

# KING STREET TRANSIT PILOT

## January Update



## TRANSIT RIDERSHIP



## TRANSIT CAPACITY

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



## TRANSIT TRAVEL TIMES

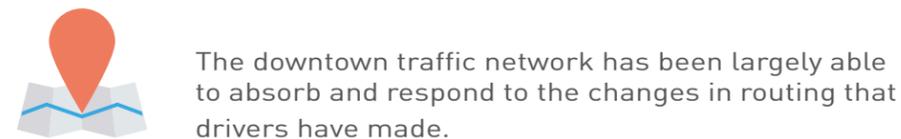
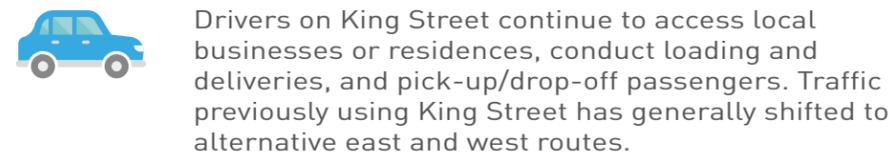
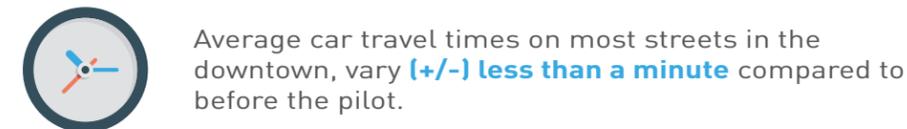
The reliability of streetcar travel times has continued to improve.



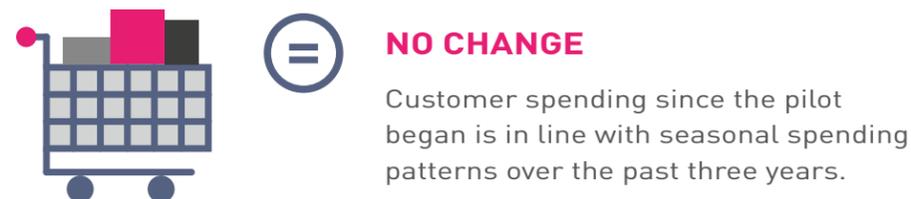
## TRANSIT RELIABILITY



## CAR TRAVEL TIMES & VOLUMES



## ECONOMIC POINT-OF-SALE DATA

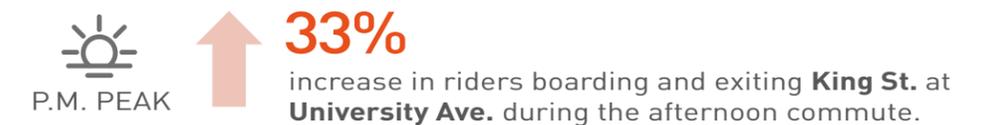
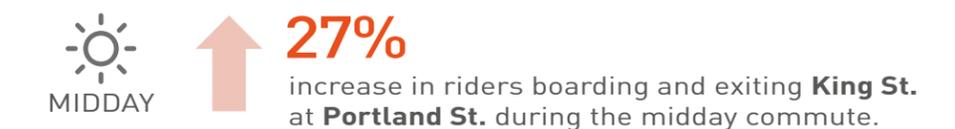
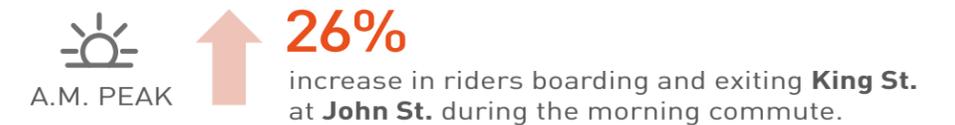


## PEDESTRIAN VOLUMES

Change in the number of pedestrians from November to January show similar seasonal decreases on both King Street and Queen Street.



## PEDESTRIANS AT STOPS



### 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).

### JANUARY

Data Collection Dates:  
TTC: December 31, 2017 to February 3, 2018  
Vehicles: January 1, 2018 to January 31, 2018



## 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 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 January.

## 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:

- Cycling volumes; and
- 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:

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



### BASELINE

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### JANUARY

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## TRANSIT RIDERSHIP

ALL DAY WEEKDAY RIDERSHIP  
(BOARDINGS)

2014	BASELINE	PILOT	RIDERSHIP GROWTH (%)
65,000	72,000	84,000	<b>(+16%)</b> FROM BASELINE

MORNING PEAK DEMAND  
BUSIEST HOUR EASTBOUND @ SPADINA

BASELINE	PILOT
2,200	2,750

AFTERNOON PEAK DEMAND  
BUSIEST HOUR WESTBOUND @ UNIVERSITY

BASELINE	PILOT
1,650	2,100

## SUMMARY

- Post-pilot ridership counts indicate that there has been significant growth in ridership throughout the pilot area.
- All-day weekday ridership has increased by 16%, from 72,200 boardings to 84,000.
- Demand during the busiest hour in both the AM and PM commutes has increased. During the morning commute, peak demand (eastbound at Spadina Avenue) has risen from 2,200 boardings to 2,750 boardings, an increase of 25%. During the afternoon commute, peak demand (westbound at University Avenue) has risen from 1,650 boardings to 2,100 boardings, a 27% increase.
- 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.)			MIDDAY (10a.m.-4p.m.)			P.M. PEAK (4p.m-7p.m.)			EARLY EVENING (7p.m.-10p.m.)		
	BASELINE	PILOT	% CHANGE	BASELINE	PILOT	% CHANGE	BASELINE	PILOT	% CHANGE	BASELINE	PILOT	% CHANGE
Bathurst Street	1,280	1,320	<b>(+3%)</b>	1,170	1,190	<b>(+2%)</b>	1,150	1,020	<b>(-11%)</b>	650	530	<b>(-18%)</b>
Portland Street	1,010	1,440	<b>(+43%)</b>	890	1,130	<b>(+27%)</b>	860	1,320	<b>(+53%)</b>	500	540	<b>(+8%)</b>
Spadina Avenue	1,500	1,500	<b>(+0%)</b>	1,610	1,620	<b>(+1%)</b>	1,970	1,820	<b>(-8%)</b>	930	900	<b>(-3%)</b>
Blue Jays Way/Peter Street	1,010	1,140	<b>(+13%)</b>	800	1,070	<b>(+34%)</b>	800	1,100	<b>(+38%)</b>	460	510	<b>(+11%)</b>
John Street	920	1,160	<b>(+26%)</b>	1,160	1,220	<b>(+5%)</b>	850	1,500	<b>(+76%)</b>	520	630	<b>(+21%)</b>
University Avenue	4,240	4,680	<b>(+10%)</b>	2,880	3,410	<b>(+18%)</b>	3,360	4,470	<b>(+33%)</b>	1,390	1,420	<b>(+2%)</b>
Bay Street	2,010	2,130	<b>(+6%)</b>	1,210	1,470	<b>(+21%)</b>	1,310	1,930	<b>(+47%)</b>	400	440	<b>(+10%)</b>
Yonge Street	4,400	4,960	<b>(+13%)</b>	4,240	5,960	<b>(+41%)</b>	3,630	6,450	<b>(+78%)</b>	1,560	2,490	<b>(+60%)</b>
Church Street	480	450	<b>(+6%)</b>	820	770	<b>(-6%)</b>	640	850	<b>(+33%)</b>	310	390	<b>(+26%)</b>
Jarvis Street	1,350	1,120	<b>(-17%)</b>	1,970	1,880	<b>(-5%)</b>	990	1,200	<b>(+21%)</b>	330	490	<b>(+48%)</b>
<b>TOTAL, ALL PILOT AREA STOPS</b>	<b>18,200</b>	<b>19,900</b>	<b>(+9%)</b>	<b>16,750</b>	<b>19,720</b>	<b>(+18%)</b>	<b>15,560</b>	<b>21,660</b>	<b>(+39%)</b>	<b>7,050</b>	<b>8,340</b>	<b>(+18%)</b>

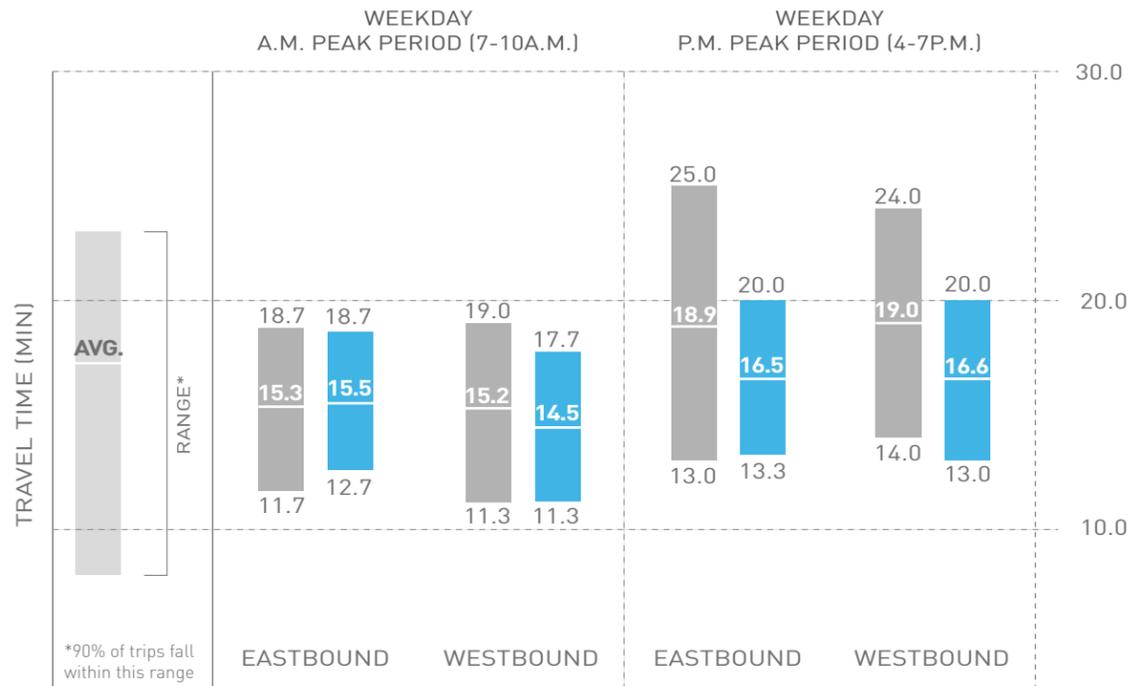
**BASELINE**  
Data Collection Dates:  
TTC: Counts Completed September 2017

**PILOT**  
Data Collection Dates:  
TTC: Counts Completed November 2017



## STREETCAR TRAVEL TIME RANGE (MIN)

(BATHURST - JARVIS)



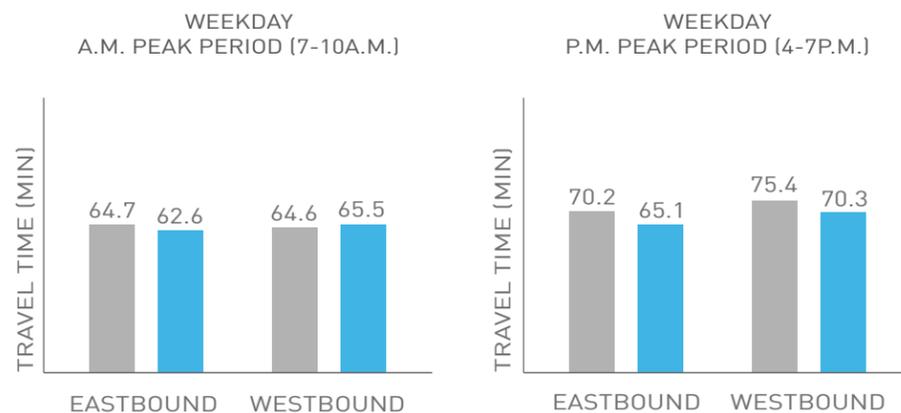
## AVERAGE STREETCAR TRAVEL TIME (MIN)

(BATHURST - JARVIS)

	A.M. PEAK (7-10a.m.)	MIDDAY (10a.m.-4p.m.)	P.M. PEAK (4p.m.-7p.m.)	EARLY EVENING (7p.m.-10p.m.)	LATE EVENING (10p.m.-2a.m.)
<b>EASTBOUND</b>					
BASELINE	15.3	16.8	18.9	15.8	15.1
<b>JANUARY</b>	<b>15.5</b>	<b>14.5</b>	<b>16.5</b>	<b>13.6</b>	<b>12.6</b>
<b>CHANGE</b>	<b>(+0.2)</b>	<b>(-2.3)</b>	<b>(-2.4)</b>	<b>(-2.2)</b>	<b>(-2.5)</b>
<b>WESTBOUND</b>					
BASELINE	15.2	16.1	19.0	16.4	14.6
<b>JANUARY</b>	<b>14.5</b>	<b>13.8</b>	<b>16.6</b>	<b>13.7</b>	<b>11.9</b>
<b>CHANGE</b>	<b>(-0.7)</b>	<b>(-2.3)</b>	<b>(-2.4)</b>	<b>(-2.7)</b>	<b>(-2.7)</b>

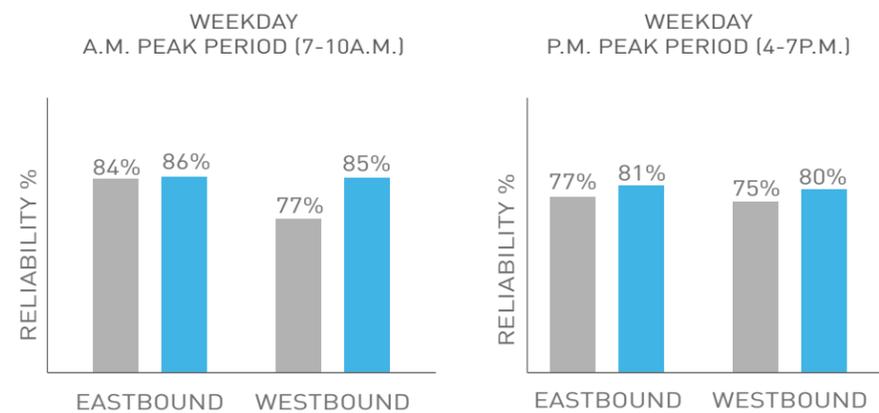
## FULL ROUTE TRAVEL TIME

(DUNDAS W. STATION - BROADVIEW STATION)



## WAIT TIME RELIABILITY \*

% streetcars arriving within 4 minutes



## SUMMARY

- Improvements to the reliability of streetcar travel times observed in November and December have continued through January in both the morning peak (7-10 a.m.) and afternoon peak (4-7 p.m.).
  - The most significant improvement continues to be during the afternoon peak, where the slowest streetcar travel times have improved by 4 to 5 minutes in each direction. Eastbound travel times have improved from 25 minutes to 20.0 minutes and westbound travel times have improved from 24 to 20 minutes when comparing January to before the pilot.
  - This improvement to the slowest trips indicates that fewer streetcars are experiencing congestion-related delays and that trips through the pilot area that exceed 20 minutes are becoming less frequent.
- Average streetcar travel times mid-day (10 a.m. – 4 p.m.) have improved by 2.3 minutes, in both directions. Early evening (7-10 p.m.), eastbound trips have improved by 2.2 minutes from an average of 15.8 minutes to 13.6 minutes.
- Staff will continue to monitor travel times and reliability for streetcars and identify opportunities for improvements.

### BASELINE

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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).

### JANUARY

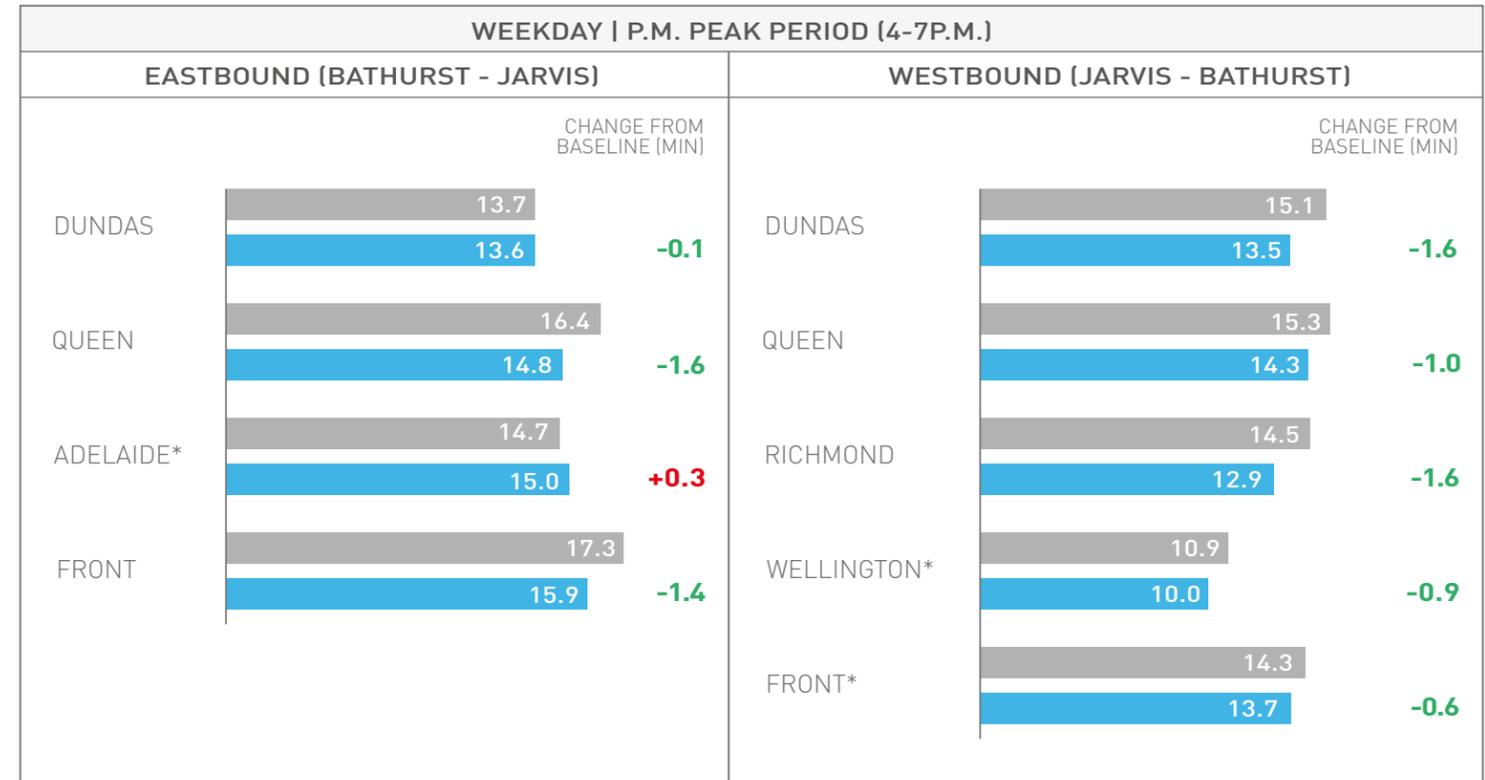
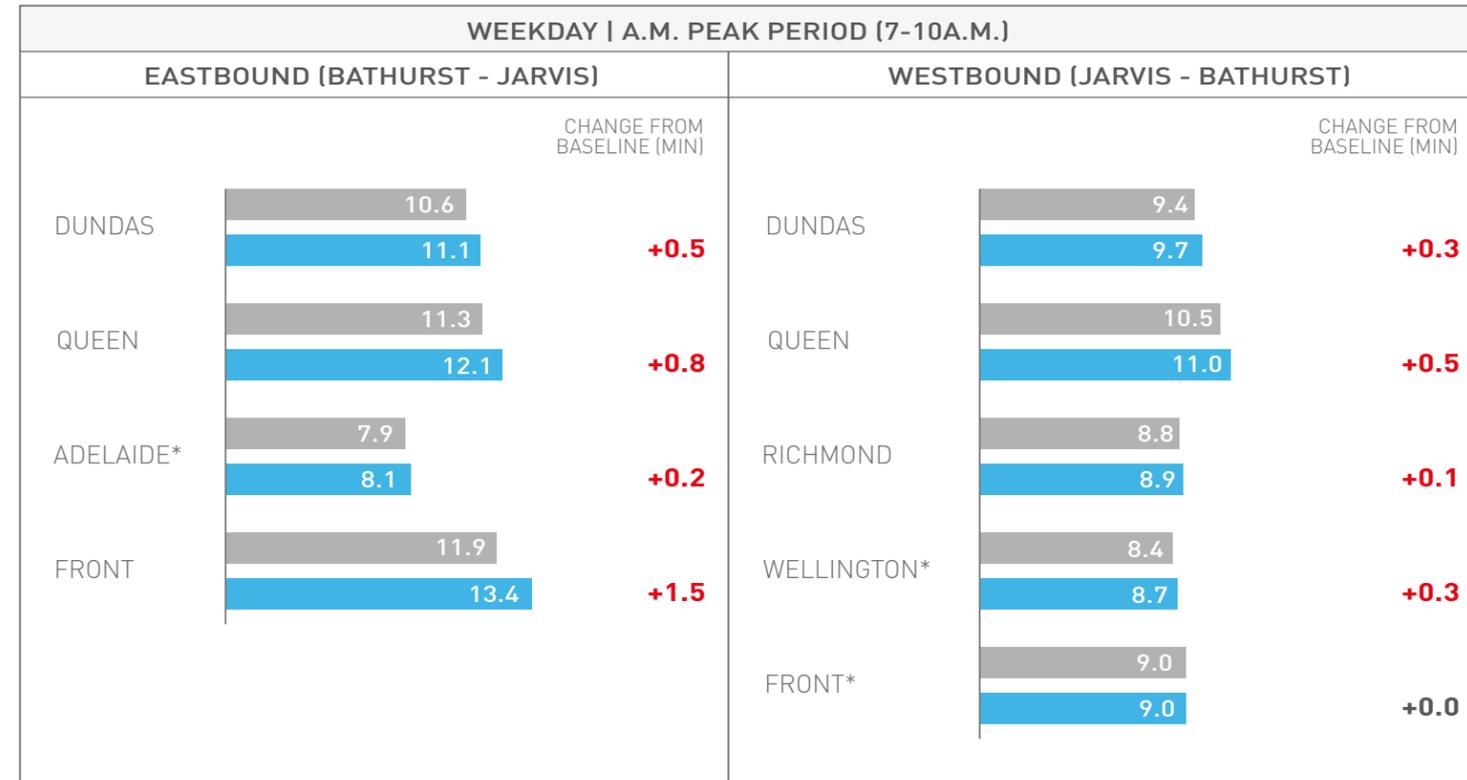
Data Collection Dates:  
TTC: December 31, 2017 to February 3, 2018

### \*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.



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



\*Adelaide EB - Spadina to Jarvis

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

## SUMMARY

- The results to this point indicate that the pilot has generally not impacted travel times on the surrounding street network. Average car travel times on most streets, both east/west and north/south, continue to vary (+/-) less than a minute compared to before the pilot.
- Through January, a number of parallel routes showed moderate improvements to car travel times relative to before the pilot. For example, during the PM peak both Richmond Street and Dundas Street were 1.6 minutes faster in the westbound direction than before the pilot.
- The only route showing moderate impact in January was Front Street, eastbound during the morning peak, which was 1.5 minutes slower than before the pilot. This was similar to the observed increase of 1.6 minutes in November, but contrasted a 0.8 minute improvement in December.
- Staff will continue to monitor travel times for vehicles during the pilot, and will identify opportunities for improvements as required.

### BASELINE

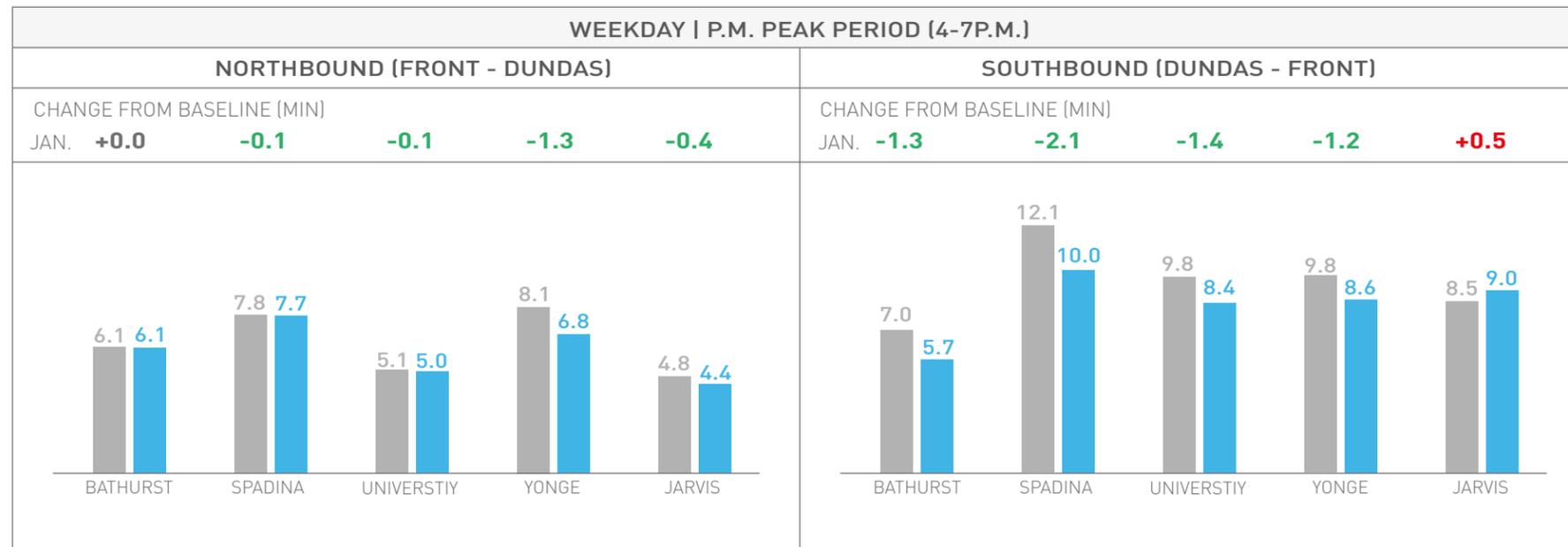
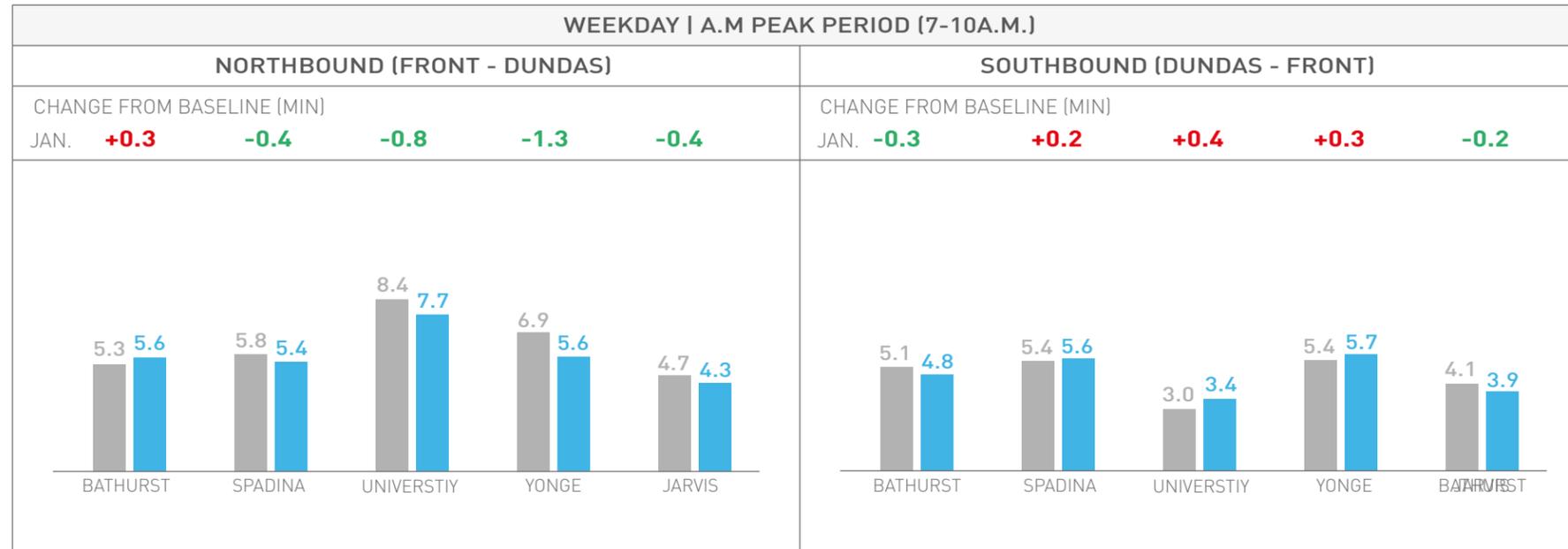
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### JANUARY

Data Collection Dates:  
Vehicles: January 1, 2018 to January 18, 2018



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



### BASELINE

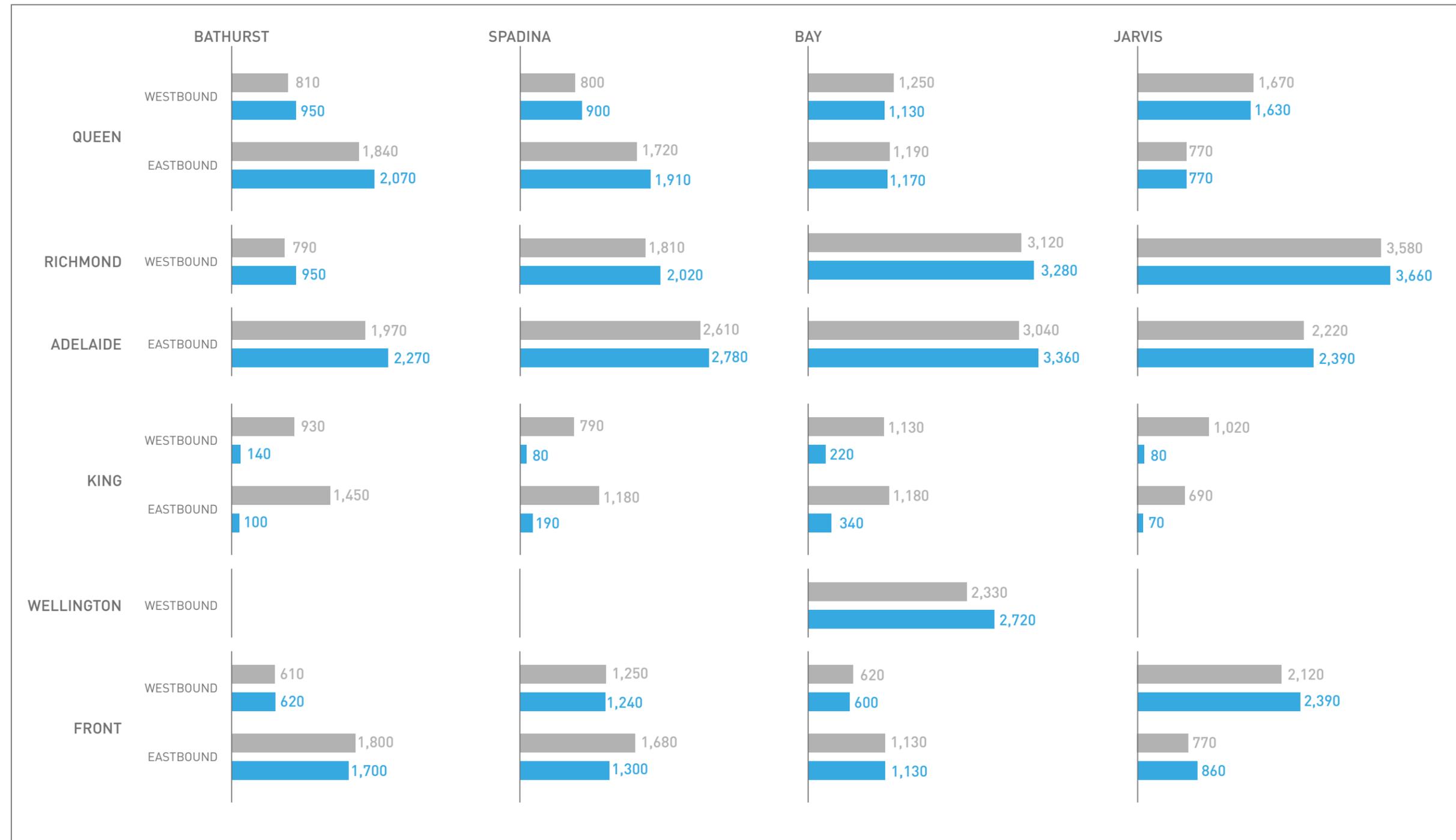
**Data Collection Dates:**  
Vehicles: September 21 to October 14, 2017 and October 30 to November 8, 2017 (Intervening period removed due to TTC track construction at Queen Street and McCaul Street)

### JANUARY

**Data Collection Dates:**  
Vehicles: January 1, 2018 to January 18, 2018



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



## SUMMARY

- Drivers on King Street continue 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 a 7-12% 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.
- While car volumes have increased on most alternative east and west routes, there has generally not been an associated increase in travel times for cars. This indicates that the downtown traffic network has been largely able to absorb and respond to the changes in routing that drivers have made.

### BASELINE

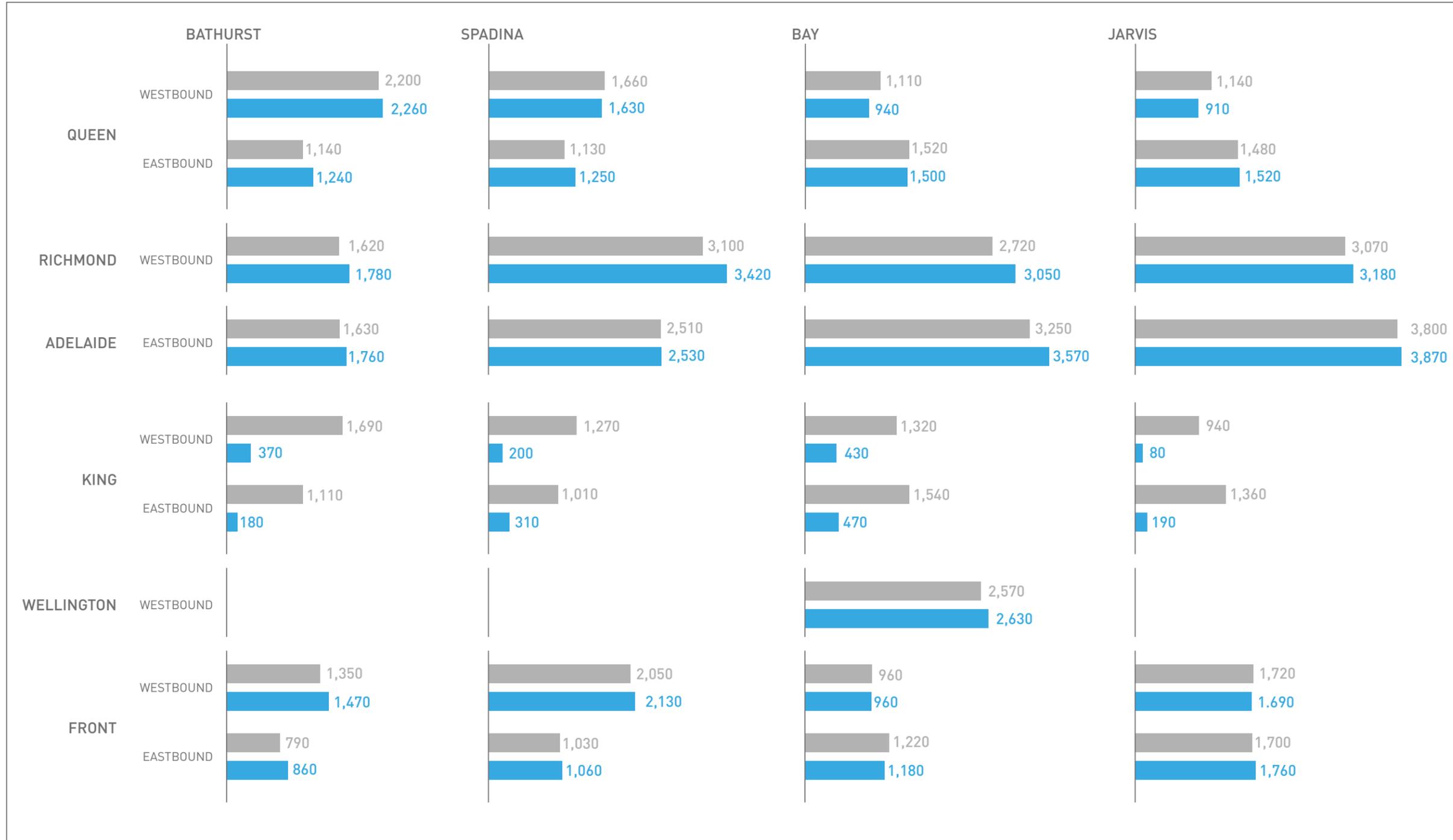
Data Collection Dates:  
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### JANUARY

Data Collection Dates:  
January 1, 2018 to January 18, 2018

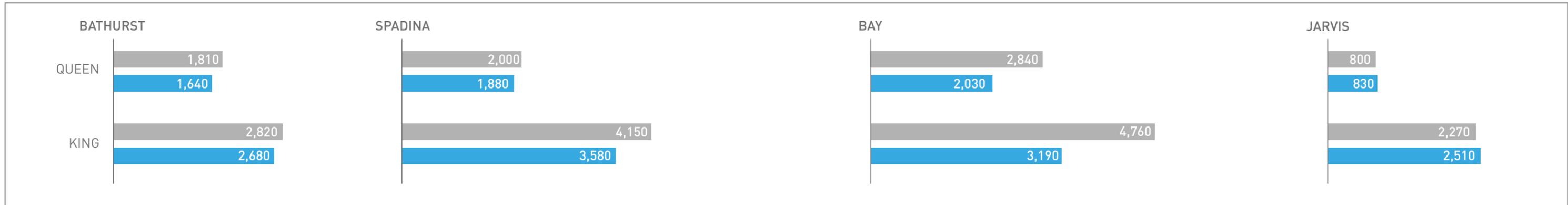


## WEEKDAY | P.M. PEAK PERIOD (4-7P.M.)

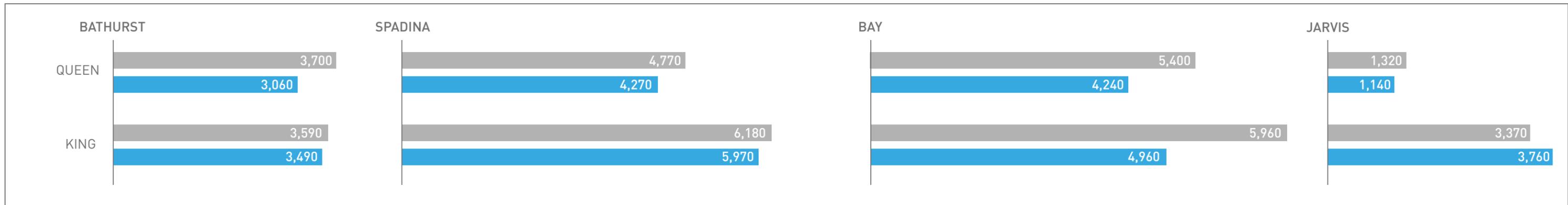




## WEEKDAY | A.M. PEAK PERIOD (7-10A.M.)



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



## SUMMARY

- Change in the number of pedestrians from November to January show similar seasonal decreases on both King Street and Queen Street.
- King Street - decreased between 5%-33% during the morning peak, and 3%-17% during the afternoon peak.
- Queen Street - decreased by 6%-29% in the morning peak and 10%-21% in the afternoon peak.
- The number of pedestrian near Jarvis Street did not decrease as much as those further west, 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 pedestrian were lower than normal during the baseline along Jarvis Street, especially near King Street.



## CUSTOMER SPENDING ANALYSIS BASED ON POINT OF SALE DATA

In order to provide independent insight into the potential effect of the pilot project on local businesses, the City obtained trend data on customer spending from Moneris Solutions Corporation, the company with the largest market share of point-of-sale payment processors in Canada.

Early data obtained to-date includes information up to December 31st, 2017 representing approximately 7 weeks of pilot duration. Information provided is based on the total value of customer spending indexed to November 2014.

Preliminary findings indicate that customer spending since the pilot began is in line with seasonal spending patterns over the past three years. The value of customer spending for the pilot area increased 21% from October 2017 to December 2017, which was in line with the seasonal growth for the City as a whole of 20%. During the same time period, growth in the comparison area surrounding King Street remained even (0%).

Staff will continue to monitor economic trends throughout the pilot, and will provide the next update in the second quarter of 2018.

TOTAL VALUE OF CUSTOMER SPENDING

