

**Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works –
March 3, 2020**

REPORTS

**Item No. 14 Speed Study and Traffic Count – Hawstead Road
(Waverley West Ward)**

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That this report be received as information.

**Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works –
March 3, 2020**

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On January 7, 2020, the Standing Policy Committee on Infrastructure Renewal and Public Works granted a further extension of time of 60 days for the Winnipeg Public Service to report back on the matter.

On November 19, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted a further extension of time to its January 7, 2020 meeting for the Winnipeg Public Service to report back on the matter.

On October 1, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time of 60 days for the Winnipeg Public Service to report back on the matter.

On March 6, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Assiniboia Community Committee and directed the Winnipeg Public Service to conduct a new speed study and traffic count along Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive, and report back to the Standing Committee within 180 days with recommendations for traffic calming infrastructure.

COMMUNITY COMMITTEE RECOMMENDATION:

On February 4, 2019, the Assiniboia Community Committee passed the following motion:

WHEREAS prior to the construction of homes in Waverley West, Hawstead Road had issues of speed and large traffic volumes;

AND WHEREAS speed and traffic counts along Hawstead Road were studied in the early eighties and at that point in time, engineers looked at traffic calming measures but none were applied;

AND WHEREAS Hawstead Road is a major cut through street for residents of the new developments in Waverley West and continues to experience increased speed and large traffic volumes;

**Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works –
March 3, 2020**

DECISION MAKING HISTORY (continued):

COMMUNITY COMMITTEE RECOMMENDATION (continued):

AND WHEREAS Hawstead Road is a major cut through street for residents of the new developments in Waverley West and continues to experience increased speed and large traffic volumes;

THEREFORE BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works be requested to direct the Winnipeg Public Service to conduct a new speed study and traffic count along Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive, and report back to the Standing Committee with recommendations for traffic calming infrastructure.

ADMINISTRATIVE REPORT

Title: Speed Study and Traffic Count – Hawstead Road

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	J. Berezowsky	N/A	M. Ruta, Interim CAO

EXECUTIVE SUMMARY

A Traffic Study was conducted on Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive to determine if traffic calming was warranted. Traffic speeds and volumes were collected, the three-year collision history was reviewed, and a site visit was conducted. Based on a speed limit of 50 km/h, existing vehicle speed results do not require moderation through traffic calming. Average weekday volumes are in the order of 2,000 vehicles per day, which is twice the intended volume for a local street like Hawstead Road. As such, the volume level was deemed sufficient for consideration of traffic calming.

The Public Service considered the Transportation Association of Canada (TAC) measures suitable for addressing traffic volume concerns through traffic calming. This resulted in the development of two conceptual traffic calming options. One option features full closure of Hawstead Road between Hazel Park Drive and Meadow Ridge Drive, and the other features movement restrictions at the Bairdmore Drive and Kirkbridge Drive intersections.

As the volume issue is ultimately a neighbourhood liveability concern, it is necessary that the neighbourhood be consulted regarding the proposed options, and whether the new traffic calming options are preferable to the status quo. Any selected traffic calming measures would have to be prioritized amongst other projects within the Traffic Engineering Improvements Program based on available budget and City-wide priorities.

RECOMMENDATIONS

1. That this report be received as information.

REASON FOR THE REPORT

On January 7, 2020, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time of 60 days for the Winnipeg Public Service to conduct a new speed study and traffic count along Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive, and report back with recommendations for traffic calming infrastructure.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications as the result of the recommendations made in this report.

HISTORY/DISCUSSION

BACKGROUND INFORMATION

On February 4, 2019, the Assiniboia Community Committee recommended to the Standing Policy Committee on Infrastructure Renewal and Public Works that the Winnipeg Public Service be directed to conduct a new speed study and traffic count along Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive, and report back to the Standing Committee with recommendations for traffic calming infrastructure. Reasons stated for the request included:

- Prior to the construction of homes in Waverley West, Hawstead Road had issues of speed and large traffic volumes;
- Speed and traffic counts along Hawstead Road were studied in the early 1980s and, at that point in time, engineers looked at traffic calming measures but none were applied;
- Hawstead Road is a major cut-through street for residents of the new developments in Waverley West and continues to experience increased speed and large traffic volumes.

CURRENT TRAFFIC CONDITIONS

Hawstead Road is a two-lane, undivided, local street with a speed limit of 50 km/h in the Richmond West neighbourhood. Hawstead Road is approximately 450 metres in length. Parking is permitted on the north side of the street and the utilization of on-street parking appears to be low. The roadway width is approximately 7.5 metres and there are no sidewalks on either side of the street. The average weekday traffic volume on Hawstead Road in 2019 is approximately 2,000 vehicles per day.

Land use on Hawstead Road is single-family residential. Properties on the south side of Hawstead Road are primarily fronting with closely spaced flared driveways. On the north side of Hawstead Road, properties are flanking between Kirkbridge Drive and Groveland Bay and between Hazel Park Drive and Bairdmore Boulevard. On the north side of Hawstead Road between Groveland Bay and Hazel Park Drive, properties are fronting with a similar characteristic to the south side. There are boulevard trees lining both sides of Hawstead Road. Figure 1 illustrates the Hawstead Road study area at the locations where traffic speed and count data were recorded for this report.



Figure 1: Study Area

Though not designed or constructed as a collector street, Hawstead Road connects Kirkbridge Drive and Bairdmore Boulevard in a collector street fashion as illustrated in Figure 2. Hawstead Road provides a direct shortcut route for east-west movement through the Richmond West neighbourhood between Waverley Street and Pembina Highway relative to the longer Kirkbridge/Bairdmore/Sandusky route. This shortcut route is a result of the neighbourhood street network layout.

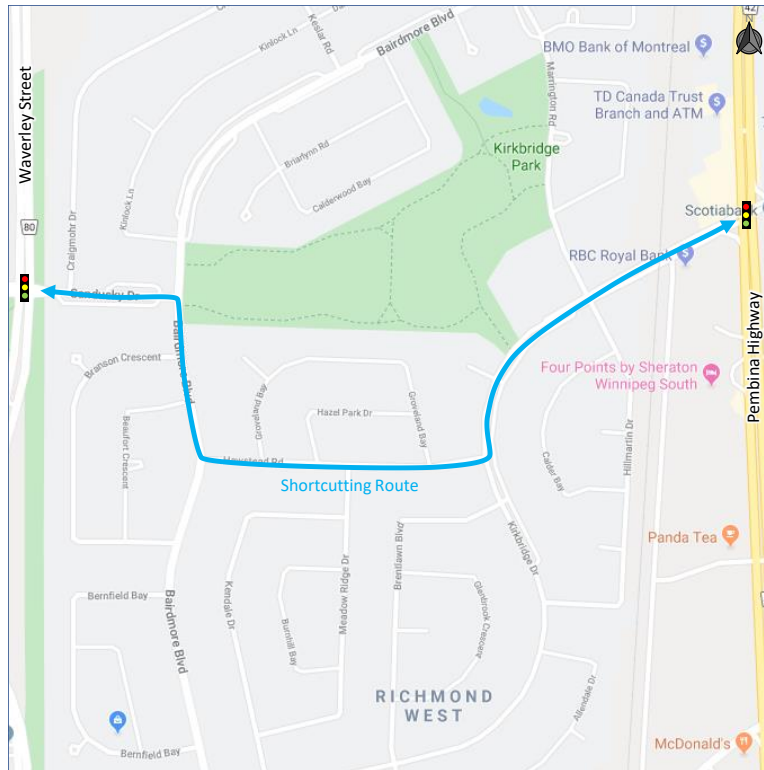


Figure 2: Shortcutting Route (Google Map Base)

TRAFFIC STUDY

Speed data and traffic volumes were collected using pneumatic tubes on Hawstead Road at two locations during the September 23 to 30, 2019 period. The two locations were in front of 74 Hawstead Road between Groveland Bay (west leg) and Hazel Park Drive and in front of 38 Hawstead Road between Meadow Ridge Drive and Groveland Bay (east leg) as illustrated in Figure 1. The results of the speed study are shown in Table 1 below.

Table 1: Speed Study Results for Combined Eastbound and Westbound Traffic on Hawstead Road (Data from September 23 to 30, 2019)

Metric	Location	
	<i>74 Hawstead Road</i>	<i>38 Hawstead Road</i>
Speed Limit	50 km/h	50 km/h
85 th Percentile Speed	44 km/h	43 km/h
Average Speed	37 km/h	36 km/h
Percent of Vehicles traveling 55 km/h or higher	0.9%	1.0%
Percent of Vehicles traveling 60 km/h or higher	0.2%	0.2%
Total Vehicles Studied (over 7 days)	13,063	13,567

Results from the speed studies indicate that values are below typical speed criteria currently used by the City in warrant considerations for speed humps. Observed vehicle speed may reflect the short length of the street (less than half a kilometre), the presence of boulevard trees

which visually narrow the roadway for drivers, and volume levels above those of a typical local street. The 85th percentile speed recorded was 43-44 km/h and the average speed recorded was 36-37 km/h. Approximately 1% of vehicles travelled 55 km/h or higher, and 0.2% of vehicles travelled 60 km/h or higher. These values are well below the speed hump warrants for treatment consideration which are: an average speed exceeding 50 km/h, 15% of vehicles exceeding 55 km/h and 10% of vehicles exceeding 60 km/h. As such, based on a speed limit of 50 km/h, existing vehicle speeds do not appear to require moderation through traffic calming. Should the speed limit change in the future these results would need to be reconsidered in that context.

Two vehicle collisions were reported on Hawstead Road between Bairdmore Boulevard and Kirkbridge Drive in the three-year period from 2016 to 2018. Both reported collisions resulted in property damage only; no injuries were reported. As such, collision history is not driving a need for traffic calming.

As noted earlier in the report, average weekday volumes are in the order of 2,000 vehicles per day. This volume is twice the intended volume limit for the local roadway classification in the City of Winnipeg. This volume was established from the two pneumatic tubes placed on Hawstead Road during the September 23 to 30, 2019 period. In addition to the tube counts, 15-hour manual intersection turning movement counts were undertaken at the Hawstead Road/Bairdmore Boulevard and Hawstead Road/Kirkbridge Drive intersections on May 9 and 10, 2019. The intersection turning movement counts are summarized in Figure 3 below. The southbound left and westbound right turn are the two movements associated with shortcutting at the Hawstead Road/Bairdmore Boulevard intersection. The eastbound left turn and southbound right turn are the two movements associated with shortcutting at Hawstead Road/Kirkbridge Drive. The volumes for these four movements at the two intersections indicate that shortcutting demand is both eastbound and westbound in almost equal measure.

TRAFFIC CALMING CONSIDERATIONS

The traffic count data confirms that traffic volumes on Hawstead Road are at a level that warrants consideration of traffic calming. The Transportation Association of Canada (TAC) *Canadian Guide to Traffic Calming Second Edition* notes the following with regards to high traffic volumes:

“High traffic volumes increase the potential for conflicts within a neighbourhood. They can also cause delays for pedestrians and cyclists, and reduce the attractiveness of local and collector streets for walking and cycling. High traffic volumes also increase noise and vehicle emissions, which can detract from the livability of a neighbourhood.”

Recorded pedestrian and cyclist volumes on Hawstead Road are low; however, there are no facilities to accommodate those users other than the road. The other potential sources of conflict are the four local cross street intersections between Kirkbridge Drive and Bairdmore Boulevard and vehicles entering and exiting fronting private approaches. Despite the potential for conflict with higher volumes, collision history indicates only two property damage only collisions on Hawstead Road in the last three years.

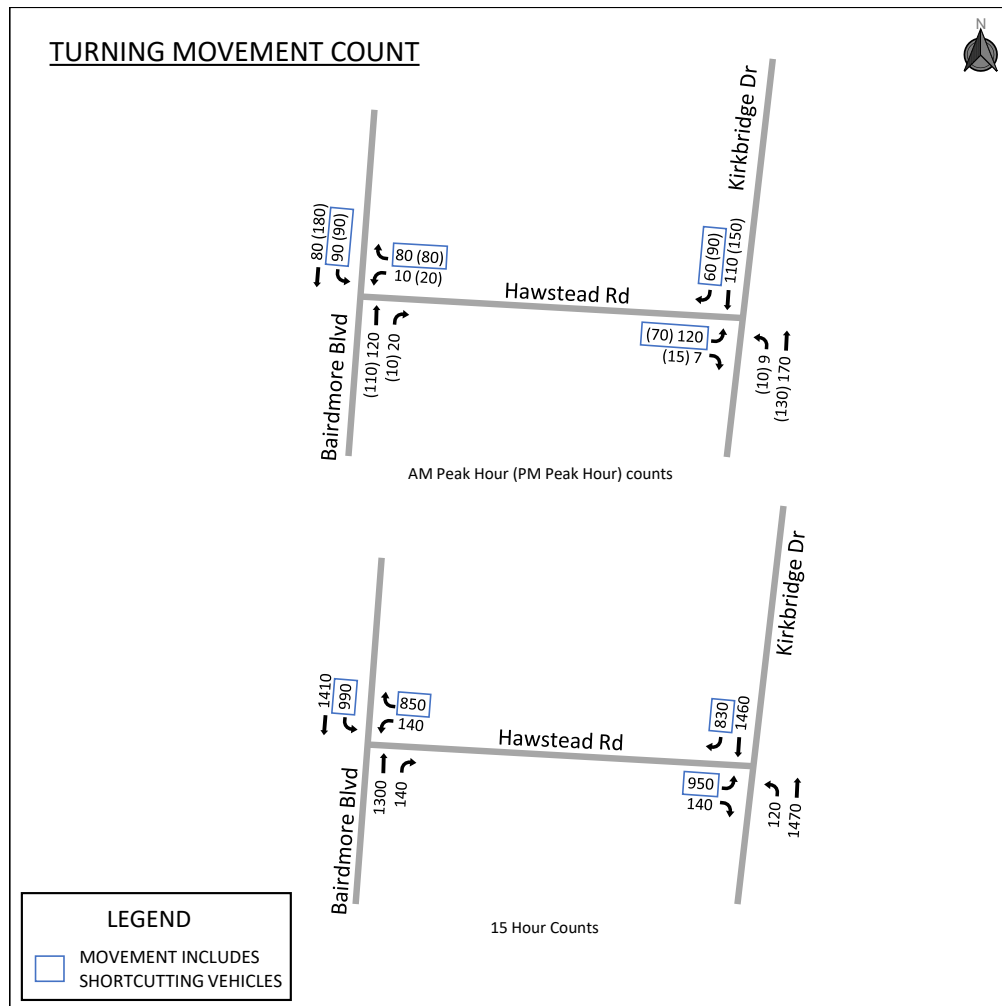


Figure 3: Hawstead Road May 9-10, 2019 Intersection Turning Movement Counts

According to the *Canadian Guide to Traffic Calming Second Edition* the most effective measures for reducing volume are access restrictions. Available access restriction measures include:

- Closing one direction of travel – The volume issue is two-way so closing a direction of travel is unlikely to resolve the issue and may result in higher speeds one direction as there would be no opposing traffic to slow down when meeting.
- Installing an intersection diverter requiring all vehicle traffic to turn at an intersection – All intersections in the study area are T-intersections which makes a diverter less applicable.
- Full closure of a street at an intersection or mid-block – This could be considered on Hawstead Road in the section between Hazel Park Drive and Meadow Ridge Drive intersections but has significant potential implications for residents.
- Right-in/right-out islands at intersections – This could be considered to physically prevent the southbound left turn shortcutting movement at Hawstead Road and Bairdmore Boulevard. It could not be employed to affect westbound shortcutting at Bairdmore and Kirkbridge as those two shortcutting movements are right turn movements.
- Introducing raised medians through intersections to prevent certain turns – This could be considered for the same movement as the right-in/right-out island.

In addition to these access restriction options, the City has previously employed turning movement prohibitions to restrict movements either at certain times of day, or full time, to reduce volumes. Restrictions of this nature also have a resident implication and would need to be supported by enforcement to have effect.

TAC also has a non-access restriction measure for volume mitigation called a one-lane chicane. A chicane is a series of curb extensions on alternating sides of a roadway, which, require drivers to steer from one side of the roadway to the other to travel through the chicane. In the case of a one-lane chicane, the road is narrowed through the curb extension to the extent that when vehicles travelling in opposite directions meet at the chicane, one vehicle must yield. The presence of numerous approaches and cross street intersections on Hawstead Road appears to make it infeasible to introduce chicanes that meet TAC geometric requirements.

Considering available measures to address volume, two potential traffic calming options were explored. These options are described below and illustrated in Figure 4 below.

Option 1:

Full Closure of Hawstead Road between Hazel Park Drive and Meadow Ridge Drive

Option 1 would see some form of physical full closure (planters, bollards, median) of Hawstead Road introduced that would close the road to vehicles but leave it open to pedestrians and cyclists between Hazel Park Drive and Meadow Ridge Drive (Figure 4). This location was chosen because it is close to the middle of Hawstead Road and is the shortest block between cross streets which should reduce the number of errant movements requiring vehicles to turn around (there is no right-of-way available to construct a turnaround at the closure). The closure would make a shortcutting route less self-evident and more circuitous, and therefore much less inviting between Bairdmore Boulevard and Kirkbridge Drive, and as a result increase the probability of traffic staying on those collector routes.

Advantages

- Eliminates Hawstead Road as a shortcutting route. Reduces volume on Hawstead Road and moves that traffic to Bairdmore Boulevard and Kirkbridge Drive.
- Reduces vehicle speed in proximity to the closure.
- Reduces conflicts on Hawstead Road.
- Could be implemented as a pilot.

Disadvantages

- Restricts resident access. Requires residents on Hawstead Road to drive around the closure using streets such as Hazel Park Drive.
- May increase traffic volume on Hazel Park Drive.
- May have a negative effect on emergency services. It would be critical to involve emergency services if this measure is given further consideration.
- May complicate snow clearing, street sweeping, and garbage collection.

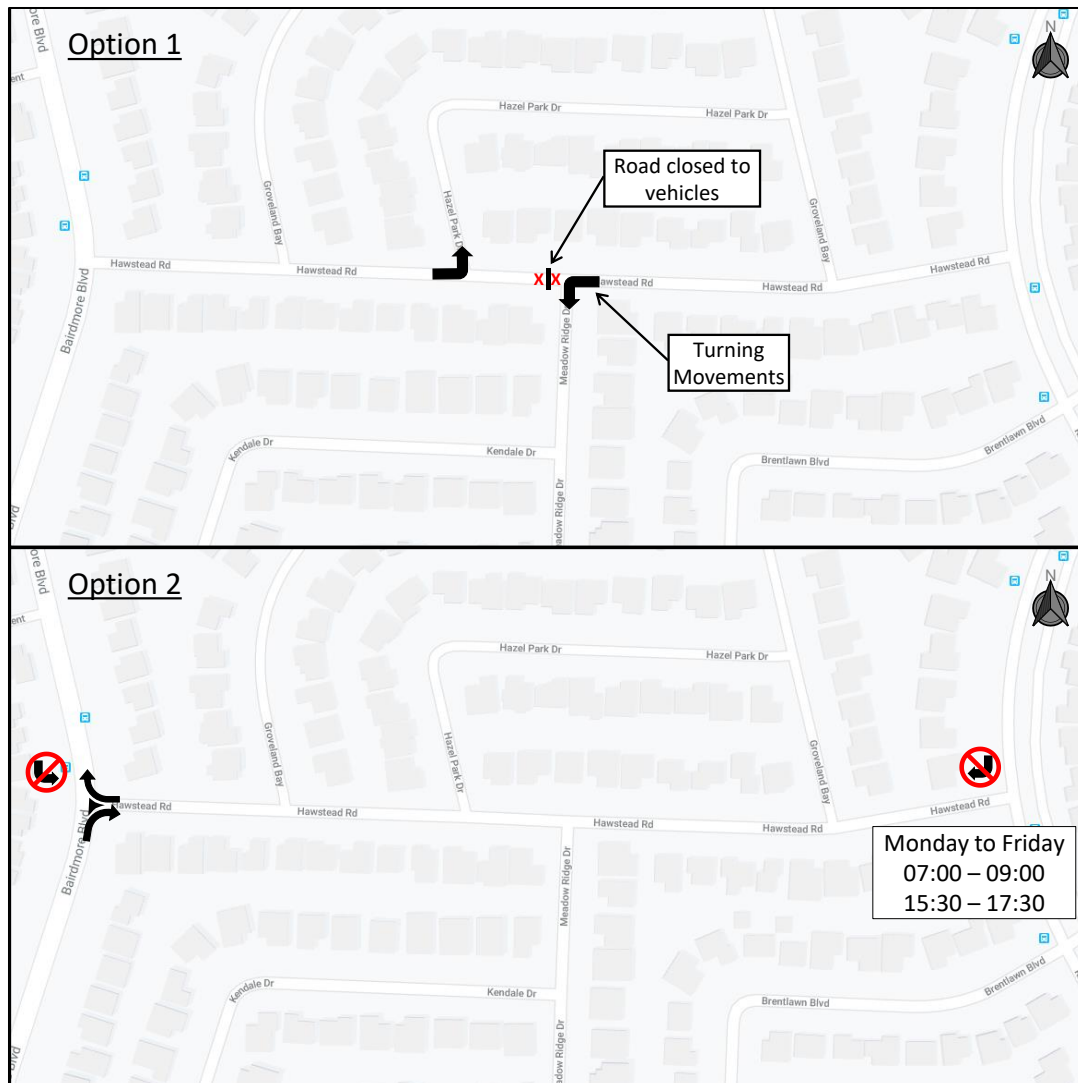


Figure 4: Hawstead Road Traffic Calming Options

Option 2:

Movement Restrictions at Bairdmore Drive and Kirkbridge Drive Intersections

Option 2 would see the Hawstead Road/Bairdmore Drive intersection become a right-in/right-out intersection with a physical island that would prohibit southbound left turns full time. At Hawstead Road and Kirkbridge Drive, southbound right turns would be prohibited Monday to Friday from 07:00 to 09:00 and from 15:30 to 17:30 with signs (Figure 4). This option would be expected to be effective at reducing eastbound shortcutting movements; however, the dependency on signs for westbound movement restriction during peak periods would likely be less effective as it creates an ongoing enforcement need.

Advantages

- Eliminates Hawstead Road as an eastbound shortcutting route full time. Reduces volume on Hawstead Road and moves that traffic to Bairdmore Boulevard and Kirkbridge Drive.
- Reduces conflicts at the Hawstead Road/Bairdmore Drive intersection.
- Could be implemented as a pilot.

Disadvantages

- Requires a long-term enforcement commitment at Hawstead Road and Kirkbridge Drive as the peak period southbound right turn restriction at this location is only signed.
- Vehicle speeds on Hawstead Road may increase with lower traffic volumes.
- Restricts resident access to Hawstead Road via certain movements either full time or during weekday peak periods. Access for those movements would shift to the intersection of Kirkbridge Drive and Kendale Drive.
- May have a negative effect on emergency services. It would be critical to involve emergency services if this measure is given further consideration.
- May complicate snow clearing, street sweeping, and garbage collection.
- Drivers may ignore or circumvent the restrictions.

Both above options could potentially have significant effects on both resident and shortcutting traffic and would be expected to move some traffic onto other streets in the neighbourhood. The TAC guide provides the following principle relative to access restrictions:

“Avoiding restricting access and egress. Generally, residents, transit operators, emergency service providers and other members of the community will be more supportive of traffic calming measures that do not unduly restrict access into and egress out of their area. Diverters, barriers and closures can limit entry for people who live or work on a street, and often there are as many residents opposed to these types of measures as those in support. Measures which restrict access might also divert traffic to other streets, creating or exacerbating problems elsewhere in the neighbourhood.”

The higher traffic volumes currently experienced on Hawstead Road are likely viewed as impacting the liveability of the street. Traffic calming measures for volume as outlined in Option 1 and 2 would also be expected to affect liveability. As the volume issue is ultimately a neighbourhood liveability concern, it is necessary that the neighbourhood be consulted to determine if they prefer the status quo or an intervention to reduce volume on Hawstead Road, and the associated advantages and disadvantages of the intervention.

Any selected traffic calming measures would have to be prioritized amongst other projects within the Traffic Engineering Improvements Program based on available budget and City-wide priorities.

FINANCIAL IMPACT

Financial Impact Statement Date: [January 27, 2020](#)

Project Name:

Speed Study and Traffic Count – Hawstead Road

COMMENTS:

There is no financial impact associated with the recommendation of this report.

"Original Signed by J. Peters, CPA, CGA"

J. Peters CPA, CGA

Acting Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

Ward Councillor

OURWINNIPEG POLICY ALIGNMENT

The recommendation of this report is aligned with the key strategic goal of a safe, efficient and equitable transportation system for people, goods and services in the Sustainable Transportation Direction Strategy that supports OurWinnipeg.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

SUBMITTED BY

Department: Public Works

Division: Transportation

Prepared by: C. Flather, P.Eng., M.Sc., Traffic Management Engineer

Date: January 27, 2020

File No.: A-08