

Lake Shore Boulevard East, Bridge and Public Realm Project - Don River to Carlaw Avenue: Traffic Mitigation and Outreach Update

Date: August 30, 2021

To: Infrastructure and Environment Committee

From: General Manager, Transportation Services

Wards: Ward 14, Toronto - Danforth

SUMMARY

In response to a request from Council at its meeting on July 14, 2021, this report provides information and updates on a number of matters regarding the reconstruction of 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 Council-adopted Gardiner Strategic Rehabilitation Plan.

As authorized by City Council, Waterfront Toronto is undertaking the project, which includes the reconstruction of the existing Lake Shore Boulevard East Bridge over the Don River, as well as the provision of active transportation and public realm components outlined in the Gardiner East EA.

Information and updates contained in this report includes:

- An update regarding the communication strategy developed and undertaken by Waterfront Toronto related to closures and reduced traffic capacity on Lake Shore Boulevard East, between the Don Roadway and Carlaw Avenue;
- A description of traffic impacts and mitigation measures, particularly as they affect businesses and truck movement within the Port Lands and South of Eastern areas, as well as information regarding planned cycling infrastructure along Carlaw Avenue and Commissioners Street; and
- Further details on the planned cycling infrastructure on Commissioners Street and Carlaw Avenue approved by Council on July 14, 2021 as part of the plan to install temporary cycling infrastructure on Cherry Street, Villiers Street, Saulter Street and Commissioners Street to support Lake Shore Boulevard East Trail and Lower Don Trail Construction Closures and Detour Routes.

The full road closure on Don Roadway, between Lake Shore Boulevard East and Villiers Street will restrict access to Northbound Don Valley Parkway from the Don Roadway. As a result, outbound heavy truck movements in the Port Lands will divert to the adjacent signalized intersections. The truck traffic patterns, impact analysis and traffic mitigation plan for heavy trucks in the Port Lands is detailed in the staff report entitled "Port Lands Flood Protection - Don Roadway - Construction Staging Area" to be considered by Toronto and East York Community Council at its meeting on September 9, 2021.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.TE27.28>

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. Infrastructure and Environment Committee receive this report for information.

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 July 14, 2021, City Council adopted recommendations authorizing the installation of temporary bicycle lanes and cycle tracks along with associated temporary traffic signals and amendments to traffic and parking regulations as part of mitigative measures required to reduce impacts associated with the reconstruction of the Lake Shore Boulevard East bridge over the Don River and right-of-way between Don Roadway and Carlaw Avenue. In its decision Council also directed that City and Waterfront Toronto staff report back to the September 14, 2021 meeting of the Infrastructure and Environment Committee regarding the project's communication plan to affected area residents and businesses regarding the proposed mitigative traffic measures.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.13>

At its meeting on December 16, 2020 City Council authorized the General Manager, Transportation Services to execute a Project Delivery Agreement with Waterfront Toronto for the reconstruction of Lake Shore Boulevard East between the Don River and Carlaw Avenue, including the Lake Shore Boulevard bridge and all required active transportation and public realm components.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE18.3>

COMMENTS

Port Lands and South of Eastern Employment Areas

The Lake Shore Boulevard East Bridge and Public Realm project is located between two key employment areas extending east of the Don River to Leslie Street and south from Eastern Avenue to the Ship Channel. At a combined approximate size of 350 ha, the Port Lands and South of Eastern Employment Areas are the home to over 100 businesses that City staff and staff from Waterfront Toronto have identified as potentially being affected by this project. These include large employers within key economic sectors such as film, digital and studio production, businesses related to port activities and city wide businesses such as postal and courier services.

Large scale businesses such as those involved in aggregate and concrete batching and employers that require the use of truck fleets to support their operations, such as Canada Post and Toronto Hydro are also located within these areas. Ensuring these businesses can continue to operate and mitigate impacts on the transportation network they rely on through the development of a Traffic Management Plan and a Communication and Public Outreach program are critical components of this project.

In response to a request from Council at its meeting on July 14, 2021, this report provides information and updates on the following items:

- The communications strategy related to the closures and reduced capacity of Lakeshore;
- The traffic mitigation plan for the neighbourhood roads North of Lakeshore;
- The impacts and mitigation plans for the Carlaw + Lakeshore and Leslie + Leslie intersections;
- The plan and design for the cycle track for Carlaw from Lakeshore to Commissioners;
- The plan and design for the cycle track on Commissioners;
- Analysis of the current South of Eastern fleet movements, truck traffic and general traffic for the entire employment zone;
- Detailed information on the fleet movements in the Port Lands including the issues identified by the businesses as a result of the closures, lane reductions and stacking;
- The plan for the management of constituent issues such as traffic infiltration in neighbourhoods; and
- List of all businesses in Port Lands and South of Eastern that will be impacted.

It should be noted that in addition to the above matters, this report also addresses comments and concerns received by letters to the Committee.

As part of the Port Lands Flood Protection Project and Enabling Infrastructure Project

(PLFP), 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;
- Reconstruction of Lake Shore Boulevard East, from Don Roadway and Carlaw Avenue;
- Temporary closure of Don Roadway, from Lake Shore Boulevard East and Villiers Street; and
- Construction of the Sediment and Debris Management Area (SDMA) adjacent to the Lower Don Trail.

Construction staging operations for the above work is scheduled to start on September 1, 2021 thereby requiring the closure of the multi-use trail on the north side of Lake Shore Boulevard East between Don Roadway and Carlaw Avenue until December 31, 2024. The reconstruction of the Lake Shore Bridge and coincident closure of Don Roadway, between Lake Shore Boulevard East and Villiers Street, will facilitate the construction of the new river valley and associated features, and will effectively close the Lake Shore Boulevard East Trail at Don Roadway. In addition, the proposed construction staging areas will require the closure of the south sidewalk on Lake Shore Boulevard East, from Don Roadway to Logan Avenue.

In order to safely detour people cycling around the construction staging areas, new cycling infrastructure detours have been planned and approved. Waterfront Toronto is installing temporary cycling infrastructure on the below listed roadways, for a period of up to 40 months (i.e. September 1, 2021 to December 31, 2024), to provide a detour route for people cycling during this and other PLFP-related Projects:

- Cherry Street (bicycle lanes/cycle tracks, Ward 10);
- Villiers Street (cycle tracks, Ward 14);
- Saulter Street South (cycle tracks, Ward 14);
- Commissioners Street (cycle tracks, Ward 14); and
- Carlaw Avenue (multi-use trail, Ward 14).

Pedestrian movements will be detoured onto existing sidewalks on the above roadways and in some cases, new sidewalks or multi-use trails will be constructed to improve pedestrian connectivity.

Traffic Impacts and Mitigation

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 expected trip patterns in the eastbound and westbound direction starting in 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 (88%);
- Gardiner Expressway via southbound Don Valley Parkway on-ramp (5% - 12%); and
- Gardiner Expressway via east-west major arterial roadways, southbound Jarvis Street and Lower Jarvis Street on-ramp (6%).

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 off-ramp at Simcoe Street, then continue through 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.

Using results from the modeling exercise, Waterfront Toronto in consultation with Transportation Services staff assembled a series of mitigating measures that are summarized below.

Heavy Truck Traffic Impacts

The truck traffic patterns, impact analysis and traffic mitigation plan for heavy trucks in the Port Lands is detailed in the staff report entitled "Port Lands Flood Protection - Don Roadway - Construction Staging Area" to be considered by Toronto and East York Community Council at its meeting on September 9, 2021.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.TE27.28>

Proposed Mitigation

A significant increase in eastbound traffic volume is expected on the off-ramp at Lower Jarvis Street, due to the removal of Gardiner East ramps at Logan Avenue. In order to accommodate the eastbound detour traffic from Gardiner Expressway, the northerly eastbound lane has been reconfigured to operate as a second through lane on the Lower Jarvis Street off-ramp. The eastbound off-ramp consists of two eastbound left-turn lanes and two eastbound through lanes. Lake Shore Boulevard East consists of one eastbound through lane. The new lane configuration will increase the throughput capacity and mitigate potential queuing onto the Gardiner Expressway.

Vehicular traffic is not expected to travel through residential areas to by-pass the lane reductions on Lake Shore Boulevard East. Notwithstanding, traffic patterns during construction will be monitored closely to identify any traffic infiltration on the local roadways north of Lake Shore Boulevard East. Traffic mitigation measures such as turn restrictions during peak periods and the modification of existing one-way traffic operations will be considered if multiple concerns regarding traffic infiltration come forward.

Additional traffic mitigation measures 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 and parallel routes to improve travel times; and
- Coordinating the City's capital works projects and private developments to avoid conflicting road closures.

Cycling Patterns and Proposed Infrastructure Improvements

By way of background, City Council, at its meeting on July 14, 2021, City Council adopted Item IE23.13 "Port Lands Flood Protection - Lake Shore Boulevard East Trail and Lower Don Trail Construction Closures and Detour Routes" authorizing the installation of temporary cycling infrastructure on Cherry Street, Villiers Street, Saulter Street and Commissioners Street. The planned cycling infrastructure on Commissioners Street and Carlaw Avenue are described below.

Existing Conditions:

Commissioners Street is a collector roadway and consists of a four-lane (two eastbound and two westbound) cross-section with parking allowed on both sides of the street for a maximum period of three hours. Currently, sidewalks are located on the north side of Commissioners Street, between Logan Avenue and Carlaw Avenue. On the south side, sidewalks are present between Saulter Street South and Logan Avenue.

Carlaw Avenue is an arterial roadway and consists of a four-lane (two northbound and two southbound) cross-section. Sidewalks are located on the east side of the roadway.

Stopping is prohibited on both sides of Carlaw Avenue, between Lake Shore Boulevard East and Commissioners Street, from 6:00 a.m. to 6:30 p.m., Monday to Friday.

Cycling Infrastructure:

Commissioners Street

- Installation of cycle tracks on both sides of the roadway, with a single eastbound and westbound traffic lane;
- Installation of 2.0 metre walkway on the south side of Commissioners Street, between Saulter Street South and Carlaw Avenue to improve pedestrian connectivity;
- Installation of a painted buffer and temporary concrete jersey barriers to separate people cycling ((leave a space)) from parked vehicles and vehicular traffic;
- Integrated bus platforms for westbound and eastbound TTC bus stops; and
- Removal of on-street parking spaces on both sides of Commissioners Street, between Bouchette Street and Carlaw Avenue, with parking spaces available between Saulter Street and Bouchette Street.

Carlaw Avenue

- A 3.6 metre wide multi-use trail will be constructed on the east boulevard of Carlaw Avenue, between Lake Shore Boulevard East and Commissioners Street, separated from road traffic;
- Installation of pathway markings on the multi-use trail; and
- Installation of new cycling signal heads and mixed cross-ride on the east side of Carlaw Avenue and Lake Shore Boulevard East.

Background Information

The Lake Shore Boulevard East Bridge and Public Realm Project will be undertaken in several phases and will require the closure of the multi-use trail on the north side of Lake Shore Boulevard East, the existing boulevard space, and alternating closures of the eastbound and westbound traffic lanes on Lake Shore Boulevard East, between Don Roadway and Carlaw Avenue. With the construction staging areas in place, one westbound traffic lane and two eastbound traffic lanes will be maintained throughout the project.

Transportation Services has reviewed the feasibility of removing a traffic lane on Lakeshore Boulevard East to accommodate people walking and cycling. With the removal of Gardiner access ramps at Logan Avenue and planned lane reductions on Lake Shore Boulevard East, the eastbound direction is the critical movement during all periods. Further lane reductions would negatively impact the eastbound traffic flow and result in excessive queues and delays. Therefore, it is not feasible nor recommended to remove a travel lane on the subject section of Lake Shore Boulevard East without causing significant travel delay.

The temporary cycling and pedestrian detour through the Port Lands was designed in parallel with the planned closures on Lake Shore Boulevard East. The detour route is

the least impactful and most efficient path for trail users. The expansion of the cycling network on other roadways such as Eastern Avenue and Broadview Avenue would increase the overall length of the detour and result in reduced capacity for vehicular traffic, which could further exacerbate the traffic congestion on the transportation network. The Lower Don Trail south of Corktown Commons will be closed on November 2021, in order to facilitate the construction of the Sediment and Debris Management Area. As a result, trail users will be diverted onto the new cycle track on Mill Street, which will connect to the cycling detour route at Cherry Street. In order to improve the cycling connectivity at the detour route, a bi-directional cycle track was installed on the east side of Bayview Avenue, between Mill Street and River Street.

The intersection redesign of Cherry Street and Lake Shore Boulevard East (north intersection) will feature an asymmetrical separated crossride, or series of pavement markings that carry a trail or cycling facility across the roadway or through intersections, on the north and west side of intersection, with bicycle signals. Crosswalks are present on all legs of the intersection with pedestrian signals. Based on the roadway geometry, this is the most appropriate configuration to connect trail users from the Martin Goodman Trail to the cycle tracks and sidewalk on the north side of the intersection.

Transportation Services also reviewed the feasibility of extending the detour on Commissioners Street, from Carlaw Avenue to Leslie Street. The extension would increase the length of the uni-directional cycle track by 840 metres and eliminate approximately 132 on-street parking spaces. The reduction in on-street parking spaces would negatively impact the operations of the adjacent property owners on Commissioners Street. The goal of the cycling/pedestrian detour is to provide the shortest route around the construction staging areas and minimize the impact to the businesses in the Port Lands. Therefore, the extension of the cycling and pedestrian detour is not recommended.

Communication and Public Outreach

Communication and public outreach is a key component of the Lake Shore Boulevard East Bridge and Public Realm project. Waterfront Toronto, in coordination with City staff and in consultation with staff from local Councillors' offices, has developed a program that includes, among other measures the establishment of a Landowner and User Advisory Committee (LUAC), Stakeholder Advisory Committee (SAC) and Construction Liaison Committee (CLC). In addition to Public Information Centres (PIC), these committees have provided local business, residents and other interested parties with the opportunity to review and provide feedback on the designs and plans developed by Waterfront Toronto for the project.

Waterfront Toronto, in consultation with City staff from City Planning, Transportation Services and Economic Development has also reached out directly to businesses in the Port Lands and South of Eastern employment areas to obtain their feedback and comments regarding the designs and related traffic measures.

A copy of Waterfront Toronto's communication plan can be found at this link [LSBE-Communications-Plan-August-2021.pdf \(portlandsto.ca\)](https://portlandsto.ca/LSBE-Communications-Plan-August-2021.pdf).

Highlights of the program include the following:

- Outreach regarding traffic impacts and proposed mitigation in the zone of impact;
- City-wide communications regarding traffic impacts;
- Adherence to the Provincially approved Complaints Protocols for both the Port Lands Flood Protection and Gardiner East EA projects, including potential expansion of the existing Port Lands Flood Protection Construction Liaison Committee; and
- Regular construction and traffic notices circulated to the Port Lands Flood Protection contact list and, as needed, via City networks.

Beginning in February 2020, Waterfront Toronto held nine stakeholder and public meetings to allow businesses and residents who may be affected by construction to provide comments and raise concerns as the Traffic Management Plan for the LSBE project was finalized. In addition to these committee meetings, Waterfront Toronto also reached out to 49 businesses individually. A list of business contacted, including feedback from those who individually met with Waterfront Toronto is provided in Attachment 3 of this report.

During the outreach meetings, project details and information were provided including:

- Final design for Lake Shore Boulevard East project components;
- Approach to traffic management, including modelling and studies;
- Construction timeline and staging, including road closures and road and trail detours; and
- Noise during ramp removal.

Feedback from these meetings was primarily related to potential traffic impacts or multi-modal conflicts at Cherry Street/Lake Shore Boulevard East and Carlaw Avenue/Lake Shore Boulevard East. Businesses and employers expressed concerns about access from the Port Lands to the Don Valley Parkway northbound. These concerns are to be mitigated by the Traffic Management Plan (TMP). Waterfront Toronto's project team is and will continue to investigate further mitigation options in response to the received feedback and will finalize and coordinate any required actions in collaboration with City staff.

Other key themes heard from both residents and businesses include, among others:

- Identifying what routes will be available after the Logan Ramps are removed, and how to access major routes;
- Information about the longer-term plans for the area;
- Confirmation that Waterfront Toronto's traffic study accounts for considerations such as: future growth in the area, existing traffic congestion in specific areas, safety for people walking and cycling;

- Cycling safety, especially at the intersection of Lake Shore Boulevard and Cherry Street;
- Identification of cycling routes and cycling amenities;
- Improving sight lines along the Lake Shore Boulevard East corridor and at key intersections; and
- Timing signals at intersections to maximize traffic flow and accommodate increased truck usage along detour routes and at key intersections.

Next Steps

As with other major capital projects undertaken by the City, various levels and types of public and stakeholder outreach may be required over the projected three year period of construction. City staff will continue working in consultation with Waterfront Toronto and the staff of the local Councillors' offices to coordinate and implement an ongoing public outreach and information program and continue to monitor and respond to resident and business concerns related to traffic mitigation for the duration of the project.

A dedicated contact for residents and businesses to express concerns and comments has been established by Waterfront Toronto through the pre-existing Complaints Protocol developed for Port Lands Flood Protection. Updated to include protocols for the City of Toronto's Gardiner East project, a dedicated email and phone number has been provided, which will be monitored by a full-time Community Liaison Officer provided by Waterfront Toronto. Information received through this network will be shared with Toronto 3-1-1 and distributed to the appropriate City staff who in coordination with Waterfront Toronto, will work to address the issues and concerns raised. In addition, the City will be implementing a Construction Hub within the area, which will provide residents with an additional source for information and point of contact. Construction Hubs are a [Vision Zero](#) measure to improve road safety and coordinate the public right-of-way around areas in the city that have a dense concentration of construction activity. The Construction Hub is expected to be in place by Q1 2022.

In addition to bi-monthly Construction Liaison Committee meetings, consultation with businesses, residents and stakeholders will be ongoing throughout construction. Any issues raised by stakeholders or observed by the project team will be addressed to the best of our abilities. The Traffic Management Plan will be adjusted as needed in response to such issues.

CONTACT

David Stonehouse, Director
Waterfront Secretariat
City Planning
Phone: (416) 392-8113
Email: david.stonehouse@toronto.ca

Jacquelyn Hayward, Director
Project Design & Management
Transportation Services
Phone: (416) 392-5348
Email: jacquelyn.hayward@toronto.ca

SIGNATURE

Barbara Gray
General Manager, Transportation Services

ATTACHMENTS

Attachment 1: Carlaw Avenue Cross-Section
Attachment 2: Commissioners Street Cross-Section
Attachment 3: Businesses Contacted within LSBE Project Area