TORONTO

REPORT FOR ACTION

Intersection Safety Review - Kingston Road and Collinsgrove Road

Date: March 15, 2024

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 25, Scarborough-Rouge Park

SUMMARY

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

Scarborough Community Council directed Transportation Services to conduct a review of various safety and operational concerns for road users at the intersection of Kingston Road and Collinsgrove Road. This report provides an overview of the assessments undertaken by Transportation Services.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council receive this report for information.

FINANCIAL IMPACT

There is no financial impact resulting from the adaption of the recommendation of this report.

DECISION HISTORY

On September 8, 2023, Scarborough Community Council adopted Item SC7.16, titled Collinsgrove Road and Kingston Road - Intersection Safety Improvements, directing Transportation Services to undertake an intersection safety review at the intersection of Kingston Road and Collinsgrove Road. The Community Council decision can be found at:

Agenda Item History - 2023.SC7.16 (toronto.ca)

COMMENTS

In response to the direction from Scarborough Community Council's adoption of the Item SC7.16, Transportation Services conducted an intersection safety review and studied operational and safety measures at the intersection of Kingston Road and Collinsgrove Road.

Existing Conditions

Kingston Road is characterized by the following conditions:

- It is a six-lane, east-west, major arterial roadway
- It operates with two-way traffic on a pavement width of approximately 26.5 metres
- The daily two-way traffic volume is approximately 34,800 vehicles
- The speed limit is 60 km/h
- There is TTC service provided by 86 Scarborough bus route
- There are sidewalks located on both sides of the street

The parking regulations on Kingston Road, in the vicinity of Collinsgrove Road, are generally as follows:

North side

Maximum three-hour statutory parking

South side

- No parking anytime, between Collinsgrove Road and a point 19.9 metres east
- Maximum three-hour statutory parking, between Morningside Avenue and Collinsgrove Road

Additionally, there are some temporary stopping prohibitions that have been enacted on the south side of the street in conjunction with an adjacent development, these will be rescinded upon the completion of the project.

Collinsgrove Road is characterized by the following conditions:

- It is a two-lane, north-south, collector roadway
- It operates two-way traffic on a pavement width of approximately 9 metres
- The daily two-way traffic volume is approximately 2,000 vehicles
- The speed limit is 40 km/h
- The northbound traffic is controlled by a stop sign
- There is no TTC service provided
- There are sidewalks located on both sides of the street

Parking is prohibited at all times on both sides of Collinsgrove Road.

The adjacent land use in the vicinity of Kingston Road and Collinsgrove Road is primarily commercial. A new 11-storey residential apartment building (4569 Kingston Road) is currently under construction on the south side of Kingston Road, immediately east of Collinsgrove Road.

A map of the area is included in Attachment 1.

Collision Review

A review of the Toronto Police Service collision records, with specific emphasis for pedestrian, cyclist and Killed or Seriously Injured (KSI) collisions within the study area for the five-year period ending December 31, 2023, revealed one collision involving a cyclist. Detail of the collision and the Motor Vehicle Collision Report has not been made available to Transportation Services staff. There are no reported collisions involving pedestrians.

Road Safety Review

Traffic Operations conducted a detailed safety review in the vicinity of the intersection of Kingston Road and Collinsgrove Road. This review included all aspects of the intersection's operation. The results of this review have been summarized as follows:

A. Signage

The signage within the study area were generally found to be in good condition, appropriate and clearly visible to road users.

B. Pavement markings

The pavement markings within the study area were in good condition. These markings when required, will be refreshed as part of Transportation Services' annual painting program.

C. Pavement quality

Kingston Road in the subject area was resurfaced within the last five years and the pavement is in good condition.

D. Sight lines

Sightlines at the intersection of Kingston Road and Collinsgrove Road were reviewed and there were no impediments identified for road users.

E. Sidewalks

Sidewalks on both sides of Kingston Road as well as Collinsgrove Road were found to be in good condition. The southeast and southwest corners of the intersection are equipped with tactile walking surface indicators.

F. Street lighting

Street lighting is the responsibility of Toronto Hydro. However, Transportation Services' review did note that there are street lights provided along Kingston Road as well as Collinsgrove Road.

G. Parking Regulations

A review of the existing parking regulations revealed that they both effectively allow for safe and efficient traffic operations and serve the community and businesses within the study area.

J. Geometric Safety Improvements

As noted, Kingston Road in the vicinity of Collinsgrove Road, has been resurfaced within the last five years. There are no capital works planned for the near future and the intersection is currently operating with a satisfactory safety record.

K. Traffic Control Signals

Kingston Road and Collinsgrove Road form a three-leg intersection. Collinsgrove Road is stop-sign controlled while Kingston Road is uncontrolled free-flow. The closest adjacent traffic control signals are located approximately 260 metres to the west, at Kingston Road and Morningside Avenue and at approximately 220 metres to the east, at Kingston Road and Old Kingston Road/private access.

To determine the need for traffic control signals at the intersection of Kingston Road and Collinsgrove Road staff rely on the justification criteria at outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes factors such a 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 transit stop, sight lines and distance between existing crossing opportunities.

As part of the investigation, staff conducted vehicle and pedestrian counts on Tuesday, August 8, 2022 at the subject intersection. It was indicated by the community that weekday counts may not be representative of the busiest time periods at this intersection, so additional weekend vehicle and pedestrian counts were conducted on Saturday, October 14, 2023.

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 Toronto Police Service for the three-year period ending December 31, 2023 disclosed seven reported collisions at the subject intersection that was potentially preventable by the installation of traffic control signals. Further review of these seven collisions did not disclose a pattern with respect to the time of day/day of week when the collisions occurred.

Table 1 - Warrant Compliance - Kingston Road and Collinsgrove Road

Justification	Compliance level	
	Tuesday August 8, 2022	Saturday October 14, 2023
Minimum vehicle volume	45%	44%
Delay to cross traffic (pedestrians and vehicles)	59%	52%
Collision hazard	47%	47%

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 regard 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.

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.

L. Future Developments

The traffic impact study undertaken for the development on the southeast corner of the intersection did not identify the need for any future road improvements as a result of projected traffic volumes, including traffic control signals.

Conclusion

Based on above reviews and findings, staff do not have any operational or safety concerns with the existing conditions at the intersection of Kingston Road and Collinsgrove Road.

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

CONTACT

Dan Clement, CET, Manager Traffic Operations (Area 1), Transportation Services 416-397-5021, Dan.Clement@toronto.ca

SIGNATURE

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

ATTACHMENTS

Attachment 1: Map - Intersection Safety Review - Kingston Road and Collinsgrove Road

Attachment 1: Map - Intersection Safety Review - Kingston Road and Collinsgrove Road

