PW17.11.1



SAFE CROSSING FOR CYCLISTS AT POPLAR PLAINS RD. AND ST. CLAIR AVE. WEST

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Summary

We strongly support the crossing proposed by City staff for a bicycle crossing at Poplar Plains over the St Clair Streetcar right-of-way. For five years, Cycle Toronto Midtown has advocated for a safe, efficient and legal way for cyclists to cross St. Clair Avenue West at Poplar Plains Road, and we are happy to see the solution proposed by City staff in <u>their report</u>¹ in motion <u>2016.PW17.11</u>². Our submission is a minor refresh of a submission prepared in <u>March 2014</u>³.

The Current Situation

Toronto's very first cycling lane was built on Poplar Plains Rd. in the 1970s. The route is the

¹ <u>http://www.toronto.ca/legdocs/mmis/2016/pw/bgrd/backgroundfile-98102.pdf</u>

² <u>http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2016.PW17.11</u>

³ https://goo.gl/Bv3tva

major central, north-south cycling thoroughfare in Toronto – the cycling analogue of Yonge and Avenue Road. Currently the Poplar Plains Route 35 carries up to 800 cyclists a day (counted at the bottom of the hill in June, 2013)⁴. To the south, the route connects to the heavily used St. George / Beverley bike lane, as well as to Davenport and Bay St; to the north, the route previously connected to the safe, quiet residential streets of Forest Hill and Deer Park, including the Route 35 bikeway up Lascelles Blvd and Duplex.

The crossing over St Clair was a relatively simple affair until the St Clair streetcar right-of-way was built, creating a barrier at raised grade. Below is a detail from the 2013 Toronto Cycling Map. Note that the Poplar Plains/ St. Clair intersection is circled, cyclists being advised to "Walk to Signal". No other intersection on the entire map is marked with an advisory to dismount – an indication that the City Cycling Department considers the Poplar Plains intersection to be especially problematic.

⁴ <u>https://docs.google.com/spreadsheet/ccc?key=0AiUrTXs8dc4edDNiY1VINF9MdmRiWWoxYkpDRIZVM1E</u>



The Poplar Plains bikeway passes under the CPR railway at the relatively safe intersection at Davenport and Boulton Dr. This is the only safe crossing of the railway in central Toronto. To the east the CPR track crossings are at Avenue Road, Yonge Street, Mount Pleasant and Bayview, all busy arterials that lack cycling facilities. There are safe crossings to the west of Bathurst St, but they are significant detours for cyclists heading north from downtown along the Yonge and Avenue corridors. Until safe cycling infrastructure is built along the Yonge or Avenue corridors, Poplar Plains will continue to be the primary northbound bike facility in central Toronto.

Below is a view of the intersection of Poplar Plains and St. Clair Ave. W., looking northbound from the terminus of the Poplar Plains bike lane.



The Problem

Currently, there are 3 legal ways for cyclists to cross St. Clair to continue a northerly direction:

- Dismount, walk 150m to the traffic lights at Timothy Eaton Church, cross, walk back to Dunvegan, remount and continue their northward journey. This option involves 180m of walking (128m to the lights plus 58m to Dunvegan)⁵.
- 2. Join the arterial traffic flow at St. Clair, travel eastbound, change two lanes to the left, perform a U-turn at Avenue Road, or dismount at the stoplights at St. Clair/Avenue Rd. intersection and walk the bike across and then ride in mixed westbound traffic until either Forest Hill or Dunvegan.
- 3. Turn west at Poplar Plains and Lynwood, turn north at Warren, travel westbound on St

⁵ The sign is correct as the crow flies!. However, legally walking is as noted above.

Clair crossing two lanes of traffic into the U-turn lane at Timothy Eaton Church. At this point they could either join the westbound St. Clair traffic to Warren Road or walk to Dunvegan to continue north.

The problem is that the vast majority of cyclists – 66% – do none of these options.

Cyclists' attitudes to arterials vary widely. Skilled 'vehicular' cyclists are comfortable riding on major thoroughfares, and most are adept at crossing busy motor vehicle lanes in order to make left turns. At the other end of the spectrum, some less experienced riders will only travel on arterials using sidewalks. These differences are manifested in the widely varying ways that cyclists travelling up Poplar Plains respond to the challenge of crossing St. Clair.

Intersection Data

In the summer of 2013, Cycle Toronto Midtown conducted an observational survey during rush hour.⁶ The sample size was 111 cyclists, and it was found that:

- 23% of cyclists ride their bike west along the sidewalk to the traffic signal at Timothy Eaton Church (illegal)
- 43% of cyclists cross the tracks directly across from the end of Poplar Plains, then walk or ride to one of the northbound streets, or west along St. Clair (illegal)
- 24% of cyclists continue eastbound along St. Clair. (legal)
- 9% leave Poplar Plains along Lynwood or Clarendon west, go north along Warren Road, then cycle back east along St. Clair or the sidewalk to the U-turn / pedestrian crossing. (legal)

The following map illustrates these statistics.

⁶

https://docs.google.com/spreadsheet/ccc?key=0AiUrTXs8dc4edDNiY1VINF9MdmRiWWoxYkpDRIZVM1E& usp=drive_web#gid=4



Further data indicate that up to <u>800 cyclists per day use Poplar Plains</u>⁷. These data were obtained using a video camera tracking movement over an 18 hour period in June 2013. The city has also done a bike count on Poplar Plains in 2013. This would suggest that over 500 cyclists on an average day (3 seasons a year) are electing to take the most expedient route and cross the tracks mid-block, or illegally cycling on sidewalks, thus compromising their safety or that of pedestrians.

Safety issues

In the TTC's Dec.19, 2013 report⁸ on the proposed Poplar Plains crossing, concern is expressed that it is "unacceptable from a safety perspective, to allow an exception for bicycles to cross the right-of-way at Poplar Plains Road." Traffic counts lead to the opposite conclusion. We shall take a second look at the figures from the safety perspective:

- The safety of pedestrians is endangered by the 23% of cyclists who cope with the crossing by riding along St. Clair's sidewalks
- Being hit by trucks or automobiles is a risk taken by all of the 43% who opt for the

⁷ <u>https://docs.google.com/spreadsheet/ccc?key=0AiUrTXs8dc4edDNiY1VINF9MdmRiWWoxYkpDRIZVM1E</u> 8

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2013/Dece mber_19/Reports/BICYLE_CROSSING_ON_S.pdf

direct, mid-block crossing due north of Poplar Plains⁹. Also, they risk collision with any St. Clair vehicles, including streetcars, not expecting bicycle traffic.

• Some of the 24% of cyclists who turn eastward on St. Clair undertake the U-turn at Avenue Rd. This requires several lane changes amidst heavy, fast-moving traffic (maneuvers that are dangerous for all but the most experienced cyclists)

The two photos below illustrate the kind of decisions cyclists are currently making: the father, toddler and son who cycled over the curb, rode along the tracks and across to Forest Hill Rd.



The next photo shows what up to 200 cyclists are currently doing daily: riding the sidewalk between Poplar Plains and the T. Eaton Church crossing.

⁹

https://docs.google.com/spreadsheet/ccc?key=0AiUrTXs8dc4edDNiY1VINF9MdmRiWWoxYkpDRIZVM1E& usp=drive_web#gid=4



Crossing Precedents

The TTC report states that

Under the Highway Traffic Act, bicycles are vehicles and, as such, they are subject to the same restrictions that apply to motorists who drive adjacent to, or wish to cross the streetcar right-of-way.

This assertion does not account for the common practice of making legal exceptions for bicycles. In fact, it is best practice in cycling infrastructure design to solve the kind of safety problems that currently exist at the Poplar Plains intersection by installing signalized crossings dedicated for use by cyclists and pedestrians only. Good examples are found on the Finch and Gatineau hydro corridor trails, and also at Spadina and Wellington.

The TTC report claims that

modifying the edges of the raised streetcar right-of-way on St. Clair Avenue at Poplar Plains Road, in order to allow cyclists to ride across the streetcar right-of-way, is not acceptable from a safety perspective because it would violate the fundamental design premise that all vehicles, including bicycles, be prohibited and physically deterred from crossing the right-of-way anywhere other than at signalized locations.

However, two unsignalized crossings **already** exist on the St. Clair streetcar line. One was built just east of Dufferin for the benefit of the privately owned Jerrett Funeral Home, in order to allow caskets to be wheeled over the right-of-way to the church across the street. The photo below

shows how curb cuts at the raised, streetcar right-of-way align with the entrance of the funeral home, at 1141 St. Clair Ave. W.



The other unsignalized crossing on St. Clair is located west of Lansdowne¹⁰, affording direct access to Prospect Cemetery. The next photo makes it clear that here too the design is minimalist: curb cuts but no signals or painted lines. If the TTC is willing to allow two unsignalized crossings in order to facilitate burials of the dead, in principle it ought to allow another crossing which increases the safety of the living.

¹⁰ <u>http://goo.gl/maps/jafQz</u>



Stoplight Proximity Precedent

The TTC Poplar Plains report also holds that "traffic signals there would be too close to adjacent signals". This statement is incorrect. The distance between the Poplar Plains crossing and the existing crossings at Timothy Eaton Church (110m) and Avenue Rd (180m) is comparable to the existing crossing over the Spadina streetcar ROW at Wellington, which is 115m from King St and 165m from Front St. That crossing was installed in 2008, years after the Spadina LRT ROW was built, following a request made by the local councillor. The TTC, whose opinion was cited in the Spadina report¹¹, did not raise any such objections to the crossing:

Transportation Services requested comments from the TTC who advised that the transit right-of-way has been constructed at road grade, protected by raised curbs. They have recommended that if traffic control signals are approved that protected breaks in the curbing be provided and the existing patterned concrete in the right-of-way be replaced with standard concrete where pedestrian crossings are delineated. Further, if traffic control signals are installed, the TTC has requested that transit priority also be implemented. The proposed signals would be for pedestrians only and Transportation Services is not proposing to allow motor vehicles access over the TTC right-of-way.

The TTC's design recommendations for the Spadina pedestrian intersection would in fact serve as a good model for the proposed crossing on St. Clair, at Poplar Plains. Below are two photos

¹¹ <u>http://www.toronto.ca/legdocs/2006/agendas/committees/te/te060913/it092.pdf</u>

of the Spadina crossing. In 2011, a bikeway was built through Clarence Square, connecting to the east of this crossing. It can be seen on <u>Google Street View here¹²</u>.



¹² <u>http://goo.gl/maps/W8Dek</u>

TTC

The <u>TTC's 2013 response</u>¹³ to our request for improvements has resulted in an unequivocal refusal to change any of the streetcar corridor conditions. Their report asserts that:

The St. Clair streetcar right-of-way was established to provide an operating environment for transit operations which is free of interaction with, or obstruction by, other vehicles and road users.

We are of the view that the TTC's position is outdated and violates the principle of Complete Streets, which dictates that all street users must be accommodated, not just transit riders.

Streets are a significant aspect of the public realm and need to be designed and operated to enable safe access for all users and uses within the transportation system.

In its arguments against allowing a signalized crossing at Poplar Plains, the TTC cites the importance of raised curbs on the St. Clair streetcar right-of-way:

Its design incorporates a physical deterrent, everywhere except at signalized intersections, in order to discourage or prevent vehicular crossings. This deterrent is mostly the raised-up nature of the right-of-way itself or, where the tracks come down to road level, on the approaches to designated intersections, it is the raised curb on either side of the streetcar right-of-way.

Firstly, we call attention to the fact that raised curbs clearly are not working as an effective deterrent. As we have mentioned above, our counts show that 43% of cyclists illegally cross St. Clair's raised curbs north of Poplar Plains.

Secondly, we are not aware of any reports of streetcar service being seriously delayed due to vehicles using the unsignalized crossings (with cut curbs) located near Prospect Cemetery and the Jerrett Funeral Home.

The TTC statement that: "the proliferation of traffic signals on streetcar routes is a major contributor to slow and unreliable service" does not take into account the effects of synchronized signals, which can be prioritized for transit vehicles. Traffic signal optimization would rely on advance sensors that would detect the approach of streetcars and adjust the signal phasing in order to ensure the fast passage of transit vehicles. Such signals are already used at other locations on the TTC streetcar network – as on the Spadina line at the Clarence Sq crossing, or on the Queen line at the Eaton Centre (just 45m from the Queen & Yonge

13

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2013/Dece mber_19/Reports/BICYLE_CROSSING_ON_S.pdf

signal). In other words, a signalized crossing will physically intersect the streetcar line, but this will NOT cause any significant service interruptions for the streetcar's passengers.

We disagree with the TTC's claim that

Limiting vehicular (including bicycle) crossings to signalized intersections is less convenient for motorists and cyclists, but the St. Clair streetcar right-of-way was designed to achieve the best balance between providing a reliable and efficient transit service and safely accommodating the needs of all other users of the road.

Truncating the most important north-south cycling corridor in Central Toronto in order to achieve zero speed gains on a streetcar line does not "achieve the best balance". Rather, it is the implementation of of transit-priority traffic signals at Poplar Plains that would put us in a balanced, win-win situation, since it would establish safe, convenient crossing conditions for cyclists and pedestrians without causing any disadvantage to streetcar passengers.

Recommendations

The situation at Poplar Plains / St. Clair is unacceptable. It is made more so by virtue of the fact that this is Toronto's primary central north-south cycling route. It is illegal to cycle on sidewalks and dangerous to cross a raised curb to a streetcar right of way on an arterial at mid-block.

We therefore support the proposed bicycle crossing over the St Clair streetcar right-of-way, as it provides a reasonable, legal, direct and safe crossing. As far as Cycle Toronto is concerned, a 'do nothing' option is unacceptable. We further request that the resolution be implemented as soon as is practically possible.