

City of Mississauga Corporate Report



Date: May 31, 2022 To: Chair and Members of General Committee	Originator's files:
From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works	Meeting date: June 15, 2022

Subject

2022 Traffic Control Signal Supply, Installation and Modernization Program

Recommendation

That the 2022 Traffic Control Signal Supply, Installation and Modernization Program as outlined in the report from the Commissioner of Transportation and Works, dated May 31, 2022 and entitled "2022 Traffic Control Signal Supply, Installation and Modernization Program", be approved.

Background

The 2022 capital budget provides funds for the Supply, Installation and Modernization of Traffic Control Signals throughout the City. Typically, intersections are signalized upon realization of technical warrants or in response to anticipated development. The decision to install a traffic control signal is based on sound engineering judgement.

In addition to the technical warrants, Staff takes into consideration that Mississauga is a Vision Zero city, with a goal of zero fatal and serious injury collisions on the transportation network. As identified in the City's Vision Zero Action Plan, signals can have a significant impact on safety for vulnerable road users. As a result, Staff will be exploring appropriate methods for the inclusion of Vision Zero principles as part of the signal warrant analysis process.

In addition to new installations, existing Traffic Control Signals are modernized considering the age of equipment and infrastructure, as well as anticipated increased maintenance costs, which indicates that upgrades and/or replacements are required.

Comments

The need for the supply and installation of a new Traffic Control Signal is indicated when signal warrant criteria are satisfied, traffic conditions have changed significantly rendering the existing form of traffic control inefficient and/or imminent adjacent development indicates that signalization will be required.

The recommended new Traffic Control Signal installation location for 2022 under these criteria is listed below and illustrated in the attached appendix.

- Ridgeway Drive and Odyssey Drive – Ward 8 (refer to Appendix 1)

In addition, there is capacity within the program for four (4) additional new Traffic Control Signal locations in 2022 that have not been identified at this time.

The recommended Traffic Control Signal modernization locations for 2022 are listed below and illustrated in the attached appendices:

- Tomken Road at Rathburn Road East - Ward 3 (refer to Appendix 2)
- Matheson Boulevard East at Timberlea Boulevard - Ward 5 (refer to Appendix 3)
- Torbram Road at Kimbel Street - Ward 5 (refer to Appendix 4)
- Burnhamthorpe Road West at Glen Erin Drive - Ward 8 (refer to Appendix 5)
- Aquitaine Avenue at Formentera Avenue/Meadowvale Town Access - Ward 9 (refer to Appendix 6)

Financial Impact

As per the approved 2022 capital budget, two projects have been approved for the following amounts:

- PN 22198 Supply and Installation of new Traffic Control Signals for the amount of \$1,070,000
- PN 22177 Modernization of existing Traffic Control Signals for the amount of \$1,200,000

The estimated supply and installation cost for a new Traffic Control Signal and a Mid-block Pedestrian Signal is approximately \$180,000 and \$115,000, respectively, and the estimated cost for the modernization of an existing Traffic Control Signal is approximately \$240,000.

It is recommended:

1. PN 22198 with budget of \$1,070,000 supports the cost of one (1) traffic control signal installation at Ridgeway Drive and four (4) new Full Traffic Control Signal and/or Mid-block Pedestrian Signal locations as they are identified.
2. PN 22177 with budget of \$1,200,000 supports the cost of the modernization of five (5) existing Traffic Control Signals. Any residual surplus funds will be allocated to Phase Updates and any related modifications to existing Traffic Control Signals.

Conclusion

As part of the 2022 Traffic Control Signal Supply, Installation and Modernization Program, Staff recommend the supply and installation of five (5) new Traffic Control Signals for a total capital cost of \$1,070,000 and the modernization of five (5) existing Traffic Control Signals for a cost of \$1,200,000. Sufficient Capital Budget exists for the supply and installation of these Traffic Control Signals.

Attachments

- Appendix 1: Proposed New Traffic Control Signal - Ridgeway Drive and Odyssey Drive (Ward 8)
- Appendix 2: Proposed Traffic Control Signal Modernization - Tomken Road at Rathburn Road East (Ward 3)
- Appendix 3: Proposed Traffic Control Signal Modernization - Matheson Boulevard East at Timberlea Boulevard (Ward 5)
- Appendix 4: Proposed Traffic Control Signal Modernization - Torbram Road at Kimber Street - (Ward 5)
- Appendix 5: Proposed Traffic Control Signal Modernization - Burnhamthorpe Road West at Glen Erin Drive (Ward 8)
- Appendix 6: Proposed Traffic Control Signal Modernization - Aquitaine Avenue at Formentera Avenue/Meadowvale Town Access (Ward 9)



Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

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