

Town of Whitby Staff Report

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Report Title: Town of Whitby Municipal Asset Management Plan Update

Report to: Committee of the Whole

Date of meeting: June 10, 2024

Report Number: FS 31-24

Department(s) Responsible:

Financial Services Department

Submitted by:

Fuwing Wong, Commissioner, Financial Services and Treasurer

Acknowledged by M. Gaskell, Chief Administrative Officer

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1. Recommendation:

1. That Council endorse the Town's 2024 Municipal Asset Management Plan which highlights the Community and Technical Levels of Service for all service areas (Facilities, Fire Equipment, Fleet, Library Resources, Parks, Roads Right-of-Way, and Technology & Innovation Services) as attached to Report FS 31-24;
2. That Council endorse the following recommendations as highlighted in Section 6 the Town's 2024 Municipal Asset Management Plan:
 - Refine existing levels of service for all other assets and propose sustainable levels of service for all service areas to be approved by Council by July 1, 2025;
 - Undertake community engagement surveys and public information sessions, to inform future asset management plans on Whitby residents' desired Levels of Service for municipal assets;
 - Assess and evaluate existing maintenance and repair activities and capture these in the Asset Management database in order to get a complete picture of future financial requirements;

- Review consequence of failure ratings regularly;
 - Assess the costs of Climate Change resilience and the associated risks to assets; and,
 - Propose Climate Change adaptation and mitigation measures for all Service Areas.
3. That Staff continuously refine lifecycle treatments to ensure assets are being maintained as cost efficiently as possible.

2. Highlights:

- The Town's existing infrastructure is in generally good condition with an overall health grade of "B" (94.7% are in fair to very good condition and 5.3% are in poor to very poor condition.)
- It is considered best infrastructure management practices to maintain a health grade in the order of "B"/"C".
- For the Town's existing infrastructure assets, the 10-year average annual financial requirement/forecasted spend is \$41,755,577/year based on the Municipal Asset Management Plan.
- The Town's current funding levels (from various sources) for asset replacements is currently \$30,999,906/year. Therefore, there is an annual funding gap of \$10,755,671 (= \$41,755,577 - \$30,999,906).
- Continued work is required by Staff to incorporate future public assets, operating costs and further climate change resilience and mitigation measures into the Municipal Asset Management Plan ("MAMP").

3. Background:

History of Asset Management

- The discipline of Asset Management ("AM") is emerging as a mainstream expectation for all public organizations. It draws on both business and financial management and also from technical, engineering, operations and maintenance management.
- 2012 - The Ontario Ministry of Infrastructure launched its Building Together initiative, which provided guidelines on the development of AM Plans. The 2012 guidelines noted that going forward, the Provincial government will require that any municipality seeking Provincial capital funding assistance have a detailed AM Plan that shows how the proposed project fits within the AM Plan.

- 2014 - The Association of Municipalities of Ontario (AMO) entered into a new gas tax agreement with the Federal government, on behalf of all municipalities, which required that detailed asset management plans be completed for all municipal asset inventories by the end of 2016.
- 2016 – The Town of Whitby completed its first Municipal Asset Management Plan and seven Service Area Asset Management Plans.
- 2017 - The Provincial Government of Ontario passed O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure mandating due dates for various Asset Management deliverables for all municipalities.
- 2019 – The Town of Whitby completed the Asset Management Policy and Asset Management Procedure. This was the first deliverable under Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure.
- 2021 – Due to the COVID Pandemic, the Province of Ontario extended the due dates for the final three O.Reg. 588/17 deliverables each by one year.
- 2022 – The Town of Whitby updated its Municipal Asset Management Plan, meeting all requirements for the O.Reg. 588/17 – July 1, 2022 deadline for the core assets (roads, bridges, structural culverts, and stormwater management assets).
- 2024 – The Town of Whitby updated its Strategic Asset Management Policy and Procedure via the March 4, 2024 Staff Report FS 08-24, in accordance with the requirements of O.Reg. 588/17.
- 2024 – Through this report, the Town of Whitby is updating its Municipal Asset Management Plan, meeting all requirements for the O.Reg. 588/17 – July 1, 2024 deadline for all service area asset classes (Facilities, Fire Equipment, Fleet, Library Resources, Parks, Roads Right-of-Way, and Technology & Innovation Services).

Future of Asset Management

- July 1, 2025 – 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,
 2. Financial Strategy which includes a 10-year expenditure forecast,
 3. Risk Analysis,
 4. Growth Analysis.

What is Asset Management?

Asset Management can be best defined as an integrated business approach within an organization that minimizes the lifecycle costs of owning, operating, and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service for present and future residents, businesses, visitors/customers.

AM includes the planning, design, construction, operation and maintenance of infrastructure used to provide services. By utilizing AM processes, infrastructure needs can be prioritized over time, while ensuring timely investments to minimize repair and rehabilitation costs and maintain municipal assets.

Key questions municipalities must ask themselves today as they continue to develop and refine their AMPs and programs are the following:

- What do you have and where is it?
- What is it worth?
- What is its 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 it?
- How much will it cost and what is the acceptable level of risk(s)?
- What are the overall life cycle needs/costs?
- What are the long-term sustainable financial needs?

4. Discussion:

The Town's 2024 Municipal Asset Management Plan report (as provided in **Attachment 1**) has five primary chapters:

1. State of Existing Infrastructure
2. Levels of Service
3. Financial Needs
4. Growth and Demand
5. Recommendations

Within this update of the MAMP, assets in all service areas have growth incorporated into the average annual costs of owning these future assets. The MAMP reports on asset information as of December 31, 2023 and includes only capital lifecycle activities. Total replacement cost of assets owned by the Town is estimated at \$3.1 billion.

State of Existing Infrastructure:

The State of Existing Infrastructure chapter identifies the inventories for all the municipal assets, replacement costs and current asset conditions. Based on this information, an Asset Health Grade has been developed for each asset category (Roads Right-of-Way, Facilities, Parks, Fleet, Library Resources, Fire Equipment, and Technology and Innovation Services as shown in Table 3 of Attachment 1. These grades range from an “A” (asset category is in excellent condition and like new) to “F” (asset category is in very poor condition, beyond its useful life and has deteriorated to the point that it is no longer fit to fulfill its function).

Based on a blend of age-based data and observed condition data, 94.7% of Whitby’s current assets (based on replacement cost) are in fair to very good condition. However, 5.3% of existing assets, (representing a current replacement cost of \$163.8 million), are in poor to very poor condition. As such, the current assets have an **Overall Asset Health Grade** of ‘B’.

It is important to note that the Asset Health Grade is a snapshot in time and does not look at future asset assumption or future funding needs to continue to adequately maintain our assets. It is also fundamental to recognize that the Asset Health Grade is an average of all the Service Area’s assets, and some individual assets are higher and lower than what the average grade indicates.

Levels of Service:

As part of the deliverables of Ontario Regulation 588/17, the Levels of Service have changed to incorporate Technical Levels of Service, such as the average pavement condition rating. Community Levels of Service, for example, could illustrate the connectivity of roads within the Town of Whitby, through a map.

The current community and technical levels of service and key performance indicators (KPIs) for all service areas’ assets will be expanded upon in the 2025 MAMP to incorporate proposed or desired service levels for Town assets. The KPIs currently measure, and in upcoming iterations of the MAMP, will define the desired performance of, the Town’s infrastructure assets and help indicate the average user’s enjoyment of our municipal infrastructure.

To comply with Asset Management regulatory requirements for next year (by July 1, 2025), staff will

- Undertake community engagement surveys and public information sessions, to inform future asset management plans on Whitby residents’ desired Levels of Service for municipal assets; and,
- Refine existing levels of service for all assets and propose sustainable levels of service for all service areas to be approved by Council by July 1, 2025.

Asset Maintenance and Renewal Strategies

Appendix 'C' of Attachment 1 identifies all asset classes' capital lifecycle activities, their frequency, and a per unit cost that is recommended to occur over an asset's life in order to minimize total lifecycle costs. In general, the Level of Service recommended would allow the assets to deteriorate to a Grade C/D prior to a major rehabilitation being undertaken, while at the same time undertaking minor maintenance strategies throughout the lifecycle to extend the life of the asset as much as possible. However, some assets such as bridges, fire equipment and facilities have been identified for higher Levels of Service for public safety reasons.

Financial Needs

While current asset health is an important indicator of the Town's asset management maturity, it is also critically important for the municipality to ensure its ability to fund long-term lifecycle needs in order to maintain its assets in an acceptable level of repair.

As shown in Table 13 in Section 4 of the MAMP (Attachment 1) the average annual capital investment requirement in total for all seven (7) Service Areas over a 10-year planning horizon has been determined to be \$41,755,577. However, the average annual funding currently allocated to these assets for asset management purposes is \$30,999,906 (funding at 74.2%). This leaves an annual capital funding deficit/gap (25.8%) of \$10,755,671 (= \$41,755,577 - \$30,999,906). These funding requirements will increase and decrease from year-to-year from the average annual requirements as various assets come due for rehabilitation or replacement.

Recommendations

The MAMP is a living document and will continually be updated and built upon. This version is considered Phase III and considers existing and growth assets for all service areas, as well as Community and Technical Levels of Service for existing assets in all service areas.

5. Financial Considerations:

This report and the attached MAMP document are to inform Council of future infrastructure funding requirements associated with existing and future assets.

As noted above:

- the Town's total projected replacement cost of all assets owned as of December 31, 2023 is \$3.1 billion;
- Based on the MAMP, the forecasted asset management related spend over the next 10 years is \$417 million which works out to approximately \$42 million per year, on average (= \$417/10years);

- The Town's current budget for asset replacement is approximately \$31 million annually (mainly from property taxes allocated to the Asset Management Reserve Fund).

Based on the forecasted (10-year) average annual spend in the MAMP and current budget funding levels shown above, there is an annual funding gap/deficit of approximately \$11 million (= \$42 requirement - \$11 million current funding). As part of the budget process, staff will recommend a continued increase in property tax-based funding for the Asset Management Reserve Fund for asset repair and reinvestment forecasted in the MAMP. As part of the budget process, staff will evaluate the condition of assets prior to moving forward with an asset management-related budget request.

6. Communication and Public Engagement:

The MAMP will be posted on the Town's website. In addition, social media and The Perspective will be utilized to communicate facts regarding the Town's assets to the public.

7. Input from Departments/Sources:

Staff from all departments continue to be instrumental in providing updates to the MAMP document. The updates that Staff from the various service areas provided were: new assets, disposed assets, updated condition ratings, updated replacement costs, service area service level key performance metrics, capital lifecycle activities, and departmental progress, challenges and opportunities regarding climate change resilience and mitigation.

Members of the Municipal Asset Management Plan Working Group continue to work with TIS Staff to ensure the needs of Asset Management for all service areas within the corporation are incorporated into the Enterprise Resource Planning (ERP) solution. Some of the main goals of the ERP solution are having a centralized database to eliminate redundancies and chances of error from entering data into multiple software platforms; capturing significant operations activities such as pothole repair that can assist in determining the optimal time to resurface a road; and closing the financial process of planning, constructing, maintaining, rehabilitating and decommissioning/reconstructing the various infrastructure.

8. Strategic Priorities:

2023-2026 Community Strategic Plan

The Municipal Asset Management Plan (MAMP) furthers the Town of Whitby's 2023-2026 Community Strategic Plan Strategic Pillars and is closely connected to Strategic Pillars 2 (Whitby's Natural and Built Environment), and 4 (Whitby's Government).

The MAMP advances Strategic Pillar 2 Whitby's Natural and Built Environment – Objective 2.1 Demonstrate environmental leadership in sustainability and addressing climate change, through Actions 2.1.1 and 2.1.6, by enabling integrated asset management practices across the Corporation, providing the opportunity to incorporate climate mitigation measures proactively. It also advances Objective 2.2 Enhance community connectivity and beautification through Actions 2.2.2 and 2.2.5, by defining and monitoring service levels of various municipal asset types, including those promoting active transportation and community beautification. Moreover, Objective 2.3 Invest in infrastructure and assets, is advanced by the MAMP through Actions 2.3.1 and 2.3.2. These major transportation and facility assets advanced by Actions 2.3.1 and 2.3.2 will require strategic asset management and planning into the future.

The MAMP and the practice of asset management is related to, and advances, Strategic Pillar 4 Whitby's Government – Objective 4.3 Deliver exceptional customer service and community engagement, through Action 4.3.2, by defining, measuring, and maintaining consistent and transparent asset service levels, which promotes accountability, community engagement, and a commitment to meeting the defined service level targets. It also advances Objective 4.4 Ensure fiscal accountability and responsibly plan for growth, and specifically Actions 4.4.1 and 4.4.4, as strategic short-, medium-, and long-term planning of asset lifecycle activities to maintain defined service levels encourage financial sustainability and fiscal responsibility.

9. Attachments:

Attachment 1 – Town of Whitby Municipal Asset Management Plan (06/03/2024)