Agenda – Council – February 27, 2025

Report – Standing Policy Committee on Public Works – February 14, 2025

Item No. 3 Speed Limit Study – Waverley Street

STANDING COMMITTEE RECOMMENDATION:

On February 18, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the following to Council:

1. That the speed limit on Waverley Street between McGillivray Boulevard and Bison Drive be reduced from 80 km/h to 70 km/h.

2. That the speed limit on Bison Drive between Waverley Street and 100 metres west of Barnes Street be reduced from 80 km/h to 70 km/h.

3. That the City Solicitor and Director of Legal Services be instructed to prepare an amendment to Speed Limit By-law No. 63/2019 in accordance with this report and bring same directly to Council for enactment.

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

Report – Standing Policy Committee on Public Works – February 14, 2025

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On February 18, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On February 14, 2025, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

David Grant submitted a communication in opposition to the matter.

ADMINISTRATIVE REPORT

Title: Speed Limit Study – Waverley Street

Critical Path: Standing Policy Committee on Public Works - Executive Policy Committee - Council

AUTHORIZATION

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

EXECUTIVE SUMMARY

The Public Service is reviewing posted speed limits on selected high-speed (greater than or equal to 70 km/h) regional streets as part of the Engineering Speed Limit Study. The Engineering Speed Limit Study report stated that speed limit study reports would be submitted for individual roadway segments on high-speed (greater than or equal to 70 km/h) regional streets.

The Public Service assessed the speed limit on the approximately nine-kilometer segment of Waverley Street from Taylor Avenue to Kenaston Boulevard. This segment currently has a mix of posted speed limits at 60 km/h, 70 km/h, and 80 km/h.

Based on the operating speed and target speed, the Public Service recommends that the speed limit on Waverley Street between McGillivray Boulevard and Bison Drive be reduced from 80 km/h to 70 km/h. This will better reflect the speed that most motorists are currently self-selecting to travel at.

As a result of the Waverley Street speed limit change, there would be a very short segment of Bison Drive between Waverley Street and 100 metres west of Barnes Street posted at 80 km/h. Since this segment of Bison Drive is essentially a continuation of the motorist path from Waverley Street, the Public Service also recommends that this short segment be reduced from 80 km/h to 70 km/h for consistency. These speed limit changes are illustrated in Appendix A.

RECOMMENDATIONS

1. That the speed limit on Waverley Street between McGillivray Boulevard and Bison Drive be reduced from 80 km/h to 70 km/h.

2. That the speed limit on Bison Drive between Waverley Street and 100 metres west of Barnes Street be reduced from 80 km/h to 70 km/h.

3. That the City Solicitor and Director of Legal Services be instructed to prepare an amendment to Speed Limit By-law No. 63/2019 in accordance with this report and bring same directly to Council for enactment.

4. 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

At the November 21, 2023, meeting of the Standing Policy Committee on Public Works, the committee received the *Engineering Speed Limit Study* report as information. The Engineering Speed Limit Study report stated that speed limit study reports would be submitted for individual roadway segments on high-speed (greater than or equal to 70 km/h) regional streets.

The recommendations of this report require an amendment to the City of Winnipeg Speed Limit By-law No. 63/2019 and must be approved by Council.

IMPLICATIONS OF THE RECOMMENDATIONS

Adoption of the speed limit change recommendations will provide more consistent speed limits on this continuous section of Waverley Street.

Schedule A to the Speed Limit By-law 63/2019 will be amended. Subsequently, appropriate speed limit signage will need to be changed. The estimated total costs are $950 for signage and will be funded by the Transportation Division Operating Budget.

HISTORY/DISCUSSION

STUDY AREA

This report assesses the speed limit on the continuous segment of Waverley Street from Taylor Avenue to Kenaston Boulevard. The study area and existing speed limits are illustrated in Appendix A, attached. Waverley Street along its entire length within the study area is a Regional Street and Full Time Truck Route. It has a four-lane divided urban cross-section within a wide right-of-way.

The study area can be grouped into four roadway sections with similar characteristics:

- **Taylor Avenue to McGillivray Boulevard.** The current speed limit on this northern section of Waverley Street is 70 km/h. The average daily traffic ranges from 32,600 to 37,700 vehicles per day. There are six traffic signals within the 2.4 kilometer segment which results in a motorist encountering a traffic signal approximately every 400 metres.
- **McGillivray Boulevard to Bison Drive.** The current speed limit on this section of Waverley Street is 80 km/h. The average daily traffic ranges from 34,700 to 54,200 vehicles per day. Higher congestion and vehicle delay are experienced at the intersection with Abinojii Mikanah. There are seven traffic signals within the 3.1 kilometer segment which results in a motorist encountering a traffic signal approximately every 440 metres.

- **Bison Drive to 280 metres north of Sandusky Drive.** The current speed limit on this section of Waverley Street is 70 km/h. The average daily traffic ranges from 15,500 to 25,500 vehicles per day. Traffic signals are placed approximately every 800 metres.
- **280 metres north of Sandusky Drive to Kenaston Boulevard.** The current speed limit on this section of Waverley Street is 60 km/h. The average daily traffic ranges from 15,500 vehicles per day. Traffic signals are placed approximately every 800 metres. There are three traffic signals within the 1.9 kilometer segment which results in a motorist encountering a traffic signal approximately every 630 metres.

SPEED LIMIT REVIEW PROCESS

In recommending appropriate speed limits, the Public Service follows the guidance from *Technical Guideline A-2b Speed Limit Reviews* which adopts the *Manitoba Infrastructure Guide for Setting Posted Speed Limits on Manitoba Roadways* (2019) engineering speed limit study as the framework, with minor modifications, to evaluate and recommend posted speed limits.

An engineering speed limit study can help identify, review, and propose solutions for roadways where the traffic authority has concerns with the current speeds. The study provides a speed limit recommendation based on the operating speed, target speed, and collision history. A summary of the City's speed limit review process is in Appendix B.

Vehicle Operating Speed Characteristics

Speed data collected on Waverley Street is summarized in Table 1.

Table 1: Vehicle Operating Speed Data on Waverley Street

Location	Posted speed limit	50th percentile speed	85th percentile speed	15 km/h pace
Northbound north of Buffalo Place	70	65	72	59 – 74
Southbound north of Buffalo Place	70	67	75	60 – 75
Northbound south of Clarence Ave	80	65	74	58 – 73
Southbound south of Clarence Ave	80	65	75	58 – 73
Northbound south of Chevrier Blvd	80	66	75	58 – 73
Southbound south of Chevrier Blvd	80	59	70	54 – 69
Northbound south of Abinojii Mikanah	80	66	75	59 – 74
Southbound south of Abinojii Mikanah	80	68	77	60 – 75
Northbound north of Lee Blvd	70	71	78	65 – 79
Southbound north of Lee Blvd	70	74	80	70 – 84
Northbound north of Sandusky Dr	60	62	69	55 – 69
Southbound north of Sandusky Dr	60	57	66	50 – 64

The 50th and 85th percentile speeds along the segment from Taylor Boulevard to Lee Boulevard are very consistent and generally support a posted speed limit of 70 km/h. Just north of Sandusky Drive the speeds lower and generally support the existing 60 km/h posted speed limit.

Target Speed
The target speed is the speed at which vehicles should operate on a facility in order to promote the safety and appropriate level of mobility for all road users. The target speed is determined using two approaches, (1) the Transportation Association of Canada Guidelines for Establishing Posted Speed Limits, and (2) comparison with similar classification roadways to promote city-wide consistency and driver expectation.

Based on the TAC methodology, the appropriate target speed for this entire segment of Waverley Street is 70 km/h.

Sections of other roadways with similar characteristics include:

- Inkster Boulevard (Brookside Blvd to Keewatin St) – 70 km/h
- Sterling Lyon Parkway (Shaftesbury Blvd to Waverley St) – 70 and 80 km/h
- McGillivray Boulevard (Columbia Dr to Beaumont St) – 70 and 80 km/h

Collision History
Table 2 provides a summary of the most recent five years of available intersection collision claims data from Manitoba Public Insurance.

Table 2: Waverley Street Intersection Collisions (2018-2022)

Intersection with Waverley Street	Collision Severity			Collisions involving pedestrians or cyclists	Total collisions where speed on Waverley St may have been a factor[1]
	Property Damage Only	*Injury*	*Fatality*		
Wilkes Ave / Hurst Way	94	18	0	1	48
Victor Lewis Dr	52	18	0	0	33
Lindenwood Pl / Seel Ave	28	11	0	1	21
Hennessey Dr / Buffalo Pl	42	18	0	1	22
McGillivray Blvd	136	33	0	2	48
Chevrier Blvd	57	21	0	0	32
Scurfield Blvd	76	24	0	0	41
Abinojii Mikanah	303	106	0	0	137
Lake Crest Rd	61	20	0	0	45
Bison Dr	70	22	0	0	33

[1] As per National Cooperative Highway Research Program Report 317:

- rear-end collisions on the roadway being assessed – drivers not anticipating a queue
- run-off-road collisions – drivers avoiding conflicts in the roadway proper
- angle collisions – drivers accepting gaps that are too small

RECOMMENDATION
Based on the operating speed and target speed, it is recommended that the speed limit on Waverley Street between McGillivray Boulevard and Bison Drive be reduced from 80 km/h to 70 km/h. This will better reflect the speed at which most motorists are currently self-selecting to travel.

This change would result in a very short isolated segment of Bison Drive between Waverley Street and 100 metres west of Barnes Street with an 80 km/h speed limit. Since this segment of Bison Drive is essentially a continuation of the motorist path from Waverley Street, it is also recommended that this short segment be reduced from 80 km/h to 70 km/h for consistency.

These speed limit changes are illustrated in Appendix A.

FINANCIAL IMPACT

Financial Impact Statement

Date: December 13, 2024

Project Name:
Speed Limit Study – Waverley Street

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	$ 950	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ 950	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	950	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Direct costs represent the estimated cost for labour and materials to install new speed signs. Costs will be charged to the 2025 Public Works Trasportation Division operating budget.

J. Ruby, 2024-12-17
J. Ruby CPA, CA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

- Legal Services

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

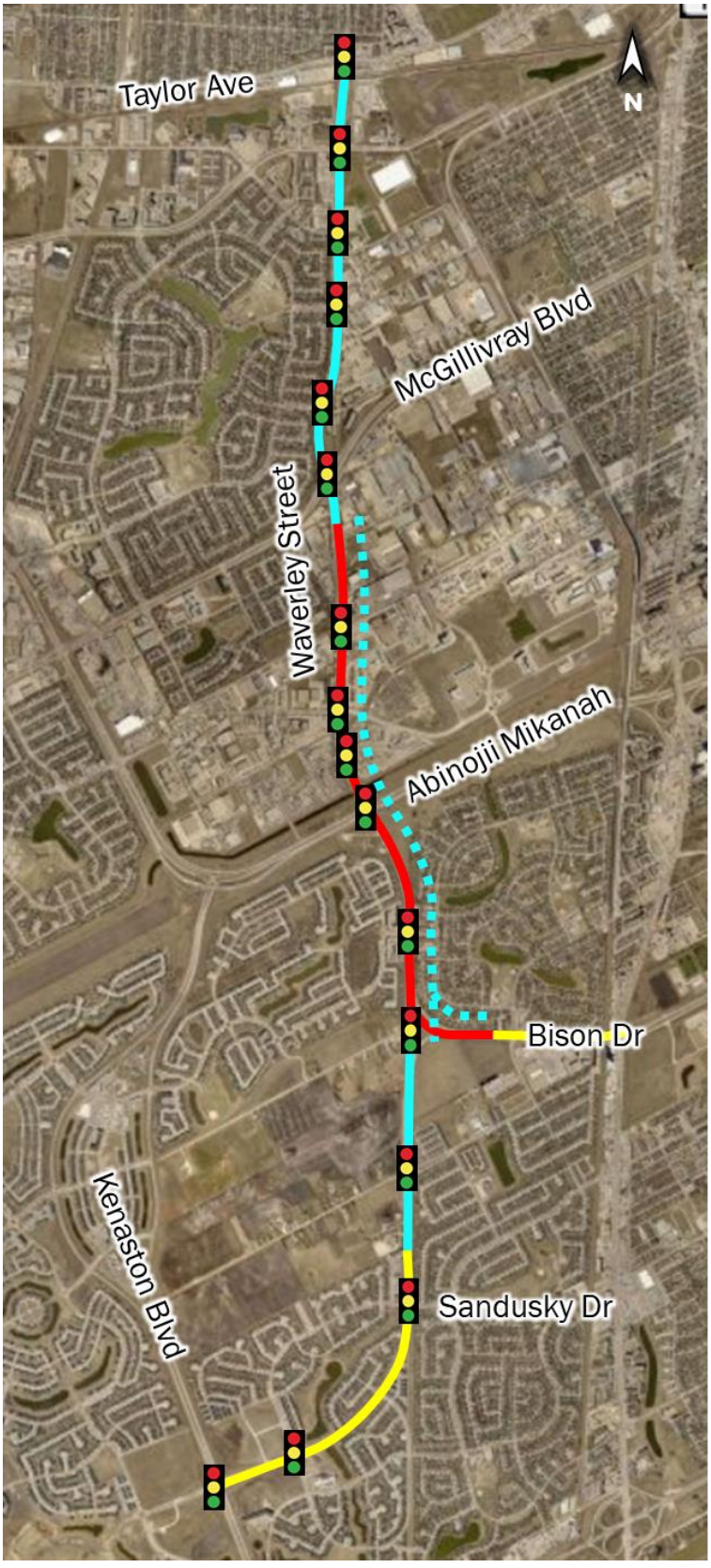
Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: Keenan Patmore, M.Sc., P.Eng., Regional Traffic Engineer
Date: December 18, 2024

Attachments:
Appendix A – Waverley Street Study Area – Current and Recommended Speed Limits
Appendix B – Speed Limit Review Process
Appendix C – Draft By-law Amendment

APPENDIX A - WAVERLEY STREET STUDY AREA – CURRENT AND RECOMMENDED SPEED LIMITS



APPENDIX B - SPEED LIMIT REVIEW PROCESS

The Winnipeg Public Service has adopted the *Manitoba Infrastructure Guide for Setting Posted Speed Limits on Manitoba Roadways* (2019) engineering speed limit study as the framework, with minor modifications, to evaluate and recommend posted speed limits.

An engineering speed limit study can help identify, review, and propose solutions for roadways where the traffic authority has concerns with the current speeds. The engineering speed limit study provides a speed limit recommendation based on the operating speed, target speed, and collision history.

Operating Speed

The operating speed is the speed at which motorists choose to travel on a given roadway. Speed choice by drivers is based on a variety of factors, including roadway and roadside characteristics, weather, traffic characteristics, vehicle characteristics and the purpose of the trip. The operating speed for a particular road section can be estimated by measuring individual speeds through a spot speed study. The following describes operating speed characteristics:

- ***50th Percentile Speed.*** The 50th percentile speed is the speed at or below 50 percent of the measured speeds in a spot speed study.
- ***85th Percentile Speed***. The 85th percentile speed is the speed at or below 85 percent of the measured speeds in a spot speed study.
- ***15 km/h pace.*** The 15 km/h pace is the 15 km/h range of speeds that encompasses the greatest percentage of measured speeds in a spot speed study.

Target Speed

The target speed is the speed at which vehicles should operate on a facility in order to promote the safety and appropriate level of mobility for all road users. The following factors can influence target speed:

- pedestrian exposure
- cyclist exposure
- stakeholder input
- roadside environment
- roadside hazards
- average lane width
- presence of a median
- horizontal and vertical alignment
- roadway surface type
- number of intersections with public roads
- number of private access driveways
- on-street parking

The target speed is determined using two approaches, (1) the Transportation Association of Canada *Guidelines for Establishing Posted Speed Limits*, and (2) comparison with similar classification roadways to promote city-wide consistency and driver expectation.

Collision History

A collision history review can identify sections of roadway that are performing poorly from a road safety perspective. A high collision frequency or rate at a location may indicate any number of operational or geometric issues and does not necessarily indicate speed as a primary contributing factor. A closer analysis of the collision types, locations, time of day, weather conditions and other factors is useful for understanding the role of speed, if any, in the collisions. National Cooperative Highway Research Program (NCHRP) Report 613 describes the following collision patterns where inappropriate speed is more likely to be a contributing factor:

- rear-end collisions – drivers not anticipating the location of the back of a queue
- run-off-road collisions – drivers avoiding conflicts in the roadway proper
- angle collisions – drivers accepting gaps that are too small

Analysis of the collision data is necessary to determine if these patterns could also be attributed to other factors, such as driver inattention or impairment, geometric conditions (alignment or sight distance) or other conditions that do not meet a driver's expectations.