

Presented To:	Operations Committee
Presented:	Monday, Sep 16, 2019
Report Date	Friday, Aug 30, 2019
Type:	Managers' Reports

Request for Decision

All Way Stop Control - Brookfield Avenue at Tulane Avenue and Hudson Street, Sudbury

Resolution

THAT the City of Greater Sudbury controls the intersection of Brookfield Avenue at Tulane Avenue at Hudson Street with an All-way Stop;

AND THAT staff be directed to prepare a by-law to amend Traffic and Parking By-Law 2010-1 to implement the recommended changes, as outlined in the report entitled "All Way Stop Control – Brookfield Avenue at Tulane Avenue and Hudson Street, Sudbury", from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on September 16, 2019.

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

The Transportation and Innovation Services section has received a request to review traffic control at the intersection of Brookfield Avenue at Tulane Avenue at Hudson Street located east of Falconbridge Road in Sudbury.

Financial Implications

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

Signed By

Report Prepared By

Soutsay Boualavong
Traffic/Trans Eng Analyst
Digitally Signed Aug 30, 19

Manager Review

Joe Rocca
Traffic and Asset Management
Supervisor
Digitally Signed Aug 30, 19

Division Review

Akli Ben-Anteur
Project Engineer
Digitally Signed Aug 30, 19

Financial Implications

Jim Lister
Manager of Financial Planning and
Budgeting
Digitally Signed Aug 30, 19

Recommended by the Department

Tony Cecutti
General Manager of Growth and
Infrastructure
Digitally Signed Aug 30, 19

Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Sep 4, 19



EXHIBIT: A
CITY OF GREATER SUDBURY
ALL-WAY STOP WARRANTS

Location:	<u>Brookfield /Hudson/Tulane</u>	Date:	<u>7/2/2019</u>
Date of TM Count:	<u>6/12/2019</u>	Analyst:	<u>SB</u>
Type of Intersection:	<u>5 legs Intersection</u>		

All-Way Stop Warrant Summary			
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Warrant #1	Minimum Vehicle Volume	<u>50%</u>	%
Warrant #2	Collision History	<u>0%</u>	%
Warrant #3	Traffic Control Signals	<u>NO</u>	Y/N

All-Way Stop Warranted?	<u>NO</u>	Y/N
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Warrant #1 - Minimum Vehicle Volume
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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	126	50%
Veh + Pedestrian volumes from side street is ≥	200/hr	140/hr	N/A		
Traffic Split	70/30	70/30	70/30	82/18	60%

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.	<u>NO</u>	Y/N
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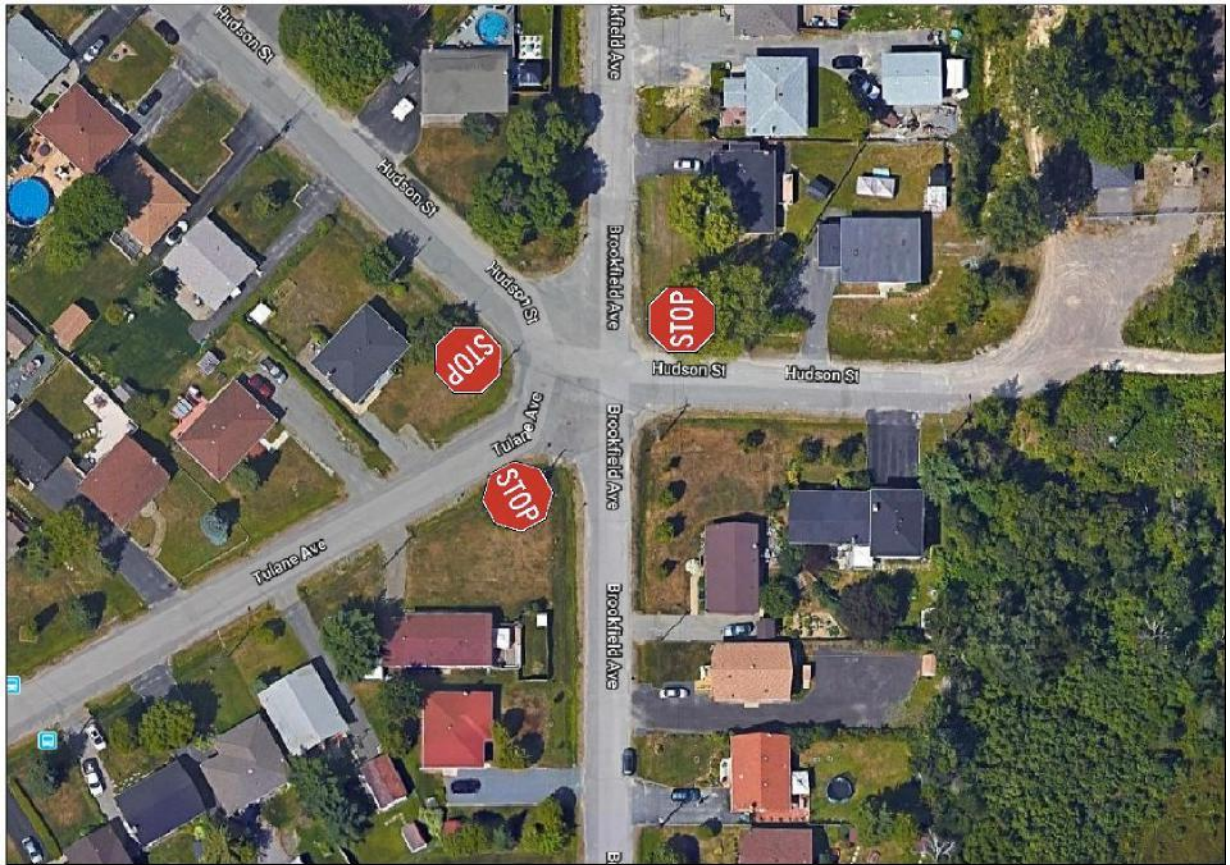
* Only those collisions susceptible to relief through multi-way stop control must be consider (i.e. right angle and turning types).

- 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.

All Way Stop Control

Brookfield Avenue at Tulane Avenue and Hudson Street

The Transportation and Innovation Services section received a request to review traffic control at the intersection of Brookfield Avenue at Tulane Avenue at Hudson Street located east of Falconbridge Road in Sudbury.



Brookfield Avenue at Tulane Avenue and Hudson Street intersects and forms a five leg intersection. Currently this intersection is controlled with three Stop signs facing eastbound and westbound traffic on Hudson Street and north eastbound traffic on Tulane Avenue.

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. Staff conducted a turning movement count on June 12, 2019 at this intersection and applied the data to the City's Minimum volume warrant. Based on the average annual daily traffic volumes on Hudson Street, this intersection would be classified as a Local. As shown in Exhibit A, the total volume meets 50% of the volume requirements (See Exhibit A).

A review of the City's collision information from 2015 to 2019 year to date, revealed that there were no collisions during this period. For a local roadway, the collision warrant requires a minimum of three collisions per year over three year period.

While the traffic volumes and collision fall below the warrants, this uncommon and unconventional intersection is confusing for drivers and can cause unnecessary conflicts. Due to this unorthodox intersection geometry, staff recommends installing all-way stops at this intersection.