

BLOOR STREET BIKE LANES

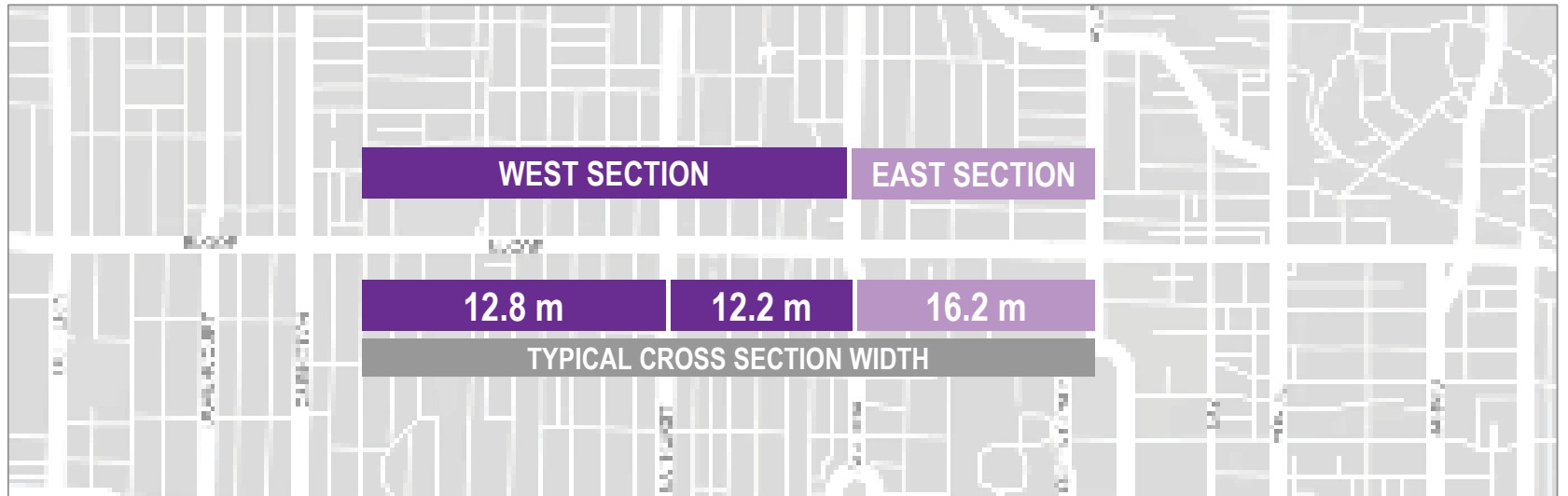
PILOT PROJECT
SHAW STREET TO AVENUE ROAD



Project Update June 5, 2017

OVERVIEW

The Bloor Street Bike Lane Pilot Project was approved by City Council in May 2016. The installation of the separated bike lanes (cycle tracks) on Bloor Street West from Shaw Street to Avenue Road was completed in late August 2016.



The pilot project will allow us to demonstrate and study the impacts and benefits of bike lanes on Bloor Street. Extensive monitoring and evaluation is being carried out and will be reported to Council later this year.



WHY BIKE LANES ON BLOOR ST.?

The City of Toronto Ten Year Cycling Network Plan has identified Bloor Street as a high priority through both cycling impact analysis and public consultation rankings.

A cycling facility on Bloor Street could be one of most significant bikeways in Toronto, given the length of the continuous corridor, relatively flat topography and absence of streetcar tracks.

The segment of Bloor Street between Shaw Street and Avenue Road includes important cycling network connectivity at Shaw Street, Montrose Avenue, Grace Street and St George Street.

With vibrant retail and commercial activity and constrained road width, this section serves as an excellent case study for demonstrating the effects of bike lanes on Bloor Street where some parking and motor vehicle travel lanes needed to be removed.

The outcomes of this project are intended to help guide the City with future projects such as planned roadwork and major corridor studies for bike lanes.



BIKE LANE ADVOCACY PARADE



CYCLISTS ON BLOOR WITH NO BIKE LANE

 **3,000** CYCLISTS PER DAY
PRIOR TO BIKE LANES

PARTS OF A SEPARATED BIKE LANE (CYCLE TRACK)

Yield to cyclists in
the bike lane signs



No stopping
by-law signs with
\$150 fine tab



Traffic lane



Separation:

Painted buffers,
with flexi-posts bollards, and
parking, where possible

Bike lane

Curb and sidewalk

Rubber curbs have been
added to the design in
some sections

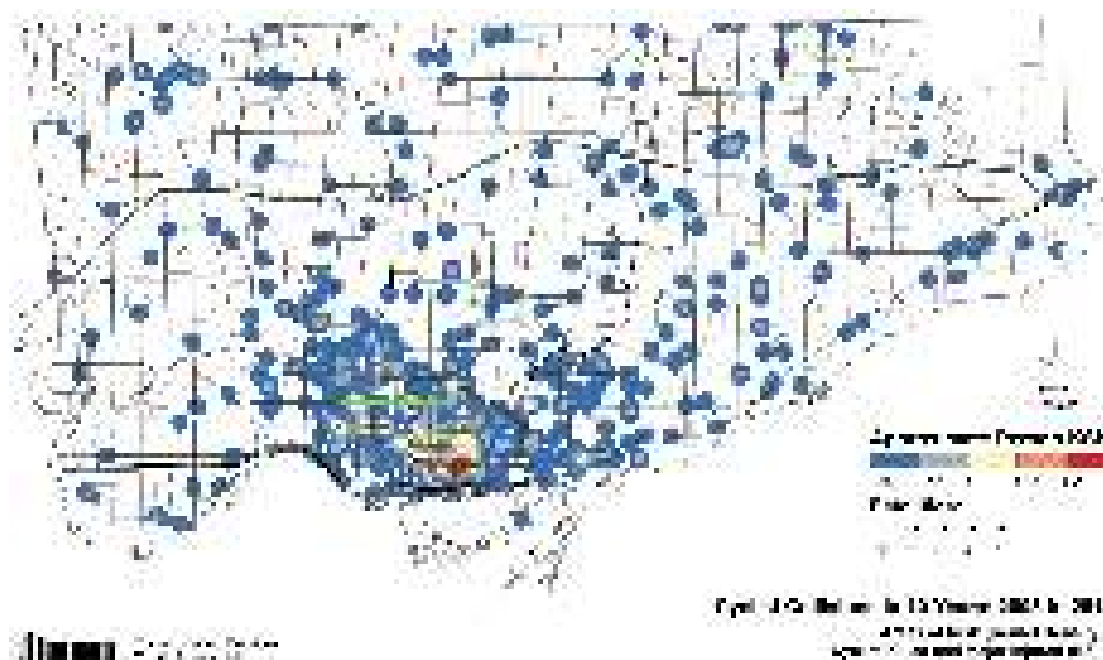


CYCLING SAFETY

Prior to the bike lanes, Bloor Street had documented safety issues, averaging 22 collisions involving cyclists annually in the pilot area (2008-2012) caused by:

- **Dooring: 32%**
- **Motorist overtaking a cyclist: 17%**
- **Motorist accessing on-street parking: 8%**

Cyclists Collisions



Separated bike lanes do not solve all cycling safety concerns, but do help:

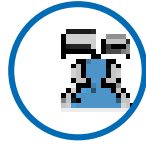
- **Significantly reduce "dooring" collisions**
- **Fewer sideswipe and rear end collisions**
- **Reduce motor vehicles stopping in the bike lane**



PROJECT MILESTONES



DESIGN FEASIBILITY STUDY



PUBLIC & STAKEHOLDER CONSULTATION



APPROVAL, IMPLEMENTATION & EVALUATION

JULY 2015
Study Initiated
Assessment of Existing
Conditions

OCTOBER 2015
Development of Design
Options & Evaluation of
Options

FEBRUARY 2016
Detail Design of Preferred
Options and Project Costing

OCTOBER 29, 2015
Stakeholder Charrette

DECEMBER 2, 2016
Public Open House

JANUARY 2016
Stakeholder Charrette

MARCH 2016
Public Open House

DEC 2015 - SPRING 2016
Online Survey #1

MARCH 2016
Report to PWIC seeking
approval to install pilot

AUGUST - SEPTEMBER 2016
Installation of Pilot

NEXT STEPS

**WINTER 2017 – SPRING
2017**
Online Survey #2

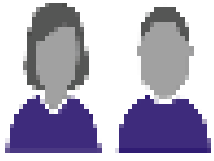
**ONGOING
STAKEHOLDER
CONSULTATION**

OCT 2016 - JUNE 2017
Monitoring & Evaluation

FEBRUARY - MAY 2017
Operational Improvements
based on Preliminary
Monitoring

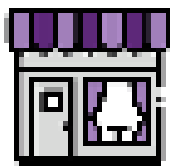
FALL 2017
Report to PWIC on Evaluation
of Pilot

HOW WE ARE MEASURING THE PILOT



PUBLIC PERCEPTION

- Level of support and feedback from businesses, BIAs and the public through online surveys and stakeholder engagement



EFFECTS ON BUSINESS

- Curbside demands
- Parking utilization
- Before & After Economic Impact Study



EFFECT ON THE CYCLING ENVIRONMENT

- Bicycle volumes
- Stated preference survey
- Safety - Road user conflict “near-miss” study in partnership with the Transportation Research Institute at the University of Toronto and Miovision



EFFECT ON THE MOTORING ENVIRONMENT

- Motor vehicle volume counts
- Motor vehicle travel time
- Left turn queue studies

PRELIMINARY TRAFFIC ANALYSIS

Traffic data collection compared June 2016 (pre-installation) to October 2016 (shortly after installation). Additional traffic data will be collected in June 2017.



EFFECTS ON CYCLING

- Cyclist volumes on Bloor Street increased from approx. 3,300 to 4,500 (+36%)
- Approx. 25% of this increase was new cyclists, and the remainder re-routed from Harbord St. and Dupont St.



EFFECTS ON MOTORING

- Traffic volumes on Bloor Street decreased from approx. 24,500 to 20,000 (-22%)
- There was no significant impact to traffic volumes on Dupont St. or Harbord St.
- Vehicular travel times on Bloor St. (from Bay St. to Ossington Ave.) increased:
 - Bloor St. Eastbound
 - AM Peak - approx. +4 min
 - Mid-Day – approx. +3 min
 - Bloor St Westbound
 - PM Peak - approx. +8.5 min
 - Mid-Day – approx. +2.5 min
- Travel times on Dupont St. and Harbord St. remained relatively unchanged

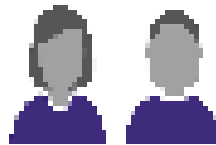
PUBLIC AND STAKEHOLDER ENGAGEMENT

PRE-INSTALLATION:



STAKEHOLDER MEETINGS

- October 29, 2015
- January 28, 2016
- 20+ stakeholders engaged face-to-face



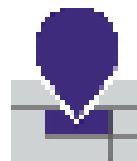
PUBLIC CONSULTATION

- December 2, 2016 - Presentation of multiple design concepts for feedback (229 attendees)
- March 9, 2016 - Presentation of preferred design concept for feedback (271 attendees)



ONLINE SURVEY #1

- Feedback on level of support for the pilot, preliminary design options
- Over 2,100 responses



VISITS TO BUSINESSES TO SEEK INPUT

- 600 addressed letters
- Hundreds of notices hand-delivered by staff who spoke with businesses

POST-INSTALLATION:



DISCUSSION AND SITE VISITS

- Ongoing discussion and site visits with local Councillors and the BIAs to address operational concerns
- Changes made to commercial and accessible vehicle loading areas



CUSTOMER OUTREACH

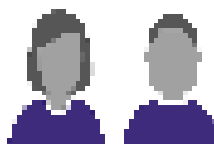
Worked with BIAs to create and distribute a customer handout with:

- Project FAQ
- Green P parking map
- \$4.00 parking discount code



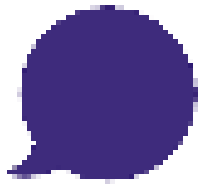
ONLINE SURVEY #2

- Feedback on level of support for the pilot, impacts to area residents and businesses.
- Over 14,000 responses



PUBLIC CONSULTATION

- June 5, 2017 - Public Drop-in Event



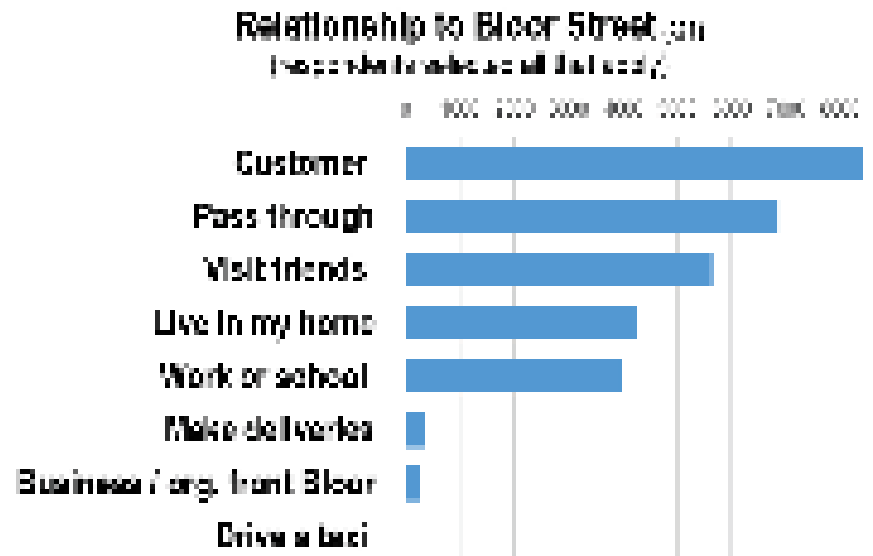
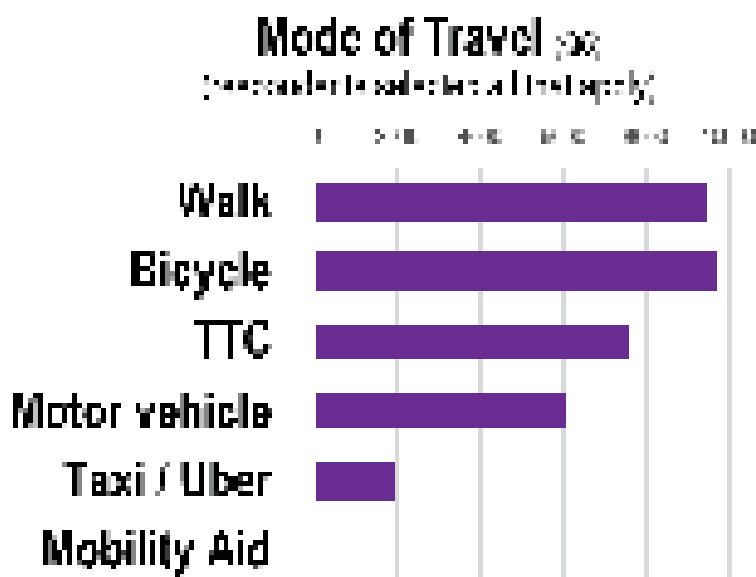
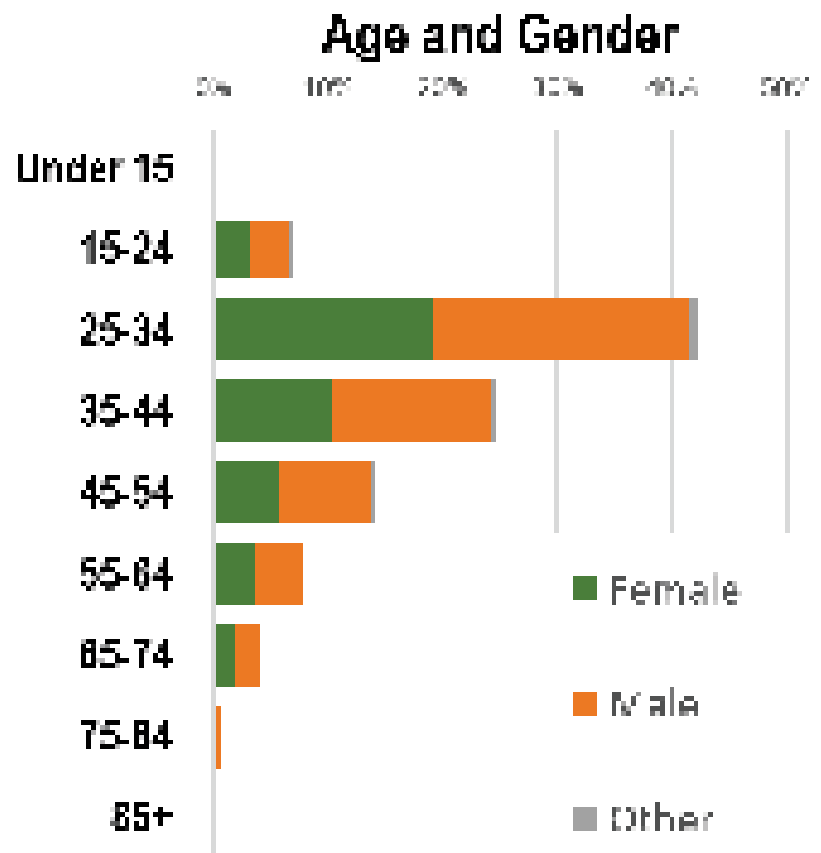
FEEDBACK SURVEY #2: WHO PARTICIPATED

Online for public input from December 13, 2016 to May 4, 2017

Promoted through 30,000 flyers, sharing on social media (Facebook, Twitter), and project and Councillor email lists

OVER 14,000 SURVEYS COMPLETED

Configured and data-reviewed for only one response per individual





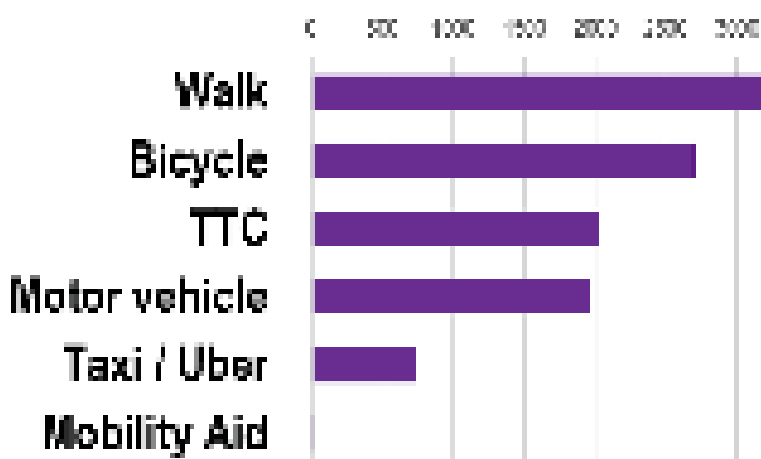
FEEDBACK SURVEY #2: PEOPLE WHO LIVE NEAR-BY

Over 3,800 responses from people who live in the postal code areas within the pilot (M6G, M5R or M5S).

Overall, neighbours gave strong support for the Bloor Street separated bike lanes.

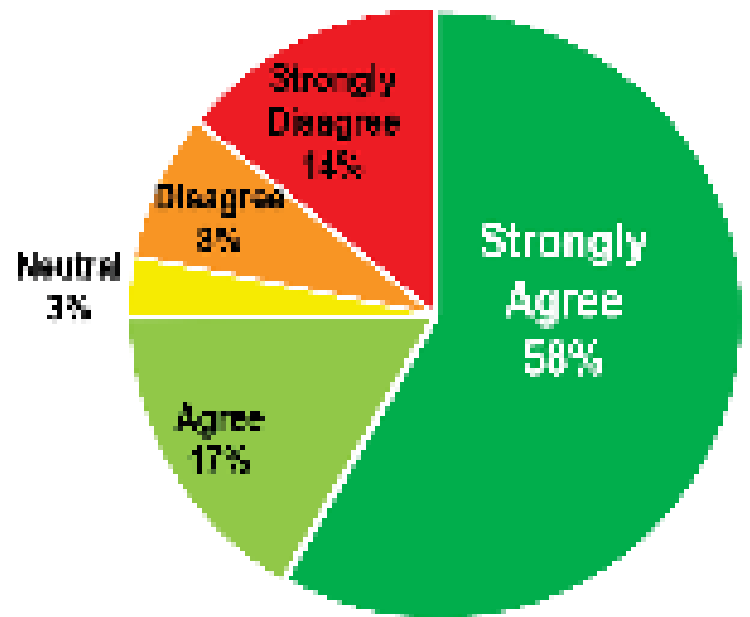
Mode of Travel (35)

(respondents selected all that apply)

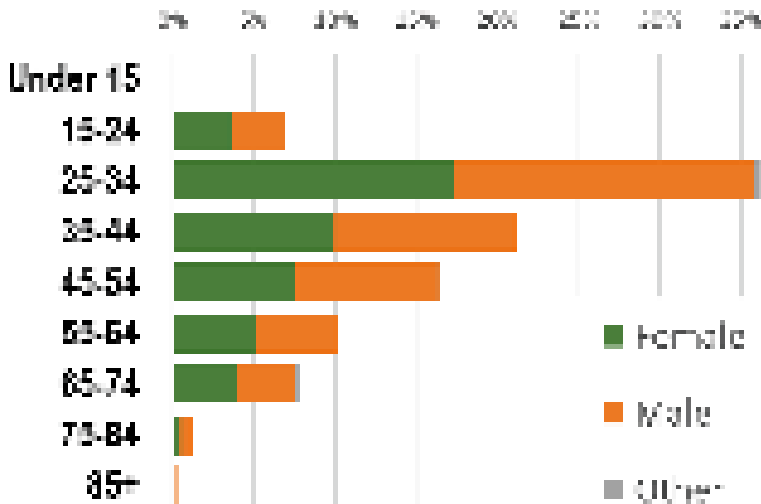


Overall,

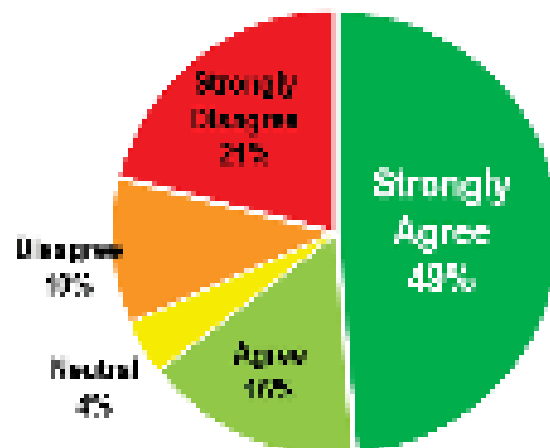
bike lanes on Bloor Street provide a safer & more comfortable environment for cyclists, with acceptable trade-offs in motorist traffic flow and parking convenience



Age and Gender (33)



Residents 55 and over, (whom more drive than bicycle) also support the bike lanes





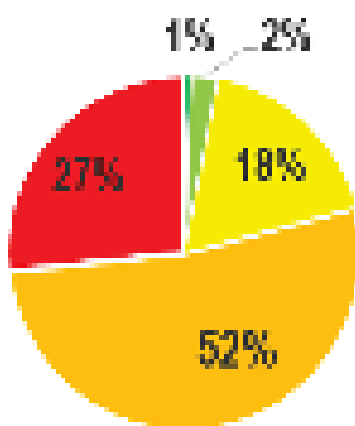
FEEDBACK SURVEY #2: PEOPLE WHO BIKE

Over 10,100 responses from people who bike on Bloor Street.

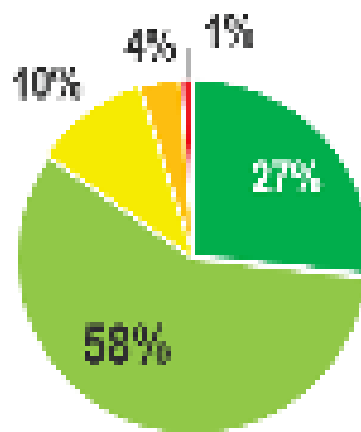
- Feeling of improved safety
- Strong support for the separated bike lanes next to the curb

How safe do you feel riding a bicycle on Bloor Street? (Q11)

Before
Without Bike Lanes
(Survey #1 in 2015)



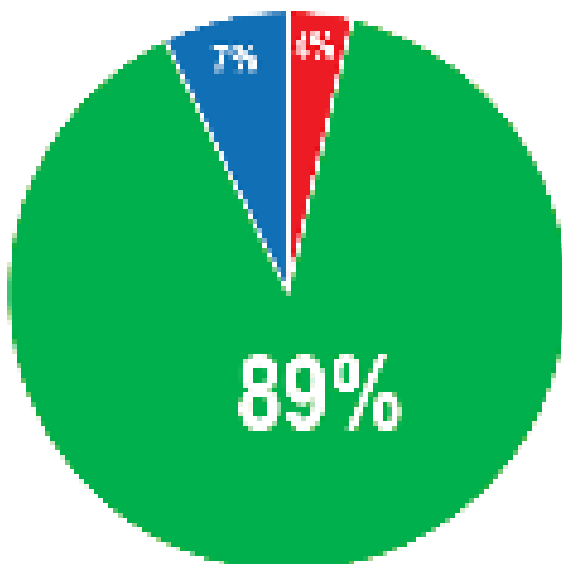
After
With Separated Bike Lanes



- Very safe
- Safe
- Neither safe nor unsafe
- Unsafe
- Very unsafe

People Who Bike:

Preferred Configuration for Bloor Street (Q12)



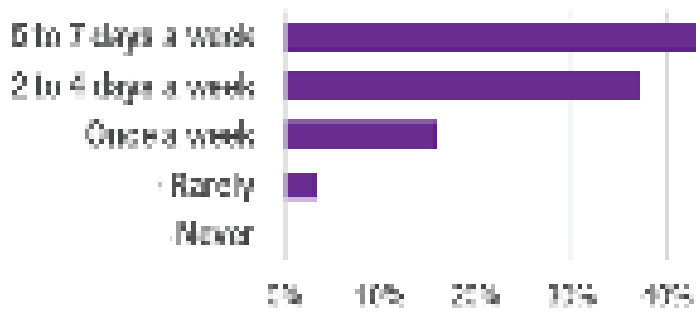
- No bike lanes (like before)
- Separated bike lanes next to the curb (currently installed)
- Traditional paint-only bike lanes next to parking (like on College St.)



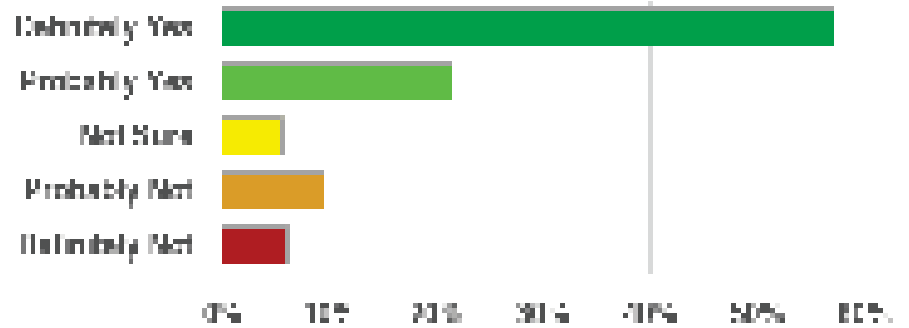
FEEDBACK SURVEY #2: PEOPLE WHO BIKE

- Concerns with motor vehicles stopping in the bike lanes and getting “cut off” by motor vehicles at intersections
- Over 75% said they cycle more often because of the bike lanes
- Location concerns were noted mostly at intersections
- Passing in the bike lane and TTC bus stops received the lowest concern score

How Often Ride a Bike on Bloor Street in the Warmer Months (n=1)



Cycle More Often Because of Bloor Bike Lanes (n=1)



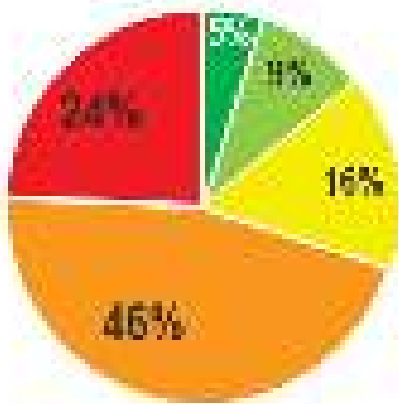


FEEDBACK SURVEY #2: PEOPLE WHO DRIVE

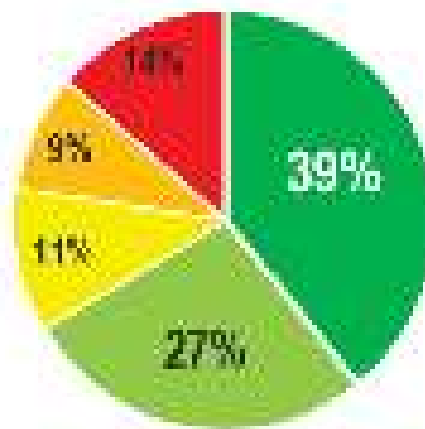
Over 6,600 responses from people who drive on Bloor Street.

Driving Comfort Next to Cyclists on Bloor Street

Before
Without Bike Lanes on Bloor
(Survey #1 in 2015)



After
With Separated Bike Lanes

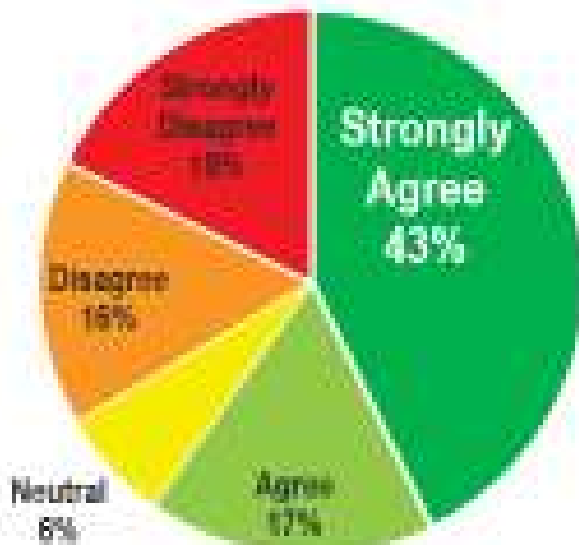


- Very comfortable
- Comfortable
- Neither comfortable nor uncomfortable
- Uncomfortable
- Very uncomfortable

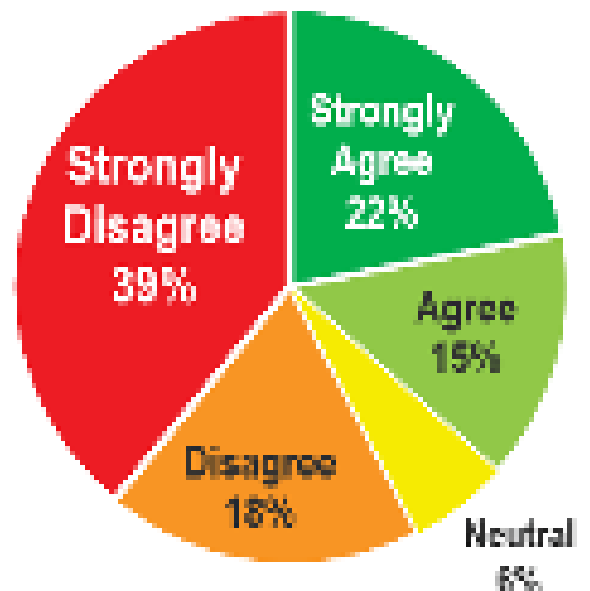
Overall,

bike lanes on Bloor Street provide a safer & more comfortable environment for cyclists, with acceptable trade-offs in motorist traffic flow and parking convenience

People who drive and sometimes bicycle on Bloor (less than once a week)



People who drive and never bicycle on Bloor





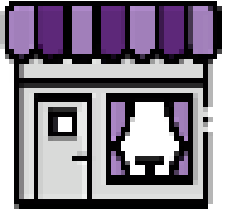
FEEDBACK SURVEY #2: PEOPLE WHO DRIVE

AND DO NOT BIKE ON BLOOR

Over 2,700 responses from people who drive and do not bike on Bloor. Issues include the following:

- Dissatisfaction with rush hour traffic
- Making right turns across the bike lane
- Loading or making deliveries next to the bike lane
- Dropping off or picking up passengers next to the bike lane
- Finding convenient parking relative to their destination

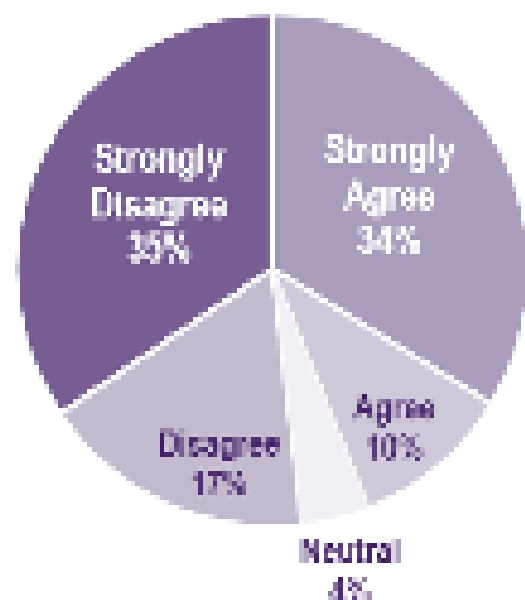




FEEDBACK SURVEY #2: BUSINESS ON BLOOR ST.

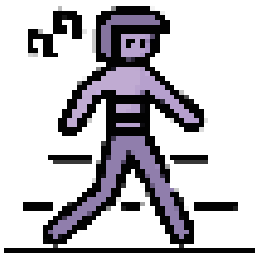
- Of 140 local business representatives, opinions are roughly split in support and opposition
- Deliveries and take-away are more challenging for some businesses
- Concerns about decreased parking convenience for customers from some businesses
- Strong support from employees and customers who bike to their business

Overall, bike lanes on Bloor Street provide a safer & more comfortable environment for cyclists, with acceptable trade-offs in motorist traffic flow and parking convenience



Merchants surveys were conducted as part of a parallel Economic Impact Study, see panel #23 for more details





FEEDBACK SURVEY #2: PEOPLE WHO WALK

AND DO NOT BIKE OR DRIVE ON BLOOR

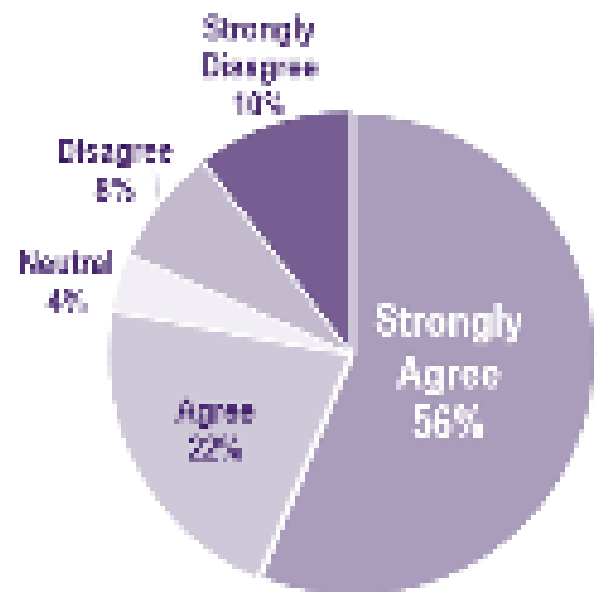
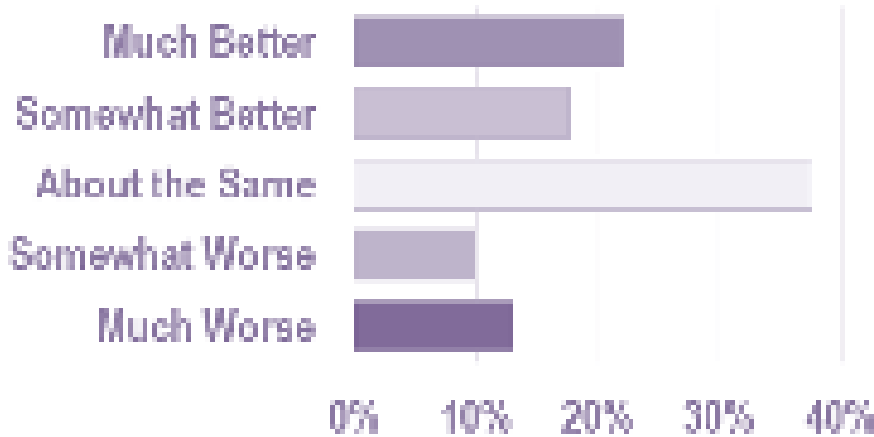
Over 1,000 responses from people who walk and do not bike or drive on Bloor.

- Majority of residents who do not bike or drive, strongly support the bike lanes
- Pedestrian experience is about the same, or considered better
- Getting in and out of vehicles or getting a taxi/Uber is a bit more challenging
- Some concerns about accessible boarding for people with disabilities

Overall,

Bike lanes on Bloor Street provide a safer & more comfortable environment for cyclists, with acceptable trade-offs in motorist traffic flow and parking convenience

Experience Walking on Bloor St Now with Bike Lanes



PUBLIC FEEDBACK THEMES AND CITY RESPONSES

TRAFFIC OPERATIONS

Traffic Delays

Slower travel times for motor vehicles has been observed during peak hours. Solutions include the following:

- **Adjustments to Signal Timing**
A 10%-16% increase to east-west green time is being applied to 9 intersections to help clear traffic queues.
- **Changing of Travel Habits**
Some motorists will choose to use other routes, or travel at non-peak hours, or change their mode of travel to transit or bicycle.



Traffic on Side Streets

- Some residents raised concerns about increased motor vehicle traffic on side streets, such as Barton Avenue.
- Turning restrictions are proposed, where feasible, to discourage traffic infiltration.



COMMERCIAL LOADING & ACCESSIBLE BOARDING

Loading for businesses can be a challenge, especially for smaller businesses, mid-block, with various deliveries to coordinate.

Solutions

- The City has and continues to offer to convert some on-street parking to loading zones, on request of adjacent businesses.
- Some businesses have adjusted their deliveries schedules to hours when there is more available on street parking.
- Business can load within “no-parking” corner restrictions on side streets. Temporary new road markings are being installed to help provide guidance.
- Some businesses can use side and rear laneways. Some laneways could benefit from improved management and maintenance.
- Some businesses are using dollies and ramps to make loading easier.

People with physical disabilities who rely on a mobility aid, such as a wheelchair or walker, generally require direct curbside loading or a curb cut. Some locations have frequent accessible loading demands such as at a medical centre. A dedicated loading zone and curb cut are provided as needed.



Curb cut constructed at 341 Bloor West

PARKING CONVENIENCE

Motor Vehicle Customer Parking within a Short Walk (150m or less)

- 114 Parking spaces are provided on Bloor Street in the pilot area.
- 879 Parking spaces are provided at Green P lots
- 560 parking spaces are provided to the public in private lots (and more will be provided in new developments)
- Dozens of “customer-only” spaces
- Hundreds of spaces on side street (primarily for residential permit holders)
- The loss in convenient parking spaces because of the bike lanes is about 160

Less than a 10% loss in
convenient customer parking



Parking on Alternates Sides

On-street parking alternates between north and south sides. This provides an equitable approach to businesses and residents, and provides drivers with potential parking in either direction.

The selection of which side would have parking was based on many factors, including providing loading for businesses without laneway access, meeting requirements for Wheel-Trans service and minimizing the number of times that parking alternated sides to provide traffic lanes that are as straight as possible.

THE TORONTO PARKING AUTHORITY

A Before and After Parking Utilization study is being undertaken by Toronto Parking Authority, to be published in the fall as part of the staff report to City Council.

Opportunities for Reducing Impacts on Parking

Short Term:

- Explore additional on-street parking opportunities on side streets
- Optimize usage & rates at current Green P lots
- 8 new on-street paid parking spaces on Borden St. & Palmerston Ave.

Medium Term:

- The Toronto Parking Authority is reviewing opportunities to enter into off-street management contracts for additional short-term parking spaces
- As of November 2015, TPA added 19 new off-street parking spaces in the pilot area through a management agreement with 292 Brunswick Avenue

Long Term:

- Create more off-street parking opportunities in new developments in partnership with the Toronto Parking Authority

BIKE PARKING



78 new bike parking spaces have been installed during the pilot study, so far. More racks and post-and-ring may be installed this summer

ECONOMIC IMPACT STUDY

The City is partnering on a parallel study on the local economic impact of bike lanes on Bloor Street. This local business activity study is principally being carried out by the Toronto Center for Active Transportation (TCAT), in partnership with the University of Toronto, and is funded by the City of Toronto, the Metcalf Foundation, the Bloor Annex BIA, and the Korea Town BIA.

Study Methodology:

- Pilot area and control area, Korean translation
- Door to door merchant surveys of business owners or managers
- Pedestrian intercept survey - random selection
- Storefront vacancy analysis

Data Collection:

- Fall 2015 – Pre-pilot
- Fall 2016 – Post-pilot
- Spring 2017 – Second post-pilot

Results will be reported in the fall of 2017.



Learn more about
the Economic
Impact Study at
tcat.ca/project

NEXT STEPS

Data Collection & Analysis Continues

- Next round of traffic data collection is scheduled for June 2017
- Before and After Parking Utilization Study

Reports to be Published in the Fall

- Overall Pilot Results and Recommendations
- Economic Impact Study (led by TCAT in partnership with the University of Toronto)

All reports on the results of the pilot project will be presented to the Public Works and Infrastructure Committee and City Council in the fall of 2017.



Learn more and subscribe for email updates online:

toronto.ca/bloorbikelanes