (carbon dioxide, methane, nitrous oxide).
- 1.4. **Infrastructure** pertains to all tangible capital assets (roads, trails, buildings, vehicles, fire equipment, computers, library collections) that are owned by the Town of Whitby.
- 1.5. **Lifecycle Activities** are all the activities (planning, designing, constructing, preventative maintenance, rehabilitation, reconstruction) that are performed on an asset throughout its useful life. These activities are performed to ensure the assets are maintained as efficiently as possible while meeting service level targets..
- 1.6. Municipal Asset Management Plan (MAMP) is a strategic document that illustrates how a group of assets are to be managed over time. The MAMP summarizes the inventories, conditions, service levels, lifecycle activities to ensure the service levels are maintained, and the funding requirements to perform the lifecycle activities of the various asset classes.

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- 1.7. **Service Areas** are like groups of asset classes which together provide a service to the residents and visitors to our community. The Town currently has seven (7) distinct service areas which are Facilities, Fire, Fleet, Library Resources, MIS, Parks, and Road Right-of-Way.
- 1.8. Service Area Asset Management Plans (SAAMPs) are strategic documents that communicate how the specific service area assets are to be managed over time. They contain the inventories, conditions, service levels, lifecycle activities to ensure the service levels are maintained, and the funding requirements to perform the lifecycle activities of the various asset classes.

2. Asset Management Objectives

The Town works as a collaborative team to comprehensively and consistently undertake the following objectives for all Town-owned assets. These asset management objectives help to inform the implementation of the Town's asset management vision.

2.1. Asset Data Objectives:

- Inventory: Capture all asset types, inventories and historical data.
- Current Valuation: Calculate current condition ratings and replacement values.
- Life Cycle Analysis: Identify maintenance and renewal strategies and life cycle costs.
- Risk and Prioritization: Integrates all asset categories through risk and prioritization strategies. The priorities should be clearly defined and available to all.
- Transparency: All relevant information to be available for the public, staff and Council's use.
- Monitoring & Reporting: At defined intervals, assess the assets and report on progress and performance.
- Continuous Processes: Provide continuous processes to ensure asset information is kept current and accurate.
- Growth/Future Assets: Integrate asset management information into all future corporate purchases, acquisitions and assumptions.

2.2. Service Objectives:

Service Level Targets: Define measurable Levels of Service Targets

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- Sustainable Financing/Budgeting: Identify sustainable Financing Strategies for all asset categories, and link capital budget needs to operating budget needs.
- Climate Change: Ensure infrastructure strategies address climate change impacts.
- Consistency: The Town of Whitby will continue to provide core public services.
- Budgeting and planning: The Town of Whitby shall incorporate any applicable budgets or fiscal plans into the AM process.
- Integration: The Town will be cognisant of content and principles of plans and strategies (provincial, regional and municipal) that affect the lifecycles of infrastructure assets.

2.3. **Broader Objectives:**

- Co-ordination: Undertake infrastructure improvements in co-ordination with other initiatives undertaken by the Town, other agencies, utilities and the development community.
- Continuous Improvement: Communicate with industry leaders and other agencies to further develop standards and best practices.
- Community-Focused: Through infrastructure projects, the Town will promote job creation and training opportunities, improve public space, and increase accessibility for people with disabilities.
- Forward-looking: The Town of Whitby will consider the needs of its residents when planning for future infrastructure assets.
- Economic Development: The Town of Whitby should promote economic competitiveness, productivity, job creation and training opportunities.
- Innovation: The Town will utilize innovative technologies, services and practices, especially those developed in Ontario for its Asset Management practice.
- Environmentally Conscious: The Town will minimize the effects infrastructure has upon the environment. The Town will promote biodiversity, resilience to the effects of climate change, and using acceptable recycled aggregates.
- Health and Safety: The Town will ensure the health and safety of its staff and citizens are protected.

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3. General

3.1. Asset Management Policy Background

- The Ontario Asset Management Planning Regulations under Bill 6 Infrastructure for Jobs and Prosperity Act, 2015 will help Ontario municipalities be more sustainable in the management of their assets, address their ageing assets, plan for increased capital needs, anticipated growth, and address their infrastructure gap.
- Following is the timeline for the Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure:
 - July 1, 2019 Strategic Asset Management Policy to be completed,
 - July 1, 2021 Asset management plans including the Proposed Level of Service and Inventory Analysis to be completed for Roads, Bridges and Stormwater,
 - July 1, 2023 Asset management plans including the Proposed Level of Service and Inventory Analysis to be completed for all other assets,
 - July 1, 2024 Updating the asset management plans to include the amended Levels of Service to match Financial Capacity. This will include the following:
 - 1. Lifecycle Management Strategy,
 - o 2. Financial Strategy which includes a 10 year forecast,
 - 3. Risk Analysis,
 - 4. Growth Analysis.
- The Town of Whitby developed the first asset management strategic plan for roads, bridges, culverts, sidewalks and multi-use paths in 2014. In response to the Association of Municipalities of Ontario's (AMO) Federal Gas Tax reporting requirements, this plan was expanded to include all seven service areas (Facilities, Fire, Fleet, Library Resources, Municipal Information Systems, Parks and Road Right-of-way) in 2016.

4. Responsibilities

4.1. Public Works Asset Management Supervisor is responsible for:

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- Updating the list of goals, plans, and policies that affect or are affected by the Town's Asset Management Plan on an annual basis.
- Assessing the economic and demographic trends of the Town, Region, and Province to ensure the services the Town delivers are appropriate for our residents.
- Ensuring the Asset Management Procedure is reviewed annually and updated at least every five (5) years.
- 4.2. Asset Management Service Area Stewards are responsible for:
 - Monitoring asset management best practices, looking for efficiencies for delivery of services, communicating with colleagues from neighbouring municipalities, and subscribing to industry-specific periodicals specific to their service area.
 - Ensuring the asset management planning is consistent with Ontario's land-use planning framework, equating the future costs of new development, promoting efficient and cost effective development, and considering all legislation and official plans when developing Asset Management Plans.
 - Optimizing the lifecycle activities for all asset classes within each service area.
 - Co-ordinating rehabilitation and reconstruction efforts with the Region of Durham and neighbouring municipalities.
 - Providing evidence-based state of the infrastructure information.
 - Developing levels of service that are delivered as efficiently and costeffectively as possible.
 - Incorporating growth of future assets within the Service Area Asset Management Plans.

5. Regulatory Requirements

- 5.1. The following municipal goals, plans and policies that will impact or be impacted by the Asset Management Plan
 - 1. Town of Whitby Official Plan
 - 2. Whitby Council Goals
 - 3. Town of Whitby Corporate Sustainability Plan
 - 4. Active Transportation Plan

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- 5. Transportation Master Plan
- 6. Whitby Community Strategic Plan
- 7. Parking Master Plan
- 8. Parks and Open Space Master Plan
- 9. Corporate Energy and Emissions Management Plan
- 10. Durham Region Official Plan
- 11. Whitby Cycling and Leisure Trails Plan
- 12. Port Whitby Secondary Plan
- 13. Port Whitby Sustainable Community Plan
- 14. Downtown Whitby Heritage Conservation District Study and Werden's Heritage Conservation District
- 15. Brooklin Heritage Conservation District
- 16. Culture, Parks, Recreation and Open Space Strategic Master Plan
- 17. Economic Development Strategy for the Town of Whitby
- 18. Sports Facility Strategy
- 19. Town of Whitby Contingency Reserves Policy
- 20. Waterfront Parks and Open Space Master Plan
- 21. West Whitby Secondary Plan
- 22. Whitby Intensification Strategy
- 23. Town of Whitby Accessibility Plan
- 24. Engineering Design Standards
- 25. Source Water Protection and Clean Water Act
- 26. Planning Act
- 27. Metrolinx Act
- 28. Greenbelt Act
- 29. Oshawa Municipal Airport Expansion
- 30. Whitby Climate Change Plan (Mitigation and Adaptation) Early 2019
- 31. Corporate Information Technology strategic Plan
- 32. Brooklin Secondary Plan
- 33. Growth Plan for the Greater Golden Horseshoe (2017)
- 34. Durham Region Cycling Plan (2012)
- 35. Design of Public Spaces Standards: Integrated Accessibility Standard Ontario Regulation 413/12
- 36. Annual Long Range Financial Plan
- 37. Capital Budget and Forecast
- 38. Sustainability Guidelines for Development

5.2. Guide the Capital Budget and Forecasts

5.2.1 Future renditions of the SAAMP and MAMP documents will outline the desired service levels and their associated costs that Council and the residents of Whitby have helped to develop. The estimated 10-year capital expenditures and resulting analysis in the corporate Long Range Financial Plan will help Finance justify any adjustments to the maintenance envelopes for each service area.

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5.3. Committed Approach to Continuously Improving Asset Management and Monitoring Asset Management Best Practices

- 5.3.1 The Town of Whitby, through its service areas, will monitor industry and municipal Asset Management best practices. The data stewards of each service area should participate in the practice of Asset Management outside of the Town by engaging with their counterparts in neighbouring municipalities and in other municipalities that are leaders in Asset Management.
- 5.3.2 On an annual basis, the Town will evaluate its past Asset Management practices, looking for improved products and procedures to increase the efficiency and effectiveness of delivering services to our residents.
- 5.3.3 The Town will involve itself in the creation of Durham Asset Management focus groups as a means to meet with employees from other municipalities dealing with similar assets, which will prove beneficial to sharing information related to the best practice management of infrastructure assets.
- 5.3.4 Subscriptions to industry-specific periodicals should be encouraged to further educate Town staff in methods and products available for lifecycle maintenance of infrastructure assets.

5.4. Long-term view of Economic and Demographic Trends

5.4.1 The Town of Whitby will assess the economic and demographic trends of the Town, Region and Province to ensure the services provided to our residents are appropriate now and into the future. Historical and current census data will be utilized to project our residents' needs for the life of the various assets.

5.5. Identification of Infrastructure Priorities for Better Decision Making

- 5.5.1 Projects within the capital budget will be prioritized based upon the following criteria:
 - Degree of risk due to the condition of the asset and the consequence of failure.
 - The criticality of the service the asset provides.
 - The opportunity cost resulting from having to implement a more expensive rehabilitation or reconstruction as a result of not performing timely preventative maintenance.

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 Identifying assets that will be reconstructed due to planned activities such as widening a road or being replaced by a new facility. These assets will have maintenance activities performed upon them to preserve their current condition but will not have major capital works until they are decommissioned.

5.6. Promote Economic Competitiveness, Productivity, Job Creation and Training Opportunities

- 5.6.1 The Town of Whitby will promote economic competitiveness through its Purchasing Policy, selecting products and services that best meet the needs of the Town while factoring in the overall cost into the decision making process.
- 5.6.2 Throughout the corporation, staff members are undergoing Lean Six Sigma training and applying this knowledge to trim unneeded steps off processes. Lean Six Sigma is a methodology of collaborative performance improvement by systematically removing procedural waste and reducing variation. Having a Lean approach helps to maximize efficiency of Town procedures and increases productivity while reducing wait times for citizens, businesses and contractors.
- 5.6.3 The Town of Whitby recognizes the need to reserve employment lands adjacent to major highways. When developed, these lands will provide employment opportunities to existing and future residents.
- 5.6.4 The Town continues to be supportive in training internal staff, providing access to online courses, in-house training and permitting staff to attend courses offered at colleges, universities and industry specific organizations. The Town also supports local educational institutions by offering cooperative learning positions such as mechanics, office assistants, urban planners, and GIS technicians.

5.7. Ensure Health and Safety of Workers is Protected

- 5.7.1 The Town of Whitby is committed to protecting the health and safety of its employees and those working as consultants and contractors for the Town. For example, Town Staff perform safety checks of consultants and contractors work areas.
- 5.7.2 Town staff members are trained to perform their jobs safely and to be mindful of the safety of colleagues and residents. For example, all staff who work within a roadway receive OTM Book 7 training on creating a safe roadside work environment.

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5.8. Foster Innovation, Utilizing Technology and Practices that are Developed in Ontario

5.8.1 The Town of Whitby will incorporate innovation, technology and best practices that are developed in Ontario into our municipal activities and infrastructure. Clauses may need to be written into the tender, proposal and quotation documents that prioritize certain Ontario-based products and/or services that the Town wishes to support.

5.9. Decisions should be Evidence-Based and Transparent

5.9.1 All decisions will be made through sound judgement and analysis of applicable data. The decisions will be transparent and, if requested, the supporting materials will be made available to be viewed by our residents.

5.10. Promote Accessibility for Persons with Disabilities

- 5.10.1 The Town of Whitby incorporates accessibility improvements to existing infrastructure through retrofits and new infrastructure through designs that are more accessible for those individuals with disabilities.
- 5.10.2 The Town encourages commercial developers to follow the Town's Accessibility Standards in an effort to make buildings more accessible.

5.11. Minimize the Impact of Infrastructure on the Environment

- 5.11.1 The Town of Whitby is committed to being a good steward of the environment. The Town will work with the Central Lake Ontario Conservation Authority (CLOCA) to ensure that natural drainage areas of the Town are protected.
- 5.11.2 The Town will work with the Ministry of the Environment, Conservation and Parks (MECP) and the Ministry of Natural Resources and Forestry (MNRF) to ensure our activities and the activities of others within our boundaries have a minimal impact on local ecosystems.
- 5.11.3 When planning new infrastructure assets and rehabilitations to existing assets, the Town of Whitby will make every effort to limit the effect these activities have upon our water, air and soil. Using recycled materials reduces the effects that constructing and rehabilitating infrastructure has upon the environment. Whitby will incorporate an acceptable quality and quantity of recycled aggregates into the construction of Town infrastructure. The

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- accepted specifications will be outlined within the individual tender documents. The Town will look at industry best practices when using recycled aggregates to ensure the optimum quality and quantity of recycled materials are utilized.
- 5.11.4 The Town commits to optimizing lifecycle management for its assets in an effort to reduce the need to replace assets and to extend their life spans. For every computer screen or cell phone that lasts an extra year beyond its expected life span, the Town reduces the demand for new products (reuse to reduce).
- 5.11.5 When disposing of assets the Town will do so in an environmentally friendly manner.

5.12. Promote Community Engagement in Asset Management Planning

- 5.12.1 The Town of Whitby will engage its residents in Asset Management Planning through:
 - Public information forums related to planned capital projects.
 - Utilizing existing databases that keep a record of residents' service requests to help identify future works.
 This information may also help the municipality define the levels of service expected from our residents.

5.13. Address Infrastructure Risk and Vulnerabilities Due to Climate Change

- 5.13.1 The Town of Whitby will work with Durham Region to implement the recommendations identified within the Durham Community Climate Adaptation Plan (DCCAP). The recommendations range from requiring hurricane strapping in new home constructions, to managing flooding of roads and bridges, to mitigating the impacts of heat exposure on outside workers, to improving forecasting of and communicating flooding events.
- 5.13.2 The Town of Whitby will identify infrastructure that is vulnerable to the effects of climate change allowing Staff to more efficiently monitor these locations thereby helping to ensure the safety of our residents. When these assets are rehabilitated or reconstructed the effects of climate change will be incorporated into the new design.
- 5.13.3 The Town of Whitby will incorporate climate change into all planning of new infrastructure and improvements in existing infrastructure to ensure our assets meet the required capacity and resiliency that climate change will dictate with more frequent and

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intense storms. The Town will investigate best practices relating to operations and capital planning in order to develop infrastructure that has a greater resiliency to severe weather events.

5.13.4 Climate Change will be ingrained into the asset management planning process. The Town of Whitby will balance the immediate costs of vulnerable infrastructure to climate change with the planned costs of reducing these vulnerabilities. Infrastructure assets and services that are vulnerable to climate change will be addressed through the various Council-approved service levels, emergency response plans, operational activities, contingency funding, and capital budgets.

5.14. Mitigation Approaches to Climate Change

- 5.14.1 The Corporate Energy and Emissions Management Plan (PL 40-14, 2014) sets the following targets for energy consumption and greenhouse gas emissions reduction to be achieved by 2020:
 - 19% reduction of GHG emissions,
 - 20% reduction in energy use.
- 5.14.2 The following initiatives will help the Town realize its goals to mitigating climate change:
 - More efficient streetlights,
 - More efficient fleet vehicles and routing,
 - More efficient facilities and equipment,
 - Organizational commitment to decreasing the energy used.

5.15. Disaster Planning and Required Contingency Funding

5.15.1 The Corporation of the Town of Whitby Emergency Plan outlines the responsibilities of all members of the Emergency Operation Centre (EOC). The EOC holds disaster planning exercises every 6 months to train staff to effectively respond to various types of disasters within the Town. Staff responses to disaster events related to climate change (flooding, ice storms, tornadoes, and extreme heat) have been modelled in the disaster planning exercises.

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5.15.2 The Town of Whitby's Contingency Reserves Policy # F 020 is to provide a source of funding for unforeseen expenditures. These expenditures could be the result of disaster events such as flooding or ice storms. Policy # F 020 describes the nature, use and funding sources for the Town's Contingency Reserves and sets target balances required to maintain a sufficient level of financial resources within these reserves. The combined target for all contingency reserves (General Contingency Reserve, Bad Debt Allowance Reserve, Winter Control Reserve, and Insurance Reserve Fund) is kept within a minimum of 5% and a maximum of 10% of gross expenditures.

5.16. Align with Ontario's Land Use Planning Framework

- 5.16.1 Asset Management planning will follow a structure consistent with Ontario's land- use planning framework. Through the asset management planning process, scenarios related to levels of service and financing options will be explored and provided to Council and the public. Council, resident and Town Staff recommendations for future improvements to the SAAMPs or MAMP reports will be documented in the Recommendations sections of the appropriate report(s).
- 5.16.2 The MAMP Working Committee will be consulted when the community plan is prepared for a new development, provide input to the expected direct and indirect future costs of the development, and provide a written comment relating to the financial viability of the development with respect to the service they manage.
- 5.16.3 The Town of Whitby will promote the principle of long-term financial viability, which is consistent with recent developments in community planning requirements in Ontario. This will be realized through:
 - Promoting efficient development and land use patterns.
 - Promoting cost-effective development patterns to minimize land consumption and servicing costs,
 - Infrastructure assets are to be functionally viable over their lifecycle. They should protect public health and safety and the natural environment.
- 5.16.4 The Town of Whitby will consider all provincial and federal legislation when developing AM Plans. When planning for new or modifying existing infrastructure this may include legislation

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- related to the Greenbelt Act, 2005, the Places to Grow Act, 2005, the Environmental Protection Act, 2005, and Heritage Act, 1990.
- 5.16.5 The Official Plans of the Town of Whitby and the Region of Durham will be considered when developing AM Plans. For example, road widenings to deal with increased traffic volumes on arterial roads will be taken into account when developing the schedule of upcoming capital expenditures.

5.17. Capitalization Thresholds

- 5.17.1 The capitalization thresholds differ between the Asset Management Plan and the Tangible Capital Asset Policy. All infrastructure assets were included in the Asset Management Plan whereas the assets within the Public Sector Accounting Board (PSAB) reporting were a minimum value of \$25,000 with the exceptions of Land Improvements (fuel tanks, irrigation systems, gates, lighting, marina dredging, and marina sea walls) and Vehicles (trucks, automobile, van, grader, crane, fire truck, maintenance equipment and other heavy equipment) which all have a capitalization threshold of \$5,000. For PSAB reporting purposes like assets are pooled together thereby meeting the minimal threshold value.
- 5.17.2 The quantitative value of an asset should not to be the basis of that asset's inclusion into the Asset Management Plan; rather its inclusion should be based upon its function, lifecycle activities, and financial planning. Another rationale for including all assets despite their value is for ease of maintaining the asset registry. By not having pooled assets within the asset management database, individual assets can be more easily and accurately added and retired.

5.18. Develop Optimized Lifecycle Activities for All Asset Classes

5.18.1 All service areas should optimize their lifecycle activities, favouring preventative maintenance techniques to decrease the average annual costs of maintaining the assets. All asset costs should be captured in the schedule of events from planning, acquisition, operation, maintenance, renewal and replacement.

5.19. Coordinate Management of Infrastructure Assets

5.19.1 The Town of Whitby, the Region of Durham and surrounding municipalities are committed to developing co-ordinated capital rehabilitation and replacement programs. Meetings will be conducted annually (or more frequently if deemed necessary) to prioritize and schedule any required rehabilitation and

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replacement of infrastructure. The needs of the underground infrastructure (water, sanitary and storm) will be identified first to see where asphalt will likely need to be replaced. Secondly, the condition of the road asphalt and capacity needs should factor in to the prioritization process.

5.20. Provide Accountable State of the Infrastructure Information

5.20.1 The Town of Whitby commits to maintaining asset class inventories, condition assessments, and KPIs (Key Performance Indicators) of all infrastructure assets. The inventories will be maintained as assets are built, assumed, modified or decommissioned. Condition assessments will vary between asset classes; the frequency of assessment for each asset class will be shown in the respective SAAMP report. The KPIs will be linked to the Levels of Service and will be reported upon annually. The KPI trend will also be shown for each asset class in its corresponding SAAMP.

5.21. Serving as a Roadmap for Decision Making

- 5.23.1 The number and complexity of the Town of Whitby's assets has surpassed the point where paper and spreadsheets are effective means of making sound, educated decisions about the management of our assets. It is now time to invest in a corporate asset management system that will maintain inventories, manage work orders, coordinate condition assessments, perform lifecycle analyses, and organize treatment options and their associated costs. The annual recommended treatments will be based upon asset performance and the available budget.
- 5.23.2 The asset management system will be linked to our GIS to enable users to view the data spatially. Through the use of GIS, the system will manage and find trends in vast amounts of asset data in order to show the user potential conflicts or opportunities in scheduling activities. This will create increased efficiencies when dealing with data from Region of Durham (water and sanitary) and adjacent municipalities (Scugog, Oshawa, Ajax and Pickering).

5.22. Developing Service Levels

5.22.1 Each service area will develop proposed levels of service for each asset class, determining the cost to maintain their assets at this level. These levels of service will be further explored based upon the costs to maintain at higher and lower standards. The associated changes to municipal tax will be shown for these service level options. The levels of service should complement

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- the Goals of Council, the upcoming Corporate Strategic Plan, and align with the expectations of our residents.
- 5.22.2 There are a number of assets (roads, bridges, sidewalks, signs, streetlights) that have a minimum level of service that are outlined in the Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Highways. Failing to meet these minimum levels of service exposes the municipality to increased liability. Similarly, Fire assets must meet NFPA regulations to remain in use.

5.23. Manage Risk

- 5.23.1 Ultimately the goal of the Town of Whitby is to continue to reduce the exposure to risk associated with the operation and maintenance of our infrastructure assets. Risk is the product of the probability and consequences of an asset failing. The probability of an asset failing is a function of the asset's physical condition, which is largely dependent upon the asset's age and the Town's level of investment in preventative maintenance and renewal activities. The consequences of failure are related to the function of the asset, the importance of the asset in the overall system, and the potential for injury or loss of life.
- 5.23.2 Risk-based prioritization of capital projects such as preventative maintenance and renewal activities should be incorporated into the budget process.

5.24. Plan for Long-Term Sustainability

- 5.24.1 The MAMP report will determine the level of anticipated expenditures required to maintain our infrastructure at a prescribed level of service. Finance through the Long-Term Financial Strategy will determine the funding sources to pay for the expenditures.
- 5.24.2 The MAMP document will identify spikes in anticipated annual capital expenditures and the budget will provide for some flexibility in the amount of funding in each maintenance envelope, allowing for transfer of funds when needed.

5.25. Growth/Assumption of Future Assets

5.25.1 Starting in 2021, the SAAMP and MAMP documents will report on the costs of maintaining our existing assets as well as the assumption of future assets. The SAAMP and MAMP documents currently only report on the cost of maintaining existing assets.

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5.25.2 The Public Works Department is currently developing an Asset Management Resourcing Strategy to determine the effects growth upon our staffing levels, required equipment, operating and capital budgets and facility space to deliver the service levels currently provided to the Town's residents.

5.26. Updating the Asset Management Procedure

5.26.1 The Town of Whitby Asset Management Procedure will be updated at least every five (5) years or sooner if it is deemed necessary.

Original Approved and Signed.

Matthew Gaskell, Chief Administrative Officer, x2211

May 9, 2019

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