# KING STREET TRANSIT PILOT

April Update





## **APRIL HIGHLIGHTS**

### TRANSIT RIDERSHIP

Before the pilot compared to March/April







increase in all-day weekday



16% - 4-

increase in AM commute ridership (eastbound at Spadina Ave.).



increase in PM commute ridership (westbound at University Ave.).

### TRANSIT RELIABILITY





of streetcars arriving within 4 minutes westbound during the morning commute.

## TRANSIT TRAVEL TIMES

The reliability of streetcar travel times has continued to improve.



Approx. 5 minute

improvement (in each direction) during the PM commute for the slowest streetcar travel time.

## **CAR TRAVEL TIMES & VOLUMES**



Average car travel times on most streets in the downtown, vary (+/-) less than a minute compared to before the pilot.



Drivers on King Street continue to access local businesses or residences, conduct loading and deliveries, and pick-up/drop-off passengers. Traffic previously using King Street has generally shifted to alternative east and west routes.



The downtown traffic network has been largely able to absorb and respond to the changes in routing that drivers have made.

## **PEDESTRIAN VOLUMES**

Pedestrian volumes in April were generally similar to those from March.

Changes in the number of pedestrians from November to April show similar trends on both King Street and Queen Street.









### On King Street...





Weekday all-day pedestrian volumes indicate that mid-day and evening volumes remain relatively high.

At King Street and Spadina Avenue, average volumes from 12 p.m. to 2 p.m. exceed those from the AM Peak between 7 a.m. and 10 a.m.

Average early evening volumes (7 p.m to 10 p.m) are comparable to those from the mid-afternoon (2 p.m. to 4 p.m.)

## **CYCLING VOLUMES**

Overall changes in the number of cyclists throughout the downtown are consistent with expected seasonal changes.

On King Street, cycling volumes initially increased after the pilot was installed, before returning to cycling volumes relatively consistent with before the pilot. In April, there was a moderate increase in the number of cyclists compared to the baseline.











## PREVIOUS HIGHLIGHTS

### TRANSIT CAPACITY

Last Update: January

To respond to this growth in ridership, the TTC has increased the capacity of streetcar service on routes that serve the pilot area.



Peak of Pilot (Jan. 24/18)



## **ECONOMIC POINT-OF-SALE DATA**

Last Update: January





## **NO CHANGE**

Customer spending since the pilot began is in line with seasonal spending patterns over the past three years.

#### **BASELINE**

#### Data Collection Dates:

TTC: September 21 to October 14, 2017 and October 30 to November 4, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street).

Vehicles: September 21 to October 14, 2017 and October 30 to November 8, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street).

#### **APRIL**

#### Data Collection Dates:

TTC Transit Travel Times & Reliability: April 1, 2018 to April 28 TTC Ridership: March 14-22, 28-29, April 20, 2018 Car Travel Times: A.M. April 1-19,24-30, 2018 & P.M. April 1-17, 30 Car, Pedestrian & Cycling Volumes: April 7-13, 2018

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## **PILOT BACKGROUND**

The King Street Transit Pilot is about moving people more efficiently on transit, improving public space, and supporting business and economic prosperity along King Street. The pilot aims to improve transit reliability, speed, and capacity on the busiest surface transit route in the city by giving transit priority on King Street from Bathurst Street to Jarvis Street.

The monitoring and evaluation plan involves the collection of data before and during the pilot in order to assess the impacts and benefits. Data is collected through methods such as the tracking of TTC streetcars using GPS, the monitoring of car travel times using Bluetooth sensors, and the collection of pedestrian, cycling and car volumes using video analytics. Monthly updates will be provided reflecting the latest data and information available to the City. This update provides an overview of the results of monitoring through the month of April.

### **COMING SOON**

Throughout the course of the pilot, the City will also be measuring or reviewing data on the following metrics, which will be made public as they become available:

- Economic point-of-sale data
- Parking Utilization

As the pilot progresses, data collected for the pilot will be made available on the City's open data catalogue. The catalogue can be accessed at:

Vehicles: September 21 to October 14, 2017 and October 30

https://www.toronto.ca/city-government/data-research-maps/open-data/



to November 8, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street). Car, Pedestrian & Cycling Volumes: April 7-13, 2018

## TRANSIT TRAVEL TIMES & RELIABILITY

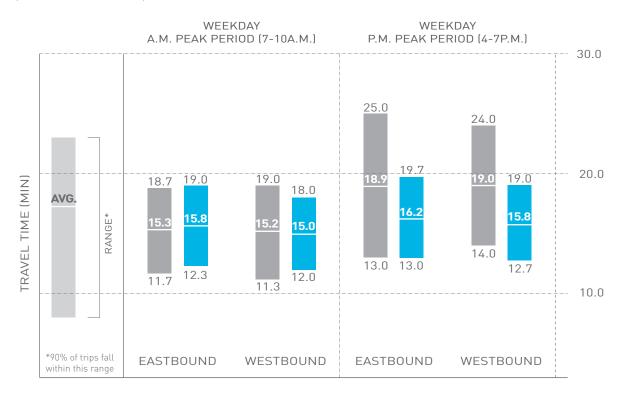
King Street Transit Pilot

April 2018



## STREETCAR TRAVEL TIME RANGE (MIN)

(BATHURST - JARVIS)



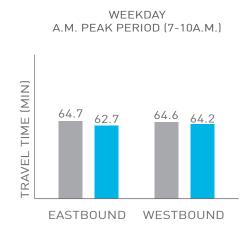
## **AVERAGE STREETCAR TRAVEL TIME (MIN)**

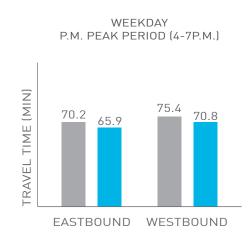
(BATHURST - JARVIS)

	A.M. PEAK (7-10a.m.)	MIDDAY (10a.m4p.m)	P.M. PEAK (4p.m-7p.m.)	EARLY EVENING (7p.m10p.m)	LATE EVENING (10p.m3a.m)			
EASTBOUND								
BASELINE	15.3	16.8	18.9	15.8	15.1 12.7 (-2.4)			
APRIL	15.8	14.7	16.2	13.9				
CHANGE	(+0.5)	(-2.1)	(-2.7)	(-1.9)				
WESTBOUND								
BASELINE	15.2	16.1	19.0	16.4	14.6			
APRIL	15.0	14.1	15.8	13.9	12.8			
CHANGE	(-0.2)	(-2.0)	(-3.2)	(-2.5)	(-1.8)			

## **FULL ROUTE TRAVEL TIME (MIN)**

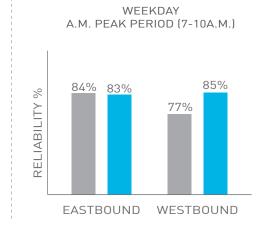
(DUNDAS W. STATION - BROADVIEW STATION)

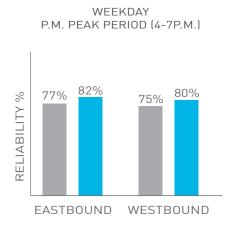




## **WAIT TIME RELIABILITY\***

% streetcars arriving within 4 minutes





## **SUMMARY**

- Improvements to the reliability of streetcar travel times observed in previous reporting periods have generally continued through April in both the morning peak (7-10 a.m.) and afternoon peak (4-7 p.m.).
- o The most significant improvement continues to be during the afternoon peak, where the slowest streetcar travel times have improved by approximately 5 minutes in each direction. Eastbound travel times have improved from 25 minutes to 19.7 minutes and westbound travel times have improved from 24 to 19 minutes when comparing April to before the pilot.
- o Westbound afternoon peak (4-7 p.m.) trips have improved by 3.2 minutes.
- Streetcar travel times have increased by 0.5 minutes in the morning eastbound direction primarily due to longer boarding times arising from increased ridership.
- Average streetcar travel times mid-day (10 a.m. 4 p.m.) have improved by 2.1 minutes eastbound and 2 minutes westbound.
- Early evening (7–10 p.m.) trips have improved by 1.9 minutes for eastbound trips and 2.2 minutes for westbound trips.
- Staff will continue to monitor travel times and reliability for streetcars and identify opportunities for improvements.

## BASELINE Data Collection Dates:

TTC: September 21 to October 14, 2017 and October 30 to November 4, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street).

#### APRII

Data Collection Dates: TTC Transit Travel Times & Reliability: April 1, 2018 to April 28, 2018

#### Wait Time Reliability

The value shown represents the percentage of streetcars in each peak period that arrive within 4 minutes of the previous vehicle and an indicator of service regularity and reliability. A higher value reflects more reliable wait times with fewer gaps in service, important components of overall journey time.



## TRANSIT RIDERSHIP 🚊

## TRANSIT RIDERSHIP

**ALL DAY WEEKDAY RIDERSHIP** (BOARDINGS)

2014	BASELINE	MARCH/APRIL	MARCH/APRIL GROWTH (%)		
65,000	72,000	81,000	(+13%) FROM BASELINE		

#### MORNING PEAK DEMAND

BUSIEST HOUR EASTBOUND @ SPADINA

BASELINE	MARCH/APRIL
2,200	2,560

#### AFTERNOON PEAK DEMAND

BUSIEST HOUR WESTBOUND @ UNIVERSITY

BASELINE	MARCH/APRIL
1,650	1,960

## **SUMMARY**

- Post-pilot ridership counts indicate that there has been significant growth in ridership throughout the pilot area.
- All-day weekday ridership in March and April has increased by 13% to 81,000 riders, compared to the baseline of 72,000.
- TTC ridership varies from month to month according to regular seasonal patterns. The latest observed ridership is consistent with TTC seasonal trends, which shows 3-4% fewer transit trips taken across the system in March/April compared to November.
- To meet this growth in demand, the TTC has significantly increased the capacity of streetcar service delivered on routes that serve the pilot area. The scheduled passenger capacity of streetcars running on King Street was 2,047 passengers per hour before the pilot and on January 24th, 2018, a peak delivered capacity of 2,892 passengers per hour was achieved.

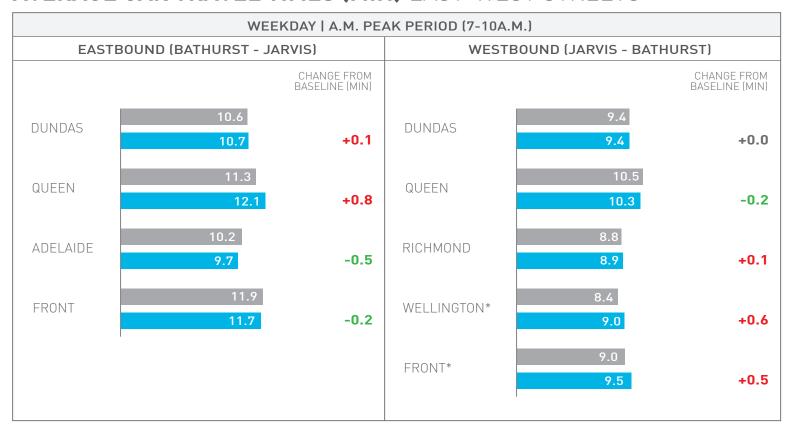
## **PEDESTRIANS AT STOPS**

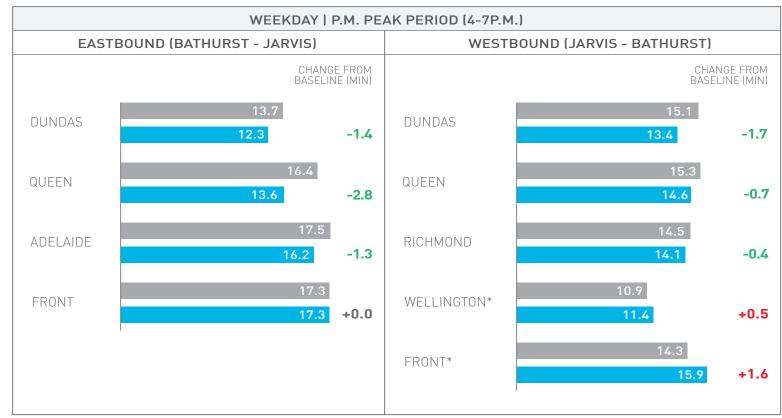
KING STREET AT	A.M. PEAK (7-10a.m.)		(1	MIDDAY 10a.m4p.m	)	P.M. PEAK (4p.m-7p.m.)		EARLY EVENING (7p.m10p.m)				
	BASELINE	MAR/APR	% CHANGE	BASELINE	PILOT	% CHANGE	BASELINE	PILOT	% CHANGE	BASELINE	PILOT	% CHANGE
Bathurst Street	1,280	1,210	(-5%)	1,170	1,140	(-3%)	1,150	1,500	(+30%)	650	540	(-17%)
Portland Street	1,010	980	(-3%)	890	980	(+10%)	860	1,070	(+24%)	500	470	(-6%)
Spadina Avenue	1,500	1,890	(+26%)	1,610	1,790	(+11%)	1,970	2,000	(+2%)	930	900	(-3%)
Blue Jays Way/Peter Street	1,010	1,210	(+20%)	800	1,010	(+26%)	800	1,010	(+26%)	460	340	(-26%)
John Street	920	1,370	(+49%)	1,160	1,300	(+12%)	850	1,130	(+33%)	520	610	(+17%)
University Avenue	4,240	5,030	(+19%)	2,880	3,640	(+26%)	3,360	4,200	(+25%)	1,390	1,130	(-19%)
Bay Street	2,010	2,160	(+7%)	1,210	1,570	(+30%)	1,310	1,880	(+44%)	400	400	(+0%)
Yonge Street	4,400	5,570	(+27%)	4,240	6,510	(+54%)	3,630	5,040	(+39%)	1,560	1,670	(+7%)
Church Street	480	560	(+17%)	820	670	(-18%)	640	740	(+16%)	310	160	(-48%)
Jarvis Street	1,350	1,150	(-15%)	1,970	1,950	(-1%)	990	1,190	(+20%)	330	350	(+6%)
TOTAL, ALL PILOT AREA STOPS	18,200	21,130	(+16%)	16,750	20,560	(+23%)	15,560	19,760	(+27%)	7,050	6,570	(-7%)



## CAR TRAVEL TIMES

## AVERAGE CAR TRAVEL TIMES (MIN) EAST-WEST STREETS





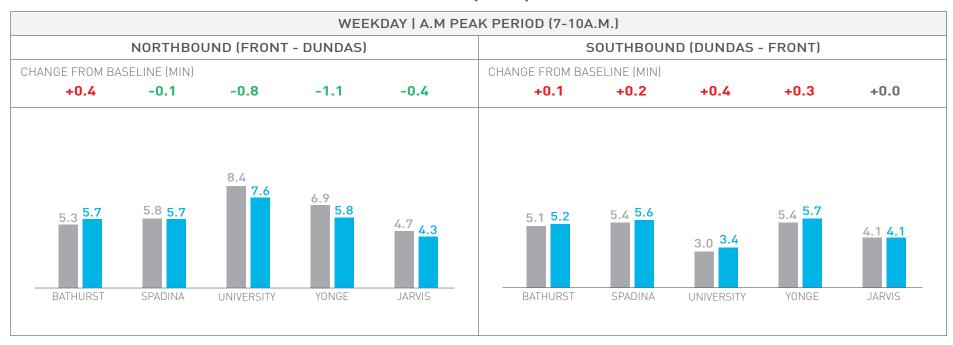
\*Wellington WB - Jarvis to Blue Jays | \*Front WB - Yonge to Bathurst

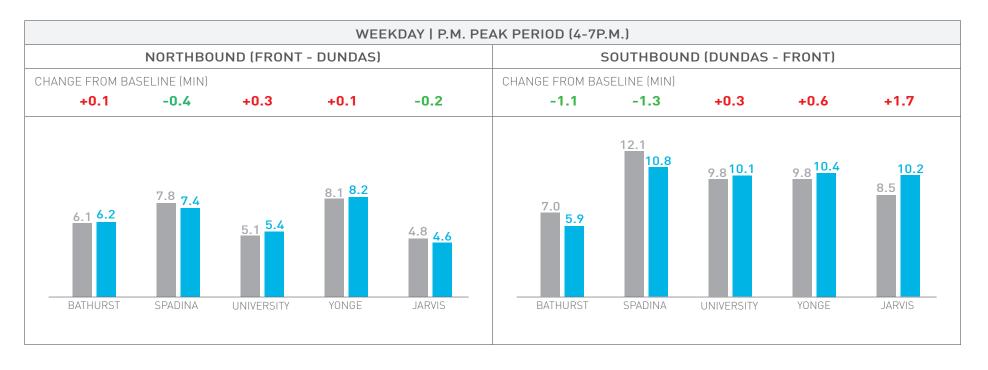
- Average car travel times on most streets in the downtown, vary (+/-) less than a minute compared to before the pilot.
- Overall, the results to this point indicate that the pilot has generally not impacted travel times on the surrounding
- Staff will continue to monitor travel times for vehicles during the pilot, and will identify opportunities for improvements as required.
- Front Street Westbound (PM Peak) continues to show a periodic increase in travel time. Month-over-month trend to date: Nov: +2.5 min; Dec: +0.6 min; Jan: -0.6 min; Feb: +2.7 min; Mar: +0.0 min; Apr: +1.6 min. Staff will continue to monitor travel times for vehicles during the pilot, and will identify opportunities for improvements as required.



# CAR TRAVEL TIMES

## AVERAGE CAR TRAVEL TIMES (MIN) NORTH-SOUTH STREETS





Vehicles: September 21 to October 14, 2017 and October 30 to November 8, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street).



## CAR VOLUMES

## **WEEKDAY | A.M. PEAK PERIOD (7-10A.M.)**



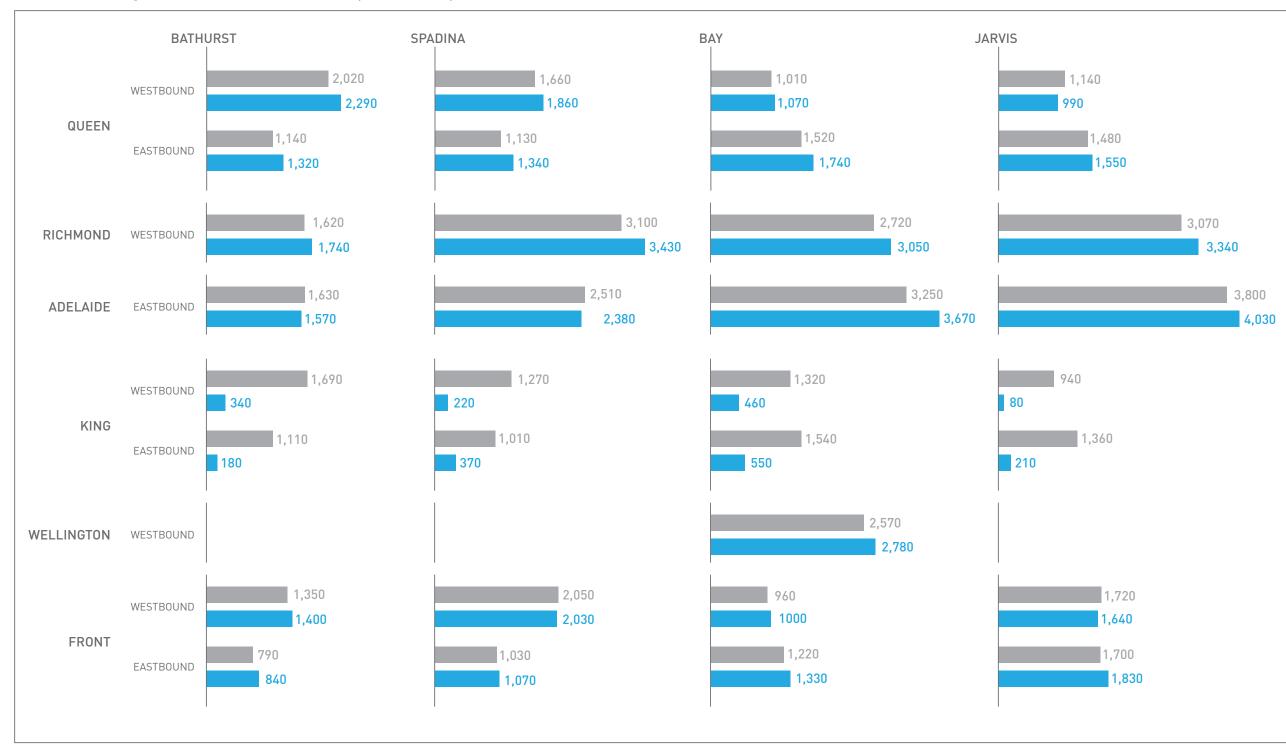
- Drivers on King Street continue to access local businesses or residences, conduct loading and deliveries, and pick-up/drop-off passengers. Traffic previously using King Street has generally shifted to alternative east and west routes.
- There has been an approximately 8% overall reduction in the total number of cars in the area surrounding King Street. Some of the reduction can likely be attributed to seasonal variations in overall traffic volumes before and during the pilot and may indicate that some people have shifted to transit, cycling, or walking.





# CAR VOLUMES 🚘

## WEEKDAY | P.M. PEAK PERIOD (4-7P.M.)



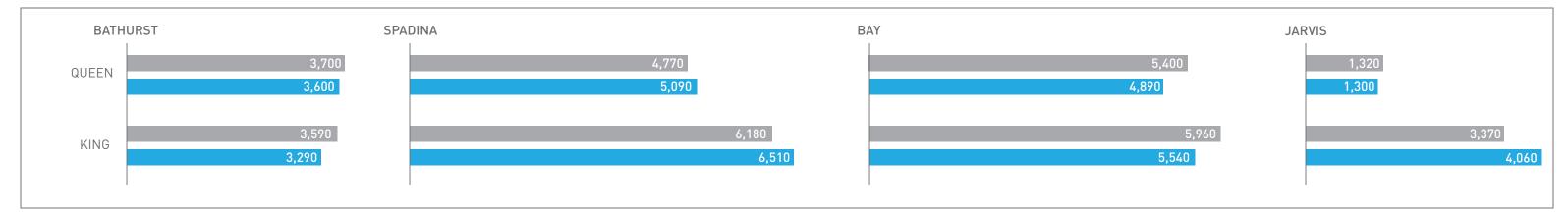


# PEDESTRIAN VOLUMES 🏌

## **WEEKDAY A.M. PEAK PERIOD (7-10A.M.) TOTAL VOLUMES**



## WEEKDAY | P.M. PEAK PERIOD (4-7P.M.) TOTAL VOLUMES

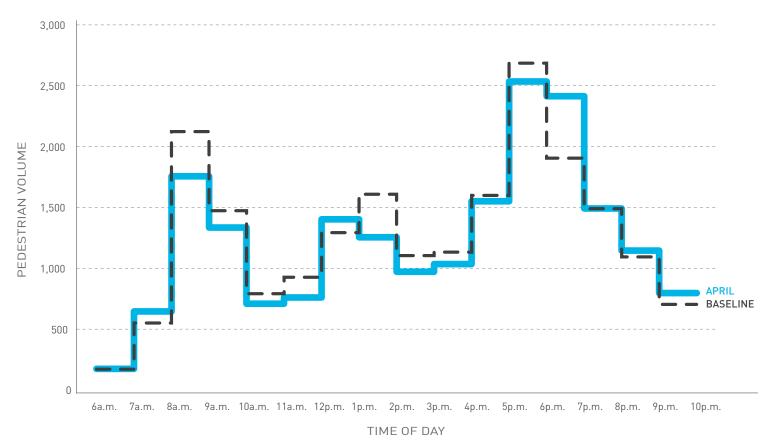


- Changes in the number of pedestrians from November to April show similar trends on both King Street and Queen Street.
- Pedestrian volumes in April were generally similar to those from March.
- The increase in the number of pedestrians near Jarvis Street is likely the result of the baseline counts being conducted during the same time period as the college teachers strike. Given the proximity of George Brown College, it is likely that the number of pedestrians were lower than normal during the baseline along Jarvis Street, especially near King Street.

# PEDESTRIAN VOLUMES 🏌

## TOTAL WEEKDAY PEDESTRIAN VOLUMES AT KING AND SPADINA

TOTAL HOURLY EAST-WEST VOLUMES, APRIL 2018



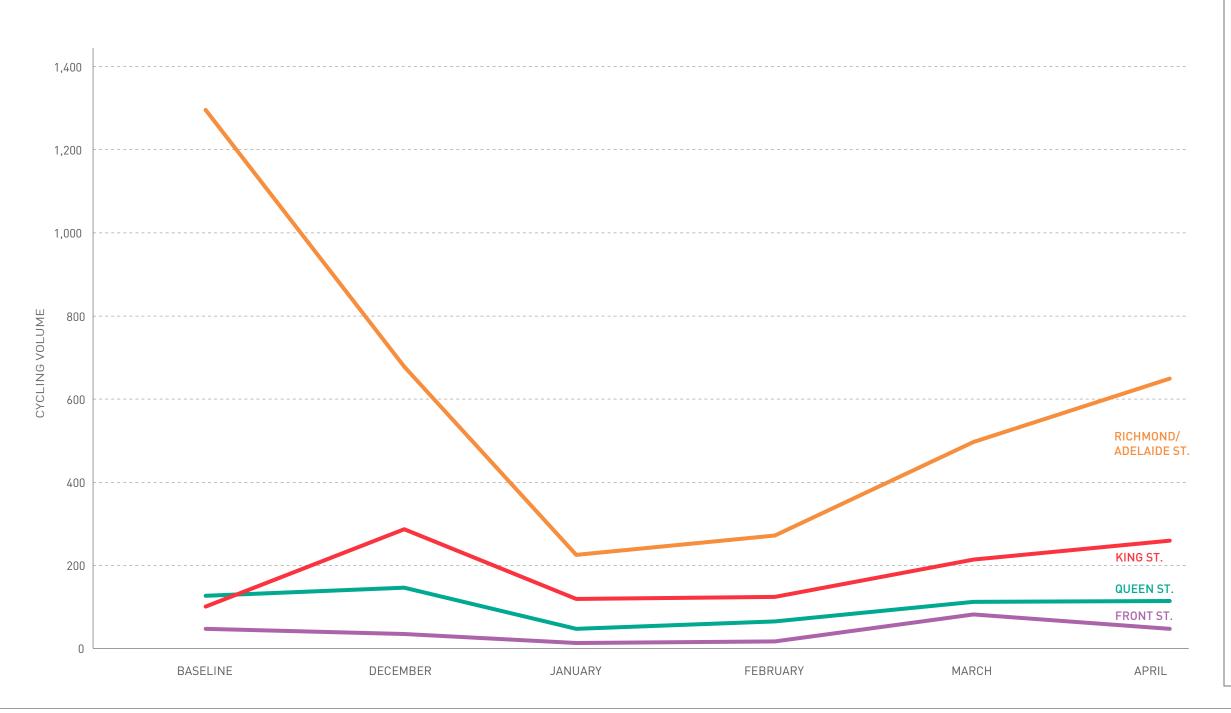
# TOTAL WEEKDAY P.M. PEAK PERIOD (4-7P.M.) PEDESTRIAN VOLUMES AT KING/QUEEN AND SPADINA



## CYCLING VOLUMES &

## TOTAL WEEKDAY P.M. PEAK PERIOD (4-7P.M.) CYCLING VOLUMES AT SPADINA

MONTHLY TRENDS

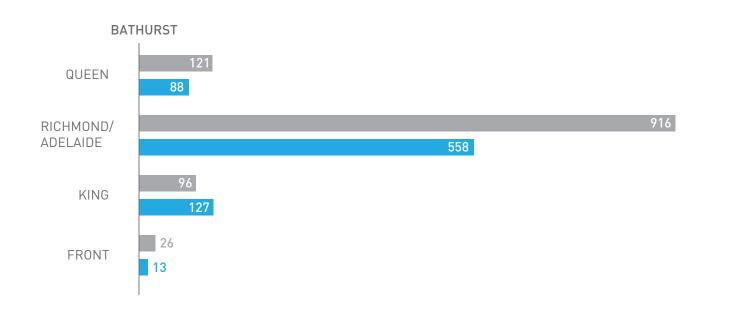


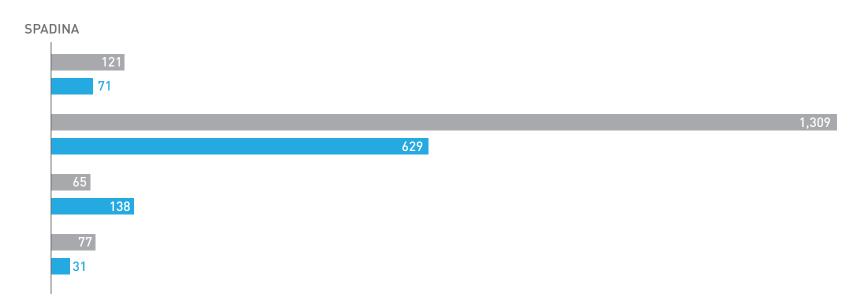
- Overall changes in the number of cyclists throughout the downtown are consistent with expected seasonal changes.
- Cycling volumes on King Street increased initially from the baseline in December (PM Peak at Spadina Avenue: +186 cyclists), before returning to cycling volumes relatively consistent with before the pilot. In April, there was a moderate increase of +119 cyclists compared to the baseline during the PM Peak at Spadina Avenue.
- Seasonal changes have most directly impacted Richmond Street and Adelaide Street, where dedicated cycle tracks are present. Other corridors without dedicated cycling facilities (e.g. Queen Street and Front Street) have generally seen more moderate change. This suggests that seasonal cyclists have generally been attracted to the dedicated facilities on Richmond Street and Adelaide Street, whereas all-weather cyclists maybe more comfortable on routes without dedicated facilities.

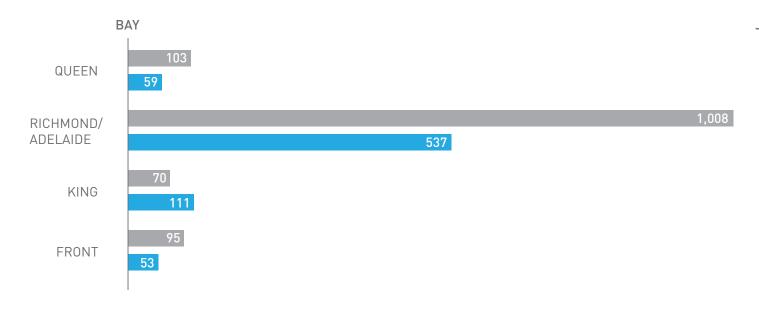


# CYCLING VOLUMES &

## WEEKDAY | A.M. PEAK PERIOD (7-10A.M.) TOTAL VOLUMES











## WEEKDAY | P.M. PEAK PERIOD (4-7P.M.) TOTAL VOLUMES

CYCLING VOLUMES &

