

Traffic Control Signals - Lawrence Avenue East and Wanless Crescent

Date: October 9, 2024

To: North York Community Council

From: Director, Planning, Design and Management, Transportation Services and
Director, Traffic Management, Transportation Services

Wards: Ward 15 - Don Valley West

SUMMARY

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

Through the Lawrence Park (LP) Transportation Plan, staff in Transportation Services reviewed the need for traffic control signals at the intersection of Lawrence Avenue East and Wanless Crescent (west side). 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, Planning, Design and Management and Director, Traffic Management, Transportation Services recommends that:

1. City Council not authorize the installation of traffic control signals at the intersection of Lawrence Avenue East and Wanless Crescent (west side)

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 Lawrence Avenue East and Wanless Crescent (west side), the estimated cost is \$230,000. This installation would be considered subject to availability of Capital funding and competing priorities.

DECISION HISTORY

In June 2019, North York Community Council adopted item 2019.NY7.24 (Lawrence Park Traffic Management Plan) directing Transportation Services to develop a Traffic Management Plan and implement changes in coordination with the Lawrence Park Environmental Assessment.

<https://secure.toronto.ca/council/agenda-item.do?item=2019.NY7.24>

In May 2017, City Council adopted item 2017.PW21.3 (Lawrence Park Neighbourhood Investigation of Basement Flooding (Area 20) and Road Improvement Class Environmental Assessment Study) and authorized the implementation of the Master Plan aimed to address road infrastructure problems and mitigate the risk of basement flooding.

<https://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-103217.pdf>

COMMENTS

Through the LP Transportation Plan study process, staff were requested to investigate the feasibility of installing traffic control signals at Lawrence Avenue East and Wanless Crescent (west side) to improve crossing conditions, specifically for vulnerable road users.

Existing Conditions

Lawrence Avenue East is characterized by the following conditions:

- It is a five-lane, east-west, major arterial roadway;
- It operates two-way traffic on a pavement width of approximately 16.5 metres;
- The daily two-way traffic volume is approximately 21,000 vehicles;
- The speed limit is 50 km/h;
- Heavy trucks are permitted at all times;
- There is TTC service provided by the 124 and 162 buses;
- There are sidewalks located on both sides of the street; and
- Wanless Park is located approximately 65 metres north of Lawrence Avenue East at Wanless Crescent.

Wanless Crescent 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 7.5 metres;
- The daily two-way traffic volume is approximately 1300 vehicles;
- The speed limit is 30 km/h;
- Heavy trucks are prohibited at all times;
- There is no TTC service provided; and
- There are no sidewalks on either side of the street.

Lawrence Avenue East and Wanless Crescent is a right-angled, four-leg intersection. Wanless Avenue is stop controlled while Lawrence Avenue East is uncontrolled free-flow. The adjacent land use in this area is mostly residential and open park space.

Wanless Crescent provides access to Wanless Park and Wanless Park Tennis Club. The closest adjacent traffic controls are located approximately 355 metres to the west at Mount Pleasant Road and approximately 448 metres to the east at Mildenhall Road, both 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 Lawrence Avenue East and Wanless Crescent, 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 8, 2019 at the subject Lawrence Avenue East and Wanless Crescent. 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 September 1, 2024 disclosed zero collisions at the subject intersection that were potentially preventable by the installation of traffic control signals.

Table 1: Warrant Compliance - Lawrence Avenue East and Wanless Crescent

Justification	Compliance level
Minimum vehicle volume	23%
Delay to cross traffic (pedestrians and vehicles)	38%
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 acknowledge that installing a traffic control signal at Lawrence Avenue East and Wanless Crescent would provide some safety benefits to vulnerable road users crossing Lawrence Avenue East, and provide signalized turns out of the

neighbourhoods. Wanless Crescent provides a connection to Wanless Park and TTC bus stops and a signalized crossing could improve vulnerable road user connections to local destinations and transit stops, however there are no sidewalks on Wanless Crescent north or south of Lawrence Avenue East. Lawrence Avenue East is a five-lane roadway with low-rise residential land use. The two closest pedestrian crossing opportunities are at Mount Pleasant Road and Mildenhall Road, 350 metres west and 457 metres east, respectively.

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, like the lack of available sidewalk connections, and adjacent land uses.

Other Considerations

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

- There will be a loss of approximately four off-peak parking spaces on Lawrence Avenue East associated with the installation of traffic control signals at this intersection.
- There is potential for increase in delays to transit service on Lawrence Avenue East.
- There is potential that a signalized traffic control will make Wanless Crescent a preferred route for people entering and exiting the neighbourhood by turning onto or from Lawrence Avenue East.

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

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SIGNATURE

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ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - Lawrence Avenue East and Wanless Street (west side)

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