ActiveTO Midtown Yonge Street Pilot Project

Stakeholder Meeting – Greater Yorkville Residents' Association and Avenue Bay Cottingham Residents Association
Date: Wednesday, May 27, 2021 from 10:30 – 11:30 a.m.
Host: City of Toronto, WebEx

Greater Yorkville Residents' Association (GYRA)

Avenue Bay Cottingham Residents Association (ABCRA)

Bloor-Yorkville Business Improvement Area

Councillor Mike Layton's Office
Councillor Layton
Aviva Coopersmith
Samantha Vite

Staff and Project Team, City of Toronto
David Dunn, Senior Project Manager, Cycling & Pedestrian Projects
Daniel Samson, Project Engineer, Cycling & Pedestrian Projects
Maogosha Pyjor, Stakeholder and Public Consultation
Rajnath Bissessar, Manager, Traffic Systems

IBI Group
Zibby Petch
Andrae Griffith

Dillon Consulting Limited
Daniel Hoang

This purpose of this meeting was to discuss traffic operations and signal modification requests from GYRA and ABCRA at three intersections along Yonge Street, within the ActiveTO Midtown Yonge Street Pilot Project area. IBI Group and the City of Toronto provided technical responses to the requests, and responded to questions.

Request: Extension of the westbound green light time, and installation of an advanced green for cars turning left onto Yonge.

- There is a generally westbound delays due to left-turning traffic delaying yielding to eastbound

traffic and causing delay to throughs.
- Given the geometry of the Aylmer Avenue intersection approach, there is a mix of left and through turning traffic in one lane – causing delays to through traffic who have to wait for left turning that is yielding to let eastbound traffic through
- Advanced left turns are a solution to this issue, but these are most successful where there is a dedicated turn lane (not feasible based on corridor constraints)

Two options are proposed:

Option 1: Split Phase
- Separate all movements from the Eastbound side and Westbound side (requires signal heads, which is outside of the pilot)
- Not recommended due to delay to all vehicles and pedestrians with little benefit to westbound

Option 2: Advance left turn without dedicated lane (requested approach)
- Eastbound is initially held while westbound is given advanced green
- Requires new signal heads
- Minor increases in delay to all vehicles and pedestrians with little benefit to the westbound
- Requires significant cycle length increases to see westbound benefit at the cost of higher delay to all vehicles and pedestrians

A table was shown comparing level of service for operations without westbound advanced and operations with a westbound advance.

Operations without westbound advance:

Approach	AM Level of Service	PM level of Service
Eastbound	C	D
Westbound	E	E
Northbound	D	E
Southbound	C	D

Operations with westbound advance:

Approach	AM Level of Service	PM level of Service
Eastbound	E	F
Westbound	E	F
Northbound	C	F
Southbound	D	D

Based on comparison, adding a westbound advance adds little benefit to westbound movement and negative impacts to other movements and pedestrians. A westbound advance would not be preferred at this time.

Q = Question, C = Comment, A = Answer

Q: What do the letters (in the comparison table) stand for?

A: Level of service is a way we assess volume to capacity for movement, it looks at how well that movement operates using a typical grading scale from A to F. “A” means it operates really well with no delays, while “F” constitutes a failure meaning you cannot clear all vehicles. “E” is used to show that it is not great, but it is not failing.

Q: The westbound traffic (mostly coming from Rosedale Valley Road) onto Yonge Street is backed up during the busy hours. I do not understand how an advanced green would not benefit by moving the traffic?

A: To accommodate the time for the advance space, we need to increase the overall length of the cycle and that impacts the amount of time you are waiting. So although you may get additional time at the beginning of the phase you are also waiting longer overall because there is more time within that cycle. What that means it hat everybody will need to wait a little more. So while there is some benefit to the westbound, this is outweighed by everyone having to wait longer.

For example, if the cycle is 60 seconds and split 50/50 between eastbound and westbound, and northbound and south bound, if we were to give 15 seconds to westbound in order to give it the advance, in order to not take time from the other movements, we would need to increase it to a 1 minute and 15 second cycle. What that means is that now everybody, depending on when you arrive to the intersection, would be waiting longer.

C: The other three intersections (north, south and east) are not as busy. These three parts generally clear with the existing traffic signals. If they had to wait 30 more seconds because there is additional time added to the westbound advance, it is already disproportionate and balances out because you are assuming they are waiting for multiple signals to clear, which they are not. The westbound is the only direction where there is a wait (where they are missing the cycle).

A: We recognize that our traffic model represents a snapshot in time which does not represent every possible time period that we see at this intersection. What we are looking at is a typical AM and PM peak. What we are saying is that we can improve the westbound by adding this advance time, however there will be negative impacts to the other movements.

Q: There is some hardware that allows for the advance green to engage when there are 3-5 cars waiting to turn. So if there are no cars (or just 2 cars) waiting there would be no advance green. Is this correct?

A: This is correct. However, given that there is only one lane we would have to assume that this would be triggered on every cycle and this is what we have modelled.

Request: Northbound turn lane.

- Northbound left-turn demand exists but movement has been prohibited for more than 10 years.
- Within the context of the current ActiveTO Midtown pilot design, it would generally be feasible to accommodate the northbound left-turn lane. There is generally enough space if some design adjustments were made.

With the current design, a 15m left-turn lane (approximately 2 car lanes) could be accommodated. The hourly vehicle volume that this could accommodate without impacting northbound through is summarized in this table:

Time Period	With advanced left-turn	Without advanced left-turn
AM Peak	40	25
PM Peak	35	25

Potential approach for pilot:

- Protect for northbound left-turn lane with design for initial installation

Post installation (pending agreement for traffic ops)

- Remove northbound left-turn prohibition; monitor demand and impact to northbound through traffic
- Advanced left phase could be added to mitigate traffic impacts if needed (pending review)

Q = Question, C = Comment, A = Answer

C: The prohibited northbound left-turn lane was put in for accessibility for the fire station, not for traffic. There was concern for the fire trucks getting access to Yonge Street from the fire station at Yorkville Avenue, as cars waiting to turn left on Davenport Road would block their entrance onto Yonge Street. This northbound left-turn restriction was put in before the traffic light was installed at Yorkville Avenue. Now with this light, it will automatically clear the traffic so the fire trucks can move.

C: Because cars cannot get to Avenue Road or Dupont Street from Yonge Street, they are forced to go to Roxborough Street, which is a residential street. If we do put in the left-turn lane with an advanced green, it will be important to monitor if there will be a traffic reduction on Roxborough Street as well.

C: A lot of cars are turning left onto Scollard Street, which is a narrow street. There is construction at Yonge Street and Scollard Street and at Bay Street and Scollard Street, which will make Scollard Street unusable as a street to travel through. There is nowhere for cars to go to get out of this area.

Q: In the summary table shown, with the advanced left turn, why is there is a difference between the PM and AM peak in terms of cars that can go by?

A: There are different cycle lengths between the AM and PM peaks as well as different opposing volumes.

Q: Just to be clear, is the northbound left-turn lane something that you can do for this ActiveTO pilot?

A: What we are suggesting is that with the pilot, we will make sure that with the initial install we will allow for the space so that it is possible to install the left-turn lane. But we would not install the left-turn lane with the initial June 13 install of the pilot. It could come, for example, when work on Davenport Avenue proceeds in or later in the summer.

C (IBI Group): If we are doing the installation of the turn lane and there is striping being contemplated, there will be some changes to the Davenport Road that the cycling unit is working on in this section west of Yonge Street.

Q: Is there a reason why we need to delay this? We do not even need an advanced green or dedicated lane at this time. Just by removing the (no northbound left-turn lane) sign, it would allow some of the traffic to flow onto Davenport Road which is a lot bigger street than Roxborough Street. We also have a Council meeting coming up in three weeks.

A: We have dedicated authority, so we would not need to go to Council to get the prohibition removed. But generally, with larger changes (going from 4 lanes down to 2), we would like to see how the traffic sorts itself out before we make any significant changes. We do not like to make major changes prior to pilots because it can be difficult to predict how traffic will change. This does not mean that we are resistant to it. It would be an easy change to make, once we have observed the traffic changes.

C: Cars are going to be forced to make left hand turns at Yonge Street and Roxborough Street. This is a narrow intersection with restaurants and bike lanes, so there is the potential for accidents. Adding the left-turn lane should not be postponed any longer in order to ensure public safety at this intersection.

A: The increase in safety at this intersection is not directly related not providing a left-turn lane at Davenport Road. There are existing turning movements at Roxborough Street and all up and down the corridor that are going to remain the same. The goal of our project is to provide a safer environment for cyclists and pedestrians and we do not foresee that there is going to be an increase in traffic or any further impact on safety. The rationale for removal of the sign prior or during the pilot is something we can take back as a potential option, we will talk to our colleagues in Traffic Operations and Signals.

C: A lot of people are turning left on Scollard Street. The Scollard Street option will no longer be an option with construction at Yonge Street and Bay Street (and Scollard Street). This means that Scollard traffic will be diverted to Davenport Avenue. We have to anticipate that there will be more pressure on left turns on Yonge Street.

A: Even if there is no left turn lane here, there is a hatched area where cars can make a left turn from. It is not a restricted turn.

C (Councillor): If there is no turn lane at Scollard Steet now, we will have a single lane, so now you are able to go around turning vehicles waiting at Roxborough Street to make the turn. This may pose a challenge to the movement of vehicles northbound because it may start to back people up. Right now it would not be much of an impact because cars could just go around. Perhaps this is an incentive to try to manage the northbound delays at Roxborough Street.

A: This is a good point. Yes, there is no left turn lane at Roxborough Street and there is an opportunity to provide one at Davenport Road. Overall, this could improve the corridor. We will take a look at this.

C: The City of Toronto did a Corridor Safety Report in September 2017 where they identified a lot of

accidents happening due to traffic along Roxborough Street. We (ABCRA) put a proposal to the City in 2017 advising them that a lot of the pressure that is happening and issues at Roxborough Street are because the left turn lane not being available at Yonge Street and Davenport Road. If you pull up the accident report you will see that there is a large volume of cars that have to across Roxborough Street to get onto Dupont Street, whereas if they could just turn left onto Davenport Road, they could go around Davenport Road onto Dupont Street without having to across Roxborough Street. A simple removal of the sign would help address some of these issues. I am not clear why there is hesitation.

A (Councillor): The City wants to see what happens with the traffic based on the existing changes and changes as we proceed. They are not saying that once they see more accidents we will change it. They are just taking a more phased approach because they want to understand what the implications are for each of the changes. I do not see any reason why we should not just remove the sign anyways, if the fire trucks can get out with the new light. But the approach that Traffic Ops wants to take is one of understanding what happens when you remove lanes and add left hand turns. It has been made clear that the removal of the sign is a change we want to see immediately, and that there are compelling arguments to do so. But for now we should leave this new information we have brought forward to them to assess and see what they come back with.

Request: Advanced eastbound left phase

- Eastbound left-turn delasy likely due to high volume of pedestrian traffic
- Eastbound left-turn advance signal equipment is present, but phase is not active
- Advanced left-turns not typically used for side street at T-intersections, but may be justified in unique circumstances

Option 1

- Eastbound left-turn advance for drivers on Yorkville Avenue
- Pedestrians on north crosswalk held until eastbound left-turn advance ends
- No changes to operations for south crosswalk
- Activation of Eastbound lane advance results in little change during the AM peak, improves eastbound from level of service E to level of service C during PM peak
- Slight increase to pedestrian delay for north crosswalk, but increased pedestrian crossing time available for south crosswalk

Potential approach for pilot:

- Due to trade-offs between pedestrian priority and reduced vehicle delay, recommend on-site monitoring of this location post-installation before any changes implemented

The project team is taking a wait and see approach, and coming from the perspective of this as a pilot project for ActiveTO with a lot changes coming, being mindful that there will be adjustments needed over time.

Q = Question, C = Comment, A = Answer

C: This request has been in for a while. There is an increase in traffic along Yorkville Avenue. There is a delay (or hold) on pedestrians who are held for several seconds to allow cars to turn left. But right

now the cars are frozen because they are unsure what to do, as there is no arrow that directs them to turn left. Can we have an advanced left and right turn lane clear the cars?

A: Our understanding of the request was for the left turn lane, so we were looking at holding the pedestrians crossing on the north. But it sounds like it may already be in place for the north light, so we may need to take another look at what we reviewed versus what was requested.

C (Councillor): One of the main points that the City brings up is that the request goes against one of the well-established principles of Vision Zero, which is that you want to let pedestrians get established in the intersection first, before you start letting cars determine where they go. Once you start the flow of cars, once you introduce pedestrians after that, it makes it more dangerous.

C: There is an example at Yorkville Avenue and Avenue Road, which has been working fine for 3 years without any issues. The traffic clears out and the traffic on Avenue Road is not impeded. This began as a test and because it was successful, it has remained. The problem at the intersection for this request (Yonge and Yorkville) currently holds the traffic because a few pedestrians are crossing the street while the vehicles are sitting there for 3 or 4 cycles.

A (Councillor): We can go back and look at the changes that have been done at Yorkville Avenue and Avenue Road. If there is another example locally that has years of data that we can rely on, I think it is worth us looking at what has been tried with elsewhere.

C: What if we got rid of the north crosswalk?

A (Councillor): People are still going to use the space the cross whether or not the hatched lines and lights are there, and we want to make sure that we make it safe for people to cross. It would go against our Vision Zero principles if we started to remove crosswalks.

C (Councillor): I think having our own opinions about this intersection is fine, but I would caution that these are established standards for pedestrian safety we are dealing with. It is probably not the same at every intersection but I would caution against making assumptions based on our observations that go directly against well-established principles of safety. I do not think it is safe to assume that we are all traffic experts and that those who are experienced and working on this for decades are incorrect. We will do our best to pull the data from the Yorkville Avenue and Yonge Street example and let staff determine whether this should be done for the ActiveTO pilot.

The meeting concluded with the next steps, which include:

- Design must be finalized next week (week of June 31)
- Installation of pilot begin June 13
- Post-installation (potential approach):
    - Implementation of northbound turn lane and removal of turn restriction with monitoring
    - Monitoring of Yonge and Yorkville to confirm next steps

Q: Can the modelling data be shared with us? I would like to know what assumptions were made and how the conclusions came to be.

A: We would have to take this back. We can share this is if possible.