

For Information Only

All Way Stop Control - Attlee Avenue at Roland Street, Sudbury

Presented To: Operations Committee

Presented: Wednesday, Oct 14, 2020

Report Date: Friday, Sep 25, 2020

Type: Managers' Reports

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report responds to a request from Ward Councillor Landry-Altmann and area residents to determine if an all-way stop is warranted at the intersection of Attlee Avenue and Roland Street. This report presents results of the traffic study and provides information regarding traffic control at this intersection.

Financial Implications

Recommendations of this report may be carried out within existing approved budget and staff complement.

Signed By

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All-Way Stop Control – Attlee Avenue at Roland Street

Background

City staff received a request from Ward Councillor Landry-Altmann and area residents to determine if an all-way stop is warranted at the intersection of Attlee Avenue and Roland Street. This intersection is located in Ward 12, one block north of LaSalle Boulevard and is currently controlled with stop signs facing eastbound traffic on Roland Street and westbound traffic from the private entrance (Figure 1).

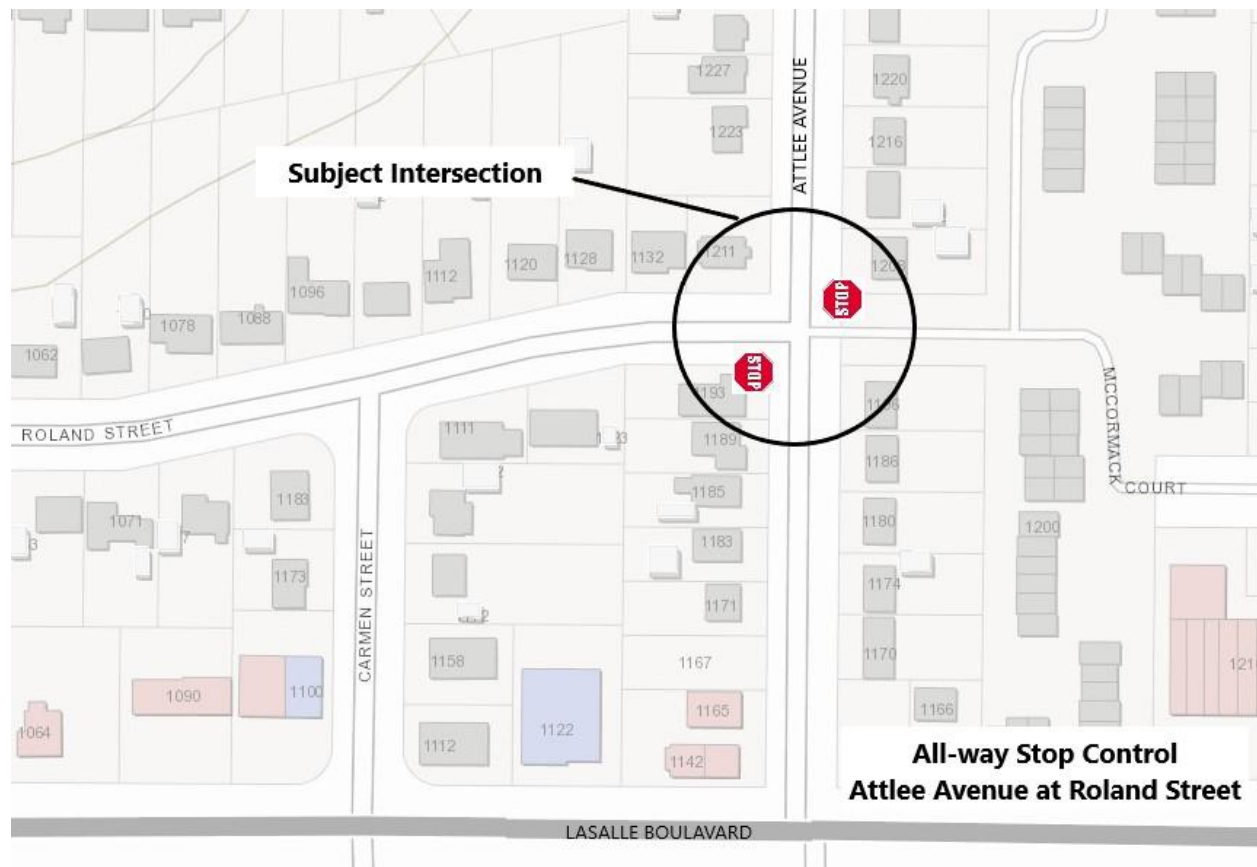


Figure 1: Existing stop sign configuration at Attlee Avenue and Roland Street

In an effort to gauge resident support, Ward 12 Councillor Landry-Altmann surveyed the residents of Attlee Avenue and Roland Street to determine whether or not they supported an all-way stop at the intersection. In total, 48 residents responded and results from the survey indicate that area residents are divided on whether they want an all-way stop installed at this intersection with 48% in favor and 52% opposed.

Data Collection and Analysis

In 2008, City Council adopted an All-Way Stop Policy for the City of Greater Sudbury. The policy is based on a jurisdictional scan of Ontario municipalities and reduces the requirements to have all-way stops installed.

On November 25, 2019, staff conducted a turning movement count at this intersection and applied the data to the all-way stop policy. As shown in Appendix A, the total vehicle volume from all approaches at this specific intersection meets only 38% of the minimum vehicle volume required to warrant an all-way stop.

A review of the collision history from 2017 to 2020 year-to-date revealed that there was a single collision that may potentially have been prevented with an all-way stop at this location. The all-way stop warrant for a local road requires there be a minimum of two (2) collisions per year over a three (3) year period to qualify for the installation of an all-way stop.

From the written feedback included on the survey, staff noted that approximately 5% of residents indicated that speeding is one of their main concerns. It is important to note that all-way stops are not effective as a speed control device. Studies have shown that stop signs only influence drivers to slow down within close proximity of the intersection and speeds may actually increase mid-block as drivers attempt to make up for the perceived lost time.

In addition to completing the all-way stop warrant, staff reviewed this section of Attlee Avenue against the City's Traffic Calming Policy and warrant to determine if it would qualify which would help to address the speeding concerns some residents expressed in the survey. The traffic calming warrant includes an initial screening where a combination of requirements must be met for a section of roadway to be eligible for traffic calming. The segment of Attlee Avenue, north of LaSalle Boulevard, did not pass the initial screening for traffic calming due to low vehicle volumes and is therefore not recommended to have traffic calming features installed on it.

At this time, based on the vehicle volumes and collision history, an all-way stop is not warranted at the intersection of Attlee Avenue and Roland Street.

Resources Cited:

City of Greater Sudbury, *Traffic Calming Policy*, Accessed online:

<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=1993.pdf>

APPENDIX A



CITY OF GREATER SUDBURY ALL-WAY STOP WARRANTS

Location: Attlee Avenue at Roland Street Date: 5/11/2020
 Date of TM Count: 11/25/2019 Analyst: SB
 Type of Intersection: Cross

All-Way Stop Warrant Summary

Warrant #1	Minimum Vehicle Volume	38%	%
Warrant #2	Collision History	0%	%
Warrant #3	Traffic Control Signals	NO	Y/N

All-Way Stop Warranted? **NO** Y/N

Warrant #1 - Minimum Vehicle Volume

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Vehicles per hour	Percent Compliance
AADT	> 5000	1000 - 5000	< 1000		
Count Period	7 hours	4 peak hours	4 peak hours		
Total vehicle volume from all approaches is ≥	500	350	250	94	38%
Veh + Pedestrian volumes from side street is ≥	200/hr	140/hr	N/A		
Traffic Split	70/30	70/30	70/30	59/41	100%

Warrant #2 - Collision History

Roadway Type	Arterial/Major Collector	Minor Collector	Local	Number of Collisions per year	Percent Compliance
Collisions per Year over 3 year period	4*	3*	2*	0	0%

Warrant #3 **Traffic Control Signals are warranted and urgently needed, signs to be used as interim measures.** **NO** **Y/N**

* Only those collisions susceptible to relief through multi-way stop control must be consider (i.e. right angle and turning types).

- If the intersection meets warrant # 1, then the all-way stop is recommended regardless of the remaining warrants.
- If the intersection does not meet warrant #1 and does not meet warrant #2, then the all-way stop is not recommended.
- If the intersection does not meet warrant #1 and does meet warrant #2, then the all-way stop is recommended.