



MEMORANDUM

To: Regional Chair Emmerson and Members of Regional Council

From: Erin Mahoney, M. Eng.

Commissioner of Public Works

Date: June 23, 2022

Re: Request for Traffic Signals at Wellington Street East and

Kaleia Avenue/Elyse Court, Town of Aurora

This memorandum responds to a resolution received from the Town of Aurora dated May 30, 2022, requesting the Region approve installation of traffic signals that do not satisfy the Region's Traffic and Pedestrian Signal Policy (Policy) criteria at the intersection of Wellington Street East and Kaleia Avenue/Elyse Court. Revised recommendations, based on deliberations at the June 16, 2022, Committee of the Whole meeting, are included in the minutes of the meeting.

The intersection of Wellington Street East and Kaleia Avenue/Elyse Court does not satisfy the Region's Traffic and Pedestrian Signal Policy criteria

Given development and growth in the area, staff have conducted regular traffic studies at this intersection annually since 2020, with the latest conducted in April 2022. Study results have been consistent, satisfying between 50% and 59% of Policy criteria. Several pedestrian studies have also been conducted in the past three years. The highest number of pedestrians seen to be crossing Wellington Street East at Kaleia Avenue/Elyse Court during the busiest eight hours of the day was 17. There have been no reported collisions at this intersection in the past five years.

Traffic signals are projected to satisfy the Policy criteria in 2044

Based on an average annual growth rate of 2% on Regional roads, the intersection of Wellington Street East and Kaleia Avenue/Elyse Court is not projected to warrant traffic signals until 2044. Developments on the north and south sides of this intersection are confirmed to be completed and fully occupied. Traffic volumes on the side streets are anticipated to remain constant.

A major development is underway at the southeast corner of Wellington Street East and Bayview Avenue, which may consist of about 1,500 additional units. Development of a new SmartCentres is underway on the south side of Wellington Street East between Leslie Street and Highway 404. Traffic volumes along the main corridor are anticipated to grow over the coming years.

Past installations of traffic signals not satisfying Policy criteria have been fully funded by the requesting party

Where requested signals on Regional roads have not satisfied Policy criteria, Council's practice has been to approve installation conditional on costs being fully recovered from the requesting party, in this case, the Town of Aurora. Aurora Council resolution acknowledges this location does not meet Policy criteria and identifies that, should Council approve installing these signals, associated installation and operating costs would be funded by the Town of Aurora.

The cost to install traffic signals at a typical four-approach intersection is about \$250,000, subject to final design. A one-time maintenance fee of \$78,000 covering 10 years would also be required. All costs are non-refundable.

Traffic signals can be safely operated at this intersection

Installation of traffic signals at the intersection of Wellington Street East and Kaleia Avenue/Elyse Court would benefit residents exiting the side street communities by assigning dedicated green time for north/south traffic. Crosswalks would be installed as part of the traffic signal installation, which would offer a clear, marked pedestrian crossing connecting the south side community to the existing sidewalk on the north side of Wellington Street East. Currently, the closest pedestrian crossing opportunities are at Mavrinac Boulevard/Stronach Boulevard (650 metres away) and Leslie Street (550 metres away). Traffic signals could also provide gaps for traffic exiting the Stronach Aurora Recreation Complex and Central York Fire Station and have shown to be effective at reducing severity and frequency of right-angle collisions.

Commuter traffic on Wellington Street East would experience approximately seven seconds of additional delay per vehicle with the installation of traffic signals at Wellington Street East and Kaleia Avenue/Elyse Court. Often, unwarranted traffic signals can lead to aggressive driving behaviour, disobedience of signal indications and an overall increase in collision frequency, most notably rear-end collisions.

The process to deliver a new traffic signal requires planning, design, procurement and construction, which can take about 12 to 18 months. Should installation of traffic signals be approved by Council, staff will initiate the design process as soon as possible and aim to install the signals in late 2023.

Erin Mahoney, M. Eng.

Commissioner of Public Works

Bruce Macgregor

Chief Administrative Officer

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