

Traffic Control Signals - Kingston Road and Kildonan Drive/Eastwood Avenue

Date: December 18, 2025

To: Scarborough Community Council

From: Director, Enforcement and Street Management, Transportation Services

Wards: Ward 20, Scarborough Southwest

SUMMARY

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

Transportation Services is requesting approval to install traffic control signals at the intersection of Kingston Road and Kildonan Drive/Eastwood Avenue. The traffic control signals will provide enhanced safety for all road users and is justified based on the assessment undertaken.

RECOMMENDATIONS

The Director, Enforcement and Street Management, Transportation Services recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Kingston Road and Kildonan Drive/Eastwood Avenue.

FINANCIAL IMPACT

The estimated cost for installing traffic control signals at the intersection of Kingston Road and Kildonan Drive/Eastwood Avenue is \$250,000.00. Funding would be subject to availability and competing priorities within the Transportation Services 2026 Interim Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by the Ward Councillor, on behalf of the Royal Canadian Legion Branch 13, to investigate the feasibility of installing traffic control signals at the intersection of Kingston Road and Kildonan Drive/Eastwood Avenue.

Existing Conditions

Kingston Road is characterized by the following conditions:

- It is a four-lane, east-west, major arterial roadway
- It operates two-way traffic on a pavement width of approximately 14.5 metres
- The daily two-way traffic volume is approximately 20,000 vehicles
- The speed limit is 40 km/h
- There is TTC service provided by 12 Kingston Road bus
- There are sidewalks located on both sides of the street.

Kildonan Drive and Eastwood Avenue are characterized by the following conditions:

- They are two-lane, north-south, local roadways
- They operate two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume is approximately 550 vehicles
- The speed limit is 30 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks located on both sides of the streets

Kingston Road and Kildonan Drive/Eastwood Avenue form a near-right offset four-leg intersection. The side streets are offset by approximately 12 metres at Kingston Road. Kildonan Drive and Eastwood Avenue are stop controlled while Kingston Road is uncontrolled free-flow.

The land use in the area consists of residential, commercial, and institutional uses. Royal Canadian Legion Branch 13 and Scarborough Baptist Church are located on the southeast corner of the intersection. There is also a multi-unit development planned to the northwest of the intersection, between Eastwood Avenue and Kalmar Avenue. The subject intersection is located within a designated Community Safety Zone.

The closest adjacent traffic controls on Kingston Road are located approximately 220 metres to the west at Manderley Drive in the form of a pedestrian crossover (PXO) and approximately 245 metres to the east at Birchcliff Avenue in the form of traffic control signals.

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 Kingston Road and Kildonan Drive/Eastwood Avenue, 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 June 24, 2025, 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 January 1, 2025, disclosed two collisions at the subject intersection that were potentially preventable by the installation of traffic control signals, including one collision involving a pedestrian

Table 1: Warrant Compliance - Kingston Road and Kildonan Drive/Eastwood Avenue

Justification	Compliance level
Minimum vehicular volume	14%
Delay to cross traffic (pedestrians and vehicles)	22%
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 results in Table 1, the numerical warrants for the installation of traffic control signals are not satisfied at the subject intersections at this time.

Notwithstanding the numeric warrants not being met, in view of the potential safety and connectivity concerns in the subject section, the four-lane cross-section, as well as the pedestrian generators in the area, the long spacing between existing traffic control signals, as well as the upcoming change in the land use on the north side of Kingston Road, Transportation Services further considered the installation of traffic signals on Kingston Road for the following reasons:

- the long spacing between pedestrian crossing protection on Kingston Road (470 metres)
- the presence of transit stops in both directions on Kingston Road that attract pedestrians to cross the street
- The four-lane cross-section on Kingston Road, as well as the pedestrian generators in the area, including Birch Cliff Public School, Royal Canadian Legion Branch 13, Scarborough Baptist Church, retail stores and a future development on the north side of Kingston Road that encourage mid-block pedestrian crossings. Vulnerable road users requiring to cross Kingston Road may find this environment challenging. Installing traffic control signals here would provide a safe, designated crossing point and help consolidate multiple unprotected crossings into one controlled location.

In considering the above reasons, Transportation Services recommends the installation of traffic control signals at Kingston Road and Kildonan Drive/Eastwood Avenue as it will provide enhanced safety for all road users.

A potential concern with the traffic control signals at this intersection is the offset between the north and south legs. An offset intersection, as opposed to a typical four-leg intersection, occurs when the side-street legs are not aligned. This geometry can introduce operational and safety challenges under full signalization. As the signal design and timing plans are developed, additional measures, including turn restrictions, may be required to ensure safe and efficient operation of the intersection.

Consultation with TTC

The TTC has been consulted and noted concerns regarding potential delays to transit associated with signal operations at this offset intersection but raised no objections to the overall proposal.

Other Considerations

It should be noted that the installation of traffic control signals will have the following additional impacts:

- There will be a loss of approximately two of parking spaces on Kingston Road associated with the installation of traffic control signals at this intersection.
- There is potential for increase in delays to transit service on Kingston Road.
- The potential of traffic infiltration may increase traffic volumes on Eastwood Avenue and Kildonan Drive as it becomes easier for motorists to enter Kingston Road.

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

CONTACT

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SIGNATURE

Mike Barnet, P. Eng.
Director, Enforcement and Street Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Proposed Traffic Control Signals, Kingston Road and Kildonan Drive/Eastwood Avenue

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