

Report to Council

Report Title: Brockton Bridge and Culvert Financial Outlook

Prepared By: John Strader, Roads Supervisor and Gregg Furtney, Director of Operations

Department: Public Works

Date: January 11, 2022

Report Number: PW2022-02 **File Number:** C11PW, T11, F06

Attachments: Brant Bridges and Culverts Map
Greenock Bridges and Culverts Map
Brant Road Counts 2020
Greenock Road Counts 2020
Walkerton Road Counts 2020

Recommendation:

That the Council of the Municipality of Brockton hereby receives Report Number PW2022-02 - Brockton Bridge and Culvert Financial Outlook, prepared by John Strader, Roads Supervisor and Gregg Furtney, Director of Operations for information purposes.

Report:

Background:

The Public Works/Road Department makes up 43% of the annual operating budget and typically requires the largest portion of Capital Funding in any given year. With more and more demands for added services and infrastructure renewal maintaining costs are an increasing challenge. The cost of projects and services is increasing each year with those demands. The COVID-19 Pandemic has certainly added to the project and service costs because of supply and demand pressures and inflation. This has been evident in several recent projects.

This report outlines some of the known and expected project costs related to bridge and culvert repairs/rehabilitation or replacements needed, prior to the end of 2025, for bridges and culverts with an opening three (3) meters wide or larger. The Municipality has these structures inspected every other year by GM BluePlan and BM Ross and Associates.

The estimated costs below do not consider the many culverts under three (3) meters wide (opening), road, roadside, and annual road related maintenance costs (i.e. paving, micro-surfacing, gravel, calcium, ditching work, repair/ replacement of culverts under three (3) meters wide opening, etc.) into consideration. Those costs are above and beyond what is outlined in this report.

In the Former Township of Brant, there are twenty (20) structures that are over three (3) meters wide (opening) that are inspected bi-annually.

In the Former Township of Greenock, there are nineteen (19) structures that are over three (3) meters wide (opening) that are inspected bi-annually.

In the Former Town of Walkerton, there are eleven (11) structures that are over three (3) meters wide (opening) that are inspected bi-annually.

Long Term Debt, to fund many of these projects, is certainly a concern for Members of Council, Senior Municipal Staff, and tax payers. As Council considers the upcoming budget and plans for the future, staff felt it was prudent to outline what the near future project costs will look like for Council's information.

Analysis:

Staff reviewed, as we do each budget cycle, the Bridge and Culvert Inspections by GM BluePlan (Rural Brockton) and BM Ross and Associates (Walkerton). Unfortunately, there a number of structures that need to be rehabilitated or replaced prior to 2025, especially in the Former Township of Brant and the Former Township of Greenock.

The good news for Walkerton, as outlined in the Inspection Report, is that the report says, "Seven (7) of the structures have no needs identified for the next five (5) years. In fact, three (3) of these are in excellent condition as they are only eleven (11) years old. The other four (4) have some defects, but they are not significant enough to warrant a repair program at this time."

The following chart indicates the structure, estimated costs and total annual repayment for long-term debt:

Former Township of Brant:

Bridge Structure Number	Location	Traffic Count	Estimated Cost	Annual Long-Term Debt Repayment
0014	Concession 10	279 cars per day	\$ 500,000.00	\$ 45,136.70
0015	Concession 8, Cargill	1,563 cars per day	\$ 500,000.00	\$ 45,136.70
0016	Side Road 25	46 cars per day	\$ 500,000.00	\$ 45,136.70
0018	Concession 8	853 cars per day	\$ 500,000.00	\$ 45,136.70
Total Cost:			\$ 2,000,000.00	\$ 180,546.80

Waterproofing and Paving

Bridge Structure Number	Traffic Count	Estimated Cost	Annual Long-Term Debt Repayment
0002		\$ 150,000.00	\$ 13,541.01
0003	158 cars per day	\$ 150,000.00	\$ 13,541.01
0007	69 cars per day	\$ 150,000.00	\$ 13,541.01
0009	133 cars per day	\$ 150,000.00	\$ 13,541.01
0010	309 cars per day	\$ 150,000.00	\$ 13,541.01
0011	1,118 cars per day	\$ 150,000.00	\$ 13,541.01
Total Cost:		\$ 900,000.00	\$ 81,246.06

*long-term debt in the charts above have been amortized over 15 years.

Former Township of Greenock:

Bridge Structure Number	Location	Traffic Count	Estimated Cost	Annual Long-Term Debt Repayment
0002	Riversdale Bridge	89 cars per day	\$ 2,500,000.00	\$ 162,521.43*
0004	Concession 6 (West of Chepstow)	677 cars per day	\$ 500,000.00	\$ 45,136.70
0006	Concession 8 (Greenock)	151 cars per day	\$ 500,000.00	\$ 45,136.70
0014	Concession 18	79 cars per day	\$ 500,000.00	\$ 45,136.70
0018	Concession 6 (Greenock Swamp)	77 cars per day	\$ 500,000.00	\$ 45,136.70
Total Cost:			\$ 4,500,000.00	\$ 343,068.23

Waterproofing and Paving

Bridge Structure Number	Traffic Count	Estimated Cost	Annual Long-Term Debt Repayment
0009	141 cars per day	\$ 150,000.00	\$ 13,541.01
Total Cost:		\$ 150,000.00	\$ 13,541.01

* long-term debt in the charts above have been amortized over 15 years except Riverdale Bridge which is amortized over 25 years due to the value of work needed.

Grand total for all estimated maintenance, rehabilitation or replacement noted above is **\$7,550,000** with a total **annual long-term debt repayment amount of \$618,402.10**

As outlined above, in the next four (4) years (2022, 2023, 2024, and 2025), the Municipality of Brockton will need to plan to invest between \$7 Million and \$8 Million (estimated only) on known bridge and culvert rehabilitation or replacement projects. These capital projects do not take other road (capital projects) related repairs or annual operating work (maintenance) into consideration.

Strategic Action Plan Checklist:

What aspect of the Brockton Strategic Action Plan does the content/recommendations in this report help advance?

- Recommendations help move the Municipality closer to its Vision Yes
- Recommendations contribute to achieving Heritage, Culture, and Community Yes
- Recommendations contribute to achieving Quality of Life Yes
- Recommendations contribute to achieving Land Use Planning and the Natural Environment N/A
- Recommendations contribute to achieving Economic Development N/A
- Recommendations contribute to achieving Municipal Governance Yes

Financial Impacts/Source of Funding:

- Do the recommendations represent a sound financial investment from a sustainability perspective?
N/A

This report is for information only, however there are significant capital costs in the next four years that Council will need to consider that will have future financial implication on the budget.

Reviewed By:

A handwritten signature in black ink, appearing to read 'Trish Serratore', with a stylized, flowing script.

Trish Serratore, Chief Financial Officer

Respectfully Submitted by:

A handwritten signature in blue ink, appearing to read 'John Strader', with a stylized, flowing script.

John Strader, Road Supervisor

A handwritten signature in blue ink, appearing to read 'Gregg Furtney', with a stylized, flowing script.

Gregg Furtney, Director of Operations

Reviewed By:

A handwritten signature in black ink, appearing to read 'Sonya Watson', with a stylized, flowing script.

Sonya Watson, Chief Administrative Officer