



Staff Report

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Report To:	General Government Committee		
Date of Meeting:	June 6, 2022	Report Number:	FSD-024-22
Submitted By:	Trevor Pinn, Deputy CAO/Treasurer		
Reviewed By:	Mary-Anne Dempster, CAO	Resolution#:	
File Number:		By-law Number:	
Report Subject:	Asset Management Plan		

Recommendations:

1. That Report FSD-024-22 and any related delegations or communication items, be received;
2. That the Municipality's 2022 Asset Management Plan attached to Report FSD-024-22 as Attachment 1, be approved, in principle, subject to formatting and branding guideline changes;
3. That Staff be directed to report back to Council in 2023 with options to reduce the infrastructure funding gap sustainably; and
4. That all interested parties listed in Report FSD-024-22 and any delegations be advised of Council's decision.

Report Overview

The Municipality of Clarington is required, in compliance with Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, to complete an updated Asset Management Plan by July 1, 2022.

The Municipality of Clarington Asset Management Plan 2022 includes update information for the Municipality's roads, bridges, and stormwater assets. The current state of the assets, replacement values, key performance indicators and life cycle activities are included in this phase of the asset management plan.

While a funding strategy is not required at this time, Staff are recommending that options for sustainably funding the infrastructure gap be brought back to Council in 2023.

1. Background

- 1.1 The Municipality of Clarington's first asset management plan was approved in 2013 through the adoption of [Report FND-020-13](#). This asset management plan was for roads and bridges and was to meet the requirements of the Small Rural and Northern Municipal Infrastructure Fund – Capital Program.
- 1.2 In 2017, the Municipality completed the 2017 Comprehensive Asset Management Plan which was "received to comply with funding agreements" through [Report FND-014-17](#). This plan included bridges and culverts, buildings, fleet, roads, parks, storm sewers, and sidewalks.
- 1.3 In 2017, it was anticipated that more formal requirements for asset management plans would be prescribed through regulation by the Province of Ontario. Asset management planning is a foundational process for creating financially sustainable municipalities; the current requirement by the Province ensures that municipalities complete these steps in a consistent manner that will allow comparability between municipalities.

2. Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure

- 2.1 On December 13, 2017, the Province of Ontario made [Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure](#) under the Infrastructure for Jobs and Prosperity Act, 2015. This regulation set new requirements for municipalities across Ontario regarding their asset management planning initiatives.
- 2.2 The regulation lays out four dates that municipalities must proceed through on their asset management journey. As a result of the COVID-19 Pandemic, the Province of Ontario delayed the requirements for phases two through five by one year.

Phase	Due Date	Description
Phase 1	July 1, 2019	All municipalities are required to prepare and publish a strategic asset management policy.
Phase 2	July 1, 2022	All municipalities must develop enhanced asset management plans covering core infrastructure assets. (Core assets include: road, bridges, stormwater, water and wastewater assets)
Phase 3	July 1, 2024	All municipalities must expand enhanced asset management plans to cover all infrastructure assets.
Phase 4	July 1, 2025	Expand asset management plans to provide additional details for all infrastructure assets.
Phase 5	Every 5 years	The Phase 4 compliant asset management plan shall be updated at least every five years after it is approved.

- 2.3 The regulations required that all asset management plans must be endorsed by the executive lead of the municipality and approved by a resolution passed by the municipal council.
- 2.4 The Municipality is required to post its current asset management policy and each of its asset management plans on a website that is available to the public (www.clarington.net) as well as provide the asset management plan to any person who requests it. The Municipality has developed a page specific to [Asset Management](#) on its website that will hold the required information for the public.

Phase 1 - Strategic Asset Management Policy

- 2.5 The first phase was the adoption of a Strategic Asset Management Policy. The first policy was required to be adopted by July 1, 2019, and shall be reviewed and updated at least every five years.
- 2.6 At its meeting of April 15, 2019, General Government Committee approved the Municipality's Strategic Asset Management Policy through the adoption of [Report FND-010-19](#).

Phase 2 and 3 – Asset Management Plans, Current Levels of Service

- 2.7 Every municipality shall prepare an asset management plan in respect of its core municipal infrastructure assets by July 1, 2021, and in respect of all of its other municipal infrastructure assets by July 1, 2023.
- 2.8 Plans in these phases are focused on the current levels of service that municipalities generate from their assets. The regulations require an asset management plan to include the following:
- a. For each asset category, the current level of service provided, determined using the required qualitative and technical metrics based on data at most two calendar years old;
 - b. The current performance of each asset category, determined in accordance with performance measures established by the municipality, with data at most two calendar years old;
 - c. A summary of the assets in each category, the replacement cost of the assets in each category, the average age of the assets in the category; condition information on the assets and a description of the approach for assessing the condition of the assets in the category;
 - d. For each asset category, the lifecycle activities that would need to be undertaken to maintain the current levels of service for each of the 10 years in the plan. The cost of the lifecycle of the assets, the options for which lifecycle activities could be undertaken, the risks with those options and the lowest cost options are also provided for each asset category; and,
 - e. As Clarington has a population over 25,000 it is required to provide additional information regarding the population growth and the impact on its asset management plan.

Phase 4 – Asset Management Plans, Proposed Levels of Service

- 2.9 In addition to the asset management plans created in Phase 2 and Phase 3, the Municipality will be required to adjust these plans to include the following additional information:
- a. For each asset category, the levels of service that the Municipality proposes to provide in each of the following ten years;
 - b. An explanation of why the proposed levels of service are appropriate for the municipality, based on an assessment of the options and risks of the proposed

levels on long term sustainability, how the proposed levels differ from the current levels of service, whether the proposed levels are achievable and the ability for the municipality to afford the proposed levels of service;

- c. The proposed performance of each asset category for each of the ten-year period;
- d. Lifecycle management and financial strategy that sets out the following for each asset category:
 - i. the full lifecycle of the assets, options for lifecycle activities to achieve the proposed levels of services, risks associated with those activities, the activities at the lowest cost to achieve the levels of service;
 - ii. an estimate of the annual costs for each of the ten years in the plan separated into capital and operating costs;
 - iii. identification of the annual funding projected to be available to undertake the activities and an explanation of options examined to maximize funding;
 - iv. if a shortfall is identified, which activities will be undertaken and if applicable the risks associated with not undertaking any of the identified activities.
- e. The growth impacts on the ten-year period will be required to be incorporated into the asset management plan created in this phase.

Phase 5 - Future Updates of Asset Management Plans

- 2.10 O.Reg 588/17 requires that every municipality shall review and update its asset management plan at least five years after the year in which the plan is completed in Phase 4 and every five years after that.
- 2.11 The requirement to update asset management plans reflects that the document is a "living document" that must be reviewed and updated as the status of the infrastructure assets of a municipality evolve. New technologies, legislation and service expectations will all impact future asset management plans as the Municipality of Clarington develops.
- 2.12 Each year, council shall conduct an annual review of its asset management progress on or before July 1 in each year starting the year after the Phase 4 asset management plan is completed.
- 2.13 The review will address the following:
 - a. The municipality's progress in implementing its asset management plan;

- b. Any factors that impeding the municipality's ability to implement its asset management plan; and
- c. A strategy to address the factors mentioned in (b).

3. The 2022 Municipality of Clarington Asset Management Plan

- 3.1 The 2022 Asset Management Plan covers roads, bridges and culverts and stormwater assets. As the Municipality does not have water and wastewater assets, these are not applicable, although we do work with the Region of Durham on timing to ensure that our asset projects are aligned.
- 3.2 The following summarizes the infrastructure costs owned by the Municipality of Clarington and the annual investment required to maintain the current levels of service.

Asset Category	2020 Replacement Cost	Annual Investment Required	Current Investment (2022 Budget)	Annual Shortfall
Stormwater	\$188,266,200	\$2,294,500	\$1,284,500	\$1,010,000
Roads	714,628,400	22,455,700	7,104,600	15,351,100
Bridges and Culverts	200,020,200	2,561,600	2,380,000	181,600
	\$1,102,914,800	\$27,311,800	\$10,769,100	\$16,542,700

- 3.3 The 2022 current investment includes projects funded by the Ontario Community Infrastructure Fund. The OCIF annual funding is approximately \$1.8 million historically, which is used for road rehabilitation projects; these are lifecycle activities to prolong the useful life of road assets. It is anticipated that the Municipality will not be eligible for OCIF starting in 2023 unless changes to the program occur.

Stormwater Management

3.4 Stormwater assets include ponds, conduit (storm sewer pipe), maintenance holes, catch basins, inlet/outlet structures as well as oil grit separators. The assets often are contributed by developers as part of subdivision assumption.

3.5 The following summarizes the number of assets within the Stormwater asset category:

Asset Segment	Quantity	2020 Replacement Cost
Ponds – Wet	23	\$5,638,700
Ponds – Dry	15	3,074,300
Conduit (km)	260	129,019,500
Maintenance Holes	4,072	35,987,600
Catch Basins	6,378	13,063,000
Inlet/Outlet Structures	184	244,700
Oil Grit Separators	13	1,238,500
		\$188,266,300

3.6 Approximately 68.6% of conduit and 69.3% of structures are rated good to very good, while 7.5% of conduit and 7.6% of structures are rated poor to very poor. All wet ponds and 93.3% of dry ponds are rated good to very good. The annual investment is approximately 60% of the annual need, and this may indicate that the condition of the assets will begin to deteriorate over time as the investment does not keep up with the anticipated lifecycle requirements.

- 3.7 Stormwater conditions were assessed with the help of the Ganaraska Region Conservation Authority (GRCA). Their report is included for information as Attachment #2.

Roads

- 3.8 Road assets include surface and base. Road surface is further separated into unpaved roads (earth, gravel) and paved roads (high class bituminous 1 to 4 and low-class bituminous). The following provides a summary of the road network:

Asset Segment	Quantity (Km)	2020 Replacement Cost
Earth Roads	40	\$0
Gravel Roads	65	3,533,900
High Class Bituminous 1 (HCB-1)	1	410,000
High Class Bituminous 2 (HCB-2)	4	1,839,000
High Class Bituminous 3 (HCB-3)	164	53,390,700
High Class Bituminous 4 (HCB-4)	259	84,393,300
Low Class Bituminous	366	32,555,300
Road Base	914	538,506,300
		\$714,628,500

- 3.9 The majority of the Municipality's roads are rated good (10%) to very good (48%) with only 5% rated as critical and 21% rated as poor.

Bridges and Culverts

3.10 Bridges and culverts include culverts and bridges with a span of 3m or greater and may include both pedestrian or vehicular travel. Bridges are inspected every other year in accordance with Provincial legislation, and repairs are prioritized based on the conditions of the structures.

3.11 The Municipality owns the following bridge and culvert assets:

Asset Segment	Quantity (each)	2020 Replacement Cost
Bridges – Cast in Place	80	\$65,386,000
Bridges – Precast Concrete	13	46,098,200
Bridges – Steel	4	4,973,100
Bridges – Timber/Wood	2	1,221,400
Culverts	149	77,365,200
Pedestrian Bridges	24	4,976,300
		\$200,020,200

3.12 Of the bridges and culverts in our inventory, 68% are rated good or very good while 20% are rated poor to very poor. The annual investment in bridges and culverts is approximately 92.9% of the annual required need.

Financing Strategy

- 3.13 Under the requirements of O.Reg 588/17, this asset management plan does not include a financing strategy that Council must adopt. This requirement will be in the final phase of AMP development.
- 3.14 However, it is prudent to recognize that there is an annual funding gap that could result in deteriorating levels of service, increased future costs that could be avoided, or service interruptions.
- 3.15 Some municipalities in Ontario have utilized dedicated infrastructure levies to reduce the infrastructure backlog and deficit. The approved Budget Policy ([Report FND-002-19](#)) included 1.5% to 2.0% per year as a target increase for the capital budget. This amount was determined based on the 2017 identified requirement for a 1.7% (in 2017 dollars) increase in order to reduce the infrastructure backlog; however, this is not a dedicated infrastructure levy, and the approved increases in 2020 to 2022 have been in line with inflation.
- 3.16 Staff would like to explore options for developing a reliable funding source as part of the budget process. This may include a dedicated infrastructure levy, a dedicated portion of the general levy for capital, or a combination of both.

4. Concurrence

Not Applicable.

5. Conclusion

- 5.1 It is respectfully recommended that Council approve the 2022 Asset Management Plan to fulfill the requirements of O.Reg 588/17 and the Infrastructure for Jobs and Prosperity Act, 2015.
- 5.2 It is recommended that Staff continue to proceed with the next phase of the asset management planning journey, which will include the remaining infrastructure assets that the Municipality owns.
- 5.3 It is recommended that Staff be directed to consider options available to the Municipality to reduce the infrastructure funding gap in a sustainable manner.

Staff Contact: Erika Watson, CAMP, Asset Management and Development Financing Manager, 905-623-3379 ext. 2607 or ewatson@clarington.net.

Attachments:

Attachment 1 – 2022 Municipality of Clarington Asset Management Plan

Attachment 2 – Storm Sewer Risk Assessment prepared by the Ganaraska Region Conservation Authority

Interested Parties:

There are no interested parties to be notified of Council's decision.