REPORTS

Item No. 19 Traffic Control Signal for Wilkes Avenue and Charleswood Road

STANDING COMMITTEE DECISION:

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

1. That the installation of a new traffic control signal at the intersection of Wilkes Avenue and Charleswood Road be approved.

2. 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 Eadie,

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

Carried

Councillor Sharma was absent from the vote on the above motion.

ADMINISTRATIVE REPORT

Title: Traffic Control Signal for Wilkes Avenue and Charleswood Road

Critical Path: Standing Policy Committee on Public Works

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	J. Berezowsky	T. Graham	S. Armbruster, Interim CAO

EXECUTIVE SUMMARY

The Public Service recommends a traffic control signal be installed at the intersection of Wilkes Avenue and Charleswood Road.

A traffic control signal is recommended based on the ongoing level of development for Ridgewood West. It will provide acceptable level of service for traffic operations. It will also increase the level of safety at the intersection.

RECOMMENDATIONS

1. That the installation of a new traffic control signal at the intersection of Wilkes Avenue and Charleswood Road be approved.

2. 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

Installation of new traffic signals must be approved by the Standing Policy Committee on Public Works as the City's Traffic Authority.

IMPLICATIONS OF THE RECOMMENDATIONS

The estimated capital cost for the installation of the traffic control signal at Wilkes Avenue and Charleswood Road is $325,000. The capital cost of the signal is 100 percent developer-funded under developer agreement AG 50/13. The combined estimated annual maintenance and operating cost associated with the signal is $5,000 and will be funded by the Public Works Department, Transportation Division Operating Budget.

HISTORY/DISCUSSION

BACKGROUND INFORMATION

Figure 1 below illustrates the location of the intersection and the surrounding roadway network. This intersection was reconstructed in 2016 to include a median on Wilkes Avenue with left turn storage lanes and channelized right turns into and out of Ridgewood West.

Wilkes Avenue is an east-west Regional Street with a two-lane undivided rural cross-section and is part of the Full-time Truck Route Network. The Average Weekday Daily Traffic (AWDT) volume on this section of Wilkes Avenue is 8,200 vehicles (based on the 2023 Traffic Flow Map) but is expected to increase in future years as it is a regional connection to the provincial highway network. The posted speed limit is 80 km/h.

Charleswood Road is a two-lane collector roadway. South of Wilkes Avenue it provides access to the Charleswood Place park and baseball diamonds and some single family homes. North of Wilkes Avenue it provides access to Charleswood and the Ridgewood West subdivision.

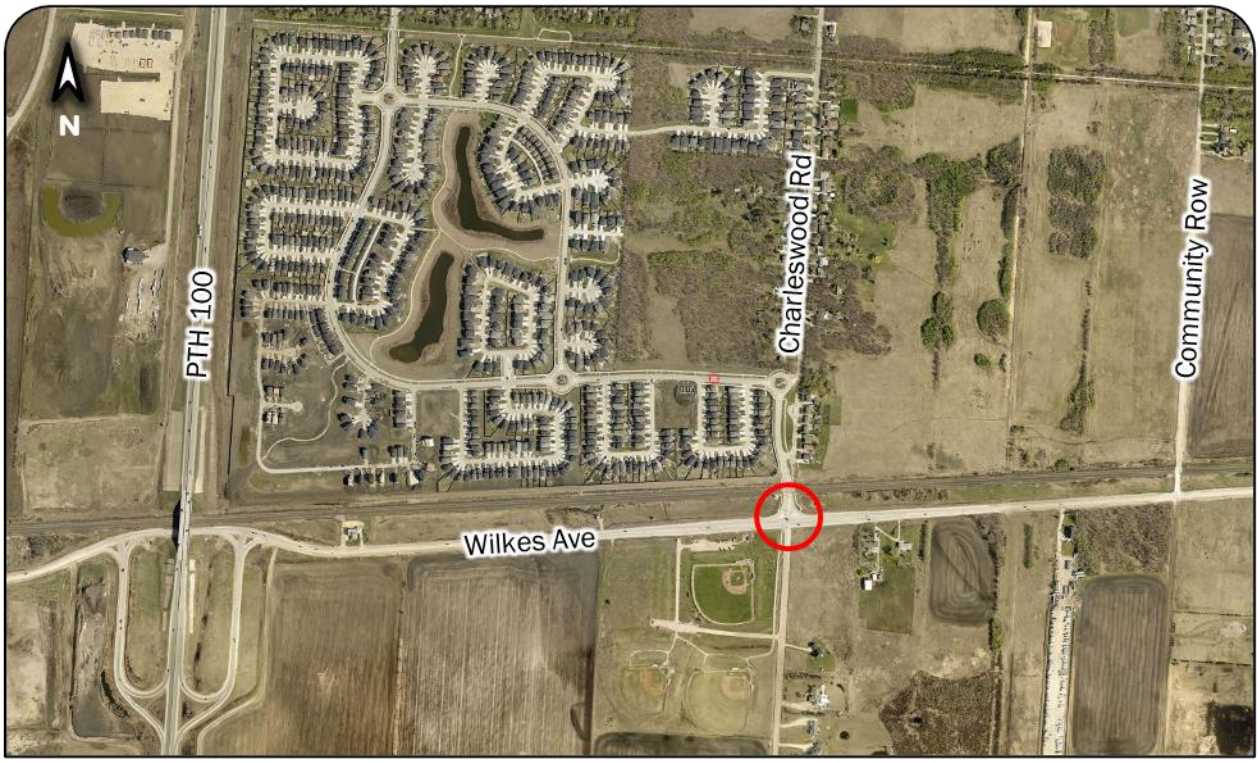


Figure 1: Intersection of Wilkes Avenue and Charleswood Road (iView 2024 airphoto)

On February 26, 2014, Council concurred in the recommendation of the Standing Policy Committee on Property and Development and adopted File DASZ 50/2013. The traffic control signal is 100 percent developer-funded through DASZ 50/2013, which resulted in the creation of Development Agreement AG 50/13, and specifies the following clause:

8. Transportation Levy

b) The Developer shall, pay to the City in cash, on demand the full costs of the installation of traffic control signals and all related works including, but not necessarily limited to pedestrian and vehicular actuation and interconnection to adjacent traffic control signals and railway crossing protection and audible pedestrian signals, pedestrian countdown signals (if required) at the intersection of Charleswood Road and Wilkes Avenue, when and as determined by and to the satisfaction of the Director of Public Works. The Ridgewood Transportation Levy shall be responsible for the costs.

TRAFFIC CONTROL SIGNAL WARRANT

In recommending the installation of new traffic control signals, the Winnipeg Public Service follows the installation warrant criteria provided in the Transportation Association of Canada (TAC) *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 signal warrant of 100 points and fulfill the minimum cross street volume criterion to ensure that traffic signal control is an appropriate consideration throughout the day.

Based on a traffic count completed in October 2024, the minimum cross street volume is 135, which exceeds the threshold for consideration. The traffic signal warrant score is 87, which is close to, but does not meet, the 100 warrant point threshold. However, the Ridgewood Subdivision Area Traffic Impact Study (prepared by Genivar Inc., 2013) indicated that traffic control signals will be warranted for the intersection and they were included in the development agreement. Based on the continued on-going development, it is recommended that the signals now be installed.

ADVANCE WARNING FLASHERS WARRANT

In recommending the installation of advance warning flashers (AWF) at signalized intersections, the Winnipeg Public Service follows the installation warrant criteria provided in the Transportation Association of Canada (TAC) *Advance Warning Flashers: Guidelines for Application and Installation*, which is a national standard. The warrant criteria consider sight distance, minimum posted speed limit, gateway from rural to urban environment, approach grade, truck traffic percentage, collision history, and minor road traffic volume. Advance warning flashers in advance of a traffic control signal may be considered when one or more of the warrant conditions exist on the approach to a signalized intersection. Generally, a location where two or more of the above noted conditions exist would strongly indicate the justification for AWF.

On the eastbound approach, two of the conditions are met (80 km/h posted speed limit and first signalized intersection approaching the city). Advance warning flashers are recommended on the eastbound approach.

On the westbound approach, only one condition is met (80 km/h posted speed limit) and advance warning flashers are not explicitly required. However, this is in a rural environment and the nearest upstream traffic control signal is approximately 5.5 kilometres away at Shaftesbury Boulevard. Advance warning flashers are also recommended on the westbound approach.

FINANCIAL IMPACT

Financial Impact Statement

Date: April 16, 2025

Project Name:

Traffic Signal for Wilkes Avenue and Charleswood Road

First Year of Program **2025**

	2025	2026	2027	2028	2029
Capital					
Capital Expenditures Required	$ -	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	-	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 325,000	$ 5,000	$ 5,100	$ 5,202	$ 5,306
Less: Incremental Revenue/Recovery	325,000	-	-	-	-
Net Cost/(Benefit)	$ -	$ 5,000	$ 5,100	$ 5,202	$ 5,306
Less: Existing Budget Amounts	-	5,000	5,100	5,202	5,306
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Direct costs represent the costs to install traffic signals at Wilkes Ave and Charleswood Road. Incremental Recovery is the amount to be reimbursed to Public Works by the Developer under agreement Development Agreement AG 50/13. Direct costs 2026 onward, are the estimated costs for maintenance of the new Traffic Signal and will be charged to the future approved Public Works operating budget for the Transportation Division.

J. Ruby, 2025-04-22

J. Ruby CPA, CA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with: N/A

OURWINNIPEG POLICY ALIGNMENT

OurWinnipeg 2045
This report is in accordance with OurWinnipeg2045 as per:

- ***Policy 4.10 Transportation Safety:*** Design, construct, maintain, and regulate an integrated and sustainable transportation system and related infrastructure that optimize safe, connected and reliable mobility, and minimize severe injuries and fatalities for all road users.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the CAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: K. Patmore, M.Sc., P.Eng., Regional Traffic Engineer
Date: April 23, 2025