

## **Sherbourne Street and Wellesley Street Cycle Track Review and Design Improvements**

**Date:** November 3, 2016  
**To:** Public Works and Infrastructure Committee  
**From:** Acting General Manager, Transportation Services  
**Wards:** Ward 27 - Toronto Centre-Rosedale, Ward 28 - Toronto Centre-Rosedale  
**Reference:** P:\2016\Cluster B\TRA\TIM\Pw16020tim.docx

### **SUMMARY**

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The purpose of this report is to respond to a request to review accessibility, encroachment and safety issues with respect to the Sherbourne Street and Wellesley Street cycle tracks. This report also seeks Council authority to amend the existing Cycle Track By-law Chapter 886 to address accessibility concerns by allowing accessible permit parking holders to enter into cycle tracks by motor vehicle.

The underlying principles in the design of the cycle tracks on Sherbourne Street and Wellesley Street were guided by user safety, accessibility needs, and deterrents for unauthorized vehicle encroachment.

Through the design process for the Sherbourne Street and Wellesley Street cycle tracks, Transportation Services staff worked with stakeholders to address accessibility needs prior to implementation. Accessibility concerns raised since installation have been addressed through site specific design modifications.

Since implementation, issues around encroachment into the cycle track by parked and stopped motor vehicles and cyclist safety have been raised as a concern in some locations. Staff have investigated these issues and implemented mitigation measures.

### **RECOMMENDATIONS**

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The Acting General Manager, Transportation Services recommends that:

1. City Council exempt vehicles displaying valid Accessible Parking Permits from stopping prohibitions in designated cycle tracks and bicycle lanes while engaged in loading and unloading persons with disabilities from vehicles.

2. City Council authorize and direct the appropriate City officials to take the required action to give effect to Recommendation 1 above, including the introduction in Council of any Bills that are required.

## **FINANCIAL IMPACT**

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There is no financial impact associated with this report.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## **DECISION HISTORY**

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At its meeting on April 9, 2015, the Public Works and Infrastructure Committee referred the communication (February 19, 2015) from Councillor Kristyn Wong-Tam to the General Manager, Transportation Services for consideration and report back regarding a review of the Sherbourne Street and Wellesley Street cycle tracks regarding separation types, accessibility concerns, parking encroachment, drop-off areas and proposed solutions to the major concerns. The Council decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW3.12>

At its meeting on September 29, 2015, the Disability, Access and Inclusion Advisory Committee received a presentation Transportation Services staff regarding this review. As a result, at its meeting on October 20, 2015, the Executive Committee requested the General Manager, Transportation Services to consider the following in the scope of the proposed cycle track review to include an assessment of those cycle track locations which are believed to be causing increased risk to others, including but not limited to those locations for which complaints have been received by Transportation Services and public input received by the Public Works and Infrastructure Committee on April 9, 2015. The Council decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX9.17>

## **COMMENTS**

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The Sherbourne Street and Wellesley Street cycle tracks were designed with consideration of best practice and in keeping with current standards for cycle tracks. Addressing user safety, appropriate separation techniques, and accessibility were guiding principles in the design. Stakeholder consultation undertaken throughout the design process ensured that the interests of all road users were considered.

Since implementation, where accessibility, encroachment issues, and user safety have been raised, Transportation Services staff have engaged with key stakeholders to address these issues as detailed within this report.

## **Cycle Track Design**

### *Sherbourne Street*

The Sherbourne Street cycle track was the first separated bicycle lane installed in the city, following City Council's approval to upgrade the standard bicycle lanes on Sherbourne Street in June, 2011. Installation of cycle tracks between Bloor Street East and Lake Shore Boulevard was completed in two phases between 2012 and 2015.

The cycle track design included context-specific safety, encroachment deterrent, and accessibility features including:

- Bloor Street to Gerrard Street - a street level cycle track physically separated from traffic lanes with a rolled curb.
- Gerrard Street to Front Street- a raised cycle track with a mountable curb beside traffic lanes and tactile unit pavers at road side curb to guide visually impaired.
- Front Street to Lake Shore Boulevard - raised cycle track with full curb separation beside traffic lane.
- Raised cycle track at TTC bus stops - buses stop at curb of cycle track and cyclists stop for passengers boarding/alighting the buses. Detectable tactile indicators are included at all of these cycle track/TTC platforms.
- Seven Lay-bys – generally, one or more per block located at major destinations for Wheel-Trans, and visitor/passenger/taxi pick-up/drop-off areas.

### *Wellesley Street*

Bicycle lanes on Wellesley Street between Parliament Street and Queens Park Crescent were converted to cycle tracks in 2013 and 2014. East of Yonge Street this conversion was completed in 2013 without any reconstruction of the roadway. West of Yonge Street the conversion was completed as part of a scheduled roadway reconstruction project in 2014.

The cycle track design included context-specific safety, encroachment deterrent and accessibility features including:

- Parliament Street to Yonge Street - a street level cycle track physically separated from traffic lanes with a painted buffer and bollards.
- Yonge Street to St. Nicholas Street - a raised cycle track with a full curb separation from traffic lanes
- St. Nicholas Street to Queens Park Crescent – a street level cycle track physically separated from traffic lanes with a low curb.
- Raised cycle track at TTC bus stops between Yonge Street and Queens Park Crescent - buses stop at curb of cycle track and cyclists stop for passengers boarding/alighting the buses. Detectable tactile indicators are included at all of these cycle track TTC platforms.

## **Accessibility Issues**

The Accessibility for Ontarians with Disabilities Act (AODA) does not address cycle track design specifically, but it requires that public spaces be accessible and barrier free. This can be achieved through providing locations for accessible boarding (i.e. of

Wheel-Trans service) as well as providing detectable delineation between the sidewalk or transit stops and the cycle track.

As part of the process to review the Sherbourne Street and Wellesley Street cycle tracks, Transportation Services staff have worked with Wheel-Trans operators to identify problem areas and solutions. In addition, Transportation Services staff sought feedback from the Disability, Access and Inclusion Advisory Committee on September 29, 2015.

### *Sherbourne Street*

Along the Sherbourne Street corridor, several health clinics and seniors' residences generate more than 1,100 Wheel-Trans stops per month. During the planning and design stages of the Sherbourne Street cycle track, City staff undertook extensive consultation with residents, TTC's Advisory Committee on Accessible Transit, and the Canadian National Institute for the Blind (CNIB) to identify and address accessibility concerns. As a result, seven (7) lay-bys were installed and are located at major destinations for Wheel-Trans and patient pick-up/drop-off. Many of these locations also include pick-up and drop-off locations for residences and commercial units.

To guide visually impaired persons, tactile pavers were installed along Sherbourne Street in between the cycle track and sidewalk where the cycle track is raised to sidewalk level from Gerrard Street and Lake Shore Boulevard. Tactile pavers were also installed along the edges of the raised cycle track at TTC bus stops.

Wheel-Trans operations staff have identified a few issues in order to improve operations of Wheel-Trans services along the Sherbourne Street cycle track. Wheel-Trans operations staff requested the removal of flexi-post bollards at some specific locations along Sherbourne Street in order to ensure that Wheel-Trans can access specific destinations. Some flexi-post bollards were removed in order to address the above issue.

Wheel-Trans operations staff have also requested that Transportation Services review opportunities to convert lay-bys into designated accessible loading zones. Further consultation would be required to accommodate designated accessible loading zones given that due to the proximity of residences and commercial facilities, some lay-bys are also extensively used for residential and business pick-up and drop-off activities.

### *Wellesley Street*

Although the demand for Wheel-Trans service is much less significant on the Wellesley Street corridor, City staff also undertook a similar consultation process as with Sherbourne Street.

No specific locations were identified during the planning and design phase, however prior to completion of the road reconstruction project, the need for an accessible loading zone in front of 24 Wellesley Street West was identified by the residents and Wheel-Trans operations staff. On this section of Wellesley Street, the separation for the street level cycle track is provided with a barrier curb which prevents vehicles from entering into the cycle track. This barrier also does not allow Wheel-Trans vehicles to access the curb. After site visits and consultation with the residents at 24 Wellesley Street W,

the cycle track design was modified to remove a section of the barrier curb and provide a designated accessible loading zone in the cycle track next to the sidewalk. A painted buffered area was provided to maintain a degree of separation for cyclists in the cycle track while also providing cyclists with an area to pass if a Wheel-Trans vehicle is stopped in the loading zone. The \$450 fine for improper use of an accessible loading zone should help deter vehicles from stopping in this section of the cycle track.

Currently only Wheel-Trans vehicles are permitted to board and un-board passengers from a cycle track. This is an impediment to those with accessible permits who require barrier-free mobility from a private vehicle. An accessible permit is issued to an individual with a disability and is not transferable. The permit is to be displayed and clearly visible on the vehicles sun visor or front dash. As such, it is recommended that Chapter 886, Footpaths, Pedestrian Ways, Bicycle Paths, Bicycle Lanes and Cycle Tracks and Chapter 903, Parking for Persons with Disabilities be amended to allow stopping to board and un-board passengers for those with an accessible permit in cycle tracks and bicycle lanes city-wide.

### **Encroachment Issues**

Encroachment refers to motor vehicles that are illegally stopped or parked within the cycle track.

#### *Sherbourne Street*

There have been no specific concerns regarding encroachment onto the Sherbourne Street cycle track from Bloor Street to Gerrard Street where raised concrete curb separates cyclists from traffic lanes as the raised curb is a deterrent to vehicle entry.

Some encroachment related complaints have been received regarding the Sherbourne Street cycle track between Gerrard Street and Front Street. In 2013, City staff observed encroachments during weekday peak periods along Sherbourne Street between Gerrard Street and Front Street. Staff found a significant number of vehicles stopping or parking on the cycle track between Shuter Street and Queen Street. For other blocks, minimal to moderate encroachments were noted next to the entrances to multi-unit residences. Based on these observations as well as consultation with emergency services and road operations staff, flexi-post bollards were installed at frequent intervals on both sides of Sherbourne Street between Shuter Street and Queen Street, and have virtually eliminated the encroachment in this section. City staff also requested additional enforcement of illegal stopping and parking in this section.

#### *Wellesley Street*

There have been no specific concerns regarding encroachment onto the Wellesley Street cycle track west of Yonge Street, where raised concrete curb separates cyclists from traffic lanes as the raised curb is a deterrent to vehicle entry.

East of Yonge Street, the painted buffer and bollards provide much less of a barrier to encroachment. Regular encroachment is most prevalent at approaches to intersections where there are TTC stops. Flexi-post bollards or other separators cannot be installed in these locations since the TTC buses need to pull into the cycle track to service the stops. When this section of road is planned for reconstruction in the future, the raised cycle track/TTC platforms similar to those on the west section of Wellesley Street could

be considered as an option to address these particular encroachment concerns. In some locations where there are currently only flexi-post bollards installed, the City will be evaluating the use of temporary rubber curbs to further discourage encroachment. These curbs have been placed in the hatched buffer area in between the existing flexi-post bollards on the south side of Wellesley Street between Bleecker Street and Ontario Street.

## **Site-Specific User Safety Concerns**

### *Sherbourne Street*

On Sherbourne Street, prior to the installation of the cycle track between the years of 2008 and 2012, there was an average of 11 cyclist collisions per year, resulting mostly in minimal to minor personal injuries. On an average, there were five (5) minimal injuries (with minor abrasions, bruises, and complaints of pain which did not require a visit to a hospital) and four (4) minor injuries (which required treatment at a hospital emergency room but not an overnight stay). In the remaining two (2) incidents, no injuries were reported. In 2015, after the Sherbourne Street cycle track was operational along the entire corridor, there were a total of 17 cyclist collisions resulting mostly in minimal to minor personal injuries. The numbers include six (6) minimal injuries and seven (7) minor injuries with two (2) where no injuries were reported. Within the same period, cyclist volumes on Sherbourne Street increased 300% from approximately 1,200 per day to 3,500 per day and respectively, the rate of collisions has been reduced from 14 per 1,000 cyclists to five (5) per 1,000 cyclists.

In summer 2016, Cycling Infrastructure and Programs staff received two site specific concerns from cyclists related to the Sherbourne Street cycle track, and specifically the lay-by area beside the northbound cycle track at the intersection of Sherbourne and Isabella Street. Staff inspected the area and determined that some improvements were warranted. Recommended design solutions included:

- Installing flexi posts and curb at the beginning of the lay-by to provide a gap between the lay-by and the adjacent road surface, so that the area is clearly marked for cyclists, and
- Removing a short section of rounded curb along the northbound cycle track at Isabella Street and Sherbourne Street.

Flexi-post bollards and rubber curb were installed in September 2016 and the removal of approximately six metres of concrete curb at Isabella Street is scheduled for fall 2016.

### *Wellesley Street*

On Wellesley Street, the only site-specific cyclist safety issue that has been raised to date is for the short section of cycle track west of Yonge Street. Staff are aware of a few reports by email and social media with regard to cyclists who may have fallen on this section of raised cycle track. For the most part these reports have been second hand or anecdotal and so information on the cause of these falls is mostly speculative. Not recognizing that the cycle track is raised or a misjudgement of the slope of the driveway have been speculated to be possible causes of these falls. Staff have investigated and can find no obvious design issues at this location. Similar issues with "falls" have not been reported on other similar sections of raised cycle tracks in the City. Staff will continue to monitor and make adjustments as necessary.

## **Conclusion**

Generally, the Sherbourne Street and Wellesley Street cycle tracks are operating well. Refinements in the design are being made as needed to address site specific needs.

City staff are working to improve upon cycle track designs that address accessibility needs including the bylaw changes as recommended in this report.

Finally the Cycling Infrastructure and Programs within Transportation Services is currently developing new On-Street Bikeway Design Guidelines, to be completed by fall 2017. Lessons learned from the design and implementation of the Sherbourne Street and Wellesley Street cycle tracks will be considered as part of the guideline development. Both internal and external stakeholders are being consulted during the development of the guidelines. This document is intended to provide state of the art guidance to practitioners and assist the City of Toronto in the development of on-street cycling infrastructure supporting the Ten Year Cycling Network Plan.

## **CONTACT**

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## **SIGNATURE**

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