Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – June 25, 2019

REPORTS

Item No. 17 Pedestrian Crossing Control at Grant Avenue & Cathcart Street and Grosvenor Avenue & Lilac Street
(Charleswood-Tuxedo-Westwood Ward)
(River Heights-Fort Garry Ward)

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and approved the following:

1. That a half signal be installed on Grant Avenue on the east side of Cathcart Street.

2. That a pedestrian corridor be installed at Grosvenor Avenue on the east side of Lilac Street.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

DECISION MAKING HISTORY:

Moved by Councillor Browaty,

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

Carried

ADMINISTRATIVE REPORT

Title: Pedestrian Crossing Control at Grant Avenue & Cathcart Street and Grosvenor Avenue & Lilac Street

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

AUTHORIZATION

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

EXECUTIVE SUMMARY

The Traffic Engineering Improvement Project (TEIP) allows for funding to upgrade the traffic network in Winnipeg. A portion of TEIP goes to improving pedestrian crossing locations to increase safety of the traffic network and to improve traffic efficiency. Two locations have been identified for 2019:

1. Grant Avenue and Cathcart Street – this connection will provide a safe crossing for senior residences on either side of Grant Avenue at Cathcart Street, as well as increase neighbourhood connectivity, as the next nearest crossing is 400m west. The recommended treatment for this crossing is a half signal.

2. Grosvenor Avenue and Lilac Street – this is a well-used pedestrian crossing that would benefit from the additional safety a pedestrian corridor would provide.

Costs of the project are $235,000, which will be funded by the 2019 TEIP capital project, as well as an additional $6,500 annually in operating and maintenance costs.

RECOMMENDATIONS

1. That a half signal be installed on Grant Avenue on the east side of Cathcart Street.

2. That a pedestrian corridor be installed at Grosvenor Avenue on the east side of Lilac Street.

3. That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

As the City's Traffic Authority, the Standing Policy Committee on Infrastructure Renewal and Public Works must approve installation or removal of pedestrian corridors and traffic control signals.

The Winnipeg Public Service reviews high priority locations that warrant pedestrian crossing control each year to develop implementation projects for the Capital budget (primarily through the Traffic Engineering Improvement Program). High priority locations are determined through analysis of requests from the public, Councillors, and within the Public Service.

IMPLICATIONS OF THE RECOMMENDATIONS

The estimated capital cost for the installation of the half signal across Grant Avenue at Cathcart Street is $185,000.00 plus overheads. The estimated capital cost for the installation of the pedestrian corridor across Grosvenor Avenue at Lilac Street is $50,000.00 plus overheads. The total estimated cost for the installations is to be funded through the 2019 Traffic Engineering Improvements – Various Locations (TEIP) capital project.

The 2019 Capital Budget adopted by Council on March 22, 2019 includes $1,575,000 for the Traffic Engineering Improvements – Various Locations capital project.

The combined estimated annual maintenance and operating cost associated with the half signal and pedestrian corridor is $6,500.

HISTORY/DISCUSSION

The City of Winnipeg has adopted the Transportation Association of Canada's (TAC) *Pedestrian Crossing Control Guide* (2011) to assess pedestrian crossing control needs. The warrant for pedestrian crossing control is based on an assessment of multiple factors, including vehicular volume at the crossing location, pedestrian volume, proximity to other traffic control devices, and route connectivity requirements. When pedestrian crossing control is considered warranted, the appropriate form of treatment is selected based on an assessment of traffic volumes, the speed limit, and the cross section of the street that pedestrians are required to cross.

Crossing Control

For non-elementary school locations, the City considers that a warrant is met when the following two criteria from the TAC 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 (i.e.: one adult = 1.0 EAU, one unaccompanied child ≤ 12 years = 2.0 EAUs, one senior ≥ 65 = 1.5 EAUs and one pedestrian with physical impairments = 2.0 EAUs).

2. The proposed crossing location is at a minimum distance, "d", from the nearest form of traffic control. "d" can be set at any distance between 100 - 200 metres for a particular location. Selection of a value for "d" depends on factors such as road type and expected queue lengths.

Using any of the above warrants should not substitute engineering judgement. For this reason, engineering judgement is an input into the warrant process.

In particular, low observed pedestrian volumes may not be an indication of low pedestrian demand when inadequate facilities are provided. Therefore, it is the responsibility of the engineer to assess the existing facility and determine the need for treatment based on system connectivity and considerations for linking land uses as outlined in the TAC Pedestrian Crossing Control Guide.

The following treatment systems are warranted at the locations listed below:

Traffic Control Signal (Half Signal)

Grant Avenue at Cathcart Street
Grant Avenue is a regional street and full time truck route with a 60 km/h speed limit and a four-lane divided cross section. The median width on Grant Avenue narrows from approximately 6 metres to 3.3 metres at Cathcart Street to accommodate a westbound left turn lane. The Average Daily Traffic (ADT) volume on Grant Avenue is approximately 27,900 vehicles per day.

The nearest controlled crossing opportunity on Grant Avenue is at the traffic control signals at Laxdal Road, which is approximately 400 metres west of Cathcart Street. The entrance to the Assiniboine Forest is located approximately 280 metres east of Cathcart Street on the south side of Grant Avenue; there are many kilometres of walking and biking trails in the Assiniboine Forest.

The intersection of Grant Avenue and Cathcart Street was studied by a consultant in 2012 as part of the Charleswood Area Transportation Study. The study recommended a half signal at Cathcart Street for pedestrians to cross Grant Avenue. As part of the 2012 study, consultation occurred with Eastern Star Chalet, a senior's residence, and The Wellington, an assisted living residence, which are located on either side of Grant Avenue at Cathcart Street. The consultation revealed that there is a demand for a pedestrian crossing on Grant Avenue at Cathcart Street and that residents of these establishments do not often cross due to safety concerns.

The most recent pedestrian count at Grant Avenue and Cathcart Street was conducted on June 8, 2016. Review of the data indicates there were a total of 40 EAUs crossing Grant Avenue at Cathcart Street over a seven hour continuous period (11:00-18:00), which equates to an average of six EAU crossings each hour. No pedestrian collisions have been reported at this intersection in the most recent five year collision history (2013 to 2017).

This intersection does not meet the minimum average hourly pedestrian volume of 15 EAUs. However, engineering judgement has been applied to determine that a controlled crossing is a requirement for system connectivity. The nearest controlled crossing is 400 metres to the west at Laxdal Road, which is a significant and unrealistic detour for many pedestrians, particularly those who are older and those with mobility impairments. There is latent pedestrian demand that is not currently being served as some pedestrians do not feel safe crossing without any formal control. A controlled crossing at Cathcart Street would link residential areas on either side of Grant Avenue and provide a safe connection to the Assiniboine Forest.

Pedestrian crossing control is considered warranted for Grant Avenue at Cathcart Street. The appropriate treatment is a half signal on Grant Avenue on the east side of Cathcart Street. The half signal will appear as a regular traffic control signal to motor vehicle traffic approaching on Grant Avenue. Separate pedestrian signal heads and push buttons will be provided for pedestrians crossing Grant Avenue. Stop-control will remain for northbound and southbound motor vehicle traffic on Cathcart Street at Grant Avenue.

Pedestrian Corridor

Grosvenor Avenue at Lilac Street and Ruskin Row

Grosvenor Avenue is a residential collector street with a 50 km/h speed limit and a four-lane undivided cross section. A turning movement count was conducted in September 2018 and found the traffic volume on Grosvenor Avenue to be approximately 5,500 vehicles in a 15-hour period. The curb lanes on Grosvenor Avenue are often used for on-street parking, except the eastbound curb lane which has a 7:00 – 9:00 No Stopping restriction. The nearest controlled crossing on Grosvenor Avenue is at the traffic control signals approximately 185 metres east at Wellington Crescent.

Lilac Street forms the south approach to the intersection; it is a residential collector street with a 50 km/h speed limit and a four-lane undivided cross section; both curb lanes are used for on-street parking. The Average Weekday Daily Traffic volume on Lilac Street near Grosvenor Avenue is approximately 2,800 vehicles per day. Ruskin Row forms the north approach to the intersection; it is a residential local street with a 50 km/h speed limit and a two-lane undivided cross section. The Average Weekday Daily Traffic volume on Ruskin Row is approximately 900 vehicles per day. Lilac Street and Ruskin Row are identified as Low Stress Routes on the City of Winnipeg Bike Route Map.

A pedestrian count was conducted at the intersection of Grosvenor Avenue, Lilac Street and Ruskin Row on September 26, 2018. Review of the data indicates there are a total of 190 EAUs crossing Grosvenor Avenue at Lilac Street/Ruskin Row over a seven hour continuous period (11:00-18:00), which equates to an average of 27 EAU crossings each hour. Nearly 75% of pedestrians crossing Grosvenor Avenue did so on the east side of Lilac Street/Ruskin Row. There has been one pedestrian collision reported at the intersection of Grosvenor Avenue, Lilac Street and Ruskin Row within the most recent five year collision history (2013 to 2017). The collision occurred in March of 2014 with a northbound vehicle and resulted in non-fatal injury.

Pedestrian crossing control is considered warranted for Grosvenor Avenue at Lilac Street and Ruskin Row. The appropriate treatment is a pedestrian corridor (pedestrian activated crossing with overhead signs and flashing amber beacons) on Grosvenor Avenue on the east side of Lilac Street/Ruskin Row.

FINANCIAL IMPACT

Financial Impact Statement

Date: June 4, 2019

Project Name:

First Year of Program **2019**

Pedestrian Crossing Control at Grant Avenue & Cathcart Street and Grosvenor Avenue & Lilac Street

	2019	2020	2021	2022	2023
Capital					
Capital Expenditures Required	$ 246,163	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	246,163	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ 13,885	$ 13,885	$ 13,885	$ 13,885
Less: Incremental Revenue/Recovery	11,163	-	-	-	-
Net Cost/(Benefit)	$ (11,163)	$ 13,885	$ 13,885	$ 13,885	$ 13,885
Less: Existing Budget Amounts	(11,163)	13,885	13,885	13,885	13,885
Net Budget Adjustment Required	$ -	$ (0)	$ (0)	$ (0)	$ (0)

Additional Comments: Total estimated Capital Expenditures of $246,163 will be funded by the 2019 Traffic Engineering Improvements Program (Public Works Capital Project #1831000119). Incremental Revenue/Recovery represents Departmental Engineering and Corporate Interest Overheads. Direct costs represent the estimated annual maintenance and operating costs of $6,500 and annual Debt and Finance charges on Internal Financing of $7,385.

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

J. Peters CPA, CGA

Acting Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with: n/a

OURWINNIPEG POLICY ALIGNMENT

The Sustainable Transportation Direction Strategy developed as part of OurWinnipeg forms the policy framework for the Transportation Master Plan (TMP). Sustainable Transportation identified a vision and five Key Strategic Goals which are critical to achieving a balanced and sustainable transportation system for Winnipeg. These goals form the basis for the TMP and the directions and strategies contained within it:

1. A transportation system that is dynamically integrated with land use;
2. A transportation system that supports active, accessible and healthy lifestyle options;
3. A safe, efficient and equitable transportation system for people, goods and services;
4. Transportation infrastructure that is well maintained
5. A transportation system that is financially sustainable

The recommendations within this report are consistent with the Key Strategic Goals.

SUBMITTED BY

Department: Transportation
Division: Public Works
Prepared by: C. Flather, M.Sc., P.Eng., Traffic Management Engineer
R. Peterniak, M.Sc., P.Eng., Community Traffic Engineer
Date: June 4, 2019