# The Corporation of the City of Kawartha Lakes Council Report

# Report Number ENG2019-007

Date:	March 26, 2019
Time:	2:00 p.m.
Place:	Council Chambers
Ward Community Identifier: 5	
Title:	Request for Traffic Calming – St. David Street
Author ar	nd Title: Joseph Kelly, Senior Engineering Technician
Recommendation(s):	
<b>That</b> Report ENG2019-007, <b>Request for Traffic Calming – St. David Street</b> , be received.	
Department Head:	
Financial/Legal/HR/Other:	
Chief Administrative Officer:	

#### Background:

At the Council Meeting of September 26, 2017 Council adopted the following Resolution:

#### CR2017-828

**RESOLVED THAT** the petition received from Margaret McLean and Philip Yates regarding Traffic on St. David Street between Queen Street and Colborne Street, be received and referred to staff with a report back by end of Q2 2018.

The petition is attached as Appendix A and lists the following concerns:

- Speed of traffic
- Volume of traffic
- Heavy truck use

The petition requests speed bumps and all-way stops claiming there has been a dramatic increase in the above since the completion of the Logie Street developments.

This report addresses those directions.

#### Rationale:

Speed studies and all-way stop warrants were performed to investigate the need for traffic calming. Firstly, it is important to understand the design and functional classification of the road and how it relates to user safety. St. David Street between Queen Street and Colborne Street East is designed and classified as a collector road under the Lindsay Official Plan and the Transportation Master Plan.

Collector roads are used as a connection between local roads and arterial roads. They provide a balance between access and traffic movement. Collector roads typically have a more residential environment than an arterial road but are designed wider than a local road with more regard to pedestrian facilitation.

This is exactly as designed in this area, with St. David Street as the collector being wide and having sidewalks on both sides of the street, while the flanking St. Peter Street and St. George Street are narrower with no sidewalks or sidewalks on only one side of the street despite being the same length and direction, and having relatively the same amount of residential houses fronting on them. St. David Street is simply designed to safely accommodate more traffic.

St. David Street, St. Peter Street, and St. George Street all are signed for no Heavy Trucks. A key map is attached as Appendix B.

## **Speed Study**

A four day speed study was performed in May 2018. It revealed 85<sup>th</sup> percentile speeds (speeds at which 85 percent of vehicles are going at or below) of 52.9 km/h. The average speed was 45 km/h. These speeds are considered typical for a collector road. It is generally an acceptable level of compliance with the speed limit considering pedestrians have sidewalks on both sides of the street. The speed study results are attached as Appendix C.

The study also revealed volumes and vehicle classes. The average daily traffic for the duration of the study was 1,396 vehicles per day. Although this may be perceived as high according to the petition, St. David Street has ample capacity to safely handle the traffic.

A look at vehicle classes showed that 70% of traffic was considered light vehicles, while the remaining 30% was considered medium and heavy vehicles (two axle truck or bus and above). The vehicle class summary is attached as Appendix D.

The signage at either end of the street prohibits heavy trucks, if enforced/complied with, the study shows there would be an average of 452 fewer vehicles travelling on the road per day.

## **All-way Stop Warrant**

The Ontario Traffic Manual (OTM) has two methods to determine if an all-way stop is warranted.

#### 1) All-way Stop Minimum Volume Warrant (Major Roads)

The OTM suggests that an all-way stop control may be considered on major (arterial/collector) roads where conditions are met for all of the following:

- Total hourly vehicular volume on all approaches must exceed 500 per hour; AND
- b) Combined vehicle and pedestrian volume for the minor street must exceed 200 units per hour; AND
- Average delay to traffic on the minor street must exceed 30 second;
   AND
- d) Volume split does not exceed 70/30

Preliminary justifications using roads needs data shows the total volume entering the intersection would not exceed 100 vehicles per hour. The minor road volumes would be under 20 vehicles per hour. The directional split based on total roads needs volumes is 89/11. Site visits show delays of much less than 30 seconds. Therefore the All-way Stop Minimum Volume Warrant is not met. The completed preliminary warrant is attached as Appendix E.

#### 2) All-way Stop Collision Warrant

An all-way stop control may be considered at an intersection with a high accident frequency. For the purpose of this warrant, a high accident frequency is an average of four collisions per year over a three-year period. Only those accidents susceptible to relief through multi-way stop control must be considered.

The intersection along St. David Street, between Queen Street and Colborne Street has a reportable collision average of 0 collisions per year over the last three years of available collision records. Therefore, the All-way Stop Collision Warrant is not met.

#### **Speed Bumps**

Out of all the residential north/south roads connecting Queen Street with Colborne Street, St. David Street is the widest and is the only street with sidewalks on both sides of the street. It is the only street designed and classified as a collector road. It is not appropriate to install speed bumps on the road, potentially diverting traffic to streets not equipped to safely handle the traffic, when speed limit compliance and volumes are at acceptable levels.

As a result of the justification review carried out by staff, it is recommended that the most appropriate action is the enforcement of the existing no heavy truck regulatory sign.

#### Other Alternatives Considered:

N/A

## **Financial/Operation Impacts:**

N/A

# Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

The City's Strategic Plan outlines Council's Vision of a Vibrant and Growing Economy, Quality of Life and a Healthy Environment.

Providing life safety and protection is a priority objective of the City.

# Review of Accessibility Implications of Any Development or Policy:

N/A

# **Servicing Implications:**

N/A

#### **Consultations:**

N/A

#### **Attachments:**

Appendix A – Petition



ENG2019-007 Appendix A.pdf

Appendix B - Key Map



ENG2019-007 Appendix B.pdf

Appendix C - Speed Study



ENG2019-007 Appendix C.pdf

Appendix D - Class Study



ENG2019-007 Appendix D.pdf

Appendix E – Preliminary All-way Stop Warrant



ENG2019-007 Appendix E.pdf

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Department Head: Juan Rojas, Director of Engineering and Corporate

**Assets** 

**Department File:**