Public Drop-In Event

Richmond-Adelaide Cycle Tracks

June 25, 2018

12:00 p.m. – 3:00 p.m.

4:30 p.m. – 7:30 p.m.

Metro Hall, Rotunda

55 John Street

Purpose of Event

In Scope

- Communicate an update about the status of the Richmond-Adelaide Cycle Track Pilot Project
- Communicate the results of the evaluation
- Receive comments and feedback on the existing pilot installation
- Review and receive feedback on the Adelaide Street Cycle Track north side option
- Review impacts to Adelaide Street businesses and properties

Timeline of Events

- **November 2011**
  - City Council authorized the initiation of an Environmental Assessment study to install bike lanes in the Richmond-Adelaide Corridor
- **February 2013**
  - Richmond-Adelaide Cycle Track Study commenced as a Municipal Class Environmental Assessment
- **June 2013**
  - Stakeholder Consultation and Public Drop-in Event to review alternatives for cycle tracks
- **June 2014**
  - City Council authorized the installation of Richmond-Adelaide Cycle Tracks – Phase 1 Pilot
- **July 2014**
  - Installation of Cycle Tracks - Richmond-Adelaide Phase 1
  - Richmond St from York St to Bathurst St
  - Adelaide St from Simcoe St to Bathurst St
  - Installation of Cycle Tracks - Simcoe St from Front St to Queen St
- **June 2015**
  - Richmond-Adelaide Phase 1 Pilot Evaluation
- **July 2015**
  - City Council authorized the installation of Richmond-Adelaide Cycle Tracks – Phase 2 Pilot
- **September 2015**
  - Installation of Cycle Tracks - Richmond-Adelaide Phase 2
  - Richmond St from Parliament St to York St
  - Adelaide St from Parliament St to Simcoe St
- **October 2016**
  - Installation of Cycle Tracks - Peter St from King St to Queen St
- **October 2017**
  - Bathurst St and Adelaide St Intersection Modification
- **Future, if approved by Council**
  - Permanent installation in conjunction with future road works
  - Relocation of Adelaide Cycle Track to the North Side

Past Public Consultation

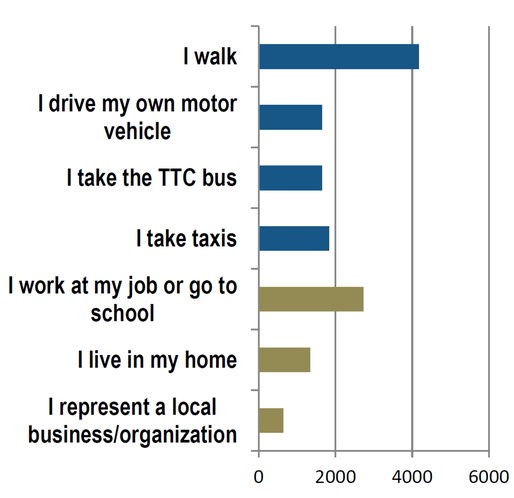
- In 2013, prior to installation of the pilot bike lanes, the City consulted with the public and stakeholders through two workshops, two 2-day public drop-in events, many direct meetings, and extensive communications.
- Following installation, the City invited road user feedback primarily through a survey and telephone hotline.
- The online survey received over 9,000 completed responses between December 2014 December 2017.
- The telephone hotline received over 200 messages between January 2015 to October 2017.

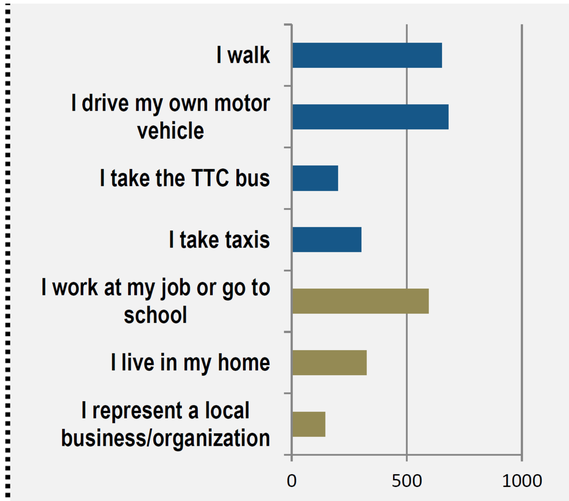
Cycle Tracks on Richmond, Adelaide & Simcoe Street Feedback Survey – Some Key Results

Who responded to the survey?

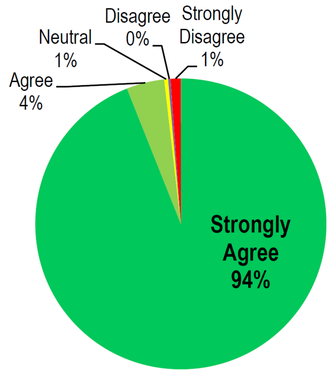
8442 People Who Bike | **1424 People Who Do Not Bike**

What relationships do they have to these streets?

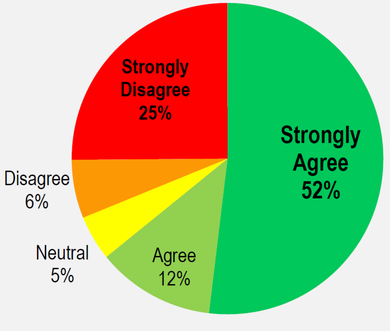




Do they think these cycle tracks should be made permanent?

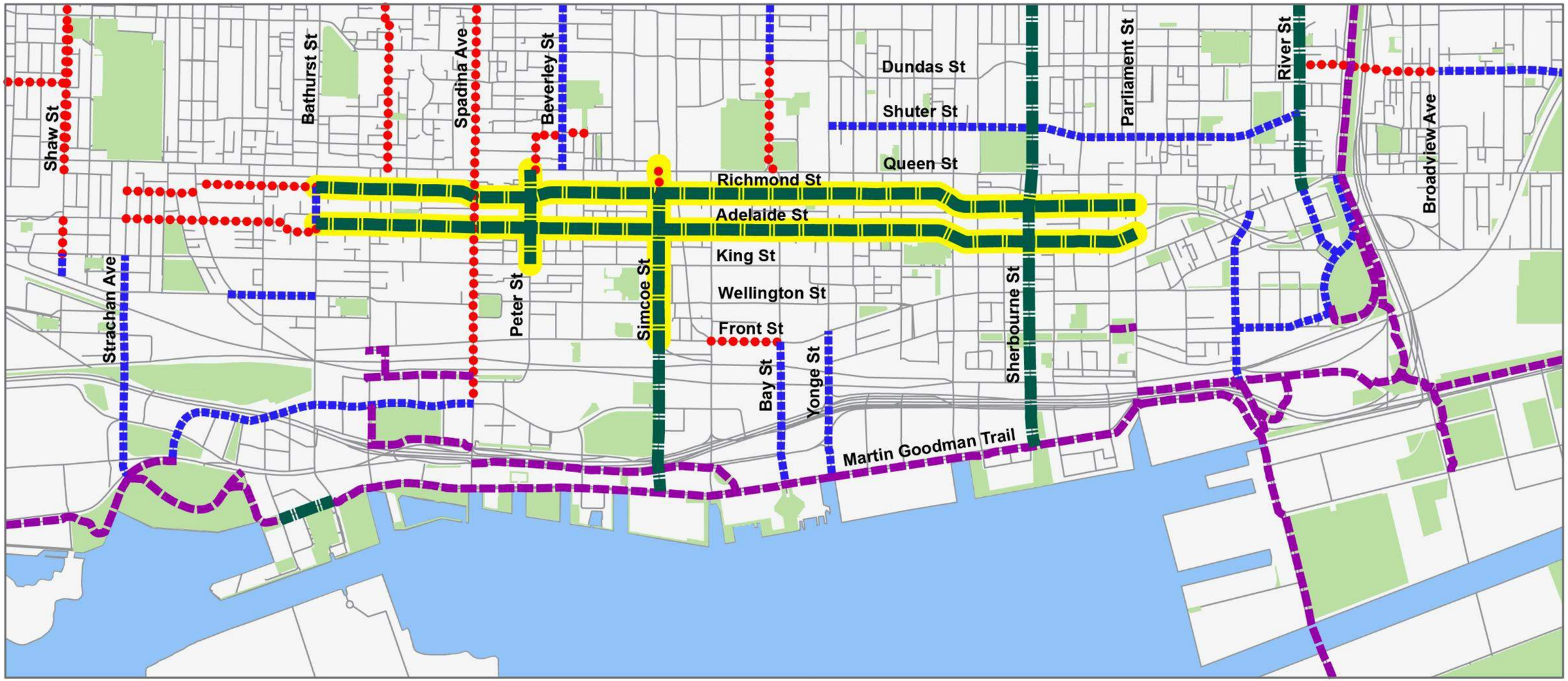


8442 People Who Bike



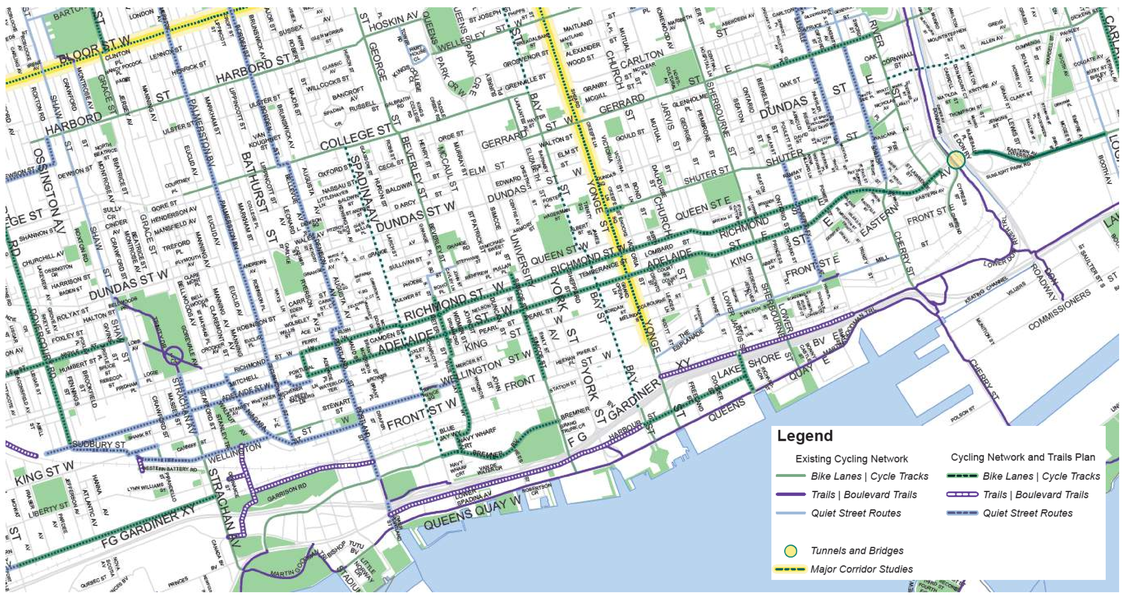
1424 People Who Do Not Bike

Key Plan


Shaw St
Bathurst St
Spadina Ave
Beverley St
Dundas St
Shuter St
Queen St
Parliament St
River St
Broadview Ave
Richmond St
Adelaide St
King St
Wellington St
Front St
Strachan Ave
Peter St
Simcoe St
Bay St
Yonge St
Sherbourne St
Martin Goodman Trail
Legend
Cycle Track
Bike Lane
Multi-Use Trail
Shared Lane
Pilot Project Study Area
Green Space
Lake Ontario

Cycling Network Plan

- The cycle tracks on Richmond St and Adelaide St are the highest volume cycling facilities in the City of Toronto and are the only east-west cycling connections between Bloor St and the Martin Goodman Trail.
- The Richmond-Adelaide Cycle Tracks including Simcoe St and Peter St are key links in the cycling network plan.
- The cycle tracks connect to existing cycling routes on Sherbourne St, Beverly St, the Martin Goodman Trail, and downtown Toronto. In the future, the cycle tracks are proposed to connect cyclists east across the Don River.



Top Ten Bicycle Facilities by Volume

Street	Count Date	Volume
1. Richmond-Adelaide	June 2016	6,540
2. Bloor Street West	June 2017	5,220
3. College Street	Sept 2017	4,960
4. Queens Quay	Aug 2016	4,730
5. Bloor Street East	June 2015	3,750
6. Harbord Street	June 2017	3,490
7. Sherbourne Street	June 2014	3,330
8. Dundas Street East	July 2016	2,300
9. Simcoe Street	May 2015	1,960
10. Davenport Road	Aug 2017	1,390

Cyclist Volumes Have Significantly Increased

Location	Average Daily Cyclist Volume (24-hour count)	Volume – Before (8-hour count)	Volume – After (8-hour count)	Change in Volume
Richmond St, Phase 1	3,460 (June 2016)	220 (Sep 2013)	2,290 (June 2016)	+2,070 (+1041%)
Adelaide St, Phase 1	3,060 (June 2016)	180 (Sep 2013)	2,130 (June 2016)	+1,950 (+1183%)
Richmond St, Phase 2	1,750 (May 2016)	170 (Oct 2013)	1,180 (May 2016)	+1010 (+694%)
Adelaide St, Phase 2	1,570 (May 2016)	160 (Oct 2013)	970 (May 2016)	+810 (+606%)
Richmond-Adelaide Total, Phase 1	6,520 (June 2016)	400 (Sep 2013)	4,420 (June 2016)	+4,020 (+1,105%)
Richmond-Adelaide Total, Phase 2	3,320 (May 2016)	330 (Oct 2013)	2,150 (June 2016)	+1,820 (+651%)
Simcoe St	1,670 (Aug 2016)	480 (June 2014)	1,020 (Aug 2016)	+600 (+213%)

- All volume counts for Phase 1 were collected at Spadina Ave, all volume counts for Phase 2 were collected at Jarvis St, and all volume counts for Simcoe St were collected at Richmond St W.
- Volumes are from counts on days where counts were successfully collected. Volume counts used were collected on days where the daily maximum temperature was over 18 degrees Celsius with no precipitation.
- The 8 hour period is a sum of counts conducted from 7:00 a.m. to 10:00 a.m., 11:00 a.m. to 1:00 p.m., and 4:00 p.m. to 7:00 p.m.

Road User Safety and Comfort Survey

We asked Cyclists:

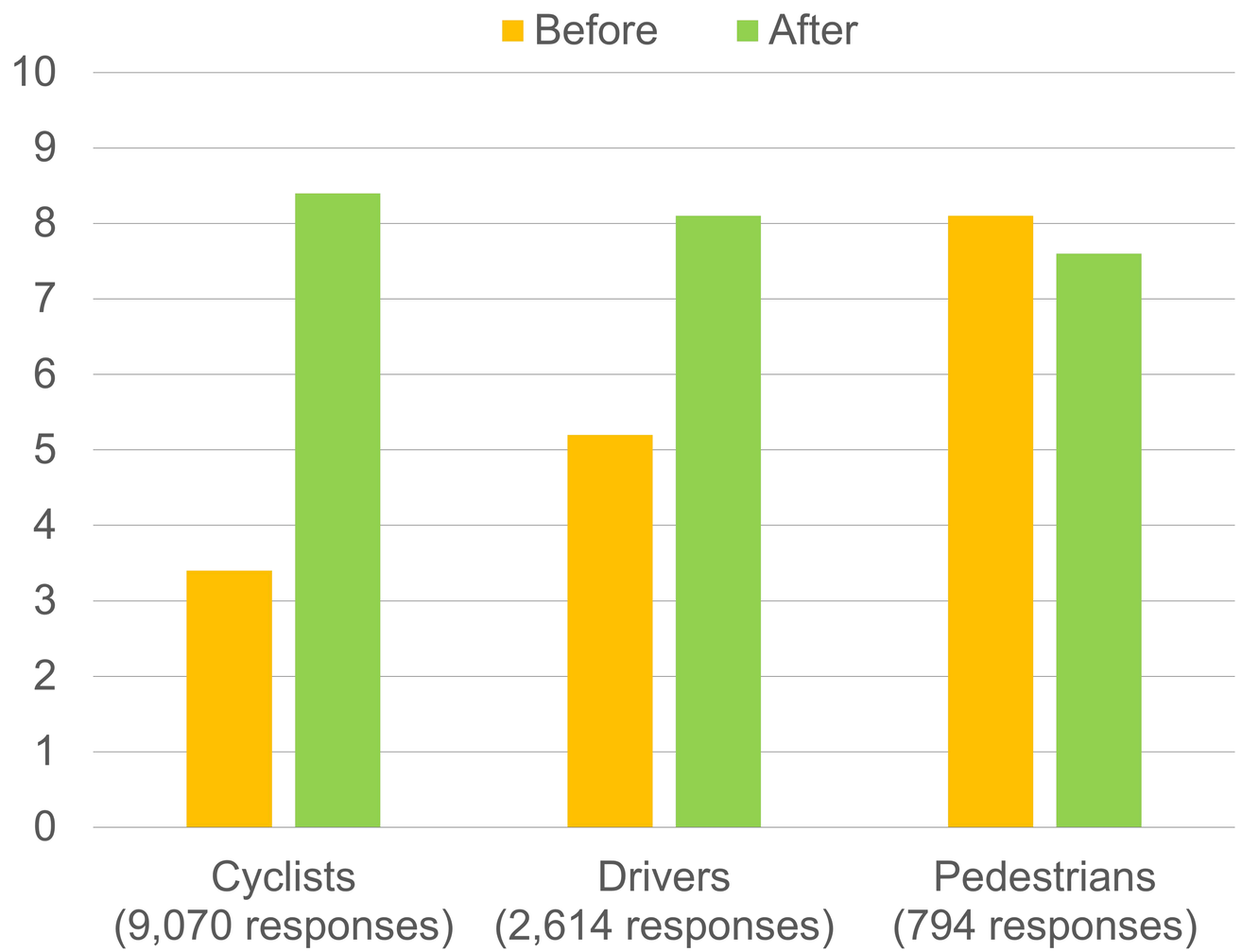
- How safe and comfortable did you feel biking on these streets *before* the cycle track was installed?
- How safe and comfortable do you feel biking *in the cycle track* on these streets?

We asked Drivers:

- How comfortable did you feel driving with cyclists in the vehicle lanes on these streets *before* the cycle tracks were installed?
- How comfortable do you feel driving on these streets when cyclists are in the cycle track?

We asked Pedestrians:

- How safe and comfortable did you feel walking on these streets *before* the cycle tracks were installed
- How safe and comfortable do you feel walking on these streets where the cycle track is installed?



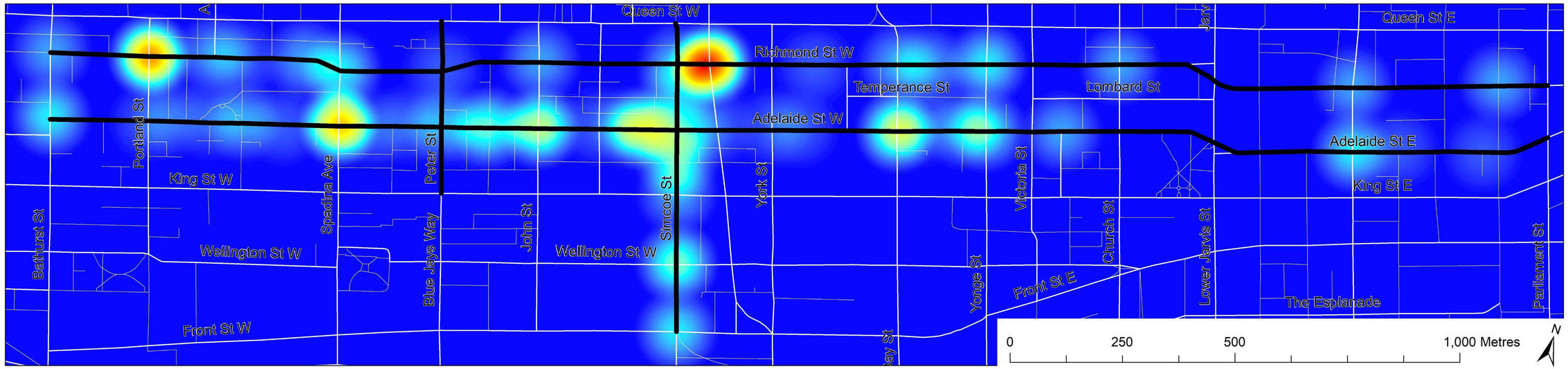
- Survey responses from December 2014 to December 2017
- Responses are on a scale from 1 to 10 with 1 being very unsafe and/or uncomfortable and 10 being very safe and/or comfortable.

Cyclist Collision Rates Have Dramatically Reduced

Collision Rates - All Cyclist Collisions

Location	Before Installation (annual collisions/1000 cyclists*)	After Installation (annual collisions/1000 cyclists*)	Change
Richmond St E and Richmond St W	39.9	8.5	-31.4 (-79%)
Adelaide St E and Adelaide St W	39.0	14.4	-24.6 (-63%)
Overall	78.9	22.9	-56.0 (-71%)

- *unit is annual collisions/1000 weekday cyclists on days where the daily maximum temperature was over 18 degrees Celsius with no precipitation.
- Collision rates were calculated using collisions that occurred from January 2010 to December 2017.
- An 8 hour to 24 hour volume conversion factor was applied to before installation volumes in order to determine the collision rate.



- Collision data from police reports are being reviewed to identify cyclist-motor vehicle collision hot spots along the Richmond-Adelaide Cycle Tracks
- Locations with high volumes of reoccurring collision types will be reviewed to identify potential safety improvements

Motor Vehicle Collision Rates and Travel Times

Collision Rates - All Motor Vehicle Collisions

Location	Before Installation (annual collisions/1000 weekday motor vehicles)	After Installation (annual collisions/1000 weekday motor vehicles)	Change
Richmond St E and Richmond St W	14.2	13.5	-0.7 (-5%)
Adelaide St E and Adelaide St W	17.2	17.2	0 (0%)
Overall	31.4	30.7	-0.7 (-2%)

- Collision rates were calculated using collisions that occurred from January 2012 to December 2017.
- An 8 hour to 24 hour volume conversion factor was applied to before installation volumes in order to determine the collision rate.

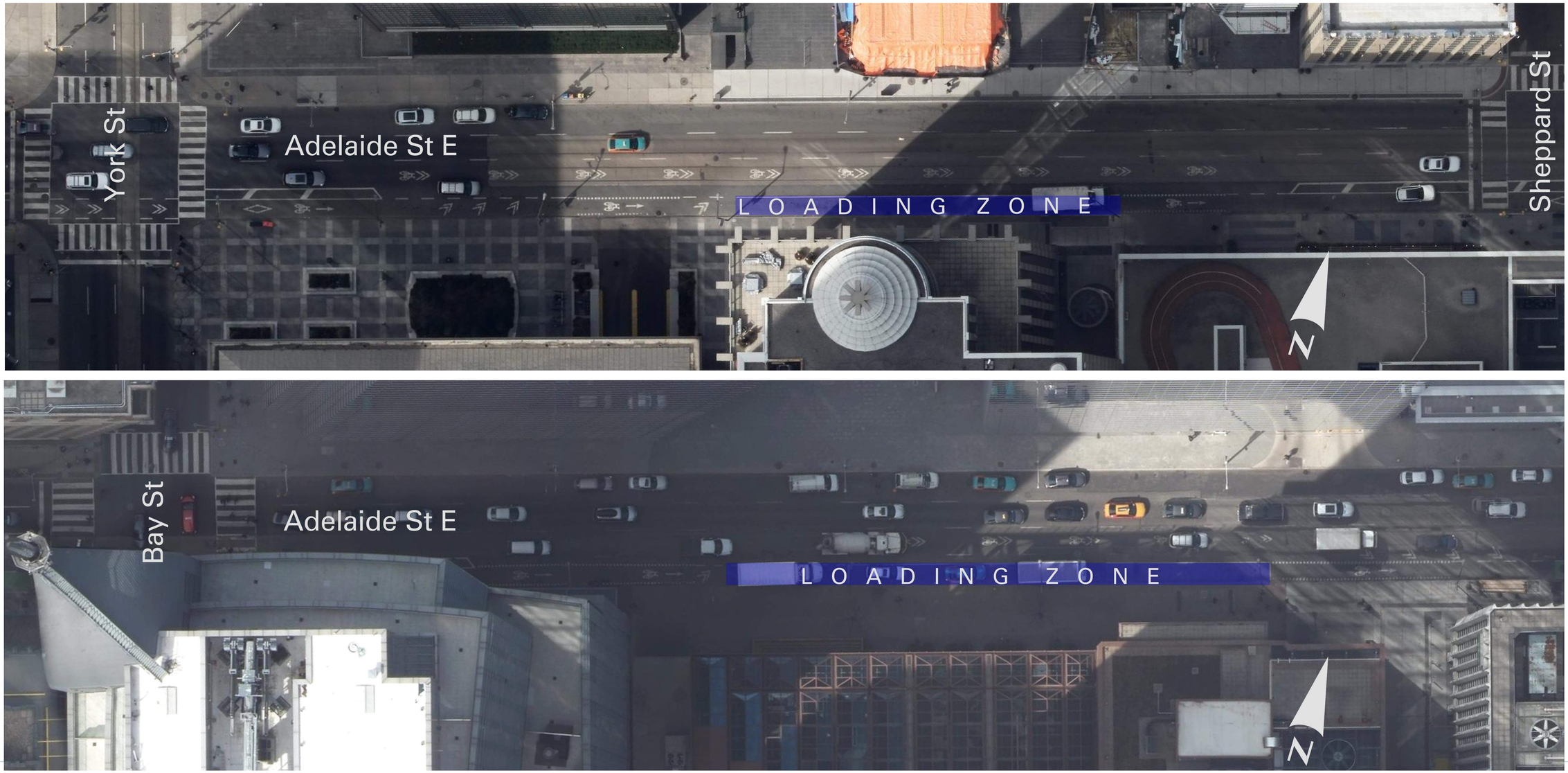
Motor Vehicle Travel Times

Location	Time	Before Installation (Jan 2012 to Dec 2013)	After Installation (Nov 2015 to Oct 2017)	Change
Richmond St from Parliament St to Bathurst St	AM Period (7:00 a.m. to 10:00 a.m.)	13m 41s	14m 32s	+51s
	PM Period (4:00 p.m. to 7:00 p.m.)	14m 9s	15m 41s	+1m 32s
Adelaide St from Bathurst St to Parliament St	AM Period (7:00 a.m. to 10:00 a.m.)	14m 26s	13m 12s	-1m 14s
	PM Period (4:00 p.m. to 7:00 p.m.)	16m 34s	16m 30s	-4s

- Travel times have not been adjusted for increasing length and duration of lane closures for development construction.

Gaps in the Adelaide Cycle Track

- There are gaps in the existing cycling network on Adelaide Street between York Street and Yonge Street at loading zones
- Existing conditions and various options were evaluated with the objective of providing a continuous cycle track in this section



Existing Conditions at High Volume Loading Docks

- There are two high volume truck elevators leading to loading docks that can only be accessed from the south side of Adelaide St W near Bay St.
- Over 300 commercial vehicles per day are required to turn right in and right out of these truck elevators
- The loading docks service over 70 food and drink establishments, over 100 retail stores, and over 5 million square feet of office space.

Adelaide Street West

Issues and Concerns

- Existing courier delivery zone/truck queuing are adjacent to the curb on the south side
- Commercial vehicles must turn right into loading docks/truck elevators on the south side
- Commercial vehicles are reversing and parallel parking adjacent to the curb on the south side
- Cycle track is discontinuous requiring cyclists to merge into through traffic lane with streetcar tracks

Adelaide Street Options

- Various options were considered and balanced to provide a dedicated cycling facility that improves cyclists safety, minimize delays for motorists and cyclists, considers requirements for high volume commercial loading operations, and minimizes midblock conflicts

Option	Reduce Motorist Delay	Reduce Cyclist Delay	Improve Cyclist Safety at Loading Docks	Improve High Volume Loading Operations	Reduce Midblock Driveway Conflicts
North (Left) Side Continuous Cycle Track	✓	✓	✓	✓	✓
Maintain Existing South (Right) Side Cycle Track	✓	✓	✗	✗	✗
South (Right) Side Continuous Cycle Track	✓	✓	✗	✗	✗
Switch sides in the Financial District	✗	✗	✓	✓	✓

- **North (Left) Side Continuous Cycle Track**: Continuous cycle track adjacent to the north curb for the full length of the cycle track
- **Maintain Existing South (Right) Side Cycle Track**: Cycle track adjacent to the south curb with gaps in the cycle track at high volume loading docks during off peak hours
- **South (Right) Side Continuous Cycle Track**: Continuous cycle track adjacent to the south curb for the full length of the cycle track
- **Switch sides in the Financial District**: Cycle track adjacent to the south curb switching to a cycle track adjacent to the north curb in the vicinity of the high volume loading docks

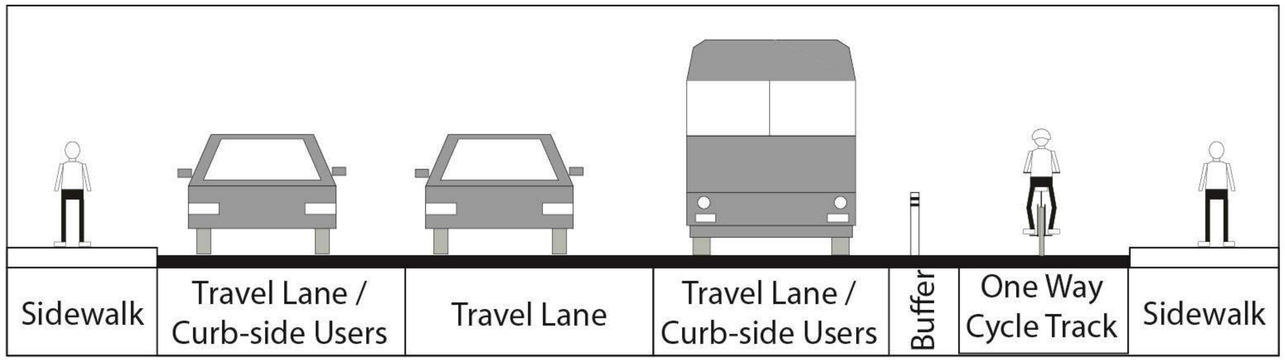
Adelaide Street North Side Option

The number of traffic lanes, bike lane width, and use of flexi-posts with planters, is expected to remain about the same, mirrored on the left side.

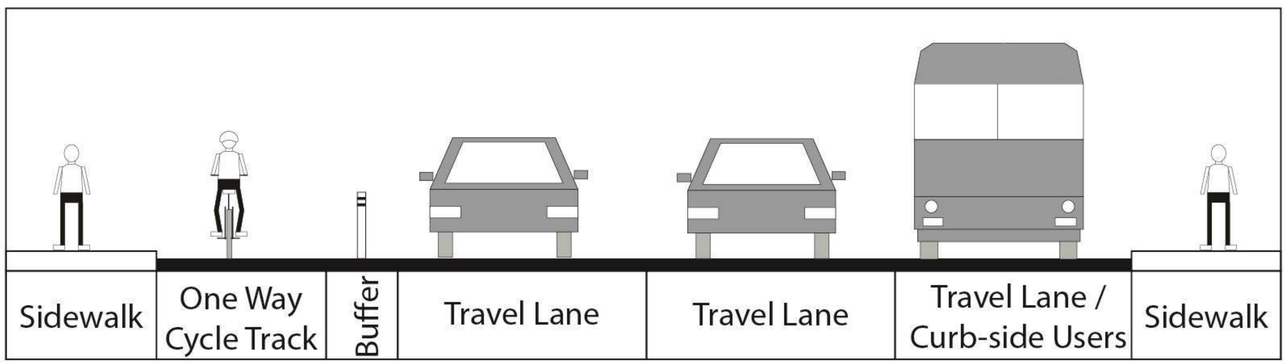
A new north (left) side cycle track configuration on Adelaide Street would:

- Provide a continuous separated cycle track
- Eliminate the requirement for cyclists to merge with through-traffic over streetcar tracks during off peak periods between York Street and Yonge Street
- Eliminate conflicts between cyclists and turning trucks at major loading dock driveways on the right side (south side) between York Street and Yonge Street
- Eliminate conflicts between cyclists and TTC buses at bus stops

Existing South (Right) Side Cycle Track Configuration (Facing East)



Proposed North (Left) Side Cycle Track Configuration (Facing East)



Adelaide Street North Side Option

On-Street Parking and Courier Delivery Zones

- All existing left side (north side) parking and loading zones will need to be removed and replaced on the right side (south side), as needed and where feasible, in consultation with adjacent properties.
- City staff will consult with local business owners/operators and property owners to identify potential issues and propose solutions.

Adelaide Street, Toronto

Cyclist Right Turns

- If the switch of cycle tracks to the north side on Adelaide St is approved by Council, options for right turning cyclists at intersections will be reviewed during detailed design
- The City may consider options such as two stage right turn queue boxes and bike boxes at locations that have a high volume of right turning cyclists

Chicago, IL

Adelaide Street North Side Option

Bathurst-Adelaide Intersection

- A new cyclist storage layby was constructed at Bathurst St and Adelaide St W in Fall 2017
- If the switch of cycle tracks to the north side on Adelaide St is approved by Council, there will be minor modifications to the cyclist storage layby. The layby will be reconfigured to bring cyclists to the north side of Adelaide St W
- Required improvements will include minor signal modifications and pavement marking modifications. Road construction is not anticipated.

Bathurst Street at Adelaide Street West

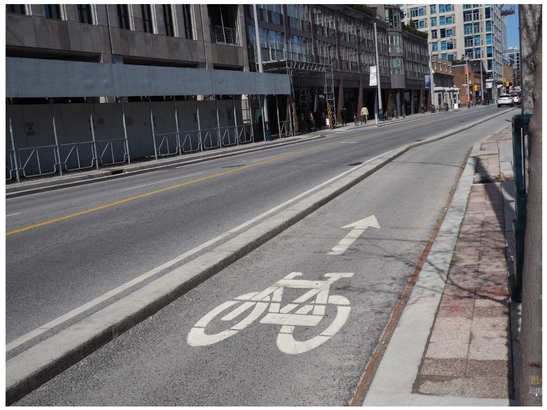
Additional Improvements

- Leading cyclist intervals with the installation of bicycle signals will be considered at key intersections to enhance the visibility of cyclists and reinforce their right-of-way over other turning vehicles.
- Protected motor vehicle left turn phases will be considered at intersections with high volumes of left turning motor vehicles improve traffic flow and reduce the number of left turning motor vehicles in conflict with pedestrians and cyclists.

Future Cycle Track Improvements

Separation

- Any future permanent designs for separation will be constructed in conjunction with future road works if the pilot project is approved to be made permanent by City Council.
- Future separation between the cycle track and vehicular lanes may consist of any combination of painted buffers, bollards, planters, curbs, and medians.

Richmond Street Bus Stops

- Options for treatment of bus stops will be reviewed during detailed design
- On Richmond St, the City may consider options such as a raised platform and cycle track where the bus will stop to the left side of the cycle track and cyclists will be required to stop behind open bus doors.
- If the Adelaide St cycle track is switched to the north side, conflicts between cyclists and buses at bus stops will be eliminated.

Sherbourne Street

Richmond-Adelaide Corridor Signal Coordination

About

- Goal of corridor signal coordination is to take a group of closely spaced vehicles (called a platoon) through a series of intersections at or near the speed limit
- Drivers can expect to be stopped less frequently with busiest traffic movements being given precedence

Implementation History

- **2012:** Implementation of first corridor signal coordination plan
- **November 2015:** Implementation of revised corridor signal coordination plan following installation of cycle tracks
- **June 2017:** Modification to corridor signal coordination plan to improve operations
- **Future:** Implementation of revised corridor signal coordination plan as required

Adelaide St W at Simcoe St, Toronto

Approved Intersection Improvements

Peter St, Queen St W, Soho St

- A southbound cyclist storage layby will be constructed on the north side of Queen St W between Peter St and Soho St to provide a refuge for southbound cyclists to wait for their signal to cross Queen St W.
- A bike box for northbound cyclists will be installed on the south leg of the intersection to assist in turning movements for cyclists at Queen St W.
- The signal is planned for installation in 2018 following completion of the adjacent development

Richmond St W, Simcoe St

- New Traffic Control Signals have been approved by City Council and will provide a controlled crossing for cyclists and pedestrians to cross Richmond Ave W without having to wait for gaps at an unprotected crossing.
- Signal construction is planned to commence in July 2018.

Queen St W and Soho St (looking NW) Artist's conceptual rendering

Next Steps

2018

- Consult with businesses and property managers to develop a detailed design for the Adelaide Cycle Track North Side Option
- Development of parking, stopping, standing, and commercial loading bylaws on the south side of Adelaide Street.
- Review feedback received about the pilot installation
- Ongoing safety review of reoccurring collision types and high volume collision locations.
- Ongoing evaluation of cycle tracks.

2019 to future

- Prepare a staff report to City Council recommending the pilot cycle track installations be made into permanent installations.
- If approved by City Council, implementation of the Adelaide Cycle Track North Side Option.
- If approved by City Council, look for opportunities to bundle improvements with future road construction.

Feedback

Thank you for attending, your feedback is appreciated

Please complete a comment form to provide any feedback

or email CyclingRichmondAdelaide@toronto.ca

For more information visit our website:

toronto.ca/cycling/richmond-adelaide