

Administrative Report

Office of the Director, Financial Services/Treasurer

То:	Warden MacDonald and Members of Essex County Council
From:	Sandra Zwiers, MAcc, CPA, CA Director, Financial Services/Treasurer
Date:	Wednesday, February 01, 2023
Subject:	2022 Asset Management Plan (AMP)
Report #:	2023-0201-FIN-R03-SZ

Purpose

The purpose of this report is to provide Council with an update to the Corporation's Asset Management Plan (AMP) in accordance with Ontario Regulation 588/17.

Background

An Asset Management Plan is a systematic process that provides for the operation, maintenance, upgrade and ultimately disposal and/or replacement of physical infrastructure/assets. The process combines multi-disciplinary management techniques, including technical and financial, over the lifecycle of the asset(s). The objective is to maximize the benefits of the asset, manage the risk associated with the asset and provide appropriate levels of service to the public in a sustainable manner.

The asset management journey for most municipalities began back in 2009 with the prescription of establishing Tangible Capital Assets. Since that time, the Province encouraged, and since legislated, municipalities build on their asset inventory data by intentionally identifying assets according to their condition, life expectancy and future replacement. The traditional financial reporting standards that focused on historical cost are now recognized to be ineffective in adequately managing current replacement costs. The integration of Asset Management Plans has increased over the last decade. Most provincial infrastructure funding programs now require reference to a municipality's Asset Management Plan. In addition, provincial funding is also

subject to municipalities demonstrating compliance with all relevant legislation (i.e. timely completion of bridge inspections as required under the *Public Transportation and Highway Improvement Act, 1990* and submitting Financial Information Returns as required under the *Municipal Act, 2001*).

The County began its asset management practices back in the early 2000's, well ahead of legislation. The Corporation's Reserve Strategy, Tangible Capital Asset Policy and multi-year capital repair and maintenance plans formed the foundation for formal Asset Management Plans that were issued in 2013 and 2017. In 2019 a Strategic Asset Management Policy was established to further integrate sound asset management practices into the County's operational and long-term planning and budget decisions.

O.Reg 588/17 sets out a multi-year progression of AMP principles and deliverables. The most recent deadline, July 1, 2022, required municipalities to comprehensively analyze linear assets by detailing the state of local infrastructure, identifying levels of service, key performance indicators and asset management renewal strategies. The Draft 2022 Asset Management Plan (Attached as Appendix A) meets the requirements of O.Reg 588/17.

It is important to note that the 2013 AMP included only linear assets. The 2017 AMP was expanded to include all municipal assets. The 2022 AMP, takes a deeper dive into the analysis of linear assets only. To get a full picture of the Corporation's assets, reference to both the 2017 and 2022 AMPs is recommended. O. Reg 588/17 requirements in 2024 and 2025 require municipalities to provide a deeper analysis on all corporate assets. Upon completion of those updates, the 2017 AMP will be fully repealed.

Discussion

The building blocks of the AMP start with the asset inventory and then expand to include asset condition ratings, remaining useful life estimates and finally current replacement cost. The combination of these factors allows for long-term financial planning that maximizes asset use and prepares for future replacement. To provide context for the County of Essex, the next sections highlight statistics related to the building block components of the Corporation's AMP.

Linear Asset Inventory

The Corporation's linear asset inventory includes County roadways, CWATS facilities, roundabouts, bridges, culverts and stormwater mains. In total, 649 unique asset segments are managed in the Corporation's asset management



software (CityWide). The chart that follows illustrates the distribution of tracked assets.

Linear Asset Condition Ratings

The Corporation's long-standing commitment to maintenance of its assets is evident in the overall condition of linear assets. Over 69% of all linear assets can be categorized in good to very good condition while only 6% of assets are in poor to very poor condition. Adherence to a consistent repair and maintenance program promotes the maximization of value for spending and helps mitigate risk associated with the public use of these assets. The chart below illustrates the breakdown of condition ratings for all linear assets.



Linear Asset Estimated Useful Life

Assessing the useful life of any asset is sometimes more of an art than a science. Materials used in construction, climate changes and level of use are some of the many variables impacting an asset's useful life. For the purposes of the 2022 AMP, a combination of methods was used to determine useful life: industry standards, practical experience and professional judgement.

Linear Asset Replacement Cost

Based on 2021 replacement cost, the Corporation's linear asset inventory totals approximately \$807 million. The chart below illustrates the allocation of replacement cost by linear asset type. The Corporation's road segments make up the largest share of linear asset replacement cost totaling \$457,960,790.



Asset Management Report Card

When the average annual cost to maintain assets exceeds the average annual investment, the result is a deficit. All municipalities experience some level of infrastructure deficit. Each municipality is required to decide for itself, what level of infrastructure deficit is tolerable and how it will respond to infrastructure repair and maintenance costs. The goal of 100% funding, while noble, is unrealistic. A more attainable goal for municipalities is to show consistent improvement in its asset management report card represented by a year over year reduction in the infrastructure deficit and/or an overall improvement in the condition of assets.

A comparison of the 2017 and 2022 report cards for the Corporation's linear assets is shown below. In addition to improvements in the accuracy of data, the County of Essex has improved in all areas of asset health for its linear assets.

From a financing capacity however, the increase in the volume of assets and the high escalation of replacement costs over the last five years has deteriorated the Corporation's score for annual funding. Lifecycle events undertaken to maintain assets in a state of good repair have also changed since the 2017 AMP. More investment is needed during a linear asset's lifecycle to maintain its condition. Factors such as population growth, use of the asset and most critically, climate change, have translated into more frequent linear asset investment. The combination of increased replacement cost and more frequent lifecycle events to maintain healthy assets results in a loss of financial capacity.

Asset Category	Asset Health (2017)	Financial Capacity (2017)	Asset Health (2022)	Financial Capacity (2022)
Road Network	C+	N/A	А	N/A
Bridges & Culverts	В	N/A	А	N/A
Storm Sewers	B+	N/A	A+	N/A
Total Average	C+	92%	Α	49.50%

Financial Implications

The 2022 AMP identifies the average annual requirement for linear assets as \$27,092,900. The Corporation's average annual investment is \$13,381,500 leaving an average annual infrastructure deficit of \$13,711,400. As noted previously, 100% funding of the infrastructure deficit is unrealistic. Insufficient capacity exists within the property tax rate, when considering affordability, to make up this difference.

Repair and maintenance program design and timing play a key role in the condition rating and cost of linear assets. While lifecycle events could be reduced in frequency to lower the average annual requirement, doing so would impact the health of the asset. Weighing the risk associated with deteriorating linear assets is also a critical element of the design and timing of lifecycle events. In many cases, legislated minimum maintenance standards also restrict a municipality's discretion for lifecycle events.

In accordance with the Corporation's Strategic Asset Management Policy administration integrates the results of the AMP into sound capital planning and budget development. The 2022 AMP will serve as a guiding document and may result in recommendations to increase repair and maintenance capital program investment.

Consultations

Heidi McLeod, Manager of Accounting – Administration / Deputy Treasurer

Allan Botham, Director of Infrastructure and Planning

Karyn Templin – Manager of Construction and Design

Hoa Du, Financial Analyst

Recommendation

That Essex County Council approve the County of Essex Asset Management Plan 2022.

Approvals

Respectfully Submitted,

Sandra Zwiers

Sandra Zwiers, MAcc, CPA, CA, Director, Financial Services/Treasurer

Concurred With,

Mary Birch

Mary Birch, B.A., CMO, Interim Chief Administrative Officer

Appendix Number	Title
А	County of Essex Asset Management Plan 2022