

REPORT

Council

Meeting Date: August 11, 2025

FROM: Community Infrastructure Commission

DATE: July 29, 2025

SUBJECT: Bronte Road One-way Traffic Assessment between Lakeshore Road West and Marine Drive

LOCATION:

WARD: Ward 1 Page 1

RECOMMENDATION:

1. That the report entitled “Bronte Road One-way Traffic Assessment between Lakeshore Road West and Marine Drive” be received
2. That the section of Bronte Road between Lakeshore Road West and Marine Drive, be maintained as a one-way southbound operation.

KEY FACTS:

The following are key points for consideration with respect to this report:

- The study area includes an assessment of the section of Bronte Road between Lakeshore Road West and Marine Drive as a one-way southbound operation, and its impacts on surrounding intersections and mid-block segments within Bronte Village.
- The skewed geometry of the intersection of Lakeshore Road West and Bronte Road creates a sightline and safety concern for northbound and southbound left- turning vehicles under two-way operation.
- This section of Bronte Road was converted to a one-way southbound operation in March 2024 to accommodate construction staging for the condominium development at 85 Bronte Road located at the southeast corner of the intersection of Lakeshore Road and Bronte Road.
- The evaluation of traffic operations within the study area included following four (4) scenarios:

- Pre-closure period (two-way operation)
 - During closure period (one-way operation)
 - Post-closure period with development traffic (two-way operation)
 - Post-closure period with development traffic (one-way operation)
- Irrespective of whether Bronte Road operates as a one-way southbound or two-way roadway, intersections within the study area are expected to operate at acceptable levels of service with slight delays, which is typical in a commercial district.
 - A public meeting was held on June 25, 2025 to present the Bronte Village streetscape design options and the Bronte One-way Traffic Assessment Study findings to area residents and businesses.
 - The recommendation of the Bronte Road One-way Traffic Assessment Study is that the section of Bronte Road between Lakeshore Road West and Marine Drive, be maintained as a one-way southbound operation and that this be reflected in the design of this section of Bronte Road as part of the streetscaping design for Bronte Village.

BACKGROUND:

Prior to March 2024, the section of Bronte Road between Lakeshore Road West and Marine Drive operated as a two-way roadway. The Town received concerns regarding limited sightline for northbound and southbound left-turning vehicles due to skewed intersection geometry at the intersection of Lakeshore Road West and Bronte Road.

In March 2024, the section of Bronte Road between Lakeshore Road West and Marine Drive was converted to one-way southbound to accommodate construction staging for the condominium development at the southeast corner of Bronte Road and Lakeshore Road West. This revised configuration helped in mitigating previously identified sightline concerns at the intersection.

As per the 2025 Capital Budget Process, Council directed staff to analyze the option to convert Bronte Road to a permanent one-way southbound configuration. The study would include assessment of traffic patterns, local access impacts, and conducting public consultation.

In March 2025, the Town retained CIMA+ to undertake an assessment of the impacts of the one-way conversion on the surrounding road network to help inform a future recommendation on whether to maintain the one-way southbound operation permanently following the completion of the Bronte Lakeside development, or to return to a two-way configuration.

The study includes analysis of:

- Traffic redistribution due to the closure of northbound movements on Bronte Road;
- Impacts on adjacent intersections and roads;
- Broader implications for traffic flow, safety, and network connectivity in Bronte Village;
- Mitigation measures related to the skewed intersection geometry at Bronte Road and Lakeshore Road West.

In conjunction with this study, the Town has initiated a streetscape study in Bronte Village to enhance overall design and public realm within Bronte Village. The recommendation from this report will be reflected in the design of this section of Bronte Road as part of the streetscaping design for Bronte Village which is being undertaken as a separate assignment by Town staff.

COMMENT/OPTIONS:

Study Area

The study area included the section of Bronte Road between Lakeshore Road West and Marine Drive, operational analysis of the two intersections on either side of the study area, and evaluation of impacts of Bronte Road as one-way southbound on the surrounding intersections and mid-block sections in Bronte Village.

Collision Analysis

A five-year collision history of the study area was reviewed to determine trends and patterns that may provide insight into potential contributing factors to the collisions. The detailed collision analysis is presented in Appendix A.

During the two-way operation period on Bronte Road, 36 collisions were reported at the intersection of Lakeshore Road and Bronte Road from 2019 to March 2024. The collision types included rear end (50%), angle (28%), turning movement (11%), sideswipe (5.5%) and single motor vehicle (5.5%) collisions.

After the conversion of Bronte Road to a one-way southbound, two (2) collisions were reported between March 2024 and December 2024 at the intersection of Lakeshore Road and Bronte Road and one collision was reported along Bronte Road between Lakeshore Road West and Marine Drive involving a southbound vehicle which ran-off the road and hit a utility pole.

Traffic Analysis

Four scenarios were evaluated to compare existing and future traffic operations on Bronte Road between Lakeshore Road West and Marine Drive. The summary of the results of these scenarios under both one-way southbound and two-way configuration.

a. Scenario 1 – Pre-closure period (two-way operation)

Analysis of 2023 traffic data showed that all traffic movements operated within capacity, with no excessive queueing. Minor delays were observed for northbound and southbound left-turns at Lakeshore Road West, attributed to the skewed intersection geometry and pedestrian activity.

b. Scenario 2 – Closure period (one-way operation)

Following the conversion of Bronte Road between Lakeshore Road West and Marine Drive to one-way southbound, analysis of the traffic data collected in 2024 indicated efficient operations with minimal delays and short queues. Slight queueing was observed for the westbound right-turn at the intersection of Lakeshore Road West and Bronte Road.

c. Scenario 3 – Future post-closure period (2028) with development traffic (two-way operation)

This scenario factored in the development traffic volumes for all identified developments along Lakeshore Road West and applied 2% annual growth rate to through traffic volumes along Lakeshore Road West to estimate 2028 horizon year traffic volumes.

With Bronte Road operating as a two-way roadway, all intersections are expected to operate at acceptable levels of service -, with minor delays during peak periods. However, at the intersection of Lakeshore Road West and Bronte Road, queue lengths for the westbound right-turn and northbound left-turn movements are expected to exceed the available storage length especially during the afternoon peak period.

d. Scenario 4 – Future post-closure period (2028) with development traffic (one-way operation)

This scenario incorporated a 2% annual growth rate and development traffic volumes for all identified developments along Lakeshore Road was used. With Bronte Road operating as a one-way roadway, the intersections within the study

area are expected to operate at an acceptable level of service. The westbound through movement at the intersection of Lakeshore Road West and Bronte Road is expected to operate near capacity during the afternoon peak period and the westbound right-turn queuing is expected. These conditions are typical for a commercial district with high traffic activity during peak periods.

Traffic Impacts on other intersections

The traffic impact of the Bronte Road one-way southbound operation on other intersections within the study area is expected to be minimal. The redistributed traffic due to Bronte Road one-way southbound configuration is expected to use the intersections of Lakeshore Road West at Jones Street and Lakeshore Road West and Nelson Street. These two intersections are expected to operate at acceptable service levels with minor delays during the weekday peak periods.

Summary of study findings

The summary of the study findings specific to the study area are listed below:

- High frequency of angle collisions (28%) was reported at the intersection of Lakeshore Road West and Bronte Road during the pre-closure two-way operation period on Bronte Road. Five (5) out of eleven (11) of these collisions involved northbound vehicles.
- Misalignment on the north-south approaches at the intersection of Lakeshore Road West and Bronte Road limits the visibility of oncoming through traffic for the northbound left-turning vehicles.
- No operational issues were identified at this intersection of Bronte Road and Marine Drive as a result of one-way southbound configuration of Bronte Road.
- Traffic analysis results at the intersection of Lakeshore Road West and Bronte Road indicate that under the post-closure two-way operation of Bronte Road, queuing is expected for the northbound left-turn and westbound right-turn movements during the afternoon peak period, whereas under the one-way southbound configuration, queuing is expected only for the westbound right-turn movement during the afternoon peak period.

Public Consultation

A public consultation meeting was held on June 25th, 2025, to present streetscape design options for Bronte Village and the results of the Bronte One-Way Assessment Traffic Study to residents and businesses.

Over 80 residents attended meeting which was held at the Walton United Church in Bronte Village. There were two sessions for the meeting, one in the afternoon from 2:30 to 4:30pm and one in the evening from 6:30 to 8:30pm.

Of the residents who provided comments on the recommendation to maintain this section of Bronte Road as one-way southbound, 80% expressed support, 16% were opposed, and 4% neither supported nor opposed.

Recommendation

Based on the findings and analysis conducted in the study area, staff recommends **that the section of Bronte Road between Lakeshore Road West and Marine Drive, be maintained as a one-way southbound operation. This configuration should be incorporated into the design of this segment as part of the Bronte Road Streetscape Study, which is scheduled for completion in Fall 2025.**

It is anticipated that the conversion of this section of Bronte Road to a one-way southbound will present an opportunity to enhance safety and improve traffic flow, at the intersection of Bronte Road and Lakeshore Road West. The anticipated benefits of this configuration are as follows:

- Reduction in conflict points along Bronte Road and at either intersection.
- Reduction in the potential for angle collisions at the intersection of Bronte Road and Lakeshore Road West.
- Through the removal of the northbound lanes, the entire southeast corner of the intersection can be devoted to streetscaping providing a larger area for active transportation users.
- The width of the south leg would be significantly narrowed, reducing the crossing distance and exposure of pedestrians to traffic.

CONSIDERATIONS:

(A) PUBLIC

A public consultation meeting was held on June 25th, 2025, to present the results of the Bronte One-Way Assessment Traffic Study, in conjunction with the streetscape design options for Bronte Village, to residents and businesses. Staff will continue to provide ongoing communications to advise residents and businesses in the Bronte Village on the outcome of the Bronte one-way traffic study.

(B) FINANCIAL

The capital costs to implement recommendation to maintain one-way operation permanently will be in completed as part of the Lakeshore Road improvements from Mississauga Steet to Bronte Athletic Park. This project was included in the 2026-2034 Capital Forecast and will be updated as part of the 2026 Budget process.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

The implementation of the Bronte Road one-way southbound movement have impacts on Planning & Development, Municipal Enforcement Services, Roads and Work Department for sign installation and maintenance, and Policy and Communications.

(D) CORPORATE STRATEGIC GOALS

This report addresses the corporate strategic goal(s) to:

- Foster a community environment that engages residents of all ages, abilities and backgrounds (Engaged Community) through the use of various methods and media for the education and outreach initiatives related to neighbourhood traffic safely, in order to reach all members of the community.
- Improve town's multi-modal transportation network to support effective movement of people and goods, by promoting safe travel on town roads.

(E) CLIMATE CHANGE/ACTION

The implementation of the one-way southbound movement on Bronte Road will improve safety for all road users, reduce conflict points and support vulnerable road users. Supporting vulnerable road users supports active modes of travel which contributes to reduced greenhouse gas emissions from motorized vehicles.

APPENDICES:

Appendix A – Final Report by CIMA+.

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