

Construction Staging Area - 1249 Queen Street East: Traffic Mitigation Update - Supplementary Report

Date: December 14, 2021
To: City Council
From: Director, Traffic Management, Transportation Services
Wards: Ward 14, Toronto - Danforth

SUMMARY

In response to a request from Toronto and East York Community Council at its meeting on November 24, 2021, this report provides information on the anticipated traffic pattern changes in East Toronto related to removal of the Gardiner Expressway access ramps at Logan Avenue and the impact on existing and future right-of-way occupations and mitigation options.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council receive this report for information, supplemental to the report entitled Construction Staging Area - 1249 Queen Street East.

FINANCIAL IMPACT

There is no financial impact associated with the above recommendation.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial implications as identified in the financial impact section.

DECISION HISTORY

At its meeting on November 24, 2021, Toronto and East York Community Council adopted Item 29.66 - "Construction Staging Area - 1249 Queen Street East" without amendments. In its decision Toronto and East York Community Council also directed

that Transportation Services and Waterfront Secretariat report back to the December 15 and 16, 2021 meeting of City Council regarding the anticipated traffic pattern changes in East Toronto related to tear down of the Gardiner, the impact on existing and future Right of Way occupations and mitigation options.

http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.TE29.66

On December 16, 2020, City Council authorized staff to enter into a Project Delivery Agreement with Waterfront Toronto for the purpose of reconstructing Lake Shore Boulevard East from the Don River to Carlaw Avenue, in accordance with the approved Environmental Assessment for the Port Lands Flood Protection project and the Counciladopted Gardiner Strategic Rehabilitation Plan.

Agenda Item History - 2020.IE18.3 (toronto.ca)

COMMENTS

The Port Lands Flood Protection Project and Enabling Infrastructure Project (PLFP), and the Lake Shore Boulevard East, Bridge and Public Realm (LSBE) Project, includes the following activities:

- Removal of the Gardiner East access ramps at Logan Avenue;
- Reconstruction of the Lake Shore Boulevard East Bridge over the Don River; and
- Reconstruction of Lake Shore Boulevard East, from Don Roadway to Carlaw Avenue.

Traffic Patterns

The above noted construction activities, in particular, the removal of the Gardiner East access ramps at Logan Avenue and reconstruction of Lake Shore Boulevard East, will have a significant impact on traffic patterns and flow within both the immediate construction area and points beyond. As part of the LSBE design process, Waterfront Toronto undertook an extensive traffic modeling exercise that identified potential impacts within a broad geographic area that extended from Jameson Avenue in the west to Victoria Park in the east, and from the lake north to Bloor Street /Danforth Avenue. Developed in consultation with Transportation Services staff and using the most recent traffic data available from the City's databases, the model revealed broad impacts on traffic patterns both within the overall study area and within the immediate construction zone and adjoining residential and employment areas.

Based on the results of the traffic modelling study, within the above study limits, the trip patterns in the eastbound and westbound direction as of September 2021 are as follows, including the approximate percentage of traffic that will be redirected on these routes:

Eastbound:

- Lake Shore Boulevard East via Gardiner Expressway off-ramp at Lower Jarvis Street and off-ramp at Simcoe Street (75% - 80%);
- Bayview Avenue off-ramp from Don Valley Parkway (5% 12%); and

• East-west major arterial roadways via Gardiner Expressway off-ramp at Lower Jarvis Street (5% - 7%).

Westbound:

- Gardiner Expressway via Lake Shore Boulevard East and Lower Jarvis Street on-ramp (78% - 88%);
- Gardiner Expressway via southbound Don Valley Parkway on-ramp (4% 7%); and
- Gardiner Expressway via east-west major arterial roadways, southbound Jarvis Street and Lower Jarvis Street on-ramp (6% 9%).

As noted above, a minor volume of traffic (5% - 9%) in the eastbound and westbound direction will utilize parallel arterial roadways such as Eastern Avenue, Queen Street East and Dundas Street East. With respect to Queen Street East, approximately 3% of traffic is expected to utilize Queen Street East as a detour, which corresponds to the following increases in vehicle traffic:

Eastbound:

- 30 vehicles during morning peak hour
- 80 vehicles during afternoon peak hour

Westbound:

- 60 vehicles during morning peak hour
- 40 vehicles during afternoon peak hour

In summary, the majority of eastbound vehicular traffic will continue to travel on Lake Shore Boulevard East via Gardiner Expressway off-ramp at Lower Jarvis Street and offramp at Simcoe Street, then continue through the construction area on Lake Shore Boulevard East, between Don Roadway and Carlaw Avenue. Likewise, westbound vehicular traffic will continue through the construction area to access the westbound Gardiner Expressway on-ramp at Lower Jarvis Street. A minor volume will divert onto parallel arterial roadways. The majority of the eastbound and westbound trips is expected to remain on Lake Shore Boulevard East, as there is limited capacity on the east-west parallel routes.

Existing and Future Right-of-Way Occupations and Traffic Mitigation

Based on the traffic model analysis, the existing right-of-way occupations (construction staging areas) are not expected to have a significant impact to the overall transportation network.

The existing construction staging areas for private development sites within Ward 14 are listed in Table 1.

No.	Development Site	Closures	Roadway Designation	Status	Metres
1	749 Gerrard Street East	Southbound curb lane on Logan Avenue	Local roadway	Active	38
2	1151 Queen Street East	East curb lane on Larchmont Avenue	Local roadway	Active	54
3	1249 Queen Street East	Eastbound curb lane Queen Street East	Arterial roadway	Proposed	48
4	1285 Queen Street East	Eastbound curb lane Queen Street East	Arterial roadway	Active	40
5	1327 Queen Street East	Eastbound curb lane Queen Street East	Arterial roadway	Active	57

Table 1: Existing and Future Construction Staging Areas in Ward 14

In view of the above, the total linear measurement for construction staging areas on major arterial roadways and local roadways are 145 metres and 92 metres, respectively. The additional detour traffic volumes around the above construction staging areas will not have a significant impact to traffic operations.

Transportation Services, in collaboration with developers, reviews multiple less impactful options, such as the feasibility of shifting the entire construction staging areas on sites to avoid impacting the public rights-of-way. Other less impactful options include the following:

- Ability to shift construction staging areas from major arterial roadways to a local roadway/public laneway;
- Ability to shorten the extent (length or width) of construction staging areas; and
- Ability to shorten the durations of the construction staging areas.

Additional traffic mitigation measures for existing and future right-of-way occupations include the following:

- Installation of advance warning and portable variable message signs to inform motorists of any upcoming road closures;
- Signal timing changes on the impacted roadways to improve travel times;
- Coordinating the City's capital works projects and private developments to avoid conflicting road closures;
- Allowing major road closures to occur on weekends only;
- Maintaining one traffic lanes in each direction on arterial roadways at all times;
- Maintaining safe pedestrian walkways and/or bike lanes around the construction staging areas to protect vulnerable road users;

- Parking amendments around construction staging areas to further enhance traffic flow;
- Designated Traffic Control Persons at site access points to facilitate the safe execution of truck (delivery, concrete, tractor-trailer and garbage pick-up) turning movements; and
- Police or Traffic Agent(s) presence to improve traffic flow and pedestrian safety during major closures.

The Gardiner access ramps at Logan Avenue permanently closed in September 2021. Since then, Transportation Services has implemented multiple traffic mitigation measures to improve traffic flow on the transportation network. Transportation Services has undertaken a secondary review of the traffic patterns (post ramp demolition). Preliminary data has confirmed that the majority of eastbound and westbound traffic remains on the Lake Shore Boulevard corridor. Further analysis is ongoing to review signal timing changes across the downtown core and East Toronto. Additionally, staff will continue to review traffic mitigation options for each new construction staging area within the project limits/study area.

The Ward Councillor has been advised of the contents of this report.

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SIGNATURE

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