KING STREET TRANSIT PRIORITY CORRIDOR

July 2024 Update



toronto.ca/kingstreet

HIGHLIGHTS



decrease in all-day weekday ridership from 2019 to Winter/Spring 2024. increase in all-day weekend ridership from 2019 to Winter/Spring 2024.

TRANSIT TRAVEL TIMES



Transit travel times remained mostly consistent with travel times in 2019 until the Fall of 2023 when construction projects had significant impacts on transit travel times. These travel times recovered in December 2023 and through the Winter and Spring of 2024 after Adelaide Street partially re-opened and traffic agents were dispatched.

TRANSIT RELIABILITY



Transit reliability deteriorated starting in May 2023 coinciding with the closure of Queen Street. Improvements have been observed starting in December 2023, and as of April 2024, wait time reliability in the PM peak period is exceeding 2019 levels.

MOTOR VEHICLE VOLUMES



decrease in motor vehicle volumes on King Street.

Construction projects on Queen Street and Adelaide Steet resulted in an additional 200-300 vehicles traveling on King Street in the Fall of 2023 (an increase of 33% compared to before the Queen Street closure in the PM peak period). This additional vehicle volume resulted in significant operational challenges for transit on King Street.

Motor vehicle volumes in the PM peak period fell after Adelaide Street partially re-opened and traffic agents were dispatched in December 2023. Volumes on King Street in May/June 2024 were 19% lower than they were in May 2023 before the closure of Queen Street for Ontario Line construction.

MOTOR VEHICLE MOVEMENT VIOLATIONS



reduction in movement violations at King Street intersections in the PM peak period in May/June 2024 compared to the Fall of 2023 after the introduction of traffic agents and the re-opening of Adelaide Street.

Violations are now 30% lower in the PM Peak period than they were in May 2023 before the initial closure of Queen St for Ontario Line construction.

PEDESTRIAN VOLUMES

Pedestrian volumes were not significantly impacted by the closures of Queen Street and Adelaide Street, and volumes follow seasonal patterns.

future updates.



King Street Transit **Priority Corridor**



TRAFFIC SIGNAL IMPROVEMENTS

Signal infrastructure changes were made at the intersections of King Street at Church Street and King Street at Yonge Street in April 2024. These changes included the addition of new dedicated transit signals, and dedicated bike signals and red signal for east-west vehicle movements at all times. The City is monitoring these changes to evaluate their effectiveness and consider expanding these changes to additional intersections on the corridor, and will be reporting on these results in

TRANSIT TRAVEL TIME RANGE

WEEKDAY AM PEAK PERIOD (7-10 A.M.)

Eastbound in Minutes



WEEKDAY PM PEAK PERIOD (4-7 P.M.)

Eastbound in Minutes



2019

2023-24











King Street Transit Priority Corridor



SUMMARY

- The King Street Transit Priority Corridor continued to show consistent and predictable travel times prior to the Fall of 2023, comparable to pre-pandemic levels. In the Fall of 2023, travel times and travel time reliability were negatively impacted from various construction-related operational challenges including the closing of Queen Street and reduced traffic lanes on Adelaide Street and Richmond Street for Ontario Line construction.
- An increase in travel times of up to 4 minutes each way in the PM peak period was observed starting in May 2023 coinciding with the closure of Queen Street between Church Street and Bay Street for Ontario Line construction.
- Further increases in travel time and higher variability were observed in the Fall of 2023, coinciding with increased construction impacts.
- The slowest travel times in November 2023 were eastbound in the PM peak period, which exceeded 2019 levels by nearly 100%, which prompted the deployment of traffic agents to direct traffic and reduce transit delays along the corridor.
- Starting in 2024, transit travel times returned to levels consistent with those observed prior to the pandemic.



DAILY AFTERNOON PEAK HOUR TRAVEL TIMES (January 2016 - March 2024)

AVERAGE AND 90% RANGE (EASTBOUND BATHURST ST TO JARVIS ST, WEEKDAY 5-6 P.M.)



Post priority Average
(January 1, 2019 - June 21, 2024)

Post priority Travel Time Reliability (90% Range)

King Street Transit Priority Corridor



Adelaide St. of Emergency **Full Closure** Deployment of Traffic Agents **Ontario Line** Queen St. Closure TIFF -TIFF 2024 Jan 2024 Mar 2023 Nov 2022 May 2022 Sep 2022 Nov 2023 Jan 2023 Mar 2023 May 2023 Sep 2024 May 2022 Jul 2023 Jul

WAIT TIME RELIABILITY

% OF STREETCARS ARRIVING WITHIN 150% OF SCHEDULED HEADWAY (BATHURST ST – JARVIS ST)



SUMMARY

- Wait time variability in early 2023 was comparable to the post-priority baseline.
- Starting in May 2023, wait time variability, especially in the PM peak period, deteriorated as a result of various operational challenges from increased downtown activities and the closing of Queen Street and reduced traffic lanes on Adelaide Street and Richmond Street for Ontario Line construction, which diverted traffic on to King Street for through movements.
- In Fall 2023, the PM peak period wait times became more variable in 2019, which prompted the deployment of traffic agents at key locations to direct traffic. Since then and up to June 2024, headway consistency improved as traffic blockages reduced.

King Street Transit Priority Corridor



TRANSIT RIDERSHIP

ALL DAY TRANSIT USAGE BETWEEN BATHURST ST AND JARVIS ST





King Street Transit **Priority Corridor**



SUMMARY

- Weekday corridor ridership continues to be below 2019 levels due to the reduction of downtown office commuters from hybrid working practices.
- As of Fall 2023, weekday corridor usage was at 71% of levels observed after implementation of the priority measures. This increased to 84% in Winter/Spring 2024.
- Weekend corridor usage, on the contrary, has continued to exceed 2019 levels.
- As of Fall 2023, weekend usage was over 50% higher than levels observed in 2019 after the implementation of the priority corridor, which could be attributed to an increase in downtown residents and transit rider diversions due to the closure of Queen Street between Church Street and Bay Street for Ontario Line construction. This increased further in Winter/Spring 2024 and is now 111% higher than 2019.
- As transit services became more reliable after December 2023, transit ridership increased in 2024 across all days of week in Winter/Spring 2024.
- Weekend corridor usage is highly variable as downtown special events, road restrictions, and subway closures all have significant impacts on transit usage on a week-over-week basis.

MOTOR VEHICLE VOLUMES

TOTAL VEHICLE TRAFFIC ON SPADINA AVE

Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months)

SUMMARY



parallel east-west streets of Queen Street and Adelaide Street.

were lower than they were in May 2023 before the closure of Queen Street for Ontario Line construction.

DATA COLLECTION

BEFORE QUEEN STREET CLOSURE February/March 2023 (Average)

AFTER QUEEN STREET CLOSURE September - December 15, 2023 (Average)

CURRENT May/June 2024 (Average)

King Street Transit Priority Corridor



TOTAL VEHICLE TRAFFIC AT BAY ST Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months) Queen to Front



• Eastbound motor vehicle volumes on King Street crossing Bay Street increased by 300 vehicles in the AM peak and 190 vehicles in the PM peak due to the closure of

• Motor vehicle volumes fell after Adelaide Street partially re-opened and traffic agents were dispatched in December 2023. Volumes on King Street in May/June 2024

MOTOR-VEHICLE TURNING MOVEMENT VIOLATIONS

AVERAGE HOURLY MOVEMENT VIOLATIONS

Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months)



DATA COLLECTION

BEFORE QUEEN STREET CLOSURE February/March 2023 (Average)

AFTER QUEEN STREET CLOSURE September - December 15, 2023 (Average)

CURRENT May/June 2024 (Average)

SUMMARY

- Movement violations are defined as through or left-turning movements at intersections where they are disallowed. Through and left-turn movements are not allowed at Yonge Street, University Avenue and Spadina Avenue while left turns are not allowed at Bay Street.
- Both the number and share of movement violations increased significantly after the Queen Street closure in May 2023. Violations returned to previous levels after traffic agents were deployed in early December 2023 and Adelaide Street partially reopened on December 16th, 2023.
- Movement violations are highest during the PM peak period, and are the most prevalent at Yonge Street, where 24% of traffic traveling on King Street were disobeying the traffic rules in the Fall of 2023. This has been reduced to 13%, generally consistent with the level of violations observed before the Queen Street closure.



MOVEMENT VIOLATIONS AS PERCENTAGE OF TOTAL VOLUME

Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months)

PEDESTRIAN VOLUMES

TOTAL TWO-WAY PEDESTRIAN TRAFFIC ON SPADINA AVE

Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months)

PM Peak Period (4-7 p.m.) AM Peak Period (7–10 a.m.) AM Peak Period (7-10 a.m.) 1210 3840 1300 1300 4070 1380 Queen Queen Queen 1230 3830 1420 1530 880 1230 1000 1960 1660 Richmond Richmond Richmond 960 2000 1510 880 1580 1740 1130 1890 2230 Adelaide Adelaide Adelaide 1090 1750 2380 3710 2430 1840 King King King 1920 4520 3620 2210 5010 3760 640 450 2570 530 3320 Front 760 Front Front 4590 n/a n/a

DATA COLLECTION

BEFORE QUEEN STREET CLOSURE February/March 2023 (Average)

AFTER QUEEN STREET CLOSURE September - December 15, 2023 (Average)

CURRENT May/June 2024 (Average)

SUMMARY

• Pedestrian volumes are sensitive to seasonal variation, and show higher volumes at most intersections in May/June 2024 compared to the Fall of 2023.

• Pedestrian volumes do not appear to have been affected by the closures of Queen Steet and Adelaide Street.



TOTAL TWO-WAY PEDESTRIAN TRAFFIC AT BAY ST

Total Weekday (Tuesday-Wednesday-Thursday) Peak Period Traffic, (Average of All Months)



