



STAFF REPORT ACTION REQUIRED

Supplementary Report - Extending the Bay Street Bicycle Lanes

Date:	September 5, 2013
To:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	Toronto Centre – Rosedale, Ward 27
Reference Number:	P:\2013\ClusterB\TRA\TIM\pw13012tim

SUMMARY

Public Works and Infrastructure Committee, at its meeting on June 19, 2013, deferred consideration of bicycle lanes and removing the northbound and southbound left turn lanes on Bay Street at the intersection of Bloor Street West, so that staff could consult further with the community. A community consultation meeting was held on July 31, 2013 to seek further input on the proposed bicycle lanes, removal of left turn lanes and the results of an evaluation of the pedestrian priority phase (pedestrian scramble) at the Bay Street and Bloor Street West intersection. In addition, staff met separately with the ABC Residents Association, the Greater Yorkville Residents Association, the Bloor Yorkville BIA, and the Yonge Bloor Bay Business Association.

Significant concerns were raised by area residents and businesses regarding the proposed loss of access to Bloor Street, as a result of the removal of the northbound and southbound left turn lanes and the restriction of those turning movements. As a result, staff have re-evaluated the proposal and have developed an alternative pavement marking plan to widen the southbound curb lane accompanied by sharrows (shared lane markings) and maintain the northbound and southbound left turn lanes. The sharrow treatment will be generally consistent with the design being implemented between Bloor Street West and College Street.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. City Council receive the previous report PW24.7 "Extending the Bay Street Bicycle Lanes" for information only.

Financial Impact

There are no financial impacts resulting from the adoption of this report. Funds to implement the sharrows are contained in the Transportation Services 2013 Approved Capital Budget in Cycling Infrastructure Account CTP813-05.

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

DECISION HISTORY

Bay Street is being reconstructed from Davenport Road to Bloor Street West this summer and fall. The road alterations required to improve pedestrian conditions along Bay Street were approved by City Council at its meeting on February 20 and 21, 2013 (TE21.58, "Road Alterations – Bay Street, Between Davenport Road and Bloor Street West"). The staff report advised that a separate staff report would be submitted to extend the bicycle lanes on Bay Street because the designation of bicycle lanes is a matter delegated to the Public Works and Infrastructure Committee.

Transportation Services subsequently submitted a report, entitled "Extending the Bay Street Bicycle Lanes on Bay Street," to the June 19, 2013 meeting of the Public Works and Infrastructure Committee. The Committee deferred consideration of the staff report until the September 20, 2013 meeting of the Committee for further consultation with the community.

ISSUE BACKGROUND

Through the design and consultation process for the Bay Street reconstruction project, Transportation staff worked with the Ward Councillor and the community to develop and evaluate potential improvements for all users of Bay Street. The proposed improvements along the corridor, including extending the bicycle lanes from Cumberland Street to Bloor Street West, were presented to the community at an open house consultation meeting on November 5, 2012. There was general support for extending the bicycle lanes at the November 5 community consultation event. The summary of the November 5, 2012 public open house is posted on the City's website at:

http://www.toronto.ca/involved/projects/bay_davenport_yorkville/index.htm.

There were several changes proposed for Bay Street, including a significant redesign of the Bay-Davenport intersection and the removal of two lay-bys to widen the sidewalks, which attracted a lot of community attention and concern. It appears that the removal of the left turn lanes to accommodate bicycle lanes was overlooked by some of the community amidst all of the changes proposed for Bay Street. Consequently, when the staff report was submitted to June 19 meeting of the Public Works and Infrastructure Committee, the Bloor-Yorkville BIA and the Greater Yorkville Residents Association (GYRA) expressed concern that they had not been adequately consulted on the proposal to remove the left turn lane to extend the bicycle lanes.

COMMENTS

Extending the bicycle lanes on Bay Street, between Cumberland Street to Bloor Street West, requires the removal of the existing northbound and southbound left turn lanes at the intersection of Bay Street and Bloor Street West. There is not sufficient roadway width to accommodate both left turn lanes and bicycle lanes.

Summary of Community Consultation

In consultation with the Ward Councillor, Transportation Services undertook additional consultation with area stakeholders to seek input on the proposed bicycle lanes, removal of left turn lanes and the results of an evaluation of the pedestrian priority phase (pedestrian scramble) at the Bay Street and Bloor Street West intersection. Staff included a presentation on results of the evaluation of Bay-Bloor pedestrian priority phase operation as part of the public consultation because any proposed changes would impact the operation of the Bay Street – Bloor Street West intersection. The feedback received during this consultation will be integrated into the final review of the three intersections with pedestrian priority phases (Bay-Bloor, Yonge-Bloor and Yonge-Dundas). The results and any recommendations arising from the pedestrian priority phase evaluation study will be presented in the fall 2013 as part of the Downtown Transportation Operations Study.

On July 25, 2013 staff met with representatives of the ABC Residents Association, the Greater Yorkville Residents Association, the Bloor Yorkville BIA, and the Yonge Bloor Bay Business Association to explain the proposal and listen to their concerns and comments.

At the meeting, there was unanimous opposition to removing the northbound and southbound left turn lanes at the Bay Street-Bloor Street West intersection to accommodate bicycle lanes. General concerns were raised about traffic congestion, already limited left turn access to Bloor Street West, traffic infiltration onto local streets. Retailers also expressed concern regarding a potential loss of business due to traffic congestion, and reduction of vehicular access to Bloor Street. The community representatives proposed that sharrows be used rather than bicycle lanes so that the left turn access onto Bloor Street West could be retained.

Public Open House was held on July 31, 2013 to engage the broad community, including businesses, residents, cyclists, pedestrians and drivers. This event was advertised through:

- The distribution of 9,000 flyers to the project area bounded by: Ramsden Park (north); Yonge Street (east); Charles Street West (south); and Avenue Road (west)
- E-mail invitations to the Bay, Davenport and Yorkville Reconstruction mailing list
- Councillor Wong-Tam's (Ward 27) office
- Project web page: www.toronto.ca/involved/projects/bay_davenport_yorkville
- City of Toronto's Civic Engagement web page and twitter feed: www.toronto.ca/civic-engagement/consultations

Participation by the Numbers

- 50 email messages received
- 85 people signed-in for Public Event on July 31st (some people viewed materials but declined to sign-in)
- 53 individual Comment Forms submitted - at event and afterwards by e-mail

The ABC Residents Association, the Greater Yorkville Residents Association, the Bloor Yorkville BIA, and the Yonge Bloor Bay Business Association are opposed to the removal of the northbound and southbound left turn lanes at the Bay Street-Bloor Street West intersection.

Support and Objection from Comment Forms received:

- 10 in clear support of new bicycle lanes on Bay between Bloor and Cumberland
- 25 in clear objection to new bicycle lanes
- 7 in support of removal of left turn lane
- 25 in clear objection to removal of the left turn lane

Support and Objection from Comment Areas (poster size forms) displayed at event

- 8 in clear support of new bicycle lanes on Bay between Bloor and Cumberland
- 3 in clear objection to new bicycle lanes
- 12 in support of removal of left turn lane
- 9 in clear objection to removal of left turn lane

The summary of the July 31 Public Open House is posted on the City's website at:

http://www.toronto.ca/involved/projects/bay_davenport_yorkville/index.htm

There were three key concerns raised with respect to the proposed bicycle lanes and removal of the left turn lanes:

- The southbound bicycle lane approaching Bloor Street West will not be of benefit to cyclists because it would be constantly blocked due to right-turning vehicles and buses;
- Restricting left turns at the Bloor Street West-Bay Street intersection would effectively cut off access to Bloor Street because left turns are already restricted at Bloor Street West-Yonge Street and Bloor Street West-Queens Park Crescent/Avenue Road; and

- Restricting left turns at the Bloor Street West-Bay Street intersection would divert traffic onto local streets within the Yorkville neighbourhood (e.g. Yorkville Avenue and Cumberland Street).

The rest of this report addresses these three key concerns.

Accommodating Cyclists on Bay Street

The Davenport Road-Bay Street bikeway currently extends from Old Weston Road along Davenport Road and Bay Street to Cumberland Street. The bikeway is being extended south of Bloor Street to connect to Queens Quay West, including:

- Sharrows from Bloor Street West to College Street;
- Bicycle lanes from College Street to Dundas Street West;
- Sharrows from Dundas Street West to Front Street; and
- Bicycle lanes from Front Street to Queens Quay.

The reconstruction of Bay Street from Davenport Road to Bloor Street West provided an opportunity to address the bikeway gap between Cumberland Street and Bloor Street West. During the Bay Street study Transportation staff suggested removing the northbound and southbound left turn lanes to extend the bicycles through the Bloor Street West intersection because the left turn volumes are relatively light and bicycle traffic is comparable or exceeds the motor vehicle left turn movements during the AM and PM peak periods, as illustrated in Table 1. Approximately 8% of southbound motor vehicles and 11% of northbound motor vehicles currently turn left at Bloor Street West.

Table 1: Bicycle Volume Compared to Motor Vehicle Left Turns (Peak Period)

Time Period	Direction of Travel	Bicycle Volume August 2012	Motor Vehicle Left Turn Volume November 2011
AM Peak 7:30 am to 9:30 am	Southbound	148	63
	Northbound	53	99
PM Peak 4:00 pm to 6:00 pm	Southbound	122	111
	Northbound	118	99
Total		441	372

Due to curb-to-curb space limitations, left turn movements cannot be maintained at Bloor Street West if the bicycle lanes are extended south of Cumberland Street. Between 7:00 am and 7:00 pm, Monday to Friday, the curb lanes on Bay Street are designated for buses, taxis and bicycles. General motor vehicle traffic operates in a single northbound and southbound traffic lane, except that right turns can be made from the curb lane. The existing left turn bays enable drivers to wait for a left turn opportunity without impeding through traffic. However, permitting left turns from the through lane during the 7:00 am to 7:00 pm period

would result in a single left turning vehicle obstructing all vehicles waiting behind it in the through lane. For the period of 7:00 pm to 7:00 am traffic operates in all four lanes along Bay Street and left turns can be accommodated in the median through lane without obstructing through traffic.

Extending the bicycle lane south from Cumberland Street through the Bloor Street intersection would improve the existing condition for both cyclists and vehicles approaching the intersection. The combined bicycle lane-curb lane width would provide cyclists with sufficient space to safely pass a stopped bus or right turning vehicle and reduce potential conflicts between cyclists and vehicles in the adjacent southbound traffic lane. In addition to the enhanced safety for southbound cyclists, the bicycle lane option would also provide a northbound bike lane from just south of the Bloor Street West intersection connecting to the existing bicycle lanes which start at Cumberland Street.

Access to Bloor Street

During the consultation with area stakeholders, concerns were raised regarding the limited opportunities to currently make northbound and southbound left hand turns onto Bloor Street from adjacent north-south arterial roadways. The following left turns are currently restricted or prohibited on the parallel arterial roads:

- Northbound and southbound left turns are prohibited at all times from Yonge Street onto Bloor Street;
- Northbound left turns are prohibited at all times from Queens Park Crescent onto Bloor Street West, and
- Southbound left turns are restricted from Avenue Road onto Bloor Street West, from 7:30 am to 6:30 pm, Monday to Saturday.

The introduction of bicycle lanes would require the removal and restriction of northbound and southbound left turns from Bay Street onto Bloor Street West, from 7:00 am to 7:00 pm (Monday to Friday). During those hours, Church Street would be the nearest major arterial roadway to the east, from which northbound and southbound left turns could be made onto Bloor Street. The nearest arterial roadways to the west from which left turns could be made onto Bloor Street would be Bedford Road, from which southbound left turns could be made, and St. George Street, from which northbound and southbound left turns could be made onto Bloor Street. As a result access to Bloor Street would be less convenient.

Northbound and southbound left turns are permitted at other intersections on Bay Street, north and south of Bloor Street:

- Northbound left turn from Bay Street at Davenport Road;
- Northbound left turn from Bay Street to Scollard Street;
- Northbound and southbound left turns from Bay Street to Yorkville Avenue;
- Southbound left turn from Bay Street to Cumberland Street;

- Northbound and southbound left turns from Bay Street to Charles Street;
- Northbound and southbound left turns from Bay Street to St. Mary Street;
- Northbound and southbound left turns from Bay Street to St. Joseph Street;
- Southbound left turn from Bay Street to Phipps Street; and
- Northbound and southbound left turns from Bay Street to Wellesley Street.

Most of the above noted streets are local streets that would continue to provide access to residential and commercial properties in the area. However, the local streets would not be effective at providing access to Bloor Street.

Appendix 1, illustrates the turn restrictions needed at the Bay Street-Bloor Street West intersection, as well as the existing left turn restrictions at Avenue Road and Yonge Street.

Traffic Diversion to Local Neighbourhood Street

When Bloor Street West was recently reconstructed and sidewalks widened, between Avenue Road and Church Street, all on-street parking previously provided along that section of the Street was removed. However, a lay-by is provided in front of Holt Renfrew and there is a private parking lot entrance on the south side of Bloor Street between Bay Street and Avenue Road. Other residential and commercial parking lots are accessed via the local street network.

We estimate that half of the vehicles currently making left turns would be diverted to the local street network if the northbound and southbound left turn movements at the Bay Street – Bloor Street West intersection were restricted; and half would be diverted to alternate arterial routes. This would result in an average of 50 vehicles per hour during the peak periods and 30 vehicles per hour during non-peak periods being diverted to the local street network.

Sharrow Option

At the request of area residents and businesses, staff investigated the use of sharrows as an alternative to the proposed bicycle lanes as an alternative to maintain the left turn lanes. Sharrows are currently installed in the curb lanes along Bloor Street West, from Church Street to Avenue Road. Sharrows will also be installed this summer along Bay Street, from Bloor Street West south to College Street. Sharrow markings do not provide a designated space for cyclists (as opposed to a bicycle lane), however, they do provide guidance to cyclists and drivers by identifying the appropriate lane position for cyclists.

There are two types of sharrow installations. Where traffic lanes are wide (4.0 m or greater) sharrows are installed adjacent to the curb to facilitate a cyclist travelling side-by-side with another vehicle in the same lane. When the traffic lane is too narrow to share side-by-side sharrows are installed in the centre of the curb lane to encourage cyclists to occupy the full traffic lane, with cyclists and vehicles operating single file.

There is insufficient curb-to-curb space to provide wide curb lanes, with side-by-side sharrows, in both directions. The sharrow design option would provide a wide southbound curb lane, with side-by-side sharrows, because it carries 60% of the bicycle traffic and there are more conflicts between southbound cyclists and vehicles queuing at the intersection. The wider curb lane would also be beneficial for cyclists manoeuvring around TTC buses serving the southbound stop and right turning vehicles on the approach to Bloor Street West. The northbound curb lane would be narrower with sharrows in the centre of the lane encouraging single-file operation. Appendix 2, illustrates the existing conditions on Bay Street immediately north of Bloor Street West, as well as the cross-sections for the bicycle lane and sharrow options.

Conclusion

Transportation Services will install sharrow markings along Bay Street, between Bloor Street West and Cumberland Street, as part of the Bay Street bikeway project. Sharrows present the most practical way to balance the needs of cyclists and drivers on this section of Bay Street. The installation of sharrows does not require Council authority because sharrow markings are not designated by by-laws. Therefore, Transportation Services recommends that the previously submitted report PW24.7 "Extending the Bay Street Bicycle Lanes" be received for information by the Public Works and Infrastructure Committee.

CONTACT

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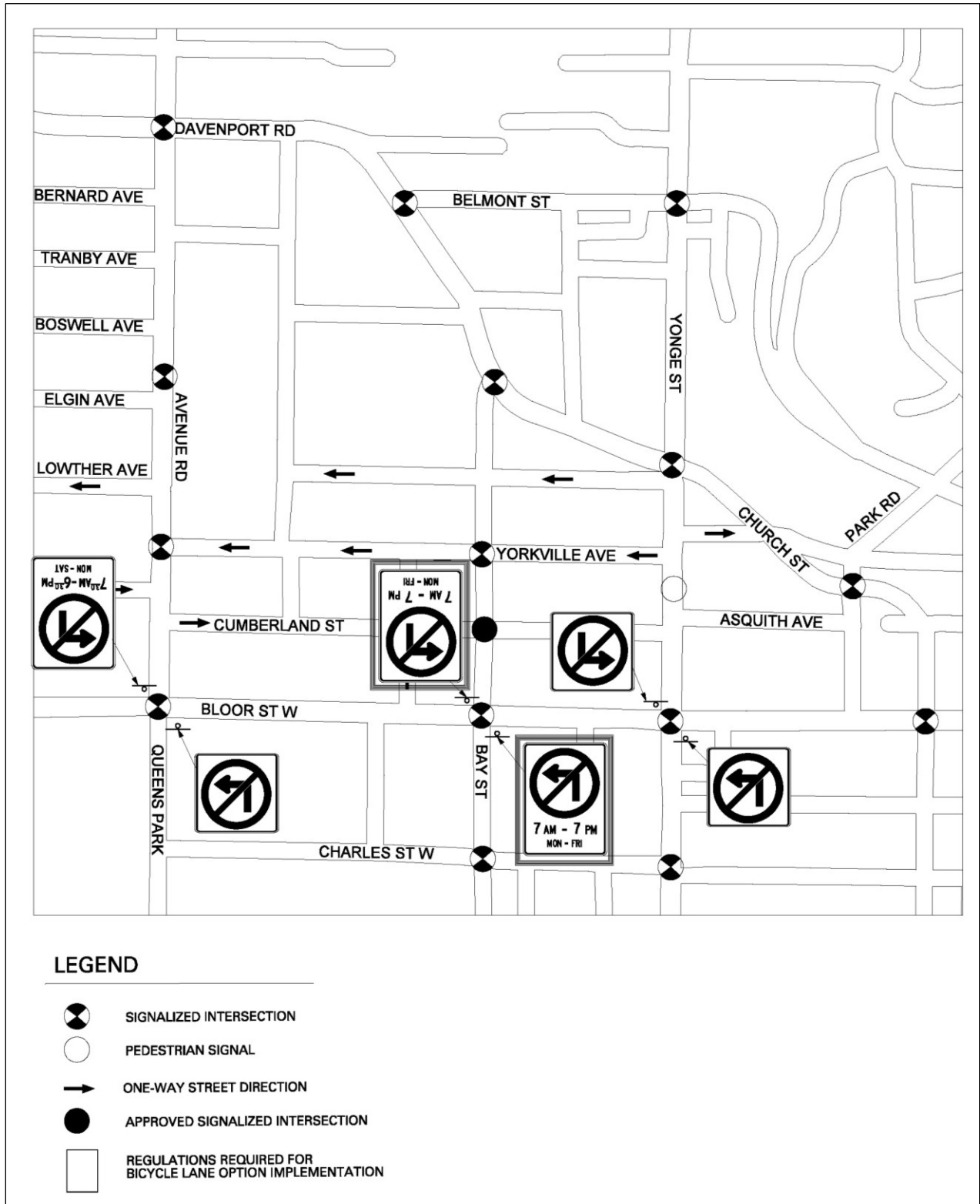
Stephen M. Buckley
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ATTACHMENTS

Appendix 1 – Left Turn Restrictions onto Bloor Street West
Appendix 2 – Existing Conditions, Bicycle Lane and Sharrow Cross-Sections

Appendix 1

Left Turn Restrictions onto Bloor Street West



Appendix 2

Existing Conditions, Bicycle Lane and Sharrow Cross Sections

