

**Subject:** Pelham Street North Speed Study Results**Recommendation:**

**BE IT RESOLVED THAT Council receive Report #2020-0171, Pelham Street North Speed Study Results, for information.**

**Background:**

Whereas Council received a petition requesting a three-way stop sign at Pelham Street and Shorthill Place on October 19, 2020, this report serves to inform Council regarding the traffic volume and speed study results collected on this roadway.

**Analysis:**

The section of Pelham Street between the urban boundary and Regional Road 20 is largely residential. As a Collector Road, the function of Pelham Street is to move traffic to and from local roads, as well as deliver traffic from rural areas and neighbouring municipalities to the north.

The intersection of Pelham Street and Shorthill Place is approximately 200m South of the Urban Boundary. North of the Urban Boundary, Pelham Street is categorized as a Rural Road Section. South of the Urban Boundary, Pelham Street transitions into a collector road that has been recently reconstructed with curb and gutter, and includes sidewalks on both sides of the roadway starting at Shorthill Place heading south.

Under O. Reg. 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS this section of Pelham Street is categorized a Class 5 Roadway based on the volume of traffic and its posted speed limit.

As per the Town of Pelham Neighborhood Traffic Management Policy No. S801-02 a Traffic Calming Pre-Screening Assessment was completed for Pelham Street between Shorthill Place and Hurricane Road. The roadway passed seven of the eight required criteria to move the process forward. The Traffic Calming Pre-Screening Assessment is attached as Appendix A.

Although the roadway did not pass the pre-screening assessment, due to road's section proximity to the urban/rural transition, and the petition received by Council, staff completed a vehicle traffic study in the area. Road sections near the urban/rural transition often experience higher traffic speeds and complaints.

The study commenced on October 29, 2020 at 2:00pm and concluded on October 30, 2020 at 2:00pm, lasting a total of 24 hours as per industry standards. Two Mhcorbin NC350 Traffic Analyzers were set up on Pelham Street, 50m South of Shorthill Place, to record both north and south bound traffic volume and speed data.

The total recorded volume for the 24 hour period or Annual Average Daily Traffic (AADT) was 1126 vehicles. The peak traffic volume of 23 vehicles was recorded south bound between 3:45pm and 4:00pm. During the peak time the headway, or time observed, between vehicles was 37.5 seconds. 37.5 seconds provides sufficient time for turning movements onto and off of Pelham Street, as well as pedestrian crossings. The headway time may also explain the low compliance to the stop sign at Shorthill Place, observed by staff while attending the area.

In both directions, at least half of all vehicles were travelling in the 50 to 60 km/h range or lower. The combined average speed was recorded at 53.5 km/h. North bound speeds were slightly higher with an 85<sup>th</sup> percentile of 68 km/h while the 85<sup>th</sup> percentile for south bound traffic was 61.5 km/h. The 85<sup>th</sup> percentile represents the speed, at or below, which 85 percent of all vehicles are recorded travelling. The Traffic Analyzer Summary Reports are attached as Appendix B.

The next step in the Neighbourhood Traffic Management Policy is to complete a Traffic Calming Point Assessment utilizing the traffic data and further staff investigation. The Traffic Calming Point Assessment has not yet been completed.

A Dynamic Speed Display has been installed near the intersection of Pelham Street and Shorthill Place as a passive traffic calming measure. Staff continue to evaluate its performance both as a calming measure, and its overall reliability.

**Financial Considerations:**

There are no financial considerations associated with this report.

**Alternatives Reviewed:**

No alternatives were considered in the preparation of this report.

**Strategic Plan Relationship: Build Strong Communities and Cultural Assets**

This report serves to communicate the results of traffic studies resulting from a resident lead petition to install a 3-way stop sign at the intersection of Pelham Street and Shorthill Place.

**Other Pertinent Reports/Attachments:**

Appendix A – Traffic Calming Pre-Screening Assessment

Appendix B – Traffic Analyzer Summary Report

October 19, 2020 - Petition Requesting a Three-Way Stop Sign at Pelham Street and Shorthill Place

**Consultation:**

No consultation was required in the preparation of this report. The traffic data study was completed by Town of Pelham Staff.

**Prepared and Recommended by:**

Jason Marr, Director of Public Works

**Approved and Submitted by:**

David Cribbs, Chief Administrative Officer