

Traffic Control Signals - Neilson Road and Oakmeadow Boulevard (north intersection)

Date: June 14, 2022

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 24, Scarborough-Guildwood

SUMMARY

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

Transportation Services has reviewed the need for traffic control signals at the intersection of Neilson Road and Oakmeadow Boulevard (north intersection). 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 Neilson Road and Oakmeadow Boulevard (north intersection).

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 Neilson Road and Oakmeadow Boulevard (north intersection), the estimated cost is \$180,000. This installation would be considered in 2022 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, on behalf of local residents to investigate the feasibility of installing traffic control signals at the intersection of Neilson Road and Oakmeadow Boulevard (north intersection).

Existing Conditions

Neilson Road is characterized by the following conditions:

- It is a four-lane, north-south, minor arterial roadway
- It operates two-way traffic on a pavement width of approximately 15 metres
- The daily two-way traffic volume is approximately 24,000 vehicles
- The speed limit is 50 km/h
- Heavy trucks are prohibited 7:00 p.m. of one day to 7:00 a.m. of the next following day on Neilson Road, between Ellesmere Road and Finch Avenue East
- There is Toronto Transit Commission (TTC) service provided by the 133 Neilson bus route, transit stops are located at the southeast and northwest corners of the intersection
- There are sidewalks located on both sides of the street

Oakmeadow Boulevard is characterized by the following conditions:

- It is a two-lane, east-west, collector roadway
- It operates two-way traffic on a pavement width of approximately 8.3 metres
- The daily two-way traffic volume is approximately 2,600 vehicles
- The speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- There is no Toronto Transit Commission (TTC) service provided
- There are sidewalks located on both sides of the street

Neilson Road and Oakmeadow Boulevard (north intersection) form a T-type intersection. Oakmeadow Boulevard is stop controlled while Neilson Road is uncontrolled free-flow.

The adjacent land use in this area is mainly residential.

The closest adjacent traffic controls are located approximately 220 metres to the north at the Highway 401 eastbound on and off ramps and approximately 170 metres to the south at Oakmeadow Boulevard/Keeler Boulevard.

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 Neilson Road and Oakmeadow Boulevard (north intersection), 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 January 27, 2022 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 December 31, 2021 disclosed four reported collisions at the subject intersection that was potentially preventable by the installation of traffic control signals.

Table 1: Warrant Compliance - Neilson Road and Oakmeadow Boulevard (north intersection)

Justification	Compliance level
Minimum vehicle volume	20%
Delay to cross traffic (pedestrians and vehicles)	60%
Collision hazard	27%

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 but has not yet provided feedback on this request at the timing of writing this report.

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, Scarborough Community Council decides to proceed with installing traffic control signals, the following impact should be noted:

- There will be a loss of approximately four parking spaces on Oakmeadow Boulevard associated with the installation of traffic control signals at this intersection.
- There is potential for increase in delays to transit service on Neilson Road.
- There is the potential increase in cut-through traffic on Oakmeadow Boulevard.

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

CONTACT

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SIGNATURE

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

ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - Neilson Road and Oakmeadow Boulevard

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