

Traffic Control Signals - Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard

Date: February 7, 2023

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 23, Scarborough-Guildwood

SUMMARY

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

Transportation Services has reviewed the need for traffic control signals at the intersection of Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard. 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. Scarborough Community Council not authorize the installation of traffic control signals at Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard.

FINANCIAL IMPACT

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

If Scarborough Community Council amends the recommendation in this report and authorizes the installation of traffic control signals at the intersection of Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard, the estimated cost is \$200,000.00. This installation would be considered in 2023 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 Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard.

Existing Conditions

Bellamy Road North is characterized by the following conditions:

- It is a four-lane, north-south, minor arterial road
- It operates two-way traffic on a pavement width of approximately 15 metres
- The daily two-way traffic volume is approximately 13,000 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 day
- There is TTC service provided by the 9 Bellamy bus and there are stops located on the north intersection leg
- There are sidewalks located on both sides of the street
- There is an edge line pavement marking treatment installed at the curbs to narrow the lanes and help to reinforce the speed limit on the roadway

Banmoor Boulevard is characterized by the following conditions:

- It is a two-lane, east-west, local roadway
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- The speed limit is 50 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks located on the south side of the street

Cedar Brae Boulevard is characterized by the following conditions:

- It is a two-lane, east-west, local roadway
- It operates two-way traffic on a pavement width of approximately 6.6 metres
- The daily two-way traffic volume is approximately 400 vehicles
- The speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are no sidewalks on either side of the street

Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard form a four-leg intersection. Westbound traffic on Banmoor Boulevard (east leg) and eastbound traffic on Cedar Brae Boulevard (west leg) is stop controlled while Bellamy Road North is uncontrolled free-flow.

The adjacent land use in this area is residential.

The closest adjacent traffic control signals are located approximately 400 metres to the north at Eastpark Boulevard and approximately 330 metres to the south at Amarillo Drive.

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 Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard, 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, 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 August 27, 2020 at the subject Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard. 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, 2022 disclosed zero collisions at the subject intersection that were potentially preventable by the installation of traffic control signals.

Table 1: Warrant Compliance - Bellamy Road North and Banmoor Boulevard/Cedar Brae Boulevard

Justification	Compliance level
Minimum vehicle volume	31%
Delay to cross traffic (pedestrians and vehicles)	27%
Collision hazard	0%

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 impacts should be noted:

- There will be a loss of approximately three paid parking spaces on Banmoor Boulevard, and six parking spaces on Cedar Brae Boulevard associated with the installation of traffic control signals at this intersection.
- There is potential for increase in delays to transit service on Bellamy Road North.
- There is the potential increase in traffic infiltration on Banmoor Boulevard and Cedar Brae 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 - Bellamy Road North and Banmoor
Boulevard/Cedar Brae Boulevard

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