

Traffic Bylaw Update – Schedule No. 4 – Speed Limit on Spadina Crescent from Pembina Avenue to Ravine Drive

ISSUE

This report presents the review of the speed limit on Spadina Crescent from Pembina Avenue to Ravine Drive.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

1. That the speed limit on Spadina Crescent from a point 100 metres north of Windsor Street to Ravine Drive be reduced from 60 km/h to 50 km/h; and
2. That the City Solicitor be requested to prepare the appropriate bylaw amendments to Bylaw No. 7200, The Traffic Bylaw, effective June 1, 2022.

BACKGROUND

At its meeting held on February 11, 2019, the Standing Policy Committee on Transportation received an information report for the River Heights Neighbourhood Traffic Review (NTR). The installation of a Rectangular Rapid Flashing Beacon (RRFB) at Spadina Crescent and Pembina Avenue was recommended from this review.

At its meeting held on October 4, 2021, the Standing Policy Committee on Transportation received an approval report regarding proposed amendments to Bylaw No. 7200, The Traffic Bylaw, and resolved, in part:

“That the Administration review and report back to the Standing Policy Committee on Transportation on the portion of Spadina from Pembina to Ravine to determine if 60 km/h is still the appropriate speed.”

The Administration periodically reviews the existing speed limits on roadways and recommends necessary modifications to be established in Schedule No. 4 of Bylaw No. 7200, The Traffic Bylaw as required.

The recommended maximum allowable speeds for new and modified roadways are based on road classification, adjacent land use, driver behaviour and familiarity, and safety concerns. The goal is to establish a reasonable and safe speed limit that is appropriate for a particular roadway based on its design and classification.

DISCUSSION/ANALYSIS

Traffic Characteristics

Spadina Crescent from Pembina Avenue to Ravine Drive is classified as an arterial roadway intended to carry between 5,000 to 25,000 vehicles per day. The Average Annual Daily Traffic (AADT) for Spadina Crescent is 6,900 vehicles per day (2020) between Ravine Drive and Circle Drive.

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There is one traffic lane in each direction and parking on the west side of the street. The current posted speed limit is 60 km/h.

There are painted bicycle lanes on both sides of the street. Painted bicycle lanes are typically not considered All Ages and Abilities (AAA) facilities and are generally not recommended on roads with speeds above 50 km/h and/or volumes above 4,000 vehicles per day. Although they are non-AAA facilities, the painted bicycle lanes on Spadina Crescent support the secondary cycling network identified in the Active Transportation Plan. The adjacent Meewasin trail provides an AAA facility along the river.

There are residences with front driveways on the west side of Spadina Crescent between Ravine Drive and Pembina Avenue.

Past Traffic Studies and Analysis

In response to speeding concerns received during the River Heights NTR, a speed study was conducted on Spadina Crescent between Pembina Avenue and Ravine Drive in 2018. The 85th percentile speed (the speed at which the majority of the motorists are travelling at or below) was measured during a seven-day period and found to be 66 km/h.

This study indicated that the speeds are slightly higher than the posted speed limit but are within 10% of the posted speed limit. The NTR recommended that a speed display board be installed in both directions on Spadina Crescent north of Pembina Avenue. A speed display board was installed for southbound traffic on Spadina Crescent north of Pembina Avenue in 2020. The installation of a speed display board for northbound traffic has not yet been installed but is scheduled for 2022.

The River Heights NTR also recommended the installation of a RRFB at the intersection of Spadina Crescent and Pembina Avenue to improve pedestrian safety while crossing Spadina Crescent. The installation of the RRFB at this location is funded in the 2022-2023 multi-year budget and is planned for installation in 2022.

Collision History

The most recently available five-year collision data (2016-2020) was provided by Saskatchewan Government Insurance (SGI). The collision history along Spadina Crescent from Pembina Avenue to Ravine Drive is summarized on the following page.

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Collision summary by location:

Street 1	Street 2	Number of Collisions					Number of Collisions	Average Number of Collisions per Year
		2016	2017	2018	2019	2020	(2016-2020)	(2016-2020)
Pembina Avenue	Spadina Crescent	3	3	0	1	2	9	1.8
Ravine Drive	Spadina Crescent	1	4	0	1	3	9	1.8
Spadina Crescent	Pembina to Ravine	1	1	0	0	0	2	0.4
Total		5	8	0	2	5	20	-

Collision summary by severity:

Year	Number of Collisions				Total
	Fatal	Severe Injury	Minor Injury	Property Damage Only	
2016	0	0	1	4	5
2017	0	0	2	6	8
2018	0	0	0	0	0
2019	0	0	0	2	2
2020	0	0	1	4	5
Total	0	0	4	16	20

The findings are summarized below.

- No fatal or severe injury collisions have occurred on this road segment.
- Lighting and time of day do not appear to play an identifiable role in any of the collisions.
- Speeding was not a major contributing factor in any of the collisions. Road surface was a major contributing factor in four of the nine collisions at Spadina Crescent and Ravine Drive. In these four single vehicle collisions, drivers slid due to slush or packed snow/ice on the road surface which resulted in property damage only.

Sight Distances

The Transportation Association of Canada’s Geometric Design Guide provides guidance for the sight distances that drivers require to come to a complete stop or complete a maneuver safely. The sight distances required depend on the posted and design speed limits.

At Spadina Crescent and Pembina Avenue, sightlines for northbound Spadina Crescent drivers are obstructed by the bridge piers and abutment, and vegetation on the west side of the street. Sight distances in all other directions of travel are adequate.

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The RRFB at Spadina Crescent and Pembina Avenue recommended from the River Heights NTR will attract driver attention and improve driver yield rates.

Conclusion

Based on the restricted sightlines for northbound drivers, adjacent family residential and recreational land uses, and adjacent on-street painted bicycle lanes, a posted speed limit of 50 km/h on Spadina Crescent from Pembina Avenue to Ravine Drive is recommended. To ensure continuity of the speed limit along the corridor, the section of Spadina Crescent between 100 metres north of Windsor Street to Pembina Avenue is also recommended to have a posted speed limit of 50 km/h.

FINANCIAL IMPLICATIONS

The RRFB device planned for the intersection of Spadina Crescent and Pembina Avenue was funded for \$20,000 as part of the 2022-2023 multi-year budget under Capital Project P.02290 – Traffic Control Systems.

The costs for the signage required for the speed limit revision are minimal and can be covered by existing operating budgets.

OTHER IMPLICATIONS

There are no privacy, legal, social, or environmental implications identified.

NEXT STEPS

The RRFB at Spadina Crescent and Pembina Avenue is scheduled for installation in 2022. The northbound speed display board on Spadina Crescent north of Pembina Avenue is scheduled for 2022. Speed limit signage on Spadina Crescent will be installed by June 1, 2022.

Report Approval

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