



## REPORT FOR ACTION

# Ten Year Cycling Network Plan: 2017 Bicycle Lane Installations

Date: April 25, 2017  
To: Public Works and Infrastructure Committee  
From: General Manager, Transportation Services  
Wards: Wards 3, 18, 20, 22

## SUMMARY

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The purpose of this report is to seek Council authority to install the following bicycle lanes that were identified as part of the Ten Year Cycling Network Plan adopted in principle by Council in June 2016:

- Bicycle lanes on Renforth Avenue between Eglinton Avenue and Rathburn Drive and
- Contra-flow bicycle lanes on Denison Avenue and Bellevue Avenue between College Street and Dundas Street West and Wolseley Street, between Augusta Avenue and Denison Avenue.

In addition, Council authority is sought to amend the following previous approvals for bicycle lanes:

- Davenport Road to include an eastbound bicycle lane between Spadina Avenue and Madison Avenue, and
- Waterloo Avenue between Dufferin Street to Gladstone Avenue to amend a westbound contra-flow bicycle lane to an eastbound contra-flow bicycle lane to reflect the recently approved conversion of this section of Waterloo Avenue from an eastbound one-way street to a westbound one-way street.

Subject to Council approval, Transportation Services proposes to install the above cycling facilities in 2017.

## RECOMMENDATIONS

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The General Manager, Transportation Services, recommends that:

1. City Council authorize the installation of bicycle lanes on Renforth Drive between Eglinton Avenue West and Rathburn Road, as described in Attachment 1 - Amendments to Bicycle Lane Designations, attached to this report.

2. City Council authorize the installation of contra-flow bicycle lanes on the following sections of roadway, as described in Attachment 1 - Amendments to Bicycle Lane Designations, attached to this report:

- a) Bellevue Avenue, northbound, between Wales Avenue and a point 40 metres south of College Street;
- b) Denison Avenue, northbound, between Queen Street West and Wales Avenue; and
- c) Wolseley Street, westbound, between Augusta Avenue and Denison Avenue,

3. City Council authorize the installation of an eastbound bicycle lane on Davenport Road, between Spadina Avenue and Madison Avenue, as described in Attachment 1 - Amendments to Bicycle Lane Designations, attached to this report.

4. City Council amend the by-law to remove the westbound contra-flow bicycle lane and approve the installation of an eastbound contra-flow bicycle lane on Waterloo Avenue, between Dufferin Street and Gladstone Avenue, as described in Attachment 1 - Amendments to Bicycle Lane Designations, attached to this report.

5. City Council enact the traffic and parking regulation amendments associated with Recommendations 1 to 4, as described in Attachment 2 - Amendments to Traffic and Parking Regulations, attached to this report.

## **FINANCIAL IMPACT**

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The estimated cost to implement the cycling facilities included in this report is approximately \$250,000. Funding is available in the 2017 Capital Budget and 2017-2025 Capital Plan for Transportation Services (Cycling Infrastructure).

The removal of Pay and Display on-street parking spaces on Davenport Avenue between Spadina Avenue and Madison Avenue will result in an estimated net reduction in Toronto Parking Authority's revenue of approximately \$20,000 annually.

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 August 5, 2009 City Council adopted the 2009 Bikeway Network Program which included contra-flow bicycle lanes on Waterloo Avenue, from Dufferin Street to Gladstone Avenue. The Council decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.PW25.20>

At its meeting on April 8, 2014, Toronto and East York Community Council adopted the traffic and parking regulations required to implement contra-flow lanes previously approved by Council, including Waterloo Avenue, from Dufferin Street to Gladstone Avenue. The Council decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.TE31.70>

At its meeting on June 7, 2016, City Council adopted, in principle, the Ten Year Cycling Network Plan with implementation of individual projects subject to future City Council approval. This network plan identified cycling facilities on Renforth Drive, Denison Avenue, and Bellevue Avenue.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW13.11>

At its meeting of April 4, 2017, Toronto and East York Community Council adopted the traffic and parking regulations required to convert Waterloo Avenue, between Dufferin Street and Gladstone Avenue from one-way eastbound to one-way westbound.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.TE23.91>

## COMMENTS

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### Renforth Drive

Renforth Drive was identified in the Ten Year Cycling Network Plan as a route that would connect existing and planned multi-use trails on Eglinton Avenue West to the existing bike lanes on Renforth Drive south of Rathburn Road. The resurfacing of Renforth Drive from Rathburn Road to Carlingview Drive in 2017 provides the opportunity to implement this route in coordination with other Capital Work.

Renforth Drive between Eglinton Avenue West and Rathburn Road operates as a minor arterial roadway with two lanes in each direction and a 40km/h posted speed limit. Dedicated left turn lanes are typically provided at intersections. Parking is prohibited at all times on both sides of the roadway between Eglinton Avenue West and Rathburn Road. No stopping prohibitions are also in effect from 8:00 a.m. to 5:00 p.m. on both sides of the roadway in the vicinity of both Hollycrest Middle School and Mother Cabrini Catholic School. Pedestrian Crossovers (PXO) are located near each of these two schools. Between Eglinton Avenue West and Rathburn Road there is one signalized intersection at Eringate Drive.

The Toronto Transit Commission (TTC) provides some school trip service to and from Michael Power-St Joseph High School. The only stop along Renforth Drive for this school trip service is at the school at the Eringate/Renforth intersection with two (2)

buses arriving in the morning and seven (7) buses arriving in the afternoon. In addition, within the study corridor, TTC Route 112 operates on Renforth Drive between Eglinton Avenue West and Gentian Drive.

With a typical roadway width of 15.0 metres, it is proposed that bicycle lanes be accommodated within the existing curb to curb width by reducing the width of the existing travel lanes. A location plan is included in Attachment 3. It is proposed that two (2) travel lanes be maintained in each direction and that the existing dedicated left turn lanes be removed except at signalized intersections where the roadway width is typically wider. While the proposed lane widths meet the City's new Vehicle Travel Lane Width Guidelines, for some sections, the proposed curb lane widths are lower than the TTC would recommend for bus operations. This has been discussed with TTC staff who have confirmed that given the very low bus flow this could be acceptable in this instance.

At the signalized intersection of Eringate Drive and Renforth Drive, the existing centre medians on Renforth Drive will be removed as part of the road resurfacing in order to provide the required width to maintain the left turn lanes. With an average traffic volume for a four (4) lane roadway of 18,000 vehicles per day, left turns made at intersections from a shared through lane should not have a significant impact on traffic flows. There would be no impact to on-street parking since parking is prohibited on this section of Renforth Drive.

Narrowing the travel lanes to accommodate the bicycle lanes will improve safety and mobility options for residents, including students, by providing a cycling connection to the three (3) schools on Renforth Drive as well as improve safety for all by encouraging drivers to travel at the posted 40 km/h speed limit. Other safety improvements included as part of the road resurfacing are tactile walking surface indicators at pedestrian crosswalks and crossings.

A public consultation meeting was held on March 21, 2017 where there was general support for the proposal. The local Councillor has been consulted and is generally in support of this proposal.

### **Denison-Bellevue Quiet Street Route**

The Denison-Bellevue cycling route was identified in the Cycling Network Plan. The proposed route would provide a connection along quiet local streets between the existing bicycle lanes on College Street and Queen Street with a connection to the cycle tracks on Richmond Street and Adelaide Street via Augusta Avenue and Portland Street.

The current one-way southbound operation of Denison Avenue and Bellevue Avenue does not allow cyclists to legally travel in both directions. The proposed contra-flow bike lane would allow northbound travel from Queen Street West to College Street. In addition, sharrow markings would be installed in the southbound direction. A location plan is included in Attachment 5.

Denison Avenue ends at Queen Street West. Wolseley Street could provide an east-west connection to Augusta Avenue which connects south of Queen Street (at a signal controlled intersection) to the cycle track on Richmond Street. Wolseley Street operates one-way eastbound, so a contra-flow bike lane is proposed westbound to enable bicycle travel in both directions between Denison Avenue and Augusta Avenues.

### *Bellevue Avenue*

Bellevue Avenue, between College Street and Wales Avenue, is a one-way local road operating in the southbound direction with a posted speed of 30 km/h. On-street parking is provided on the east side of the roadway with overnight permit parking from 12:00 a.m. and 7:00 a.m. and a one hour parking restriction in effect after 7:00 a.m..

The installation of a contra-flow bicycle lane is proposed in the northbound direction, from College Street to Wales Avenue, adjacent to the east curb in order to allow two-way cycling on this one-way street. The southbound travel lane would be maintained on the west side and shared use lane markings (sharrows) would be added in the southbound direction. This proposal would require that on-street parking, including overnight permit parking, be relocated to the west side. This change would result in an increase in on-street parking supply by approximately twenty (20) spaces.

The proposed contra-flow bicycle lane would require that stop controls be introduced for contra-flow bicycle traffic where Bellevue Avenue intersects with College Street, Oxford Street, Nassau Street, and Denison Square.

Toronto Fire Station 315, located on the southwest corner of College Street and Bellevue Avenue, was consulted to ensure the traffic and parking recommendations in this report would not affect the vehicles operating out of this station. They have no objection to the proposed design.

### *Denison Avenue*

Denison Avenue, between Wales Avenue and Queen Street West, is one-way local road operating in the southbound direction, with the exception of the block between Dundas Street West and Grange Avenue where it operates as two-way in front of the Ryerson Community School. The posted speed is 30km/h.

The installation of a contra-flow bicycle lane is proposed in the northbound direction, from Wales Avenue to Dundas Street West and Grange Avenue to Queen Street West, in order to allow two-way cycling. The southbound travel lane would be maintained on the west side and shared use lane markings (sharrows) would be added in the southbound direction. This proposal would require that on-street parking, including overnight permit parking, be moved to the west side.

One-hour parking is currently permitted at all times on the east side of Denison Avenue between Grange Avenue and a point 30.5 metres north of Wolseley Street, and overnight permit parking is permitted on the east side only from 10:00 p.m. to 10:00 a.m. and parking is prohibited on-street from the same point north of Wolseley Street to Queen Street West.

On the west side of Denison Avenue, between Dundas Street West and Grange Avenue, school zone pick up and drop off parking and a school bus loading zone is permitted for ten minutes at certain times on weekdays; both are adjacent to Ryerson Community School. No parking is permitted on the east side of Denison Avenue for this block. No changes to these conditions are proposed in this report. Bicycle shared use lane markings (sharrows) are proposed in both directions for this block.

Between Grange Avenue and Carr Street, the northbound contra-flow bicycle lane is recommended to be placed adjacent to the existing on-street parking along the east curb. Maintaining this approach optimizes the number of on-street parking spaces on this block.

From Carr Street to Queen Street West, the contra-flow bicycle lane would be installed along the east side of Denison Avenue. This would require that on-street parking be moved to the west side between Carr Street and Wolseley Street

The proposed contra-flow bicycle lane would require that northbound stop controls be introduced at Grange Avenue, Carr Street, and Wolseley Street.

#### *Wolseley Street*

Wolseley Street is a one-way local road operating in the eastbound direction to Augusta Avenue. The posted speed is 30km/h. There is no on-street parking on the block between Denison Avenue and Augusta Avenue. It is proposed that a westbound contra-flow bicycle lane be installed along Wolseley Street to give northbound cyclists the option of crossing Queen Street West at the signalized intersection at Augusta Avenue to access the Denison Avenue contra-flow bicycle lane via Wolseley Street. Southbound cyclists would be able to use Wolseley Street to cross Queen Street at Augusta Avenue in order to connect to the cycle track on Richmond Street.

The proposed contra-flow bicycle lane would require that a westbound stop control be introduced at Denison Avenue.

#### *Public Consultation*

A public consultation meeting on the proposals for Bellevue Avenue, Denison Avenue and Wolseley Street was held on November 21, 2016 at Ryerson Community School on Denison Avenue. Attendees were supportive of the contraflow route in order to improve safety. Nearly all supported the new bicycle lane with some residents raising concern about the protection of existing on-street permit parking spaces.

The consultation identified the need for special consideration around St. Stephen's Community House and West Side Montessori School which offer programming to young children. Currently pick-up and drop-off for these facilities takes place in an on-street parking area on the east side of the roadway.

Moving the on-street parking to the west side of Bellevue Avenue would eliminate potential conflicts with the northbound bicycle lane (i.e. a conflict zone of driver blind

spots while pulling out southbound). Further, situating on-street parking on the west side of the street would result in a gain of five parking spaces on the block.

To mitigate concerns with pick-up and drop-off on the east side and enhance safety, pedestrian crossing signs would be installed in both directions adjacent to the daycares in addition to the existing signs advising that children are present. Traffic Operations would monitor traffic volume and behaviour after the installation of the new design.

The local Councillor has been consulted and is generally in support of this proposal.

## **Davenport Road**

For almost twenty years, the existing bicycle lanes along Davenport Road have provided an important east-west commuter route for cyclists. In order to improve safety and connectivity of these bicycle lanes, various opportunities to improve the Davenport Road bicycle lanes have been reviewed including opportunities to resolve gaps in the bicycle lanes and enhance some intersections with green pavement markings.

The Davenport Road bicycle lanes extends 6.1km from Old Weston Road to Bay Street. West of Kendal Avenue, the roadway width is typically 12.8-14.0 metres which accommodates bicycle lanes in both directions, one travel lane in each direction and parking on one or both sides of the street. East of Kendal Avenue to MacPherson Avenue, the roadway narrows to 9.8-10.0 metres which accommodates bicycle lanes in both directions, generally without on-street parking.

There is a gap in the bicycle lanes on the south side of Davenport Road between Spadina Avenue and Madison Avenue in order to provide space for approximately seven (7) on-street Pay and Display parking spots. A location plan is included in Attachment 6.

During both morning and afternoon rush hour periods there are No Stopping regulations in this parking area provides space for cyclists travelling eastbound during those times. In 2015, shared lane pavement markings (sharrows) were installed on south side of Davenport Road, between Spadina Avenue and Madison Avenue to highlight the area where cyclists should be riding during the rush hour periods. At other times when parking is permitted, cars are permitted to park on top of the sharrows, and cyclists are required to merge with motor vehicles to ride around the parked cars.

In order to address this gap in the bicycle lane, a parking study was completed to understand the rate-of-use for the parking spots on the south side of Davenport Road, between Spadina Avenue and Madison Avenue. This found that of the 7 available parking spaces on Davenport Road, on average between 1 and 3 of those spaces were typically used. Approximately 15 parking spaces may be available for use nearby on Madison Avenue.

As over 1,000 cyclists have been counted travelling eastbound on Davenport Road in a weekday 24 hour period (August, 2015), it is recommended that the parking on the south side of Davenport Road, between Spadina Avenue and Madison Avenue be removed, and that an eastbound dedicated bicycle lane be installed.

The local Ward Councillor has been consulted and, after soliciting feedback from the area residents and business owners, is generally supportive of this proposal.

## **Waterloo Avenue**

As part of the 2009 Bikeway Network Program, Council approved the installation of a series of cycling routes that were referred to as "West End Bikeways" on local streets west of the downtown core including Argyle Street, Gladstone Avenue, and Waterloo Avenue between Dufferin Street and Shaw Street in August 2009. Most of the road sections on the above streets were one-way and approved cycling facilities included contra-flow bicycle lanes and sharrows which have largely been installed.

However, the approved contra-flow bicycle lanes and sharrows on Waterloo Avenue between Dufferin Street and Gladstone Avenue have not been installed due to concerns about the lack of cycling connectivity at Dufferin Street and concerns about traffic circulation and school pick-up and drop-off beside the Alexander Muir / Gladstone Avenue Public School. The installation of approved contra-flow bicycle lane and sharrows on Gladstone Avenue between Argyle Avenue and Waterloo Avenue was also on hold until a decision was made on type and timing of connecting cycling facilities on Waterloo Avenue.

Between 2014 and 2016, several meetings were held with the local community to address their concerns with cycling connectivity and local traffic circulation. As a result of these meetings, broader traffic circulation changes were approved by Toronto and East York Community Council in April 2017, including the reversal of the traffic direction on Waterloo Avenue between Dufferin Street and Gladstone Avenue from one-way eastbound to one-way westbound. The approved changes will allow better traffic circulation in the neighbourhood and will allow accommodation of a pick-up and drop-off area for students and parents beside the Alexander Muir / Gladstone Avenue Public School.

The changes approved by TEYCC require a revision of the approved contra-flow bicycle lane and sharrow proposal for Waterloo Avenue. In keeping with the TEYCC approved changes, this report proposes to reverse the approved contra-flow bicycle lane on Waterloo Avenue between Dufferin Street and Gladstone Avenue from eastbound on south side of street to westbound on north side of street and modify the associated by-laws. A location plan is included in Attachment 7.

This report also proposes to introduce a pick-up and drop-off area for students and parents beside the Alexander Muir / Gladstone Avenue Public School on north side of Waterloo Avenue. Within the pick-up and drop-off area, short-term parking would operate during the hours of 8:00 a.m. to 5:00 p.m., Monday to Friday. Outside of these operating times, residents and visitors would be able to use the short-term parking area to park their vehicles on north side of Waterloo Avenue, between Dufferin Street and Gladstone Avenue. The proposed changes would provide about fifteen (15) parking spaces and will not result in the loss of any overnight on-street parking spaces on Waterloo Avenue. Stopping would be prohibited on south side of Waterloo Avenue.



Attachment 2 identifies the related cycling, traffic, and parking by-law amendments that are required to accommodate the above changes on Waterloo Avenue.

Finally, in order to facilitate a connection across Dufferin Street between Waterloo Avenue and Florence Street as part of the "West End Bikeways" routes, a short segment of boulevard trail has been proposed. Transportation Services is currently working with the Toronto District School Board on the approvals and property requirements for the boulevard trail. The above installations would complete the missing east-west cycling link in the neighbourhood as part of the "West End Bikeways" routes.

The local Councillor has been consulted and is generally supportive of this proposal.

## CONTACT

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## SIGNATURE

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Barbara Gray  
General Manager, Transportation Services

## ATTACHMENTS

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Attachment 1 - Amendments to Bicycle Lane Designations  
Attachment 2 - Amendments to Traffic and Parking Regulations  
Attachment 3 - 2017 Bicycle Lane Installations Cycling Network Plan Location Map  
Attachment 4 - Renforth Drive Location Plan  
Attachment 5 - Denison-Bellevue Location Plan  
Attachment 6 - Davenport Road Location Plan  
Attachment 7 - Waterloo Avenue Location Plan