

Meeting Date:	April 20, 2022
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Report No:	PWE 16-2022
Subject:	Streetscan Results

Recommendation:

THAT Report PWE-16-2022, re: Streetscan Results be received for information

Purpose:

To share with Council, and the public the results of the FCM Grant and corresponding Streetscan results for roadway and sidewalk condition review.

Background:

In accordance with Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure Middlesex Centre is required to develop an updated asset management plan addressing our core infrastructure. One of the key components of such plans is a database of the condition of those core assets, which include such things as roads, bridges, sidewalks, and others.

Analysis:

The Municipality of Middlesex Centre in a joint submission with other lower tiers and the County of Middlesex was successful in securing funding through the Federation of Canadian Municipalities (FCM). This funding was used to procure the services of Streetscan which offers a pavement and sidewalk data collection. This data is used to provide a Pavement Condition Index (PCI). The web based software uses the PCI in an algorithm with other variables (road classification, deterioration curves, and local repair costs) to generate a customized road repair prioritization allowing the user to run reports for multiple forecasting scenarios for maintenance and capital planning. The Streetscan software product Streetlogix allows staff to run a number of budget scenarios to help develop and understand the financial impacts of various levels of service.

The below chart depicts the current 5 year capital projections for hard surface road resurfacing/reconstruction as well as two budget scenarios one with a target PCI of 70

which is the PCI service level identified in the municipalities <u>Asset Management Plan</u> (AMP). The second scenario is a target PCI of 75 which would be to maintain the roads in a condition similar to today.

Year	*Existing Capital	Target PCI of 70	Target PCI of 75
	Budget Projections		
2022	\$4,120,000	\$3,751,426	\$6,300,864
2023	\$3,482,500	\$3,913,889	\$4,995,904
2024	\$6,155,000	\$3,296,685	\$1,861,975
2025	\$2,885,000	\$1,051,430	\$1,783,750
2026	\$2,920,000	\$1,077,988	\$1,844,125
5 year average	\$3,912,500	\$2,618,283	\$3,357,323
5 year total	\$19,562,500	\$13,091,418	\$16,786,618

*This includes planned road reconstructions as well tar and chip and asphalt resurfacing

It is worth noting the budget projections for a target PCI scenario of 70 identifies a capital budget below the currently planned capital budget however the PCI identified in the AMP was based on the Road Needs Study (RNS) which was completed in 2019, which indicated at that time the municipality had an existing PCI of just under 70. Because the RNS and AMP are based on the same PCI measurements and study there will be some discrepancies in comparing to the Streetscan PCI due to differences in the collection method. The Streetscan study indicates a PCI of 75 which is comparable to a PCI of 70 in the RNS and AMP. However the information provided does indicated that should the municipality hold to the planned expenditures it is generally expected the roads will be in a similar to slightly better condition then as they exist today.

Attached in Appendix A is the 5 year Budget Planner results based on existing capital budget projections. Under the current planned expenditures the PCI is expected to increase slightly to 78.5, which would result in roads in slightly better condition then they exist today.

The sidewalk average condition rating is 89 out of 100 and identified a small backlog of \$18,235 worth of replacement. Sidewalks in the municipality can generally be described as being in very good condition, this can be attributed to the municipality's robust sidewalk replacement program that has been in place for the last number of years, as well as the yearly legislated sidewalk maintenance inspections which typical results in minor repairs and replacements as required, ensuring assets are maintained at a relatively high level.

Financial Implications:

Staff will use this information in addition to the bi-annual road needs study to inform the capital budget process and long-term financial needs required to meet the AMP service level.

Strategic Plan:

This matter aligns with following strategic priorities:

• Sustainable Infrastructure and Services

Staff through the use of technology, data analysis and budget forecasting, will use the information contained in this report and appendix to further inform and help staff and Council make long term sustainable infrastructure decisions.

Attachments:

Appendix A- Streetlogix 5 Year Budget Planner Results