

Traffic Control Signals - Wilson Avenue and Maniza Road

Date: August 21, 2023

To: North York Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 6 - York Centre

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Wilson Avenue, City Council approval of this report is required.

Transportation Services has reviewed the need for traffic control signals at the intersection of Wilson Avenue and Maniza Road. Based on the assessment undertaken, Transportation Services does not recommend the installation of traffic control signals at this intersection as the warrant criteria was not met.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council not authorize the installation of traffic control signals at the intersection of Wilson Avenue and Maniza Road.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendation in the report.

If City Council amends the recommendation in this report and authorizes the installation of traffic control signals at the intersection of Wilson Avenue and Maniza Road, the estimated cost is \$220,000. This installation would be considered in 2024 subject to availability of Capital funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by the Ward Councillor and local residents to investigate the feasibility of installing traffic control signals at the intersection of Wilson Avenue and Maniza Road.

Existing Conditions

Wilson Avenue is characterized by the following conditions:

- It is a four through lane with left turn centre lane, east-west major arterial roadway
- It operates two-way traffic on a pavement width of approximately 16 metres
- The daily two-way traffic volume is approximately 32,000 vehicles
- The speed limit is 50 km/h
- Heavy trucks are permitted at all times
- There is TTC service provided by the 96 Wilson bus
- There are sidewalks located on both sides of the street
- East-west U-turns are prohibited at all times at the intersection with Maniza Road

Maniza Road is characterized by the following conditions:

- It is a two lane, north-south, local roadway
- It operates two-way traffic on a pavement width of approximately 10.5 metres
- The daily two-way traffic volume is approximately 1000 vehicles
- The speed limit is 30 km/h
- Heavy trucks are prohibited at all times
- There is TTC service provided by the 184 Ancaster Park bus
- There are sidewalks located on both sides of the street
- There is a designated Community Safety Zone

Wilson Avenue and Maniza Road form a T-type intersection. Maniza Road is stop controlled while Wilson Avenue is uncontrolled free-flow

The adjacent land use in this area is a mix of residential, business and commercial.

The closest adjacent traffic control signals are located approximately 325 metres to the east at Dufferin Street and approximately 215 metres to the west at Ancaster Road.

A map of the area is included in Attachment 1.

Traffic Control Signals

To determine the need for traffic control signals at the intersection of Wilson Avenue and Maniza Road, staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes factors such as volume of vehicles and pedestrians, delay to cross traffic, and collision history. In addition to these technical justifications, staff consider an environmental checklist which includes: consideration of road width, posted speed limit, operating speeds, adjacent land uses, pedestrian desire lines and demographics, presence of a transit stop, sight lines, and distance between existing crossing opportunities.

As part of the investigation, staff conducted vehicle and pedestrian counts on December 15, 2021 at the subject intersection. The results of the counts and collision hazard are summarized in Table 1. The "Collision hazard" criterion is based on the number of collisions potentially preventable by the installation of traffic control signals. Collision history provided by the Toronto Police Service for the three-year period ending February 28, 2022 disclosed two collisions at the subject intersection that were potentially preventable by the installation of traffic control signals. There were no pedestrian related collision at the intersection.

Table 1: Warrant Compliance - Wilson Avenue and Maniza Road

Justification	Compliance level
Minimum vehicle volume	14%
Delay to cross traffic (pedestrians and vehicles)	21%
Collision hazard	13%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or both the minimum vehicular volume and delay to cross traffic justifications must be at least 80 percent satisfied. Based on the technical warrant criteria, the installation of traffic control signals is not justified.

In regards to the environmental checklist, staff completed an assessment and determined that there are no other environmental or external factors that would justify the need for traffic control signals at this time.

The TTC has been consulted and concurs with these findings.

Transportation Services does not recommend the installation of traffic control signals as they are not justified based on the technical and environmental criteria that was evaluated.

Other Considerations

If, despite the findings above, City Council decides to proceed with installing traffic control signals, the following impacts should be noted:

- There would be a loss of ten parking spaces on Wilson Avenue and seven parking spaces on Maniza Road associated with the installation of traffic control signals at this intersection
- There is potential for increase in delays to transit service on Wilson Avenue and Maniza Road
- There is the potential for an increase in traffic infiltration on Maniza Road

The Ward Councillor has been advised of the recommendation in this report.

CONTACT

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SIGNATURE

Roger Browne, M.A.Sc., P. Eng.
Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - Wilson Avenue and Maniza Road

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