



## **Administrative Report**

### **Office of the Director, Financial Services/Treasurer**

**To:** Warden MacDonald and Members of Essex County Council

**From:** Melissa Ryan, CPA  
Director, Financial Services/Treasurer

**Date:** Wednesday, June 05, 2024

**Subject:** 2024 Asset Management Plan (AMP)

**Report #:** 2024-0605-FIN-R11-MR

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#### **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 and receive direction to include funding in the 2025 Budget to gradually fund the shortfall in replacement costs of assets.

#### **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 to 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, 2023, required municipalities to provide key asset attribute data, including the current composition of the asset portfolio, an estimation of its current replacement value and an assessment of the current capital spending framework. The Draft 2024 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 took a deeper dive into the analysis of linear assets only. This 2024 iteration of the plan continues to improve the level of data accuracy and relevance to today's economic, social and political environment. While the previous AMP focused on core infrastructure assets, such as road networks, bridges, culverts and stormwater networks, this plan broadens the scope and brings the quality of data for all County assets to the standards of the core infrastructure assets.

## **Discussion**

Included in the AMP is a detailed discussion of the state of local infrastructure and assets for each category; an outline of the County's current levels of service and key performance indicators (KPIs); the strategy used to guide the County's lifecycle management for all portfolio assets; and the framework that establishes the risk associated with each asset in order to aid in decision making. The data presented in the report is limited to assets in service on December 31, 2022 and requiring replacement at the

end of their anticipated useful life. Assets required for expansion of service capacity will be addressed in a future version of this plan.

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.

## **Asset Portfolio Summary**

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As outlined in the Table below, assets are generally in good overall condition, however there is an annual funding deficit of \$27.3 million that, if not addressed, could lead to decreased levels of service and a deteriorating asset base. The County has successfully implemented several preventative maintenance strategies and takes a proactive approach to maintaining and repairing assets, which has directly resulted in an overall favourable condition assessment. However, maintenance and repairs only go so far and eventual replacement of assets is inevitable.

<b>Category</b>	<b>Replacement Cost (million)</b>	<b>Weighted Average Condition</b>	<b>Average Annual Requirement</b>	<b>Average Annual Deficit</b>
<b>Road Network</b>	\$568.4	68.9% (Good)	\$24,890,900	\$14,369,300
<b>Bridges &amp; Culverts</b>	\$274.2	63.0% (Good)	\$8,163,500	\$5,007,600
<b>Stormwater Network</b>	\$5.1	72.0% (Good)	\$127,000	\$127,000
<b>Infrastructure and Planning Services</b>	\$33.0	56.2% (Fair)	\$1,973,700	\$614,100
<b>Sun Parlor Home</b>	\$99.9	77.8% (Good)	\$2,185,200	\$2,016,600

Category	Replacement Cost (million)	Weighted Average Condition	Average Annual Requirement	Average Annual Deficit
<b>Emergency Medical Services</b>	\$65.4	74.8% (Good)	\$4,768,300	\$2,934,100
<b>General Government Services</b>	\$36.5	77.4% (Good)	\$482,400	(\$17,200)
<b>Essex County Library</b>	\$6.3	45.1% (Fair)	\$720,500	\$156,800
<b>Essex Windsor Solid Waste Authority</b>	\$35.0	63.8% (Good)	\$2,896,300	\$2,074,800
<b>Total</b>	<b>\$1,123.8</b>	<b>68.1% (Good)</b>	<b>\$46,207,800</b>	<b>\$27,283,100</b>

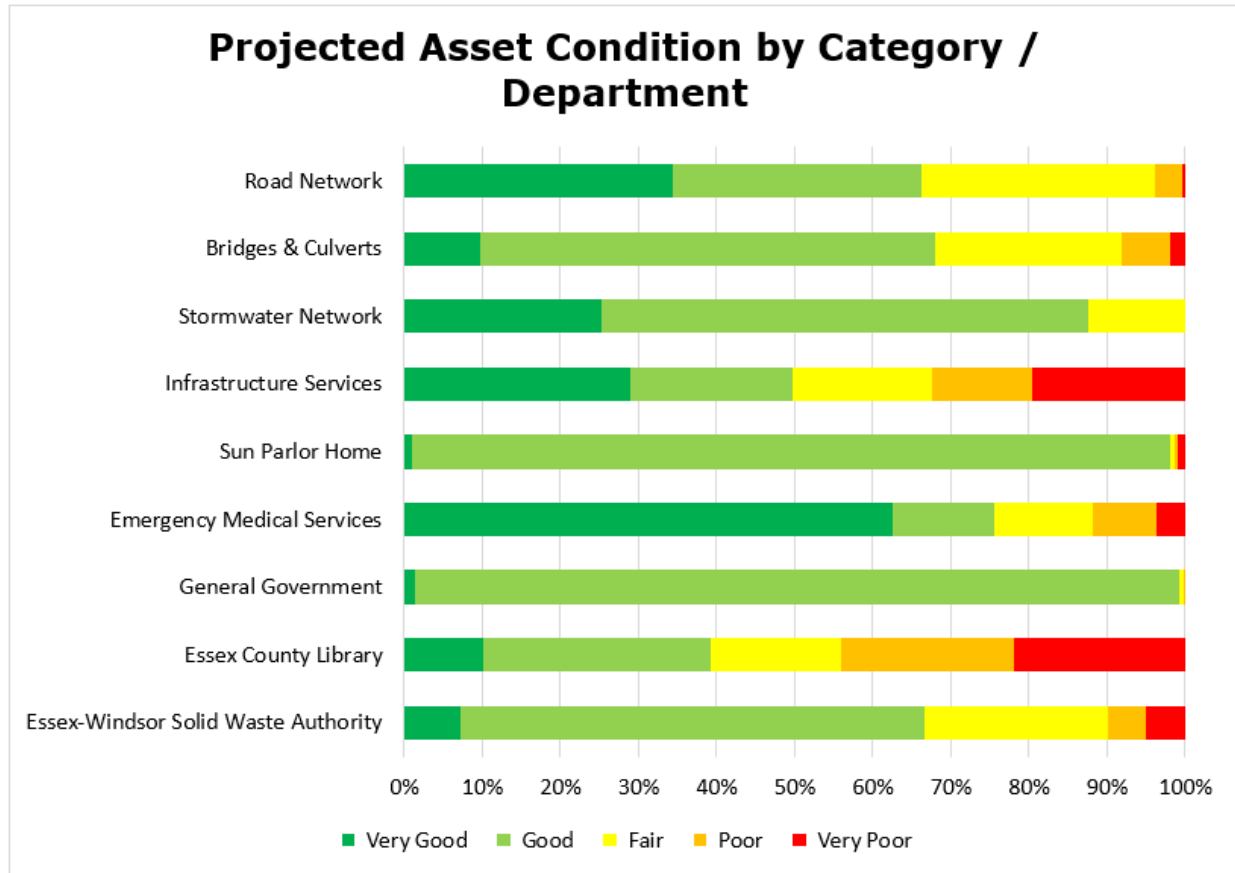
## **Total Replacement Cost of Asset Portfolio**

The County's total replacement cost for all assets stands at approximately \$1.12 billion. This estimation includes all types of assets, from linear assets like roads and CWATS routes to other non-core assets such as buildings, fleet and equipment. Replacement costs for linear assets were calculated based on current cost per lane kilometre or deck area, inflated annually, while costs for roundabout intersections were determined using historical data inflated quarterly. For all other municipal assets, replacement costs were established through consultation with industry professionals, departmental managers, and review of historical price trends and current market prices.

## **Condition of Asset Portfolio**

The overall condition of County assets is crucial for maintaining service levels. Approximately 94.8% of core assets and 90.6% of non-core assets are in Fair or better condition, with 66.9% of core assets and 81.8% of non-core assets rated as Good to Very Good. Core infrastructure undergoes

regular assessments, except for the stormwater network, which relies on age-based assessments. The County is enhancing inspection and maintenance strategies to better forecast asset repairs or replacements.

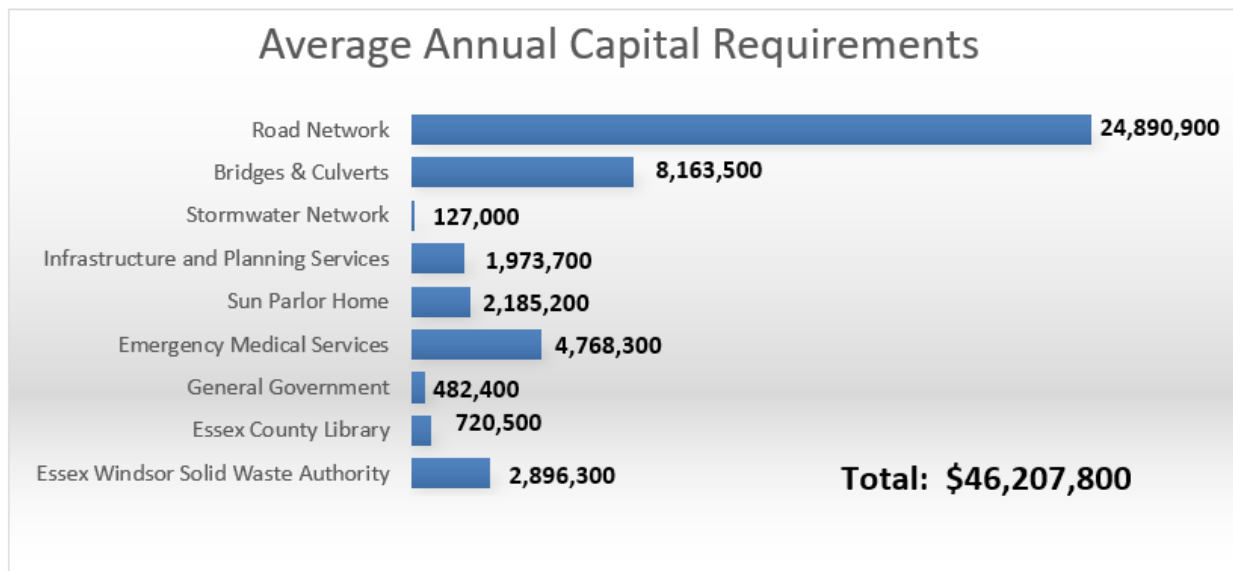


Linear assets, such as roads, undergo annual Pavement Condition Index assessments, while Bridges and Culverts are assessed every two years as per OSIM regulations. These evaluations are typically conducted internally by professional engineers from the Infrastructure and Planning Services department. The County is also in the process of engaging a third-party vendor to conduct road network assessments every five years, allowing for comparisons with internal procedures and adjustments as needed. Condition assessments are crucial for evaluating asset performance. Most assets have been assessed recently by knowledgeable internal staff. Non-core assets follow an age-based approach, with a review of remaining service life conducted to extend estimated useful life and provide accurate condition projections.

## Capital Requirements

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The yearly capital requirement denotes the funding necessary for managing the lifecycle and future replacement of a specific asset category. This allocation is vital for maintaining sustainable service levels. It focuses solely on the total replacement cost needed over the expected useful life of the asset and does not include ongoing operating or maintenance expenses associated with the assets.



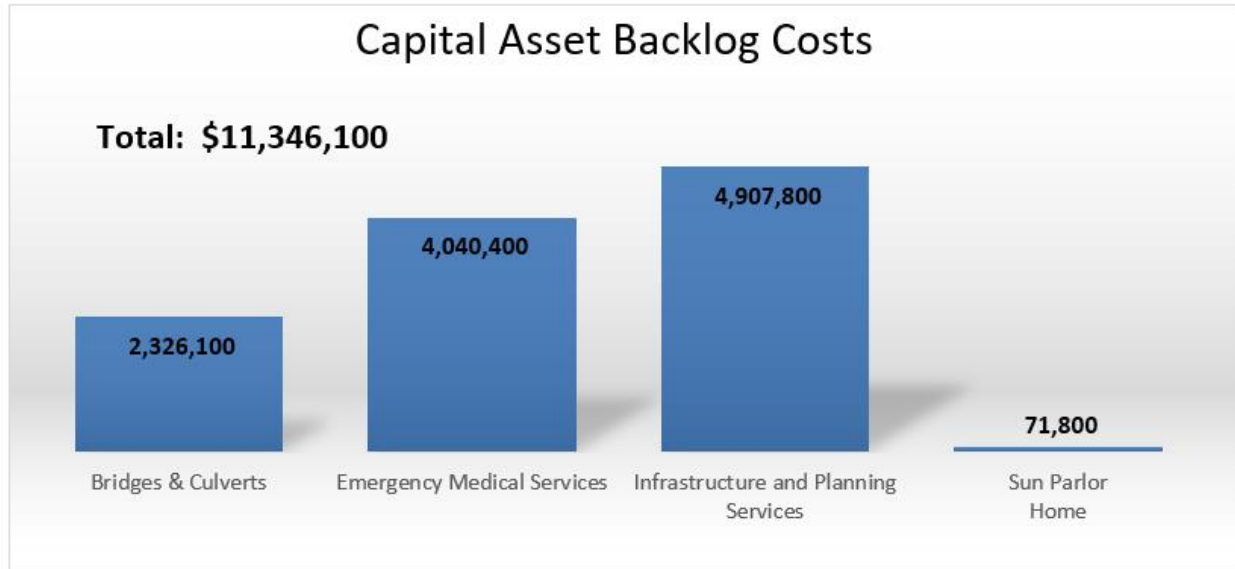
The County should allocate \$46 million annually in order to address the ongoing capital requirements for all assets. The annual requirements, however, do not include any costs to address backlog.

## Backlog Costs

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Backlog costs denote the replacement value of assets that have reached the end of their useful life as of the conclusion of 2022 but have yet to undergo rehabilitation or replacement. These assets may be jointly managed with local or neighboring municipalities, with whom agreements stipulate responsibility for conducting condition assessments and establishing rehabilitation or replacement schedules. Backlog can also arise when assets cannot be promptly replaced due to factors such as insufficient funding or delays in manufacturer delivery. In cases where the backlog is under the County's jurisdiction, these assets typically carry a lower risk rating and are often slated for replacement within a few years of their initial estimated replacement date. As the risk assessment escalates, the County actively

seeks alternative measures to mitigate the associated risks of potential failure. Further explanation on this matter is provided throughout the Plan.



The data presented in the report offers valuable insights into the state of County assets, highlighting the importance of proactive maintenance and replacement strategies. Despite the overall favorable condition of assets, there exists an annual funding deficit of \$27.3 million, which must be addressed to prevent deteriorating service levels and asset quality.

Moving forward, the recommendations outlined in the report will serve as essential guidelines for improving the County's asset management plan and ensuring optimal asset performance. By integrating asset management processes with long-term financial planning, the County can prioritize investments, minimize lifecycle costs, and meet the needs of the community effectively.

In summary, the AMP provides a roadmap for optimizing asset use, maintaining service levels, and preparing for future infrastructure needs. It underscores the critical role of strategic asset management in supporting the County's economic, social, and environmental advancement, ultimately enhancing the quality of life for residents and businesses alike.

## **Financial Implications**

The 2024 AMP highlights the average annual requirement for all assets, totaling \$46 million. Reinvestment rates are calculated by comparing actual and targeted annual expenditures to the required capital expenditures

outlined in the plan. With an annual capital requirement of \$46 million and a total replacement cost exceeding \$1.12 billion, the overall target reinvestment rate stands at 4.11%. However, as of 2022, the current annual capital expenditure level sits at approximately \$18.9 million, resulting in an actual reinvestment rate of only 1.68%. This leaves a significant funding gap of \$27.3 million per year for all assets.

It's important to acknowledge that achieving 100% funding of the infrastructure deficit may not be feasible. The capacity in the property tax is challenged to bridge this gap while maintaining affordability for taxpayers.

The design and timing of repair and maintenance programs significantly influence the condition rating and costs associated with linear assets. While reducing the frequency of lifecycle events may lower the average annual requirement, it could compromise asset health. Additionally, assessing the risk linked with deteriorating linear assets is crucial when determining the timing and design of lifecycle events. Moreover, legislative minimum maintenance standards often constrain a municipality's discretion regarding these events.

Aligned with the Corporation's Strategic Asset Management Policy, administration integrates the findings of the AMP into robust capital planning and budget development processes. The 2024 AMP will guide the formulation of the 2025 Budget, ensuring that asset management principles are incorporated into decision-making and resource allocation.

## **Consultations**

Asset Management Steering Committee

Heidi McLeod, Manager, Accounting – Administration / Deputy Treasurer

County Senior Leadership Team (SLT)

## **Recommendation**

That Essex County Council approve the County of Essex 2024 Asset Management Plan.

That Essex County Council support Administration's incorporation of the findings of the 2024 Asset Management Plan into the 2025 Budget preparation process to begin to address the shortfall in replacement costs.



## Approvals

Respectfully Submitted,

*Melissa Ryan*

Melissa Ryan, CPA, Director, Financial Services/Treasurer

Concurred With,

*Sandra Zwiers*

Sandra Zwiers, MAcc, CPA, CA, Chief Administrative Officer

<b>Appendix</b>	<b>Title</b>
A	County of Essex Asset Management Plan 2023