Traffic Study – Intersection of Second Avenue and Concession Street

Presented To:	Operations Committee
Meeting Date:	August 12, 2024
Type:	Correspondence for Information Only
Prepared by:	Mofor Augustine Linear Infrastructure Services
Recommended by:	General Manager of Growth and Infrastructure

Report Summary

This report provides information regarding the findings for a traffic study at the intersection of Second Avenue and Concession Street.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report refers to Climate Change and Create a Healthier Community strategic initiatives as identified in the Strategic Plan and goal 8: Achieve 35% active mobility transportation mode share by 2050 in the Community Energy & Emissions Plan (CEEP).

Financial Implications

There are no financial implications associated with this report.

Background

At the October 14, 2020 Community Services Committee meeting a resolution was passed “THAT the City of Greater Sudbury directs staff to further delay the withdrawal of the crossing guards at the intersection of Second Avenue and Concession Street in Coniston until they have completed another study to determine if a Pedestrian Crossover is warranted at this location, which is proposed to be conducted in the Spring of 2021. AND THAT the funds required to keep the crossing guards in place be drawn from the existing Transit Services budget.”

Second Avenue is a two-lane, north-south collector with a pavement width of 10 meters curb-to-curb. It is paved to an urban standard with sidewalks on both sides. The intersection with Concession Street is stop controlled for motorists on Concession Street only. There are two elementary schools to the west of the

intersection which makes Concession Street a popular walking route for school aged children. Currently a school crossing guard connects the north side sidewalk on Concession Street across Second Avenue. Figure 1 & 2 show the intersection and school crossing guard location in satellite view and street view, respectively.

Figure 1 – Satellite View

Figure 2 – Street View

Staff have conducted pedestrian crossover studies in 2018, 2021 and 2024 at the intersection. The results of these studies are summarized below in Table 1.

Year	Crossing Volume with Crossing Guard (Peak 8 Hours)	Crossing Volume without Crossing Guard (Peak 8 Hours)
2018	95	47
2021	115	59
2024	N/A	46

Table 1 – Pedestrian Crossing Volumes

It should be noted that no pedestrian crossing volume with a crossing guard present is available for the 2024 count. The study was conducted in May 2024, however, due to a lack of available crossing guards, no crossing guard has been present at this location starting in April 2024. The 'Ontario Traffic Manual (OTM) Book 15 – Pedestrian Crossing Treatments' identifies the pedestrian volume threshold to warrant a pedestrian crossover is 100 crossing pedestrians in the peak 8 hours. In all three years that staff conducted studies the volume of crossing pedestrians when the crossing guard is not present are all well below this threshold.

The pedestrian crossing volumes have remained consistent across the six years staff have been studying the intersection. A slight bump in 2021 is noted and likely due to the COVID 19 pandemic. It is possible this increase was due to an increase in work-from-home parents walking their children to school and/or children choosing to walk to school to avoid potential exposures on the school bus.

The use of a pedestrian crossover to replace a school crossing guard is not seen as best practice, especially with elementary aged school children. OTM Book 15 states that "Children have difficulty judging speed, spatial relations, and distance as compared to adults. Their auditory and visual acuity, depth perception and proper scanning ability develop gradually and do not fully mature until at least age 10. Even children above this age are easily distracted and may not always behave as drivers expect. Furthermore, according to ITE Handbook, their concept of safety is not well developed, their knowledge of safe crossing conditions and ability to properly judge traffic gaps is poor, they have limited understanding about traffic control devices, and have difficulty correctly perceiving the direction of sound and the speed of a vehicle."

Given the intersection does not meet the required pedestrian crossing volumes to warrant a pedestrian crossover and considering best practice states that children aged 10 and under are not seen as having the required cognitive ability to safely cross a roadway, a school crossing guard is the most suitable pedestrian crossing treatment.

Next Steps

Staff will continue to monitor the intersection going forward and should the pedestrian crossing volumes change, or best practices related to pedestrian crossovers change, the intersection will be reevaluated for a pedestrian crossover.

Resources Cited

Ontario Traffic Manual, Book 15 – Pedestrian Crossing Facilities, accessed online: library.mto.gov.on.ca/SydneyPLUS/Sydney/Portal/default.aspx?component=AAAAIY&record=fa5caef1-9963-4786-b3c9-4b5e50e70321