

**Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works –
September 12, 2019**

REPORTS

**Item No. 22 Traffic Study – Ness Avenue and Thompson Drive
(St. James Ward)**

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and received the report as information.

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DECISION MAKING HISTORY:

Moved by Councillor Sharma,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

STANDING COMMITTEE RECOMMENDATION:

On November 20, 2018, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Assiniboia Community Committee, with the following amendment:

- Remove “by June 30, 2019” and replace with “to the Standing Committee within 240 days”

COMMUNITY COMMITTEE RECOMMENDATION:

On September 11, 2018, the Assiniboia Community Committee passed the following motion:

WHEREAS the intersection at Ness Avenue and Thompson Drive sees increased traffic flows during the school year;

AND WHEREAS many motorists attempt to turn onto eastbound Ness Avenue from Thompson Drive during periods of increased traffic;

AND WHEREAS there have been complaints and safety concerns from area residents regarding traffic volumes at that intersection;

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 traffic study at the intersection of Ness Avenue and Thompson Drive for a period of time between the months of September and June and report back by June 30, 2019 with recommendations for enhancing safety at the intersection.

ADMINISTRATIVE REPORT

Title: Traffic Study – Ness Avenue and Thompson Drive (St. James)

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

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	B. Neirinck, P.Eng. on behalf of J. Berezowsky	N/A	D. Wardrop, Acting Interim CAO

EXECUTIVE SUMMARY

Updated traffic studies were completed at Ness Avenue and Thompson Street in May 2019. The traffic studies indicated that pedestrian crossing control and traffic control signals are not warranted at this time. Other recommendations for enhancing safety at the intersection include time of day turn restrictions, and/or parking restrictions on southbound Thompson Drive approaching Ness Avenue. Parking will be monitored on an ongoing basis to determine when restriction is needed and will be discussed with the Ward Councillor for St. James. Left turn peak hour restrictions will be discussed with the Ward Councillor before implementation.

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

On November 20, 2018, 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 traffic study at the intersection of Ness Avenue and Thompson Drive for a period of time between the months of September and June and report back to the Standing Committee within 240 days with recommendations for enhancing safety at the intersection.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications as a result of this recommendation.

HISTORY/DISCUSSION

PEDESTRIAN CROSSING CONTROL GUIDELINES

Current Pedestrian Crossing Control Guidelines were approved by the Standing Policy Committee on Infrastructure Renewal and Public Works on January 11, 2013. These guidelines are based on the Pedestrian Crossing Control Guide published by the Transportation Association of Canada (TAC). The Pedestrian Crossing Control Guide presents a set of principles to guide professionals during the decision-making process associated with the provision of pedestrian crossing control. The warrant for a treatment system is based on factors that include pedestrian volume at the crossing location, vehicular traffic volume, proximity to other traffic control devices, and route connectivity requirements. The City considers that a warrant is fulfilled when the following two criteria from the Pedestrian Crossing Control Guide are met:

1. Average hourly pedestrian volume in terms of Equivalent Adult Units (EAUs) is greater or equal to 15 per hour over a minimum seven-hour continuous period and Average Daily Traffic (ADT) is greater or equal to 1,500 vehicles per day. EAUs account for age and differences in physical ability. For example; an able-bodied adult is considered as 1.0 EAU, an unaccompanied child (estimated age ≤ 12 years) is considered as 2.0 EAUs, a senior citizen (estimated age >65 years) is considered as 1.5 EAUs, and an individual of any age with a physical impairment crossing is considered as 2.0 EAUs.
2. The proposed crossing location is at a minimum distance from the nearest form of traffic control, typically between 100m and 200m for a particular location. This may vary based on a location's individual traffic characteristics and engineering judgment.

If pedestrian crossing control is warranted, the guideline's "Decision Support Tool – Treatment Selection Matrix" recommends a treatment based on the following factors: Average Daily Traffic (ADT) volumes, speed limit, and roadway cross section.

There are limited resources for installing pedestrian corridors and traffic control signals. As a result, warranted locations must be prioritized relative to each other City-wide so that limited funds are dedicated to locations with the highest need. Prior to the installation of any pedestrian corridors or traffic signals, approval must be sought and granted by the Standing Policy Committee on Infrastructure Renewal and Public Works.

Prior to confirming a location for a pedestrian corridor, the Winnipeg Public Service plans to consult with the adjacent schools and the Green Action Centre (Active and Safe Routes to School) to determine the optimal location. A subsequent report seeking Standing Committee approval will be submitted in due course.

TRAFFIC CONTROL SIGNALS – WARRANT

In recommending the installation of new traffic control signals, the Winnipeg Public Service follows the installation warrant criteria contained in the *Manual of Uniform Traffic Control Devices for Canada*, a national standard which is based upon the conflicting pedestrian and vehicular volumes for the busiest six hours during a typical weekday. The minimum cross street volume threshold for consideration of traffic control signals is 75 vehicles per hour (excluding right turns) for at least six hours of the day. Generally, traffic control signals are recommended

when the conflicting traffic volumes for the busiest six hours of a typical weekday produce a cross product of 100 and fulfill the minimum cross street volume criterion to ensure that traffic signal control is an appropriate consideration throughout the day.

NESS AVENUE AND THOMPSON DRIVE

Ness Avenue in the vicinity of Thompson Street is a four-lane undivided roadway, a regional street, a full-time truck route, and a Transit route, with an Average Weekday Daily Traffic (AWDT) volume of approximately 19,700 vehicles, and a speed limit of 60 km/h. Thompson Avenue is a four lane divided collector street north of Ness Avenue and a two lane residential street south of Ness Avenue.



Figure 1: Ness Avenue and Thompson Drive. Map courtesy of iView.

Updated traffic studies were completed at Ness Avenue and Thompson Street in May 2019. The data was reviewed in accordance with the Pedestrian Crossing Control Guidelines (PCCG) and Traffic Control Signal Warrant described above.

Based on the PCCG's "Decision Support Tool – Treatment Selection Matrix", the recommended treatment across Ness Avenue would be a traffic signal system (either a half signal or full signal).

The pedestrian crossing study indicated that there were only six (6) Average Hourly EAU's crossing during the highest seven-hour continuous period, approximately two-thirds of which occurred on the east side of the intersection. As the 15 EAU minimum was not met, pedestrian crossing control is not warranted at this time. It is noted there is an existing pedestrian corridor approximately 180m to the west at Harcourt Street providing safe pedestrian crossings.

The vehicular count indicated the cross product was 60 (57 vehicular + 3 pedestrian), and the cross street volume was 41. As the cross product was 60/100 and the cross street volume was 41/75, the warrant for traffic control signals is not met at this time.

Collision history for the past five years of available collision data (January 1, 2013 through to December 31, 2017) was reviewed for collisions that would be correctable with left turn restrictions. In five years, there were seven collisions involving left turn movements, of these only three were during peak hours.

Enhancing safety at an intersection can be achieved by reducing vehicle conflicts, specifically by restricting left turns for northbound and southbound motorists at Ness Avenue during peak hours (07:00 – 09:00 and 15:30 – 17:30). Introducing turning restrictions at Ness Avenue and Thompson Drive will encourage alternate routes for southbound vehicles wanting to proceed eastbound and northbound vehicles wanting to proceed westbound. Southbound vehicles with a destination east of the intersection will likely go north on Thompson Drive to Moray Street via Strauss Drive, completing their route at the signalized intersection of Moray Street and Ness Avenue. As mentioned, Thompson Drive north of Ness Avenue is a collector street, Strauss Drive is also a collector and Moray Street is also a collector north of Ness Avenue. The alternate route introduced by the southbound left turn restriction will keep traffic to collector streets, which is an acceptable use of the traffic network.

Similarly, introducing turn restrictions for peak hours at Ness Avenue and Thompson Drive will result in drivers selecting alternate routes for destinations west of the intersection. Thompson Drive is a residential street south of Ness Avenue. Additional catchment traffic is not encouraged on residential streets as it is with collector streets; with that said, the geometry of the traffic network will likely not draw traffic onto Thompson Drive south of Ness Avenue due to the peak hour turn restrictions. Some motorists with destinations west of the intersection will choose Moray Street as an alternative; this is encouraged as Moray Street is an arterial roadway south of Ness Avenue. Other motorists may choose Harcourt Street as an alternative. If this becomes a problem, a peak hour turn restriction will be introduced at Harcourt Street and Ness Avenue; the Transportation Division will monitor the traffic patterns.

While left turn restrictions based on collision history data are not warranted, the numbers of resident complaints about the safety of the intersection to the Ward Councillor have increased as of late. Implementing left turn restrictions will be discussed with the Ward Councillor changes are implemented.

Restricting parking on southbound Thompson Drive approaching Ness Avenue would be expected to help prevent queue spillback which can restrict access to the right turn cut-off, therefore causing congestion and a perceived safety risk. Parking on Thompson Drive southbound from Strauss Drive to Ness Avenue is unrestricted. At this time, parking is not used at capacity and restricting the parking on Thompson Drive is not necessary. The intersection will be reviewed on an on-going basis to determine if parking restrictions are warranted in the future.

Improvements to the intersection of Thompson Drive and Ness Avenue may include left turn restrictions and restricted parking on southbound Thompson Drive. Changes to the intersection will be monitored on an on-going basis and discussed with the Ward Councillor.

FINANCIAL IMPACT

Financial Impact Statement Date: July 25, 2019

Project Name:

Traffic Study – Ness Avenue and Thompson Drive (St. James)

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: N/A

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.

SUBMITTED BY

Department: Public Works

Division: Transportation

Prepared by: T. Jangula, C.E.T., Traffic Analyst

C. Flather, P.Eng., M.Sc., Traffic Management Engineer

Date: July 26, 2019