

Region of Waterloo

Transportation Services

Transportation

To: Planning and Works Committee

Meeting Date: May 7, 2024

Report Title: Additional Traffic Controls – Various Locations

1. Recommendation

That the Regional Municipality of Waterloo approve the installation of various types of traffic control in the City of Kitchener, the City of Waterloo, City of Cambridge, and the Township of Woolwich by amending the Region’s Traffic and Parking By-law 16-023 as follows:

- Add to Schedule 10, Level 2 Pedestrian Crossover – Type C, on Courtland Avenue (Regional Road 53) in the vicinity of Courtland Avenue Public School, in the City of Kitchener;
- Add to Schedule 10, Level 2 Pedestrian Crossover – Type B, on Frederick Street (Regional Road 6) at East Avenue, in the City of Kitchener;
- Add to Schedule 10, Level 2 Pedestrian Crossover – Type B, on Queen Street (Regional Road 6) at Joseph Schneider Haus Trail Crossing, in the City of Kitchener;
- Add to Schedule 10, Level 2 Pedestrian Crossover – Type C, on St. Andrews Street (Regional Road 75) at Gilholm Avenue, in the City of Cambridge;
- Remove from Schedule 10, Level 2 Pedestrian Crossover on Borden Avenue (Regional Road 66), at the Iron Horse Trail Crossing, in the City of Kitchener;
- Add to Schedule 20, School Bus Loading Zone, on Frederick Street (Regional Road 6) from 8 meters east of Irvin Street to 32 meters east of Irvin Street (in front of Suddaby Public School), in the City of Kitchener;
- Add to Schedule 14, Prohibited Movements, No-Right-Turn-on-Red, Erb Street (Regional Road 9) at University Avenue (Regional Road 57), All Directions, Anytime, in the City of Waterloo;
- Add to Schedule 14, Prohibited Movements, No-Right-Turn-on-Red, Whippoorwill Drive at Arthur Street (Regional Road 85), Eastbound, Anytime, in the Township of Woolwich;

- Remove from Schedule 17, Rates of Speed, 70 km/h on Bleams Road (Regional Road 56) from Trussler Road (Regional Road 70) to 400 m west of Fischer-Hallman Road (Regional Road 58), in the City of Kitchener;
- Add to Schedule 17, Rates of Speed, 50 km/h on Bleams (Regional Road 56) from Trussler Road (Regional Road 70) to Fischer-Hallman Road (Regional Road 58), in the City of Kitchener;
- Remove from Schedule 17, Rates of Speed, 60 km/h on Bleams Road (Regional Road 56) from 400 m west Fischer-Hallman Road (Regional Road 58) to Manitou Drive (Regional Road 69), in the City of Kitchener; and
- Add to Schedule 17, Rates of Speed, 60 km/h on Bleams (Regional Road 56) from Fischer-Hallman Road (Regional Road 58) to Manitou Drive (Regional Road 69), in the City of Kitchener.

as outlined in Report TSD-TRP-24-005 dated May 7, 2024.

2. Purpose / Issue:

As part of normal day-to-day operations, Regional staff have reviewed the need for enhanced traffic control at various locations around the Region. Staff's review included analyses of warrants for pedestrian traffic control, right-turn-on-red restrictions and lower posted speed limits. As a result of these analyses, staff is recommending the addition of a number of traffic controls which require amendments to the Region's Traffic and Parking By-law. This report serves to provide a set of staff recommendations around additional traffic control and the associated amendments to the Region's Traffic and Parking By-law in order to accommodate the proposed additional control.

3. Strategic Plan:

The staff recommendations within this report aligns with the Region's 2023-2027 Strategic Plan in the following key areas:

- Climate Aligned Growth:
 - Foster car-alternative options through complete streets and extended alternative transportation networks.
- Equitable Services and Opportunities:
 - Design equitable regional services that meet local community needs.

By expanding public transit and active transportation networks equitably across the region, we will make it easier and more affordable for people to get around using more sustainable modes of transportation.

4. Report Highlights:

- Regional staff are always looking for opportunities to improve the safety for all users within the regional transportation network, and are listening to suggestions

from members of the public and Area Municipality colleagues for tangible network improvements.

- As part of ongoing road safety efforts, staff have conducted an operational review of several locations around the Region with a focus on improving the safety and efficiency at key locations. From that review, staff are proposing the following changes:
 - The addition of four Level 2 Pedestrian Crossovers on various Regional Roads in Kitchener and Cambridge.
 - Level 2 Pedestrian Crossovers include signs, pavement markings, and, in some cases, rapid flashing beacons that are used to advise motorists that they must stop and yield the right-of-way to any pedestrian(s) crossing the roadway. More details can be found in Appendix A.
 - The addition of traffic control signals to assist Iron Horse Trail users crossing Borden Avenue in Kitchener.
 - The addition of a School Bus Loading Zone on Frederick Street in front of Suddaby Public School in Kitchener.
 - The introduction of right-turn-on-red restrictions to improve safety for cyclists and pedestrians at the Erb Street & University Avenue intersection in Waterloo, and at the Arthur Street & Whippoorwill Drive intersection in Woolwich.
 - The reduction of the posted speed limit to 50km/h on Bleams Road between Trussler Road and Fischer-Hallman Drive to accommodate the recommended design in the ongoing Bleams Road reconstruction project.
- The costs for all of the proposed improvements would be funded through various transportation projects approved in the 2024 capital budget. These changes would not require any amendment to the 2024 budget.
- Following approval from Regional Council, staff would begin implementing the changes in 2024 and would expect to have them completed once the Bleams Road reconstruction project concludes.

5. Background:

In recent months, staff have conducted reviews at various locations around the Region to assess the safety and mobility of pedestrians, cyclists and vehicle drivers. Through these reviews, staff identified a number of proposed changes to traffic control, turning restrictions, and speed reductions to provide improvements for people moving in and about the Region. More details around the justification for each recommendation are included in Appendix A, but short descriptions of the proposed changes are provided below:

- Addition of a Level 2 Pedestrian Crossover – Type C on Courtland Avenue in the vicinity of Courtland Avenue Public School in Kitchener. This pedestrian

crossover will help community members who wish to walk or roll to the school, through the addition of a protected pedestrian crossing.

- Addition of a Level 2 Pedestrian Crossover – Type B on Frederick Street at East Avenue in Kitchener. The addition of the formal pedestrian crossover will elevate the current passive pedestrian crossing by providing priority to pedestrians who wish to cross Frederick Street at East Avenue.
- Addition of a Level 2 Pedestrian Crossover – Type B on Queen Street at the Joseph Schneider Haus Trail Crossing in Kitchener. The pedestrian crossover will provide an enhanced crossing of Queen Street, facilitating improved connectivity between the bus stops and the adjacent community spaces on both sides of Queen Street.
- Addition of a Level 2 Pedestrian Crossover – Type C on St. Andrews Street at Gilholm Avenue in Cambridge. The addition of the formal pedestrian crossover will elevate the current passive pedestrian crossing by providing priority to pedestrians who wish to cross St. Andrews Street at Gilholm Avenue.
- Revision of the original plan (Level 2 Pedestrian Crossover) to, instead, implement traffic control signals on Borden Avenue at the Iron Horse Trail Crossing in Kitchener. By using traffic control signals, we will be able to maintain uninterrupted ION LRT service through this crossing, while still protecting for active transportation users along the Iron Horse Trail.
- Implementation of a School Bus Loading Zone on Frederick Street in front of Suddaby Public School in Kitchener to enable safe and more efficient school bus operations.
- Introduction of a “No Right-Turn-on-Red” (RTOR) restriction on all approaches to the Erb Street/University Avenue intersection in Waterloo. By restricting RTOR movements at the intersection, we would introduce a layer of safety for cyclists and pedestrians by eliminating a prevailing conflict with turning cars.
- Introduction of an eastbound “No-Right-Turn-on-Red” restriction from Whippoorwill Drive to Arthur Street in Elmira (Woolwich) to improve the conditions for pedestrians navigating this intersection, particularly in the west crosswalk.
 - This change would be supplemented with a new eastbound right-turn arrow to operate in parallel with the northbound left-turn phase to offset some of the capacity loss introduced with the RTOR restriction.
- Implementation of a posted speed limit reduction along Bleams Road from 70km/h to 50km/h between Trussler Road and Fischer-Hallman Road in Kitchener to better align with the proposed new road design along this portion of roadway.

6. Communication and Engagement with Area Municipalities and the Public

Area Municipalities:

Regional staff have engaged counterparts from each of the impacted area municipalities to seek feedback regarding the proposed changes. Feedback is summarized below:

- City of Kitchener staff are in agreement with the proposed recommendations and would like more information around the exact placement of the proposed Level 2 Pedestrian Crossover proposed for Courtland Avenue (which would be determined during the detailed design process).
- City of Waterloo staff are in agreement with the proposal.
- City of Cambridge staff have no concerns.
- Township of Woolwich staff agree in principle with the Region's recommendations, but expressed concerns with possible impacts to the delay experienced by motorists wishing to make the eastbound right-turn at the Arthur Street & Whippoorwill Drive intersection. Regional staff have committed to review the operation following the change (if approved by Council) and, if necessary, work to minimize impacts to the eastbound right-turning motorists through changes to signal timings and/or a review of the overall effectiveness of the Right-Turn-on-Red prohibition.

Public:

Many of the recommendations (and associated analyses) were prompted by public inquiries for improved traffic control received throughout 2023 and early 2024. In some cases, Regional staff received those inquiries directly from members of the public while, in others, the inquiry was channeled through Area Municipality colleagues. In the case of Level 2 Pedestrian Crossovers, it is standard practice for Regional staff to monitor warrants over time. For some of the pedestrian crossover locations included in this set of recommendations, public inquiries prompted another review of the warrants.

7. Financial Implications:

The cost to implement the proposed improvements, and the associated funding sources are as follows:

- The addition of four Level 2 Pedestrian Crossovers is approximately \$108,800, to be funded through the 2024 New Traffic Control Installation (Project #07478);
- The installation of traffic signals at the Borden Street Iron Horse Trail crossing is approximately \$100,000, to be funded through the 2024 New Traffic Control Installation (Project #07478);
- The addition of the School Bus Loading Zone along Frederick Street is approximately \$500, to be funded through the 2024 New Signs and Markings (Project #07607);

- The implementation of the right-turn-on-red restrictions at two locations is approximately \$1000, to be funded through the 2024 New Signs and Markings (Project #07607);
- There is limited additional cost associated with the posted speed limit change along Bleams Road, since this work would be completed as part of the roadway reconstruction works associated with Project #05705.

In summary, each of the proposed changes would be included in one of a number of projects that are funded from the Transportation Capital Reserve or the Roads Regional Development Charges Reserve Fund as shown in the Region's approved 2024-2033 Transportation Capital Program. There is sufficient budget in each of these projects to accommodate the expenditures.

8. Conclusion / Next Steps:

Subject to Council approval, staff will proceed with the design and installation of the various recommended forms of traffic control outlined in this report. It is anticipated that the installation of most of the recommendations would be completed by the fall of 2024.

9. Attachments:

Appendix A: Additional Traffic Control

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