



## ROADS, PARKS AND FLEET DEPARTMENT MEMORANDUM

---

**TO:** MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

**FROM:** D. FRIARY, DIRECTOR OF ROADS, PARKS AND FLEET

**NOTED:** A. BOURRIE, RPP, GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH  
MANAGEMENT (ACTING)

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

**RE:** ALL-WAY STOP INVESTIGATION FOR HENRY STREET AND BOYS STREET

**DATE:** APRIL 15, 2019

---

This Memo is in response to the request for an All-Way Stop investigation at the intersection of Henry Street and Boys Street. Currently, the stop control requires vehicles travelling along Boys Street (Local Street) to stop at Henry Street (Local Street) please refer to Appendix "A" for a map of the study area.

Staff have investigated the intersection of Henry Street and Boys Street to determine if an All-Way Stop is warranted based on criteria within the Ontario Traffic Manual (OTM) Book 5 – Regulatory Signs.

The OTM warrant is based on volume, collision history, and stopping sight distance at the intersection. There are two (2) classes of Minimum Volume Warrants identified in the OTM; each class is based on the classifications of roadways; Minor Roadways (Local Roadways) and Major Roadways (Collector and Arterial Roadways). A road classification is determined by using the City of Barrie Official Plan, Schedule D – Road Plan.

Based on the classification of Henry Street, as a Local Roadway the Minor Roadway Minimum Volume Warrant was used. Each component of the All-Way Stop Warrant has the ability to satisfy the warrant independently.

- **Volume** - The total vehicle volume on all intersection approaches exceeds 350 vehicles for the highest hour recorded.
- **Collision History** - reviews collisions over a three-year period, which are correctable through All-Way Stop control (i.e. right angle and turning type collisions) and which are reported to Barrie Police.
- **Stopping Sight Distance** - the distance required for a driver to see ahead in order to stop if necessary.



## ROADS, PARKS AND FLEET DEPARTMENT MEMORANDUM

A traffic count was completed on February 14, 2019 for the purpose of completing an All-Way Stop warrant. The results of the investigation are summarized below:

<u>Description</u>	<u>All-Way Warrant</u>	<u>Recorded Data</u>	<u>Satisfied All-Way Warrant</u>	
			<u>Yes</u>	<u>No</u>
<b>Part 1a – Total Volume</b> Hourly Traffic Volume <sup>(1)</sup>	Greater than 350 vehicles in peak hour <sup>(2)</sup>	212 vehicles in the peak hour		
<b>Part 1b – Volume Split</b> Percentage of Traffic on Henry Street (Minor Street)	Greater than 35% <sup>(2)</sup>	54 vehicles (25%) in the peak hour		X
<b>Part 2 – Collisions</b> Intersection Collision History	Average 4 per year over 3 years	4 collisions over a 3 year period		X
<b>Part 3 – Visibility</b> Stopping Sight Distance from Boys Street	Less than 65m	No restrictions		X

(1) *Peak Hour Volume is the maximum number of vehicles that pass through the intersection during a one hour period.*

(2) *1a & 1b must both be satisfied to warrant an All-Way stop.*

An All-Way Stop Survey was prepared and mailed to 34 property owners on Henry Street and Boys Street. Results of the All-Way Stop Survey are as follows:

<b>Henry Street and Boys All-Way Stop Survey</b>	<b>Response Received</b>	<b>Percentage of Responses</b>
<b>Option A</b> - Leave as is (traffic along Boys Street stops at Henry Street)	0	0%
<b>Option B</b> – Install an All-Way Stop at Henry Street and Boys Street.	6	100%
<b>TOTAL</b> (Out of 34)	<b>6</b>	<b>18%</b>

Residents, also had expressed concerns regarding vehicles speeding along Henry Street at Boys Drive and that the implementation of a stop sign would discourage this. Staff considered this concern however do not support the installation of an All-Way Stop for this purpose as The Ontario Traffic Manual Book 5 – Regulatory Signs states:

“Inappropriate Use of All-way Stop Control. All-way stop controls should not be used under the following conditions:

- Where the protection of pedestrians, school children in particular, is a prime concern. This concern can usually be addressed by other means; and
- As a speed control device.



## ROADS, PARKS AND FLEET DEPARTMENT MEMORANDUM

Historically, Staff have implemented radar speed boards to display motorist's speeds at the specific location. Data has shown that when radar speed boards are installed the average speed is reduced 3km/h – 5km/h. Staff will place Henry Street in consideration for a radar speed board in 2019.

Staff has requested police enforcement through Barrie Police Services to monitor the speeding concerns along Henry Street.

Staff have implemented pedestrian ahead signs on Henry Street for both directions to provide advance warning to motorists and pedestrians in the area. This is to address the concern from residents that the presence of pedestrians can come as a surprise to a motorist around the intersection of Henry Street and Boys Street.

Staff have analysed collision history data, and noticed a trend in angle collisions from vehicles travelling northbound on Boys Street. Staff will install auxiliary stop signs on Boys Street for both directions to improve the visibility of the stop control.

Unwarranted All-Way Stops create operation and safety concerns for both pedestrians and vehicles entering the intersection. The unwarranted All-Way Stop makes drivers feel the stop is unnecessary and motorists do not comply with the stop control, as there is little to infrequent side street traffic encountered. This also creates a disregard for other traffic control devices because drivers soon learn to ignore the stop control device, as they feel the signs are not required.

Staff do not support the implementation of an unwarranted All-Way Stop. There have been numerous engineering studies that have shown that the implementation of unwarranted All-Way Stop result in an increase in aggressive driving. Motorists do not feel they are required to stop since they do not encounter vehicles on the side street. Studies also indicate there is usually an increase in vehicles speeds as drivers attempt to make up for lost time at the stop location.

Staff have reviewed the intersection of Henry Street and Boys Street for the installation of an All-Way Stop. Based on the results of the investigation, the installation of an All-Way Stop at this intersection does not satisfy the warrants identified in the OTM at this time.

In accordance with the Council approved All-Way Stop Policy a memo is provided to advise of the results of an investigation when the OTM warrants have not been satisfied.

## Appendix "A"

