Asset Management Plan Update - Bridges and Structures

ISSUE

This report and accompanying documents provide information on the asset management programs related to bridges, overpasses, pedestrian crossings, sound attenuation walls, chain-link fencing, and retaining walls. Specific information on inventory, value, condition, asset management initiatives, funding, and preservation programs is included.

BACKGROUND

Long-term planning for the preservation of bridges and structures assets is performed by the Technical Services Department. Summary reports on the current state of infrastructure, funding, and ongoing programs are prepared annually and the findings are presented to City Council as asset management plans when updates are identified.

At its special meeting held on December 4 and 5, 2012, City Council was provided the service level and recommended funding for bridges.

The Asset Management Plan for Bridges and Structures has been updated and was last received for information at the Standing Policy Committee on Transportation on August 6, 2019.

CURRENT STATUS

The City of Saskatoon (City) works diligently to ensure all bridges and structures remain safe and structurally sound through operating and capital preservation programs. The condition of structures is assessed based on safety inspections, detailed industry standard inspections, and deck testing data.

The program's overall strategy is to address the backlog of reactive projects and focus on proactive rehabilitation and maintenance to reduce the overall life-cycle cost to maintain the assets.

DISCUSSION/ANALYSIS

The 2021 Corporate Asset Management Plan – Saskatoon Bridges and Structures report outlines the current inventory, physical condition, current and desired expenditure levels, and preservation programs, and discusses the funding gap in the Bridge Major Repair Reserve (BMRR) (see Appendix 1).

As identified in the 2018 Asset Management Report, the BMRR has been underfunded in the past. At the time of that report, the annual funding was \$3.18 million per year. As of 2021, the funding has increased to \$4.24 million. The target funding for the BMRR is \$5.8 million of base funding per year with no requirements of one-time contributions.

The recent increases to the BMRR has allowed for the planning and timely delivery of major rehabilitation projects on multiple overpasses in need of reactive rehabilitation.

This will ensure that the condition rating of these structures is elevated to the desired rating of "Good". The program currently has a shortfall which will require one-time funding for projects, delaying projects, and/or increasing the long-term funding requirements.

The current base funding is forecasted to be sufficient for the 2022 and 2023 program plan, although there remains an estimated annual funding gap of \$1.57M to support the longer-term Asset Management Plan. Work planned on Broadway Bridge and University Bridge (substructure) within the next ten years has some cost uncertainty until detailed design work can be completed. One-time funding or further delays of other projects may be required to allow for the Broadway Bridge and University Bridge work to be completed.

The Administration will continue program improvements, explore alternative funding sources, and provide financial updates as future maintenance schedules and condition data change. The funding gap for the Asset Management Plan for Bridges and Structures will be presented as part of the 2022/2023 Busines Plan and Budget Options presented at the August 23, 2021 Governance and Priority Committee Meeting.

FINANCIAL IMPLICATIONS

The financial implications are discussed in the preceding section of this report.

OTHER IMPLICATIONS

There are no privacy, legal, social, or environmental implications identified.

NEXT STEPS

The Asset Management Plan for Bridges and Structures will be considered as part of the 2022/2023 budget options presented at the August 23, 2021 Governance and Priority Committee Meeting.

The Technical Services Department will continue to put emphasis on continuous improvements to the inspection process, condition analysis, preventative maintenance, and preservation programs with the goal of reducing life-cycle costs associated with maintaining and operating the assets.

APPENDIX

1. 2021 Corporate Asset Management Plan – Saskatoon Bridges and Structures

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