



Transit Priority Measures on Queens Quay East – Interim Bus Priority Lanes

Date: February 24, 2025To: TTC BoardFrom: Chief Strategy and Customer Experience Officer

Summary

TTC staff, with support from City Transportation Services, is requesting approval from City Council to install transit priority measures (TPMs) on Queens Quay East to improve travel times and reliability for transit customers. The proposed transit priority measures will benefit approximately 4,000 riders daily. No general traffic lanes will be removed and existing road capacity will be maintained by optimizing the existing curb-to-curb space on the Queens Quay East right-of-way. Local access and right-turns will be maintained.

On December 17, 2024, City Council directed Transportation Service to work with the TTC to report back on interim bus priority lane implementation along Queens Quay East between Bay Street and Parliament Street. This segment of Queens Quay East has a wide and consistent pavement width currently painted for four lanes of traffic, with generous urban shoulder. Converting the urban shoulder with red-paint into interim bus priority lanes will provide immediate improvements to three bus routes operating on Queens Quay East and may be further utilized by other bus routes for future diversion routing during construction.

Currently, the City, TTC and Waterfront Toronto are working to advance the Waterfront East Light Rail Transit (WELRT) project design which will eventually replace these interim bus priority lanes. The interim bus priority lanes are intended to provide immediate improvements to customers prior to the full implementation of WELRT and will be used as a baseline assumption when City Staff undertake the Phasing and Delivery Plan for the WELRT as approved by City Council in February 2025.

In addition to the above bus lanes on Queens Quay East, the removal of on-street parking on Front Street West, between Bay Street and Yonge Street, is proposed to allow for buses to have a dedicated layover area. This will facilitate better service reliability for customers and allow buses laying over to keep clear from general traffic. This will also simplify the customer experience for TTC bus transfers at Union Station.

Recommendations

It is recommended that the TTC Board:

- 1. Endorse the installation of transit priority measures on Queens Quay East and Front Street West.
- 2. Forward this report to City Council, through the Executive Committee, for approval of bus priority lanes and bylaw amendments to support transit priority.

Financial Summary

The estimated capital funding required to implement the transit priority measures on Queens Quay East is expected to be \$800,000 and is planned for 2025. Funds for this expenditure are included in the TTC's 2025-2034 Capital Budget and Plan under program 9.2 Service Planning, Transit Priority Measures, which was approved by the TTC Board at its meeting on January 10, 2025, and by City Council on February 11, 2025.

The 10-Year Capital Budget and Plan includes a total of \$32.8 million in approved funding for the Transit Priority Measures program, cash-flowed between 2025 and 2034 as presented in Table 1 below.

Table 1: Transit Priority Measures – 2025-2034 Capital Budget and Plan Summary (\$000s)

Project (000's)	2025 Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year Total
Transit Priority Measures	4,064	3,000	3,000	3,000	3,000	3,350	3,280	3,300	3,475	3,351	32,820

Transportation Services has consulted with Toronto Parking Authority (TPA), who assessed that the financial impact of permanent lost revenue and operating expenses will be approximately \$300,000.

The Executive Director, Finance has reviewed the report and agrees with the Financial Impact information.

Equity/Accessibility Matters

The TTC is committed to providing accessible and inclusive service across the network. As an immediate step to address challenges on Queens Quay East, TTC staff recommend the implementation of transit priority measures in the form of interim bus priority lanes from Bay Street to Parliament Street. These bus lanes will address immediate challenges impacting bus operations for customers and travel time along the eastern waterfront. Current delays to service are having a material impact on the East Bayfront community, which is home to a rapidly growing resident population, businesses, and visitors including students attending George Brown College.

Decision History

At its December 17, 2024 meeting, City Council directed City and TTC staff to report to City Council by the second quarter of 2025 on recommendations for interim bus priority lane implementation along Queens Quay East between Bay Street and Parliament Street.

https://secure.toronto.ca/council/agenda-item.do?item=2024.EX19.2

Issue Background

Queens Quay East is a rapidly growing corridor and is the major thoroughfare of the East Bayfront neighbourhood. Several key destinations and institutions are located here, such as George Brown College Waterfront Campus, the Waterfront and Ookwemin Minising. The corridor has experienced major development growth over the past 15 years. From 2016 to 2021, over 5,000 new dwelling units were constructed in the East Bayfront neighbourhood, resulting in population growth of approximately 200%, compared to the City-wide growth of 2.3% in the same period. Over 90% of the dwellings in East Bayfront are high-rise apartments.



Figure 1: new construction on Queens Quay East, 2018 to 2024

Waterfront East Light Rail Transit (WELRT)

The WELRT is a City of Toronto priority transit project. According to growth projections, when fully built, this 3.8-kilometre planned transit line will provide over 50,000 daily trips, bringing higher-order transit to support an estimated 100,000 residents and 50,000 jobs along its alignment. The WELRT will provide improved transit options to the Central Waterfront, Lower Yonge, East Bayfront, Quayside, Keating Precinct, and the Port

Lands communities, and is an integral part of the future development on Ookwemin Minising (formerly known as Villiers Island). In February 2025, under <u>EX20.10</u>, Toronto City Council approved advancing the project by directing City staff to develop a Phasing and Delivery Plan in consultation with Waterfront Toronto and the TTC which will provide updated project costing for the WELRT, confirm the delivery approach and identify recommendations for early phase transit improvements in advance of the full construction of the WELRT. The report was provided by City Council to the TTC Board for information on February 24, 2025. It is important to note that the Queens Quay East Interim Bus Priority Lanes project is intended to only address the immediate and urgent challenges faced by TTC customers, and is not a replacement for higher-order transit to be provided by WELRT. The TTC, along with partners at the City of Toronto and Waterfront Toronto, remain committed to supporting the advancement of the WELRT.

Existing Transit Conditions

The bus service for customers along the Queens Quay East corridor are shown in Figure 2.

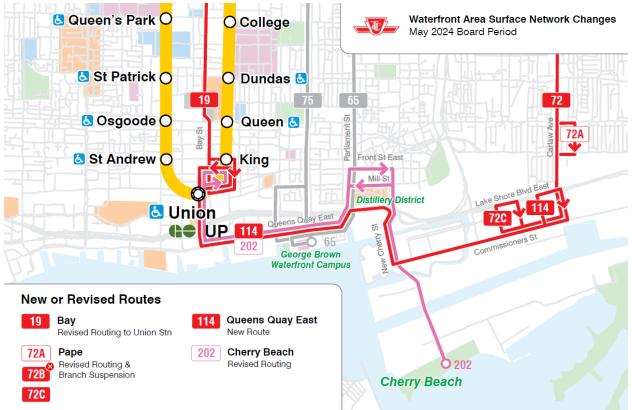


Figure 2: Waterfront East Bus Network as of May 2024

The 114 Queens Quay East was introduced in May 2024 and operates from Union Station to Commissioners Street and Carlaw Avenue. Originally a branch of the 72 Pape, the 114 was introduced to provide more tailored service to the growing Queens Quay East corridor, as well as isolate the corridor from construction impacts from the Ontario Line construction and other downtown projects. The 19 Bay bus was also truncated to Front Street as part of these changes. The 114 also runs a similar route to the future Waterfront East LRT and introduces the community to the new travel pattern that will be present in the future.

The 65 Parliament and 75 Sherbourne operate north-south ending at George Brown College on Queens Quay East. On the Queens Quay East corridor, the 65 Parliament operates two-way service from Lake Shore Boulevard to George Brown College (Dockside Drive), while the 75 Sherbourne operates one-way westbound service from Lower Sherbourne Street to Lower Jarvis Street.

From May to October, the 202 Cherry Beach operates seasonal service, connecting Union Station to the Distillery District and Cherry Beach via Queens Quay East. This route operates the same routing as 114 Queens Quay East between Bay Street to Lake Shore Boulevard East.

Recent travel time data of bus routes operating on Queens Quay East have indicated that service reliability and slow travel speeds are a major issue impacting customers in all periods of the day. From 2021 to 2024, scheduled trips take approximately 11 minutes longer in the westbound direction in the peak periods, and approximately 7 minutes longer in off-peak periods in the eastbound direction (Table 2).

	East	bound	Westbound		
	Peak	Off Peak	Peak	Off Peak	
2021	13	6	10	7	
2022	9 (-4)	9 (+3)	17 (+7)	13 (+6)	
2023	9 <i>(0)</i>	9 <i>(0)</i>	17 <i>(0)</i>	13 <i>(0</i>)	
2024	15 <i>(</i> +6)	13 <i>(+4)</i>	21 <i>(+4)</i>	17 <i>(+4)</i>	
Total Change	+2	+7	+11	+10	

 Table 2: Scheduled Travel Time from Yonge to Carlaw by Bus (delta in parentheses)

The causes for the increase in travel time include major construction on the Gardiner Expressway, and in the downtown in general, causing more traffic to divert to Queens Quay East. The increase in population growth on the corridor, and expansion of destinations like George Brown College Waterfront Campus, have also increased demand to and from the area.

Transit mode share in the East Bayfront neighbourhood is approximately 19%, which is similar compared to other high-density neighbourhoods in Toronto (Table 3). However, origin-destination data collected indicates that East Bayfront residents are overwhelmingly choosing to walk to/from Line 1 stations (i.e. Union or King stations) or take a parallel streetcar route to access transit rather than riding the bus on Queens Quay East. This is indicative of an unattractive bus service on Queens Quay East due to poor service compounded by traffic congestion and lack of transit priority (Table 4).

Table 3: Transit Mode Share of East Bayfront and high-density neighbourhoods (TTS	
2022)	

Neighbourhood	2022 Transit Mode Share (All day)		
East Bayfront	19%		
Humber Bay Shores	20%		
Liberty Village	26%		
Church-Wellesley	20%		
North York Centre	20%		

Table 4: Queens Quay East residents access to Line 1 (TTS 2022)

Resident access to Line 1	Mode Share
Walking to nearest station	61%
Walking to nearest streetcar	34%
Bus service on Queens Quay East	5%

Existing Road Conditions

Queens Quay East is a four-lane arterial roadway between Yonge Street to the west and Small Street to the east. Queens Quay East becomes Parliament Street east of Small Street. The roadway has a posted speed limit of 40 km/h and has wide urban shoulders on both sides. The urban shoulder space is generally signed "no stopping" and is used in some locations for Toronto bikeshare dock modules.

Located south parallel to Queens Quay East is the Martin Goodman Trail. The Martin Goodman Trail is part of the Waterfront Trail System, spanning along the Toronto waterfront from Humber Bay to the Eastern Beaches. The Martin Goodman Trail is the major active transportation corridor for Queens Quay East and Downtown Toronto.

Front Street West between Bay Street and Yonge Street is a four-lane arterial roadway, with a posted speed limit of 40 km/h. In the eastbound direction, there is a shoulder lane designated for bus stop, accessible loading, and on-street parking. In the afternoon peak hour, approximately 500 vehicles travel eastbound on Front Street West to Yonge Street. The building fronting Front Street West is the Dominion Public Building, which currently sits vacant as it awaits private redevelopment.

Comments

Interim Bus Priority Lanes

The proposed transit priority measures (TPMs) focus on roadway modifications and updates to parking and traffic regulations. These measures will reduce delays and improve travel times for transit customers on Queens Quay East. These improvements

were developed collaboratively with City staff to ensure that TPMs align with City policies and capital projects.

Physical roadway modifications include the installation of bus priority lanes on the existing urban shoulder in the curb lane of Queens Quay East and Parliament Street (Figure 3). Local access will be maintained at all driveways along Queens Quay East, as well as right turns at intersections. In general, the pavement width of Queens Quay East is 19.2 metres, sufficient for a six lane cross section. Where the pavement width is not wide enough to maintain six total lanes (due to bus stop islands or general reduction in pavement width), bus priority is only given in the westbound direction as traffic delays are more significant than the eastbound direction.

In the westbound direction, the interim bus priority lanes will be installed on Parliament Street from Lake Shore Boulevard West to Small Street, and continue on Queens Quay East from Small Street to Bay Street. In the eastbound direction, the interim bus priority lanes will be installed from Lower Jarvis Street to Bonnycastle Street.



Figure 3: Extent of the Queens Quay East Interim Bus Priority Lanes

This project does not include any major capital works beyond redesignation of existing pavement. There will be no changes to existing curbs, and the existing transit stop islands at Freeland Street and Lower Jarvis Street in the eastbound direction will remain.

Additionally, the redesignation of on-street parking on Front Street West between Bay Street and Yonge Street is proposed to create a "bus only" layby area for downtown bus routes. This layby area is intended to be the end-of-line for buses operating on Queens Quay East and other downtown bus corridors, and will facilitate better service reliability for routes while keeping buses off of live traffic lanes while buses are idle.

Anticipated Transit Benefits

The Queens Quay East Interim Bus Priority Lanes will improve customer experience for transit users travelling on the corridor. Analysis conducted by the TTC indicates that the provision of transit priority measures and other adjustments to the roadway could improve travel time between Bay Street and Lake Shore Boulevard by up to 30%.

For 114 Queens Quay East, in the westbound direction where traffic is the heaviest, especially approaching Lower Jarvis Street, customer travel times are estimated to improve by up to 5 minutes. In the eastbound direction, the benefits will mainly be derived from improved service reliability. The time savings allows for reinvestment of existing resources to improve service frequency and supports more effective service investments in the future on the corridor as development progresses.

Customers on 65 Parliament and 75 Sherbourne bus routes will also benefit from the bus priority lanes. For customers on 75 Sherbourne in particular, the introduction of the westbound right-turn only lane at Lower Jarvis Street, and the northbound left-turn prohibition at Dockside Drive, will allow buses to more reliably traverse Queens Quay East, as less vehicles will be merging into the turn lane. Similarly, the 65 Parliament buses will be able to merge more reliably out from the curb lane at Lower Sherbourne Street and perform the westbound left-turn at Dockside Drive with the introduction of the bus lane and northbound left-turn prohibition.

Overall, the interim bus priority lanes are expected to immediately improve the journeys of approximately 4,000 customers daily and save approximately 20,000 customers minutes a day.

With King Street track replacement expected sometime from 2025 to 2028, the Queens Quay East Interim Bus Priority Lanes can also be leveraged as a diversion routing option for east-west transit travel in the future. Diversion plans will be developed in advance of construction, with the goal of balancing service coverage and bus replacement travel speeds.

The redesignation of Front Street West between Bay Street and Yonge Street from onstreet parking to "bus only" layby area is expected to facilitate better service reliability for routes for downtown bus routes to layover off of live traffic lanes. Historically, the TTC has struggled to find locations in the downtown to layover and hold buses without impacting live traffic lanes. By designating a layover area long enough to house up to five standard buses, better adherence to scheduled departure times can be achieved and thus have a positive impact on service reliability. Additionally, this area could also become the designated bus stop for all routes serving Union Station (i.e. 19 Bay, 97 Yonge, 114 Queens Quay East and 121 Esplanade-River), simplifying the customer experience for TTC bus transfers at Union Station.

Impacts on General Purpose Traffic

The introduction of the Queens Quay East Interim Bus priority Lanes is not expected to impact general traffic along the corridor due to the design maintaining two lanes of through traffic in each direction. Bus lanes are only proposed where the pavement width is wide enough to support a five or six lane cross section. Where there is not enough

space on Queens Quay to maintain two lanes of through traffic, the interim bus priority lanes end.

At Lower Jarvis Street, the introduction of the westbound right-turn lane and peak-only prohibition of the northbound left turn at Dockside Drive (west leg) is projected to actually improve travel times for general purpose traffic. Due to the high demand for auto travel to reach the Gardiner Expressway, the right-turn lane spanning from Lower Jarvis Street to Lower Sherbourne Street is expected to alleviate the congestion issue. The peak-only northbound left turn prohibition at Dockside Drive (west leg) further optimizes traffic flow in this area, as there should no longer be vehicles merging across multiple lanes in a short distance (thus blocking eastbound and westbound through lanes).

The redesignation of Front Street West between Bay Street and Yonge Street will eliminate eight curbside parking spaces. The existing accessible loading zone will be relocated 30 metres west of the current location, and will continue to serve the same general area on Front Street West. On Queens Quay East, no on-street parking spaces are impacted as the length of the corridor is designated "no stopping".

Future Waterfront Related Construction

Queens Quay East is the future corridor for WELRT. Construction timelines for the full LRT project are undetermined and pending funding. However, Waterfront Toronto, in consultation with City staff have identified opportunities to build components of the corridor as separate projects in advance the full construction of the WELRT. Projects include the Quayside Infrastructure and Public Realm project and the Queens Quay East Extension Early Works (QQEE).

The QIPR project will normalize the Parliament Street and Queens Quay East intersection and build out the Parliament Slip to unlock development parcels and public realm improvements. As a result, there will be a realignment and lane reconfiguration of Queens Quay East from approximately Bonnycastle Street to Parliament Street. QQEE will further extend Queens Quay East from the future Street A to Cherry Street, which will improve traffic and active transportation connectivity to the Port Lands.

Another project is Yonge Slip Early Works, which will infill the Yonge Street Slip located south of Queens Quay East and provide required access to properties south of the WELRT. Lanes on Queens Quay East will be impacted during different construction phases but will be restored upon completion of the project.

Both the QQEE and Yonge Slip Early Works are advancing to 60% design currently. Determining the possibility for building these components before full WELRT construction is part of the work City staff will undertake as part of the Phasing and Deliver Plan adopted by City Council in February 2025 under EX20.10. TTC staff are working with City staff and Waterfront Toronto to understand the potential timing and impacts of this work and will advocate to incorporate bus priority where possible into construction phasing and final design.

Other Bus Priority Lane Initiatives

The City of Toronto and TTC have seen successful implementation of other bus priority lane projects in recent years. Eglinton East RapidTO, and the priority lanes for Line 3 bus replacement, have improved travel times and service reliability for customers, and have demonstrated the positive impact of what visible, physical priority for transit can achieve. RapidTO continues to be the major program for where corridor-level changes are implemented – a more detailed status update of RapidTO is in the *Transit Network Expansion Update Report*.

With the experience gained from the implementation of these red-painted lanes projects, the TTC is expanding their use in targeted and strategic settings. Bus station driveways, dedicated streetcar right-of-way entrances, and queue jump lanes will be examined for further implementation to enhance transit priority compliance (Figure 4).



Figure 4: Red-paint application at dedicated streetcar right-of-way entrance (at Cherry/Eastern)

Next Steps

The target schedule for the key milestones is in the following table.

Milestone	Target Date
Finalize Design	February 2025
Council Approval	March 2025
Issue Work Order to Contractor	April 2025
Implementation of On-Street Measures (TPMs)	Early May 2025
Bus Priority Lane Service Start Date	Mid-May 2025

Contact

Eric Chu, Head – Project Development and Planning eric.chu@ttc.ca

Dominic Ho, Manager – Project Development and Coordination dominic.ho@ttc.ca

Signature

Josh Colle Chief Strategy and Customer Experience Officer

Attachments

Attachment 1 – Queens Quay East Interim Bus Lane Design Details

Appendix 1 – Queens Quay East Interim Bus Lane Design Details

Details of the Queens Quay East Interim Bus Lane designs are described below, by signalized segment. These designs are subject to change based on further refinement and comments from stakeholders.

<u>Westbound from Lake Shore Boulevard West to Lower Sherbourne Street</u> In the westbound direction, the interim bus priority lane begins on Parliament Street at Lake Shore Boulevard West, and extends to Lower Sherbourne Street on the curb lane (Figure 1). This space was previously underutilized urban shoulder, designated "No Stopping". Right turns are permitted at intersections and driveways.



Figure 1: Interim bus priority lane design from Parliament Street to Bonnycastle Street

Westbound from Lower Sherbourne Street to Lower Jarvis Street

The interim bus priority lane design at Lower Jarvis Street is atypical compared to the rest of the corridor. Due to the heavy westbound right turn movement of general vehicles from Queens Quay East to Lower Jarvis Street to access the Gardiner Expressway, the second lane from the curb is designated as the bus lane, and a dedicated eastbound right turn lane is created with the urban shoulder (Figure 2). The bus lane here extends back to the Dockside Drive (east leg) / Lower Sherbourne Street intersection. Signage indicating the designation of each westbound lane will be installed at the intersection.



Figure 2: Interim bus priority lane design from Lower Sherbourne Street to Lower Jarvis Street

For westbound bus operations, buses approaching Lower Sherbourne Street from the curbside bus lane should merge into the second lane when safely able to and proceed to Lower Jarvis Street. After crossing Lower Jarvis Street, buses can merge back to into the curb lane to serve the farside bus stop.

For general westbound traffic, vehicles approaching Lower Sherbourne Street from the second through lane should merge right for right turn on Richardson Street or Lower

Jarvis Street, or merge left to turn left onto Dockside Drive (west leg) or continue through Lower Jarvis Street.

As westbound buses on Queens Quay East will operate on the second lane, they will not be able to serve the existing bus stop nearside at Richardson Street (stop ID 6865). Thus, this bus stop will be removed. The closest bus stops are approximately 200 metres west at Lower Jarvis Street, or 150 metres east at Lower Sherbourne Street. Approximately 90 customers will be impacted with a longer walk with the deletion of this stop. It should be noted that:

- 1. This stop is located in an unsignalized location against best practices to provide transit stops near protected crossings.
- 2. The two adjacent stops would fall within TTC's stop spacing standard of 300 to 400 metres.
- 3. This stop does not have a matching stop pair in the eastbound direction, so customers travelling in the eastbound direction are already walking to either Lower Jarvis or Lower Sherbourne.

To further optimize traffic operations at this location, a peak only northbound left turn prohibition from the west leg of northbound Dockside Drive (opposite Richardson Street) to westbound Queens Quay East is proposed. This proposal would prevent left turning vehicles trying to access Lower Jarvis Street from blocking the through traffic on Queens Quay East. The alternate option for these vehicles is to exit Dockside Drive on the east leg (opposite Lower Sherbourne Street) where the turn is signalized and has more distance to merge into the curb lane to access Lower Jarvis Street.

Westbound from Lower Jarvis Street to Yonge Street

The westbound bus lane continues on the curb lane again from Lower Jarvis Street and ends at Cooper Street due to space constraints caused by narrowing of the pavement width approaching Yonge Street (Figure 3). Two general purpose lanes are maintained west of Cooper Street, ending at Yonge Street with the existing condition of one rightturn lane and one through-lane. A taper and painted median are included east and west of the Freeland Street intersection to merge vehicles from the five-lane cross-section east of Cooper Street to the four-lane cross-section approaching Yonge Street.



Figure 3: Interim bus priority lane design from Lower Jarvis Street to Freeland Street

Westbound from Yonge Street to Bay Street

The westbound bus lane starts again west of Yonge Street to Bay Street, as existing condition only has one westbound through lane opening up to one right-turn lane, one through-lane, and one left-turn lane at Bay Street (Figure 4). There is a hatched area west of Yonge Street currently signed as a "Motorcoach Loading Zone", with loading

space for two motorcoaches; this loading zone is proposed for removal and replaced by the bus lane. Per City of Toronto Parking Bylaw, there are four other motorcoach loading spaces located in the eastbound curb lane of Queens Quay East¹, between Bay Street and Yonge Street, and four more motorcoach parking spaces located on Bay Street, north of Queens Quay East².



Figure 4: Interim bus priority lane design from Freeland Street to Bay Street

Eastbound from Bay Street to Lower Jarvis Street

Due to the presence of transit stop islands at Freeland Street and Lower Jarvis Street, there is not enough space to implement a continuous bus priority lane in this segment without impacting general traffic lanes. The roadway space here will be maintained as current but may be narrowed to accommodate adequate lane dimensions in the westbound direction.

Eastbound from Lower Jarvis Street to Bonnycastle Street

The eastbound interim bus priority lane begins at Lower Jarvis Street after the Lower Jarvis bus stop island. The lane is continuous and ends just east of Bonnycastle Street, due to the narrowing pavement width approaching Parliament Street and Lake Shore Boulevard West. This space was previously underutilized urban shoulder, designated "No Stopping". Right turns are permitted at intersections and driveways.

Eastbound from Bonnycastle Street to Lake Shore Boulevard West

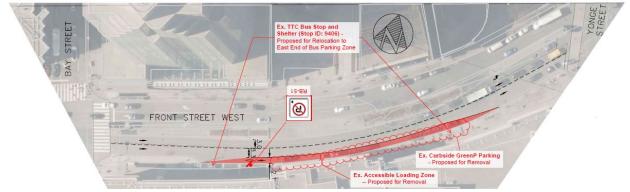
Due to the constrained pavement width in this segment, the eastbound interim bus priority lane ends at Bonnycastle Street. Buses operating eastbound exit the bus lane at Bonnycastle Street, merging into the through-lane approaching Merchants' Wharf. A new eastbound right-turn lane is introduced at Merchants' Wharf. East of Merchants' Wharf, the curb lane becomes a 1.7 metre wide urban shoulder, with the east/northbound bus stop at Lake Shore Boulevard West.

Front Street West from Bay Street to Yonge Street

The removal of eight on-street parking spots on Front Street West between Bay Street and Yonge Street is proposed, and the space replaced by a demarcated "bus only" layby area (Figure 5). The "bus only" designation begins from a point 50 metres east of Bay Street, extending to end of the existing on-street parking area. This demarcated space should be at least 70 metres long with capacity for five standard length buses to layover. A new bus stop marker and bus shelter will be required at the east end of the layby area to indicate customer pick-up.

¹ https://www.toronto.ca/wp-content/uploads/2022/04/9547-TSLoading-Zone-Locations-421T-0347.pdf ² https://www.toronto.ca/wp-content/uploads/2022/04/9504-TSZone-3-Parking-421T-0344.pdf

Through consultation with Wheel-Trans, the existing accessible loading zone will be relocated 30 metres west from its current location to the beginning of the layby and behind the marked bus layover area. The accessible loading zone will continue to serve this block of Front Street West.



There will be no impact to the westbound direction of Front Street West.

Figure 5: Front Street West from Bay Street to Yonge Street