



REPORT FOR ACTION

Bicycle Lane and Cycle Track Designations and Associated By-law Amendments

Date: September 13, 2016
To: Public Works and Infrastructure Committee
From: Acting General Manager, Transportation Services
Wards: Wards 18, 19, 20, 27, 28, 42, 44

SUMMARY

The purpose of this report is to seek Council authority to amend City by-laws to designate various bicycle lane and cycle track installations.

When bicycle lanes and cycle tracks are approved through development applications, planning studies, or capital projects, and are being implemented by (or on behalf of) the City, it is necessary to amend City by-laws in order for the associated regulations to be enforceable.

This report requests by-law amendments to reflect the following:

- Recently completed bicycle lanes in the West Don Lands on Bayview Avenue, Mill Street, Lawren Harris Square and Lower River Street as well as sections of Sheppard Avenue East and Kingston Road in Scarborough.
- Conversion of existing bicycle lanes into cycle tracks on Gerrard Street, Shuter Street and River Street, which are being implemented as part of road reconstruction or resurfacing projects and which are scheduled for completion in 2016, and as part of the council approved Ten Year Cycling Network Plan: 2016 Implementation Program
- Conversion of bicycle lanes on Simcoe Street to cycle tracks as part of the council approved Ten Year Cycling Network Plan: 2016 Implementation Program.
- Intersection modifications to improve the safety and operations of the Adelaide Street cycle track at the intersection with Bathurst Street.
- The retraction of the designation of bicycle lanes on Spadina Circle and a section of Lansdowne Avenue that are no longer proposed for completion.

RECOMMENDATIONS

The Acting General Manager, Transportation Services, recommends that:

1. City Council approve the designation of the following sections of roadway for bicycle lanes, as described in Attachment 5 - Amendments to Bicycle Lane and Cycle Track Designations, attached to this report:
 - a) Bayview Avenue between King Street East and Mill Street;
 - b) Mill Street between Bayview Avenue and Cherry Street;
 - c) Lower River Street between King Street East and Lawren Harris Square (north leg)/Lawren Harris Square (west leg);
 - d) Lawren Harris Square (north leg) between Lower River Street/Lawren Harris Square (west leg) and Bayview Avenue;
 - e) Sheppard Avenue East between Kingston Road and Morningside Avenue; and,
 - f) Kingston Road between Highway 401 Westbound off ramp and a point 90 metres west of Sheppard Avenue East.

2. City Council approve amendments to convert the following sections of roadway from bicycle lanes to cycle tracks, as described in Attachment 5 - Amendments to Bicycle Lane and Cycle Track Designations, attached to this report:
 - a) the northerly westbound side of Gerrard Street East, between Yonge Street and Jarvis Street and both sides of Gerrard Street East, between Jarvis Street and Berkley Street;
 - b) the northerly westbound side of Shuter Street, between Victoria Street and Bond Street;
 - c) both sides of River Street, between Queen Street and Gerrard Street East; and,
 - d) both sides of Simcoe Street/Lower Simcoe Street, between Lake Shore Boulevard West and Front Street West.

3. City Council approve the installation of cycle tracks on the westerly side of Bathurst Street, between Adelaide Street West (east leg) and Adelaide Street West (west leg) and the northerly side of Adelaide Street West (west leg), from Bathurst Street to a point 25 metres further west, as described in Attachment 5 - Amendments to Bicycle Lane and Cycle Track Designations, attached to this report.

4. City Council rescind the previous approval for the designation of bicycle lanes for the following sections of roadway, as described in Attachment 5 - Amendments to Bicycle Lane and Cycle Track Designations, attached to this report:
 - a) Spadina Crescent for its entire length; and,
 - b) Lansdowne Avenue, between Bloor Street West and Lappin Avenue.

5. City Council approve the traffic and parking regulation amendments required in connection with Recommendations 1 to 4, as described in Attachment 6 attached to this report.

6. City Council authorize and direct the appropriate City officials to take the necessary action to give effect to the amendments in Recommendations 1 through 5 above, inclusive, including the introduction of all necessary bills.

FINANCIAL IMPACT

The recommendations contained in this report pertain to bicycle lanes and cycle tracks (with the exception of Simcoe Street and a section of Gerrard Street) that have already been installed or are part of capital projects currently underway and therefore will not require additional funds. For Simcoe Street and Gerrard Street, funds to implement the cycle track pavement markings, signage, and flexi-post bollards recommended in this report (approximately \$30,000) are available in the 2016 Capital Budget for Transportation Services in the Cycling Infrastructure account (CTP816-05).

The cycle tracks identified in this report will require ongoing maintenance once installed. This maintenance service will include winter snow clearing to a level similar to the adjacent roadway and in-line with existing standards for priority winter bicycle routes. During the spring, summer and fall periods sweeping will be required. Based on Transportation Services experience with similar facilities, annual winter maintenance costs are estimated at \$7,000 per lane-kilometer while annual sweeping costs are estimated at \$12,000 per lane-kilometer. The proposed 4.0 lane kilometers of cycle track facilities contained in this report will result in an additional total annual maintenance cost of approximately \$76,000 annually. The additional Operating funds would be considered as part of a future Budget process.

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

DECISION HISTORY

At its meeting on October 3, 4 and 5, 2000, and its Special Meetings on October 6, 10, 11 and 12, 2000, City Council adopted the Sheppard Avenue East Widening Environmental Assessment (EA) which included bicycle lanes on Sheppard Avenue East between Kingston Road and Morningside Avenue. The Council decision can be found at:

<http://www.toronto.ca/legdocs/2000/agendas/council/cc/cc001003/wks17rpt/cl028.pdf>

At its meeting on May 17, 18, and 19, 2005, City Council adopted the West Don Lands Precinct Plan and Environmental Assessment Master Plan which included bicycle lanes on Bayview Avenue, Mill Street, Lawren Harris Square and Lower River Street. The Council decision can be found at:

<http://www.toronto.ca/legdocs/2005/agendas/council/cc050517/pof5rpt/cl001.pdf>

At its meeting on September 24, 2008, City Council adopted No Stopping regulations on Kingston Road associated with bicycle lanes in the vicinity of Sheppard Avenue East:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2008.SC18.21>

At its meeting on May 11, 2010, City Council adopted the 2010n Bikeway Network Program which included bicycle lanes on Spadina Crescent and on Lansdowne Avenue from Dupont Street to Bloor Street West. The Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.PW32.9>

At its meeting on September 21, 2011, City Council adopted No Stopping regulations on Shepard Avenue East associated with bicycle lanes between Kingston Road and Morningside Avenue. The Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.SC9.24>

At its meeting on June 10, 11, 12, and 13, 2014, City Council adopted the Richmond - Adelaide Cycle Track Planning and Design Study - Pilot Project which included a bicycle lane on the west side of Bathurst Street, from Richmond Street West to Adelaide Street West connecting to the cycle track on Adelaide Street West. The Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PW31.7>

At its meeting on September 22, 2015, Public Works and Infrastructure Committee received a staff report PW 7.5 “Ten Year Cycling Network Plan: Project Update and 2016 Implementation Program”, which included a list of on-street bikeway projects. The projects recommended for detailed design, consultation and implementation in 2016 included on-street bikeway upgrades to existing bicycle lanes on Gerrard Street, Shuter Street, River Street and Simcoe Street. The Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW7.5>

At its meeting on June 7, 2016, City Council adopted Parking and Loading amendments on Gerrard Street East associated with pedestrian and cycling infrastructure enhancements being delivered through planned 2016 road reconstruction and streetscape improvements. The Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.TE16.42>

COMMENTS

The cycling infrastructure covered by this report is located in two districts: (1) Scarborough; and (2) Toronto & East York. The proposed cycling facilities include a combination of cycle tracks, which feature separation elements (a painted buffer, parked cars and/or flexi-post bollards) between the bicycle lane and the traffic/parking lane, as well as painted bicycle lanes.

(1) Bicycle Lane and Cycle Track in Scarborough District

Refer to Attachment 1, which presents the location plan for bicycle lane designations for roadway segments in Scarborough.

Sheppard Avenue East – Kingston Road to Morningside Avenue

In 2000, City Council approved the Sheppard Avenue East Widening Environmental Assessment (EA). As per the approved design for this EA, bicycle lanes were provided in each direction along Sheppard Avenue East between Kingston Road and Morningside Avenue when the roadway was reconstructed and widened in 2002. In order to enforce the bicycle lane regulations, these bicycle lanes need to be designated.

Kingston Road - HWY 401 off-ramp to just west of Sheppard Avenue East

In 2006, Kingston Road was reconstructed and widened at the Sheppard Avenue East intersection to provide westbound double left turn lanes. As part of this work, bicycle lanes were also installed from the Hwy 401 westbound off-ramp on the east side of the intersection to approximately 90 metres west of the intersection. In order to enforce the bicycle lane regulations, these bicycle lanes need to be designated.

(2) Bicycle Lane and Cycle Track in Toronto and East York District

Refer to Attachments 2 and 3, which present the location plans for bicycle lane designations for roadway segments in Toronto and East York.

West Don Lands

The West Don Lands Precinct Plan was endorsed by City Council in 2005 and the roads opened to the public in April 2016. The West Don Lands Neighbourhood is bounded by King Street East, Cherry Street, Lake Shore Boulevard East, and the Don Valley Parkway. As part of the design, bicycle lanes were identified and pavement markings were installed on the following roadway segments:

- Bayview Avenue, between King Street East and Mill Street;
- Mill Street, between Bayview Avenue and Cherry Street;
- Lower River Street, between King Street East and Lawren Harris Square (north leg)/Lawren Harris Square (west leg); and
- Lawren Harris Square (north leg), between Lower River Street/Lawren Harris Square (west leg) and Bayview Avenue

In order to enforce the bicycle lane regulations, the above-listed bicycle lanes need to be designated.

Gerrard Street East – Yonge Street to Berkeley Street

Prior to amalgamation, bicycle lanes were installed on Gerrard Street from Elizabeth Street to Berkeley Street. The configuration of the roadway includes one general purpose lane and one bicycle lane in each direction with on-street parking provided on one side of the roadway.

The reconstruction of Gerrard Street East from Yonge Street to Sherbourne Street in 2016 provides the opportunity to replace the bicycle lanes with cycle tracks. A cycle track typically requires more width than a standard bicycle lane. The existing roadway width for Gerrard Street East can accommodate a cycle track design without impacting the current function or capacity of the street. There will be no change in the number of general purpose lanes or parking spaces.

For the section from Yonge Street to Jarvis Street, the existing parking on the north side of Gerrard Street East is being shifted to the south side, as adopted by Toronto and East York Community Council and subsequently approved by City Council in June 2016. Parking bays will be created on the south side of the roadway that will allow for enhancements to the boulevard areas to improve pedestrian clearways next to Ryerson University. Standard bicycle lanes will be maintained on the south side next to these parking bays. On the north side of the roadway, a cycle track will be installed with a painted buffer and flexi-post bollards.

For the section from Jarvis Street to Sherbourne Street, on-street parking is being maintained on the south side of the roadway. The parking is being shifted in between the traffic lane and the cycle track which will be next to the curb. This parking protected cycle track will be enhanced with physical separation where the parking ends in the approaches to intersections. This separation, in the form of curbed islands, will help define the parking areas. On the north side of the roadway, a cycle track will be installed with a painted buffer and flexi-post bollards.

The section of Gerrard Street east of Sherbourne Street is beyond the limits of the reconstruction, however, the continuation of parking protected cycle tracks to Berkeley Street is being installed as part of the 2016 Cycling Network Program. Existing parking is being shifted between the traffic lane and cycle track with the separation provided with a painted buffer and flexi-post bollards.

Shuter Street – Victoria Street to Bond Street

Bicycle lanes were installed on Shuter Street between Victoria Street and River Street in 2003. Generally, the configuration of the roadway includes one motor general purpose lane and one bicycle lane in each direction with on-street parking on both sides. One exception is that parking is not provided on either side of the street for the block from Victoria Street to Bond Street in the vicinity of St. Michael's Hospital.

The resurfacing of Shuter Street between Yonge Street and Church Street in 2016 has provided the opportunity to replace the bicycle lane on the north side, between Victoria Street and Bond Street, with a cycle track. A location plan is included in Attachment 2. A cycle track typically requires more width than a standard bicycle lane. Since parking is not permitted on this section of Shuter Street, there is additional width available so that the cycle track design can be accommodated without impacting the current function or capacity of the street. This cycle track is being installed with a painted buffer and flexi-post bollards.

Cycle tracks are not contemplated on the south side since bay parking is proposed on this side of Shuter Street as part of the future redevelopment of St. Michael's Hospital.

River Street – King Street to Gerrard Street

Bicycle lanes were installed on River Street between Queen Street and Gerrard Street in 2003. The configuration of the roadway includes one general purpose lane and one bicycle lane in each direction with a 1.0 metre painted median and on-street parking provided on the east side of the street.

The reconstruction of River Street in 2016 has provided the opportunity to replace the bicycle lanes with a cycle track. A cycle track typically requires more width than a standard bicycle lane. The existing roadway width for River Street can accommodate a cycle track design without impacting the current function or capacity of the street. There will be no change in the number of general purpose lanes or parking spaces.

On the east side of the roadway the parking is being shifted in between the traffic lane and the cycle track which will be next to the curb. This parking protected cycle track will be enhanced with a physical separation where the parking ends in the approaches to intersections. This separation, in the form of curbed islands, will help define the parking areas. On the west side of the roadway, a cycle track will be installed with a painted buffer and flexi-post bollards.

Simcoe Street/Lower Simcoe Street – Front Street West to Lake Shore Boulevard West

Bicycle lanes were installed on Simcoe Street/Lower Simcoe Street between Front Street West and Queens Quay in 2010. In 2014, cycle tracks were installed on Simcoe Street from Queen Street West to Front Street. As part of the 2016 Cycling Network Program, the cycle tracks will be extended south of Front Street to Lake Shore Boulevard West by replacing the existing bicycle lanes.

The existing bicycle lanes on Simcoe Street/Lower Simcoe Street south of Front Street to Lake Shore Boulevard West are provided next to the curb. There is no on-street parking on either side of the roadway for this section of Simcoe Street/Lower Simcoe Street. A cycle track typically requires more width than a standard bicycle lane. The existing roadway width of Simcoe Street/Lower Simcoe Street can accommodate a cycle track design without impacting the function or capacity of the street. The cycle track will be installed with a painted buffer and flexi-post bollards. Between Lake Shore Boulevard West and Queens Quay, there is insufficient roadway width on Lower Simcoe Street in order to provide a painted buffer and flexi-post bollards and as such this section of Lower Simcoe Street will continue to have standard bicycle lanes.

Spadina Crescent

In May 2010, City Council approved bicycle lanes on Spadina Crescent from Spadina Avenue South to Spadina Avenue North. The associated by-laws were enacted in accordance with these approvals. However, since these bicycle lanes have not been installed, the current roadway configuration still reflects the previous regulations.

The installation of bicycle lanes on Spadina Crescent did not proceed due to constraints in providing a bicycle facility immediately north of Spadina Crescent on Spadina Avenue. Due to these constraints, bicycle lanes on Spadina Crescent are not included in the recently approved Ten Year Cycling Network Plan. As such, the regulations on Spadina Crescent should return to those in place prior to the bicycle lane approval, with no changes to the current roadway configuration.

Lansdowne Avenue

In May 2010, City Council approved bicycle lanes on Lansdowne Avenue from Bloor Street West to Dupont Street. The associated by-laws were enacted in accordance with these approvals. However, since these bicycle lanes have not been installed, the current roadway configuration still reflects the previous regulations.

As previously approved by Council, the installation of the bicycle lanes on Lansdowne Avenue between Dupont Street and Lappin Avenue will be proceeding in 2016 with the support of the local Councillor. This will connect the existing bicycle lanes on Dupont Street with the existing cycling route on Lappin Avenue. This installation will be coordinated with the installation of a new traffic control signal at the intersection of Lansdowne Avenue and Lappin Avenue.

However, the extension of the bicycle lanes south of Lappin Avenue to Bloor Street is not proceeding at this time due to concerns with impacts to residential on-street parking. The approved design for this section will be re-evaluated as part of the Bloor-Dupont Major Corridor Study that is included in the Ten Year Cycling Network Plan. Until a new design is determined, the regulations on Lansdowne Avenue between Bloor Street and Lappin Avenue should return to those prior to the bicycle lane approval, with no changes to the current roadway configuration. A location plan is included in Attachment 3.

Bathurst Street and Adelaide Street Intersection Improvements

Cycle tracks were installed eastbound on Adelaide Street West from Bathurst Street to University Avenue in 2014. Adelaide Street West is offset at Bathurst Street so that the west leg is south of the east leg. The cycle track starts on the east leg of Adelaide Street. A southbound bike lane on Bathurst Street connects the westbound cycle track on Richmond Street to the Adelaide Street cycle track. Furthermore, the west leg of Adelaide Street is a suggested cycling route providing a connection to the cycling route on Shaw Street.

Observations in May 2015 showed significant queuing of cyclists at this location during the morning peak hour. Upwards of fifty (50) cyclists were observed to be congregating at the west boulevard of the Bathurst Street and Adelaide Street intersection during a single cycle length of the traffic control signal, totaling approximately 500 eastbound cyclists using this intersection during the morning peak hour. The extent of queuing of cyclists at this location is a safety and operational concern that increases potential conflicts between cyclists and pedestrians and cyclists and motorists.

Based on the above context, an intersection improvement design to accommodate cyclists within the boulevard area on the west side of Bathurst Street and Adelaide Street West intersection has been prepared. The preferred design is attached in Attachment 4. The local Councillor and stakeholders, including St. Mary's Church and Cycle Toronto, have been consulted in developing the preferred design. Subject to Council approval, the intersection improvements are planned to be constructed in fall 2016.

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SIGNATURE

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ATTACHMENTS

Attachment 1 - Scarborough Bicycle Lane Designation Location Plan
Attachment 2 - Toronto & East York Bicycle Lane and Cycle Track Designation Location Plan
Attachment 3 - Toronto & East York Bicycle Lane Location Plan
Attachment 4 - Adelaide St W and Bathurst St Intersection Improvement
Attachment 5 - Amendments to Bicycle Lane and Cycle Track Designations
Attachment 6 - Amendments to Traffic and Parking By-Laws