

City Council Committee Report

To: Kyle Attanasio, CAO

Fr: Greg Breen, Director, Engineering & Infrastructure

David Mellor, General Manager, Engineering

Re: Budget Amendment - Portage Bay Bridge Interim Repairs

Recommendation:

That Council hereby approves an amendment to the 2025 Capital Budget in the amount of \$600,000 to proceed with design and construction of repairs that will allow for the reopening of the Portage Bay Bridge to pre-closure service level, to be funded from the 2026 budgeted OCIF funding.

That in accordance with Public Notices By-law Number 160-2022, public notice is hereby given that Council intends to amend its 2025 Capital Budget at its April 15, 2025, meeting for this purpose; and further

That Council gives three readings to a by-law to amend the 2025 Capital Budget for this purpose.

Background:

The 2018 Ontario Structure Inspection Manual (OSIM) inspection of the Portage Bay Bridge indicated that major rehabilitation would be needed within 6-10 years. Accordingly, the City's Capital budgets have included the following:

- A 2024 pre-design feasibility study of best-value options for rehabilitation, relocation, and potential re-routing of traffic that best suits the circumstances
- 2025 detailed design work
- 2026 construction work

The Portage Bay Bridge is 100 years old this year (built in 1925). Opinions on the probable lifespan of steel bridges vary, based on many factors, from 50 to just over 100 years. At the time of planning for this feasibility study, it was well understood that the bridge was at, or at least very near, the end of service life, and that minimal lifespan extension would be possible. Nonetheless, the City sought to understand to what extent lifespan extension is possible, while ensuring the City is fully informed about whether rehabilitation was achieving the highest and best use of the funds required for the work.

The feasibility study project was tendered in combination with the OSIM inspection work for all City bridges through a public procurement process in early 2024.

Inspection Work

A third-party engineering firm conducted their inspection work, with enhanced inspection work taking place on the Portage Bay Bridge in late October 2024.

The enhanced inspection revealed new information. There were critical defects in the bridge's structural members that were significant enough to create uncertainty around the bridge's ability to support any loading. To ensure public safety, the third-party

engineering firm immediately recommended closure of the bridge, which the City implemented immediately. Formal public communication was issued on October 29, 2024.

City Administration acknowledges the impact this bridge closure is having on the community. The current closure means that the feasibility review and planning and design work, that normally takes place ahead of a physical bridge construction project, behind the scenes and while a bridge remains open, is now taking place while the Portage Bay Bridge is closed. This, of course, makes the required work feel like it is taking longer than it is.

City Administration and the third-party engineering firm supporting this project have a professional and ethical responsibility to ensure that any work planned or constructed is planned, designed, and executed properly, and the appropriate amount of time is taken to carry out this work.

Draft Findings

City Administration received the draft feasibility study report in March 2025. City Administration is currently reviewing the report and the proposed options. It's important to note that working collaboratively with external engineers to finalize reports like this is a normal process that ensures that City-specific considerations are taken into consideration, and the final recommendation is in the City's best interest.

The feasibility analysis has confirmed the uncertainty from the detailed inspection undertaken in Fall 2024; the decision to close the bridge to both pedestrians and vehicles was the right decision. In its current state, the bridge cannot support any loading.

The draft report also indicates that while a bridge replacement option exists at an estimated cost of \$32-36M, there are other options that are more cost effective (30-40% less) for the City, including alternate routes. However, all alternate options need to be further refined to ensure they are fully viable prior to being brought forward.

Short Term Repair Solution

While more work is required to determine the City's long-term options, it has been confirmed that a shorter-term solution can be implemented.

In October 2024, because of the bridge closure, Administration initiated an assessment to determine whether a short-term repair solution made sense, given the newly discovered critical defects in the bridge.

To be clear, if a major rehabilitation to the overall structure is going to cost \$10 million, but the new information related to the critical defects was now going to double that cost, it may not make sense for the City to proceed with that \$20 million project if it would only minimally extend the bridge's lifespan, when compared to the option of installing a new 75 to 100-year lifespan bridge, that might cost roughly 50% more. This analysis is critical in ensuring the City adheres to the Strategic Plan goal of sustainably financing City infrastructure.

The outcome of the external engineering analysis is that repairs, estimated at roughly \$600,000, would allow the bridge to be reopened to pre-closure status for approximately five years; this amount includes both the design and construction work. The timeline for the work has not yet been determined. It can be noted however, that repeated repair solutions such as this are not possible to continue to extend the bridge's lifespan; the bridge is truly approaching the end of its useful life.

At a cost of \$120,000 per year of extended lifespan, this solution represents a best-value option, when compared to a longer-term solution of rerouting for 100 years that will cost a minimally estimated \$20,000,000 (\$200,000 per year) and may take significantly longer to implement.

Therefore, Administration is recommending that Council approve a budget amendment in the amount of \$600,000 to undertake a short-term rehabilitation project that will support the reopening of the bridge for approximately five years.

Administration will continue to work with our external engineers to finalize the feasibility report alongside initiating this bridge repair work.

Budget: 2025 Capital Budget increase of \$600,000 to be funded from the 2026 OCIF funding budgeted for the Portage Bay Bridge rehabilitation project.

Risk Analysis:

The risk associated with not proceeding this budget amendment is high. This short-term solution represents good value in terms of infrastructure spending that restores traffic flow to the neighborhood of Keewatin.

Communication Plan/Notice By-law Requirements: By-Law & Public notice required

Strategic Plan or Other Guiding Document:

Strategic Plan Focus Area 1 – Infrastructure and Environment Goal 1.2 Ensure Well Maintained and Sustainably Financed City Infrastructure