

## **Traffic Control Signals - Spadina Road and Macpherson Avenue**

**Date:** August 27, 2019  
**To:** Toronto and East York Community Council  
**From:** Acting Director, Traffic Management, Transportation Services  
**Wards:** Ward 12, Toronto - St. Paul's

### **SUMMARY**

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As the Toronto Transit Commission (TTC) operates a transit service on both Spadina Road and Macpherson Avenue, City Council approval of this report is required.

Transportation Services is requesting approval from City Council to install traffic control signals at the intersection of Spadina Road and Macpherson Avenue. This installation is justified based on the technical requirements and will provide improved safety for pedestrians, cyclists and motorists at this intersection.

### **RECOMMENDATIONS**

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The Acting Director, Traffic Management, Transportation Services, recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Spadina Road and Macpherson Avenue.

### **FINANCIAL IMPACT**

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The estimated cost of installing traffic control signals at the intersection of Spadina Road and Macpherson Avenue is \$200,000.00. This installation would be subject to the availability of funding and competing priorities.

### **DECISION HISTORY**

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This report addresses a new initiative.

## COMMENTS

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Transportation Services was requested by Councillor Josh Matlow and local residents to investigate the feasibility of installing traffic control signals at the intersection of Spadina Road and Macpherson Avenue.

### Existing Conditions

Spadina Road and Macpherson Avenue form an offset near-right four-leg intersection. Macpherson Avenue is stop-sign controlled while Spadina Road is uncontrolled free-flow. Spadina Road, in this vicinity, is classified as a minor arterial roadway that operates with two-way traffic and has a speed limit of 40 km/h. TTC north-south service on Spadina Road is provided by the "127 Davenport" bus route.

Macpherson Avenue, west of Spadina Road, is classified as a minor arterial roadway that operates with two-way traffic and has a speed limit of 40 km/h. TTC service on eastbound Macpherson Avenue to Spadina Road is provided by the "127 Davenport" bus route. Macpherson Avenue, east of Spadina Road, is classified as a local roadway that operates with two-way traffic and has a speed limit of 30 km/h.

Adjacent traffic control signals on Spadina Road are located about 180 metres to the north at Davenport Road and about 115 metres to the south at Dupont Street.

### Collision Review

Collision statistics provided by Toronto Police Service for the three-year period ending December 31, 2018 disclosed that 21 collisions had occurred at the intersection of Spadina Road and Macpherson Avenue. Of these 21 collisions, 11 were of the type considered to be potentially preventable by the installation of traffic control signals.

### Traffic Control Signals

Based on the eight-hour vehicular and pedestrian traffic counts, and the collision history, the technical justifications for the installation of traffic control signals are satisfied to the following extent:

<b>Justification 1:</b> Minimum Vehicular Volume	100 percent
<b>Justification 2:</b> Delay to Cross Traffic	77 percent
<b>Justification 3:</b> Collision Hazard	73 percent

To meet the technical requirements for the installation of traffic control signals, one of the Minimum Vehicular Volume or Delay to Cross Traffic justifications must be 100 percent satisfied, or any two of the three justifications must be at least 80 percent satisfied. Based on the above results, the installation of traffic control signals are justified at the intersection of Spadina Road and Macpherson Avenue.

There will be no loss of on-street parking as a result of the statutory 30.5-metre corner parking prohibition at signalized intersections. Due to the geometry at this intersection, an auxiliary third signal head may be required for the northbound approach.

The proposed Green Line multi-use facility will run adjacent to the south side of Macpherson Avenue. Adding a signal at Spadina Road and Macpherson Avenue would improve safety for pedestrians and cyclists using this trail. The TTC has been informed of the proposal to install traffic control signals at the intersection of Spadina Road and Macpherson Avenue. Comments have yet to be received from the TTC.

### **Summary**

Based on the above review, Transportation Services recommends the installation of traffic control signals at the intersection of Spadina Road and Macpherson Avenue. The proposed traffic control signals may result in increased delays for traffic on Spadina Road since the north-south traffic will no longer operate free-flow. However, traffic control signals at this intersection will improve safety for all road users.

Councillor Josh Matlow has been advised of the recommendation of this staff report.

### **CONTACT**

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Shawn Dillon  
Manager, Traffic Operations (Area 1)  
Traffic Management  
Transportation Services  
Telephone: (416) 397-5021  
Fax: (416) 392-1920  
E-mail: [Shawn.Dillon@toronto.ca](mailto:Shawn.Dillon@toronto.ca)

### **SIGNATURE**

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Roger Browne, M.A.Sc., P.Eng.,  
Acting Director,  
Traffic Management  
Transportation Services

### **ATTACHMENTS**

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1. Drawing No. 421G-3463, dated August 2019.

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