

# RapidT0: Eglinton East Bus Lane

Baseline to September 2021

Release Date: February 2022









The RapidTO bus priority program, a partnership between the City of Toronto and the TTC, advances the City's Surface Transit Network Plan and the TTC's 5-Year Service Plan & 10-Year Outlook. It aims to move people more efficiently on transit by improving reliability, speed and capacity on some of the busiest surface transit routes in the city. More reliable bus routes with faster service improves access to employment, healthcare and community services, and contributes to transit equity.

The Eglinton East bus lane, which spans 8.5 km and includes parts of Eglinton Avenue East, Kingston Road and Morningside Avenue, is the first RapidTO bus priority project in operation. It is also among the TTC's most heavily used transit routes, serving several Neighbourhood Improvement Areas and playing a significant role in moving people around the city even during the COVID-19 pandemic.

Transit and traffic data will be posted on the City's Open Data Portal in the coming months.

#### Eglinton East RapidTO - Project Timeline



Eglinton East RapidTO Bus Lane



### Baseline to September 2021 Highlights





This data has been collected during the city's response to the ongoing COVID-19 pandemic. Traffic volumes and congestion in Toronto remain lower than usual as residents follow public health direction, and have varied significantly in recent months as restrictions have evolved.



#### TRANSIT TRAVEL TIMES



#### 2 minutes

#### **AM COMMUTE**

Transit travel times have decreased by as much as 1 minutes 30 seconds compared to the week prior to the RapidTO launch; when compared to the October 2019 baseline, they decreased by as much as 6 minutes.



#### **5** minutes

#### PM COMMUTE

Transit travel times have decreased by as much as 5 minutes compared to the week prior to the RapidTO launch and to the October 2019 baseline.

#### TRANSIT RELIABILITY



10%

Reliability across all four routes has improved by an average of 10% in June – September 2021 compared to the October 2019 baseline, with the 116 Morningside improving by 15%. In the first dashboard, reliability had improved by an average of 8% in October 2020 – May 2021 and 12% in May 2021, compared to the October 2019 baseline.

#### TRANSIT RIDERSHIP



The COVID-19 pandemic has significantly impacted ridership (boardings), changing as restrictions evolve. Since summer 2021 RapidTO boardings have recovered faster than the system-wide bus network.

#### **CAR TRAVEL TIMES**





Average travel times along the RapidTO roadway continue to be lower than the Fall 2019 baseline in the AM Peak.

Travel times have risen on some segments with the return to school in September and are in line with Fall 2019 in the Eastbound direction in the PM Peak from Markham Road to Lawrence Avenue.

#### **CAR VOLUMES**







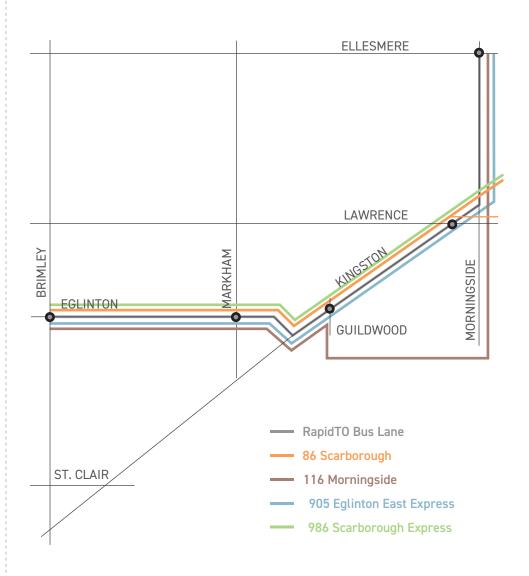




Volumes continue to be lower on the RapidTO roadway and alternate routes relative to the baseline period as influenced by the different COVID-19 restrictions but are slowly rising through the summer. Volumes increased in September with the return to school on both the RapidTO roadway and alternate routes.

#### **ROAD NETWORK**

There is no indication of traffic infiltration on Lawrence Avenue East, St. Clair Avenue East and Brimley Road. Volumes along these roadways are lower than comparable baselines and follow the trend of the RapidTO roadway volumes.



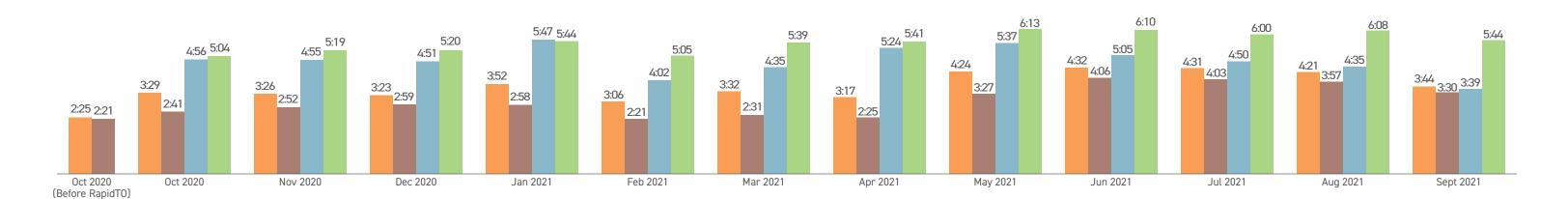
### Eglinton East Bus Lane

Baseline to September 2021

### Transit Travel Time Savings (Mins)



### Transit Travel Time Savings in A.M. Peak Period (6-9 A.M.) | Compared to Oct 2019 Baseline ✓ Westbound



### Transit Travel Time Savings in P.M. Peak Period (3-7 P.M.) | Compared to Oct 2019 Baseline Eastbound



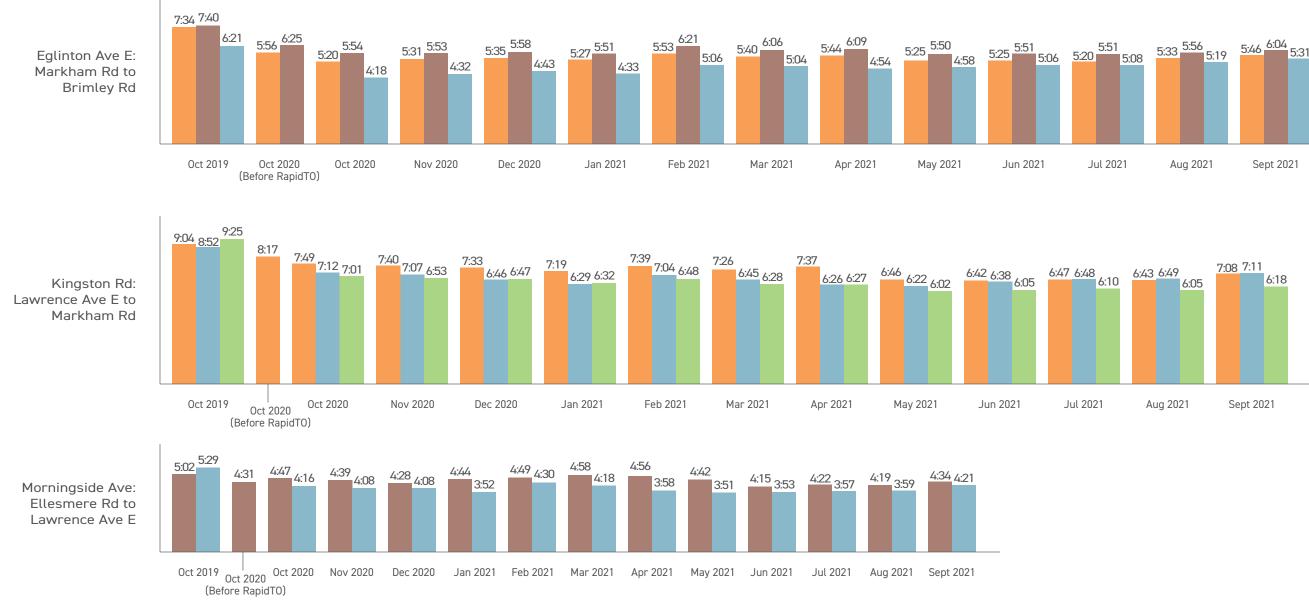
#### **Transit Travel Times Savings:**

- To read this graph, the October 2019 baseline travel time is the x-axis. Travel time savings from just COVID-19 can be seen in the first column, and travel time savings from RapidTO and COVID-19 are shown in the remaining columns. Travel time impacts of COVID-19 change as restrictions evolve.
- In the AM Peak, average travel time savings were about 3 minutes 30 seconds to 6 minutes compared to the October 2019 baseline, and as much as 1 minute 30 seconds compared to just prior to installation (some travel time savings due to COVID-19 restrictions).
- In the PM Peak, average travel time savings were about 0 to 5 minutes compared to the October 2019 baseline, and as much as 3 minute 30 seconds compared to just prior to installation (no travel time savings due to COVID-19 restrictions).
- The average reduction in travel time was calculated for each RapidTO route across RapidTO segments, excluding Eglinton Avenue East between Kennedy Road and Brimley Road (with the exception of the 986).
- Express services were suspended from April 2020 to October 2020.
- Travel time data was obtained from VISION, TTC's bus GPS tracking system.

### Transit Travel Times (Westbound)

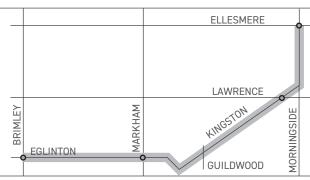


Weekday | A.M Peak Period (6-9 A.M.) ◀ Westbound



#### **Transit Travel Times:**

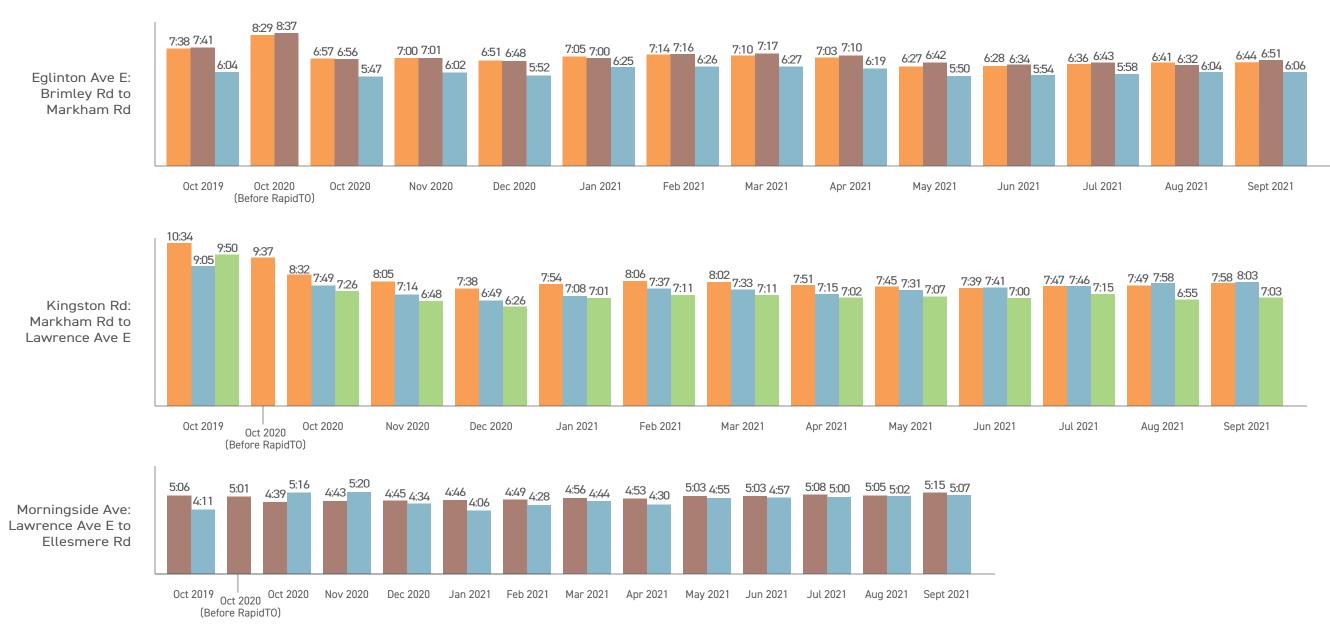
- · The average reduction in travel time was calculated for each RapidT0 route across RapidT0 segments.
- The segment of Eglinton between Brimley and Markham had four stops removed for the 86 and 116 in both directions, and no stops were removed for the 905 and 986 in both directions. The segment of Eglinton and Kingston between Markham and Lawrence had four stops for the 86 removed in both directions, one added for the 905 in both directions, and two removed for the 986 in both directions. The segment of Morningside between Lawrence and Ellesmere had one stop for the 116 removed in both directions, and one stop for the 905 added in both directions.
- Red paint was installed on Morningside Ave between September 2 October 9, prior to the RapidTO launch, which may have contributed to travel time savings seen in October 2020 (Before RapidTO).
- Travel time data was obtained from VISION, our bus GPS tracking system.

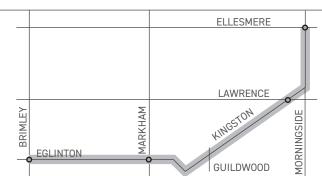


### Transit Travel Times (Eastbound)



Weekday | P.M Peak Period (3-7 P.M.) Eastbound

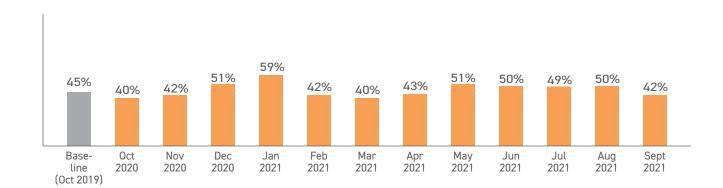


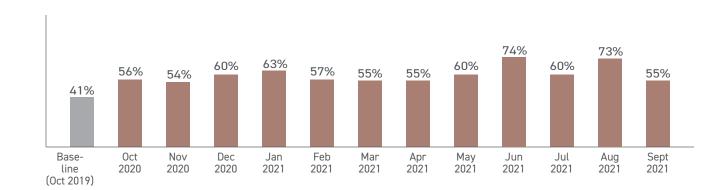


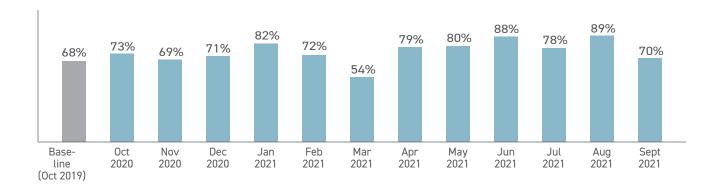
### Transit Wait-Time Reliability

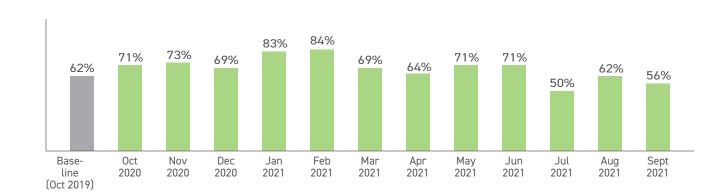


#### Transit Wait-Time Reliability - % of Arrivals within ±50% of Average Scheduled Headway









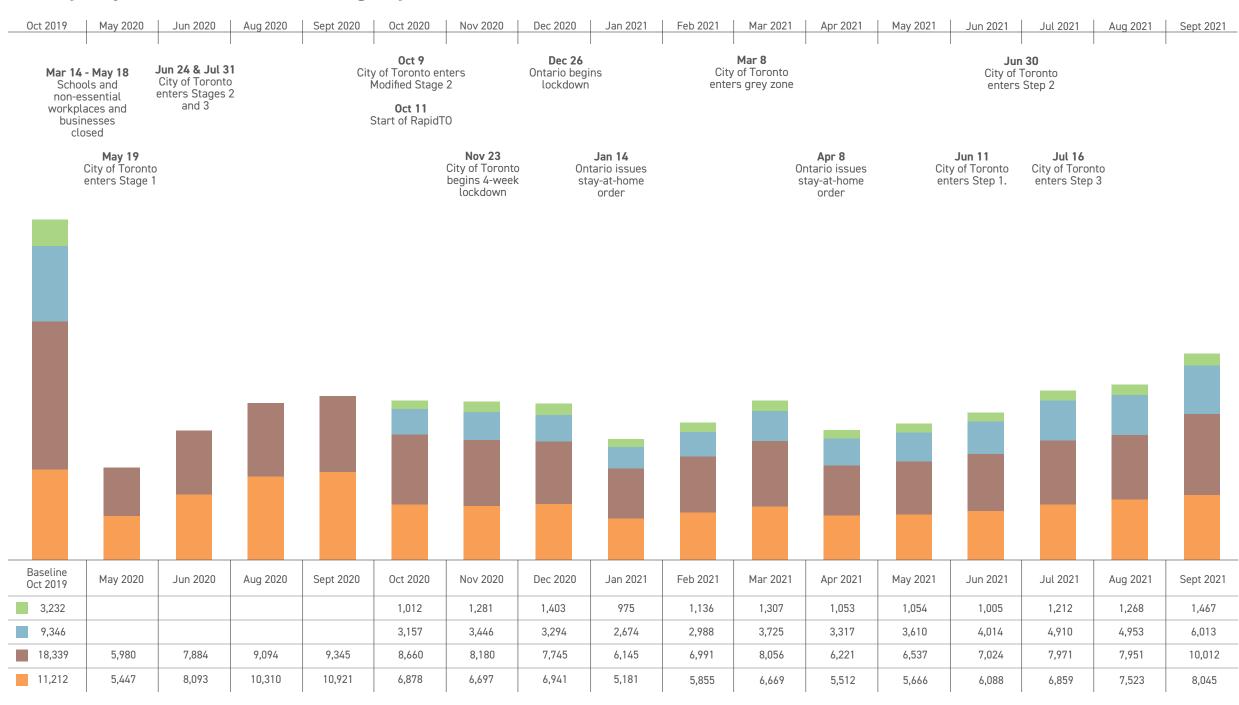
#### **Transit Wait-Time Reliability:**

- The values shown represent the percentage of trips that arrived within ±50% of the average scheduled headway, as defined in our Service Standards. For example, if a route is scheduled to operate every 8 minutes, a bus between every 4 and 12 minutes would be considered to meet the standard. A higher value indicates more predictable wait times and fewer gaps in service.
- · Scheduled headway is the scheduled time interval between buses.
- The graphs above were measured during the busiest hour and direction of the PM peak period (5:30 p.m. 6:30 p.m.), at Eglinton Avenue East and Markham Road in the Eastbound direction.
- · Reliability decreased in September due to operator availability. Reliability was 2% higher in September 2021 compared to the October 2019 baseline.

### Transit Ridership



#### All Day RapidTO Bus Lane Boardings by Route



#### **Transit Ridership:**

- The COVID-19 pandemic has significantly impacted ridership, changing as restrictions evolve.
- Since summer 2021 RapidTO boardings have recovered faster than the system-wide bus network (see page 8).
- Ridership figures on the 116 Morningside have been revised from the first dashboard. This is due to a change in counting the ridership that boarded on Guildwood Pkwy and in addressing an error where an incorrect stop was used. The revised ridership calculations varied between -137 and +240 boardings.
- The ridership figure for the 86 Scarborough in May 2021 has been revised from the first dashboard. This is due to the boardings at two stops that were relocated to far-side having not been included. The revised ridership calculation resulted in +159 boardings.

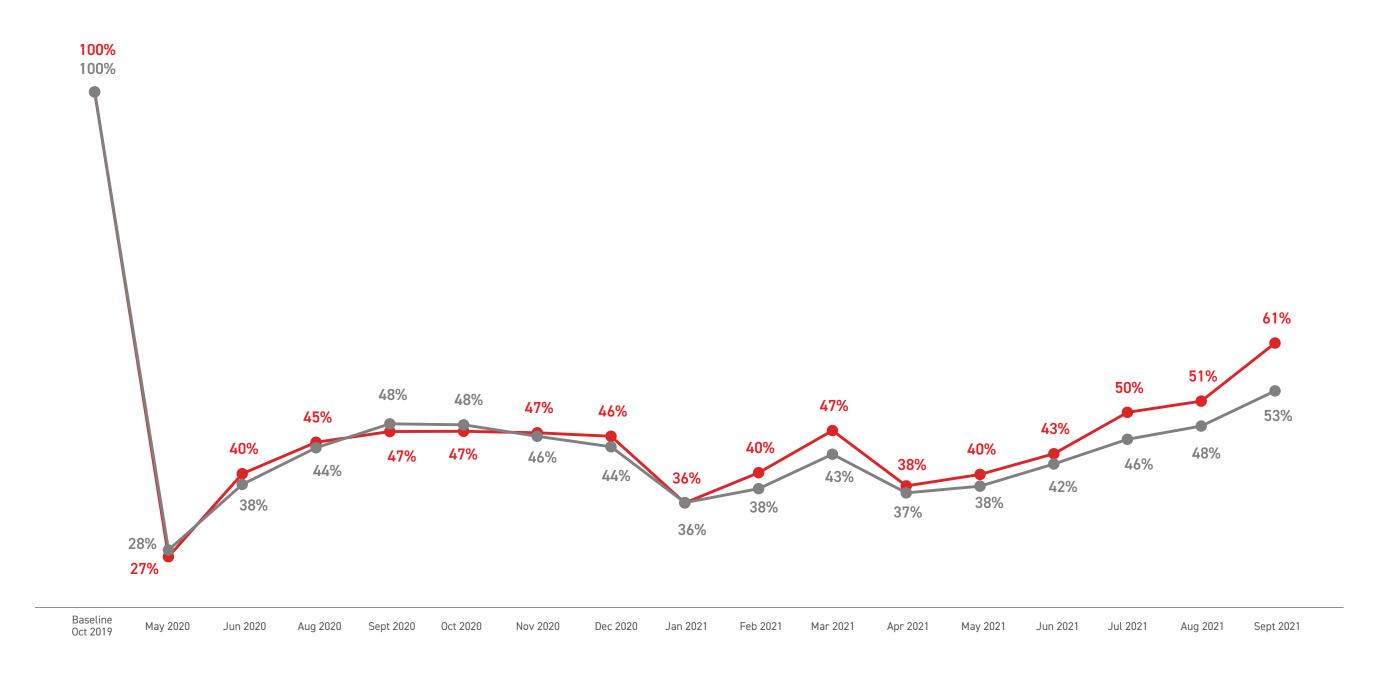
#### Methodology:

- Average weekday customers who travelled on RapidTO segments of the 86, 116, 905, and 986 routes, including Eglinton Avenue East between Kennedy Road and Brimley Road.
- This excludes those who travelled only within segments that did not have any transit priority (e.g. a few stops along Guildwood Parkway on the 116 Morningside).
- All boardings are obtained from APC (Automated Passenger Counter) data. Prior to Oct 2020 (RapidTO implementation) each month of boarding data corresponds to its respective Board Period, starting Oct 2020 boarding data is collected weekly and aggregated monthly.
- The TTC suspended express bus routes at the start of the pandemic.

### Transit Ridership



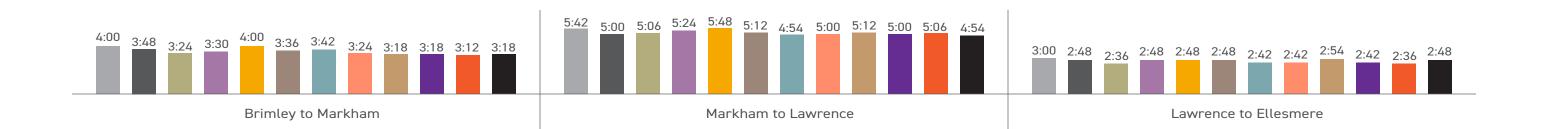
Percentage of Baseline (October 2019)
All Day RapidTO (86/116/905/986) and Systemwide Bus Boardings



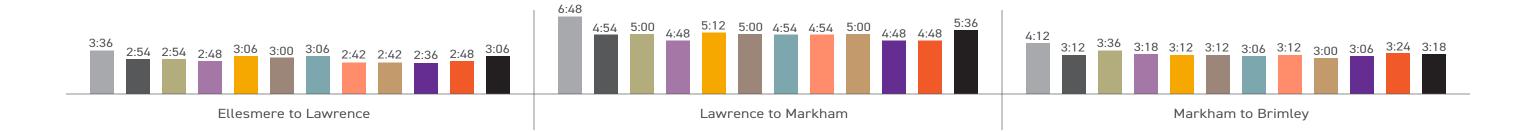


### RapidTO Roadway: Weekday | A.M Peak Period (6-9 A.M.)

#### **Eastbound** >>

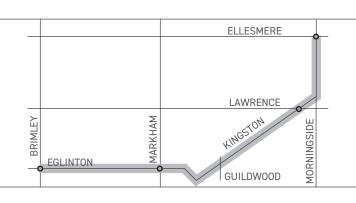


#### **◀** Westbound



#### **Average Car Travel Times:**

- Data collection occurred against a backdrop of significant changes in background traffic conditions due to COVID-19 restrictions on businesses and schools.
- · Car travel times are determined using aggregated speed data from a third-party GPS probe data provider.
- · Average travel times along the RapidTO roadway continue to be lower than the Fall 2019 baseline in the AM Peak.
- Travel times have risen on some segments with the return to school in September and are in line with the Fall 2019 in the Eastbound direction in the PM Peak from Markham Road to Lawrence Avenue.
- · There is no indication that travel times have been impacted on Lawrence Avenue East and Brimley Road, although this will continue to be monitored as travel restrictions are lifted.



Eglinton East Bus Lane
Baseline to September 2021





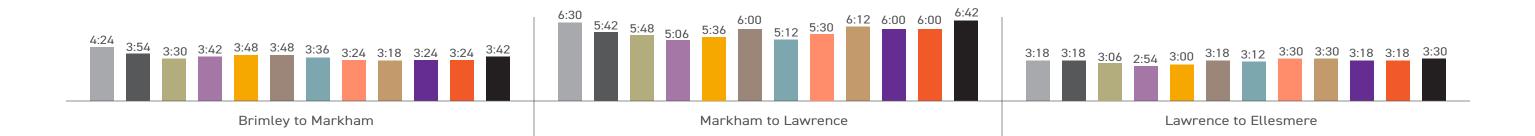
(Sept 1 to Sept 30)



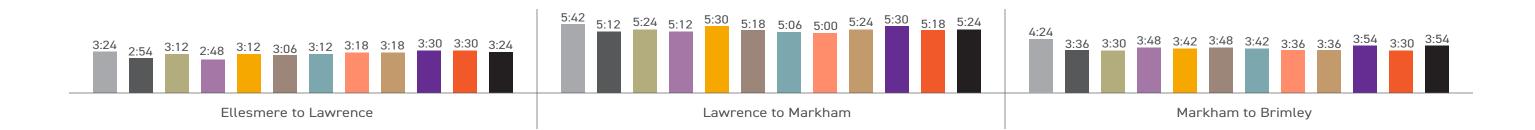


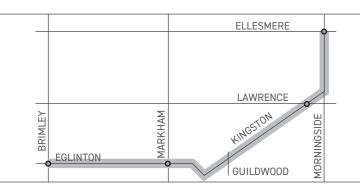
#### RapidTO Roadway: Weekday | P.M Peak Period (3-7 P.M.)

#### **Eastbound** >>



#### **◀** Westbound







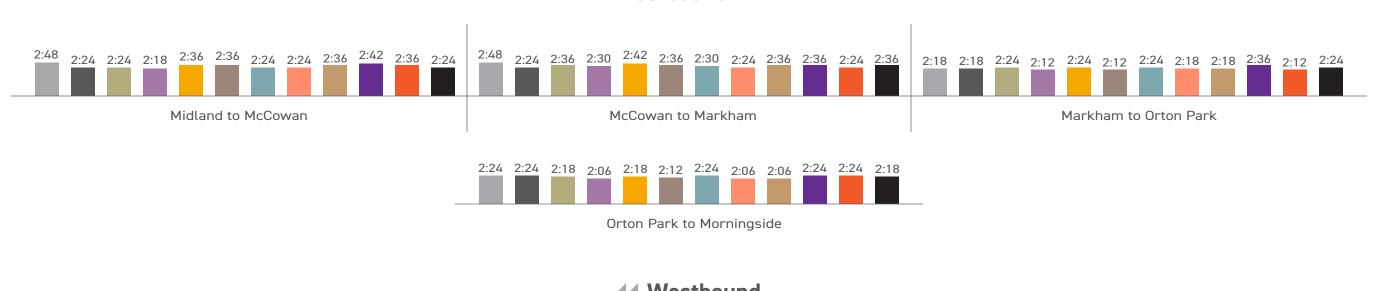
(Jul 1 to Jul 30)

(Sept 1 to Sept 30)

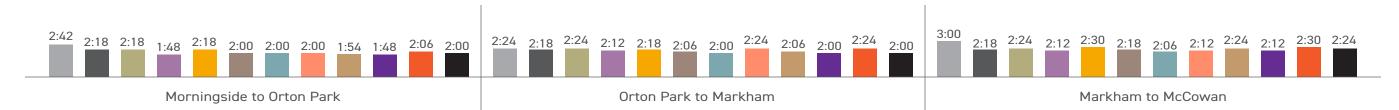


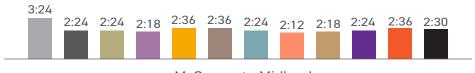
#### Lawrence Avenue East: Weekday | A.M Peak Period (6-9 A.M.)

#### **Eastbound**

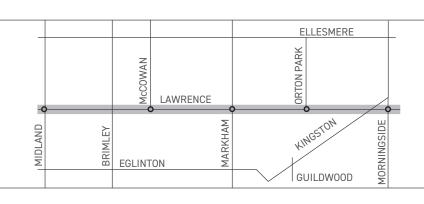


#### **◀** Westbound





McCowan to Midland





(Jul 1 to Jul 30)

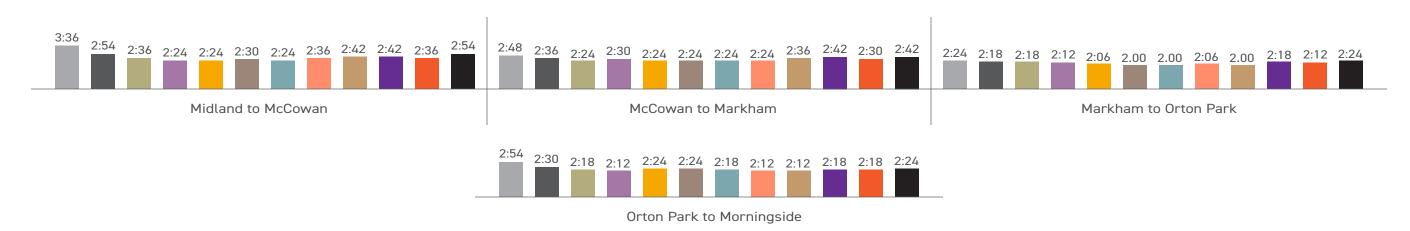
(Aug 2 to Aug 31)



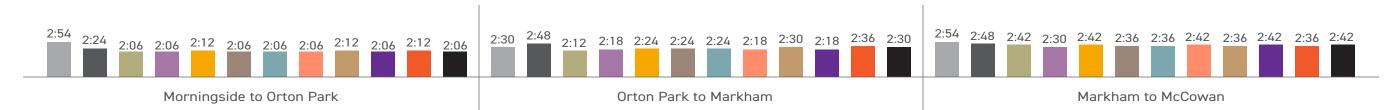


#### Lawrence Avenue East: Weekday | P.M Peak Period (3-7 P.M.)

#### Eastbound >>

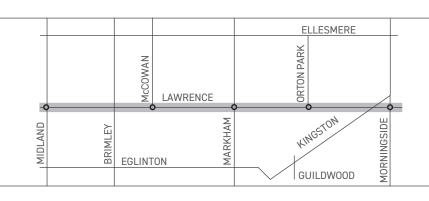


#### **◀** Westbound





McCowan to Midland





(Jul 1 to Jul 30)

December 2020
(Dec 1 to Dec 23)

August 2021

(Aug 2 to Aug 31)

January 2021 (Jan 4 to Jan 29)

September 2021

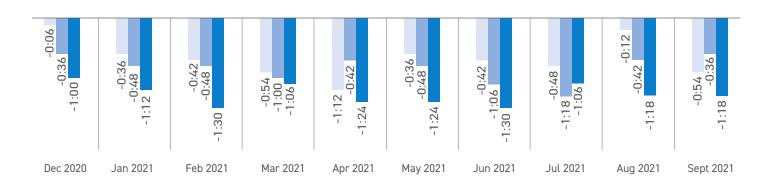
(Sept 1 to Sept 30)

February 2021 (Feb 1 to Feb 26) March 2021 (Mar 1 to Mar 31) April 2021 (Apr 1 to Apr 30) May 2021 (May 3 to May 31)

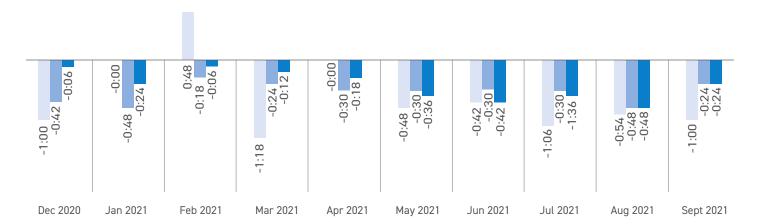
### Change in Peak Car Travel Times from Fall 2019 (Mins)



#### Westbound Eglinton: Markham to Brimley (AM Peak)



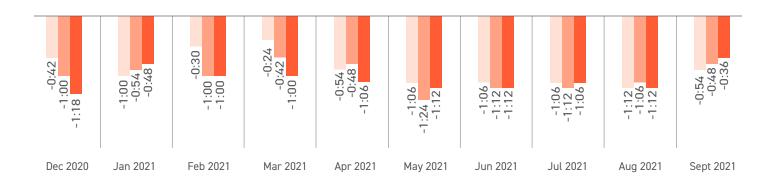
#### Eastbound Eglinton: Brimley to Markham (AM Peak)

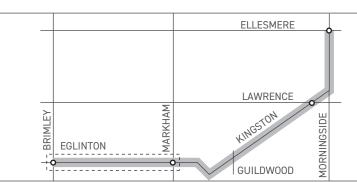


#### Westbound Eglinton: Markham to Brimley (PM Peak)



#### Eastbound Eglinton: Brimley to Markham (PM Peak)

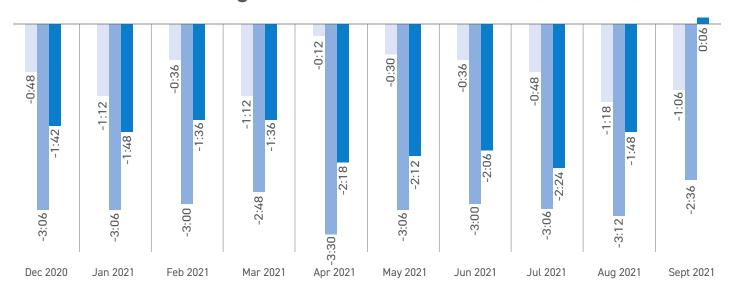




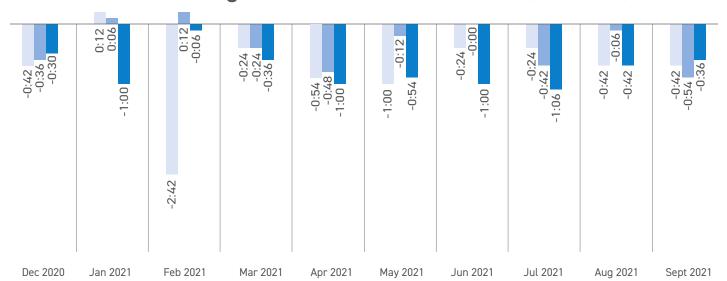
## Change in Peak Car Travel Times from Fall 2019 (Mins)



#### Westbound Kingston: Lawrence to Markham (AM Peak)



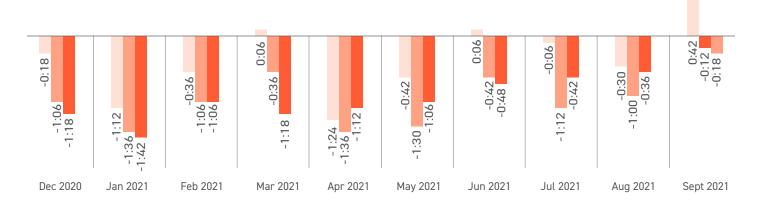
#### Eastbound Kingston: Markham to Lawrence (AM Peak)

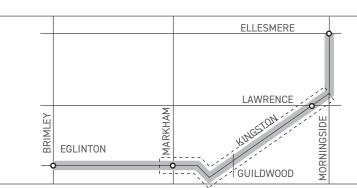


#### Westbound Kingston: Lawrence to Markham (PM Peak)



#### Eastbound Kingston: Markham to Lawrence (PM Peak)



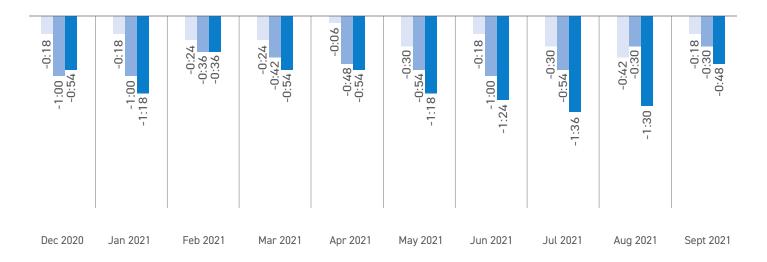




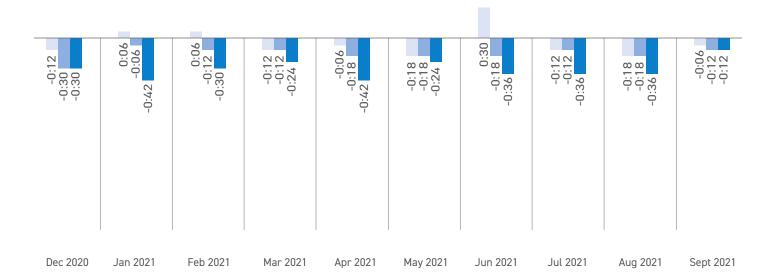
### Change in Peak Car Travel Times from Fall 2019 (Mins)



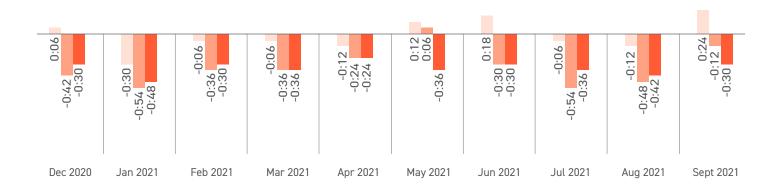
#### Southbound Morningside: Ellesmere to Lawrence (AM Peak)



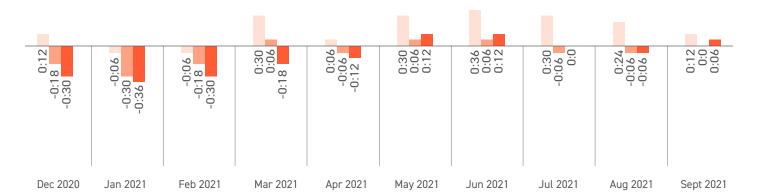
#### Nouthbound Morningside: Lawrence to Ellesmere (AM Peak)



#### Southbound Morningside: Ellesmere to Lawrence (AM Peak)

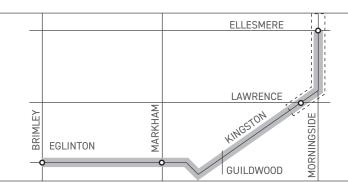


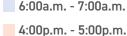
#### Nouthbound Morningside: Lawrence to Ellesmere (PM Peak)



#### Change in Peak Car Travel Times from Fall 2019:

• There has been a slight and consistent increase in travel time on Morningside Avenue in the Northbound direction during the PM Peak from Lawrence Avenue to Ellesmere Road since spring 2021.

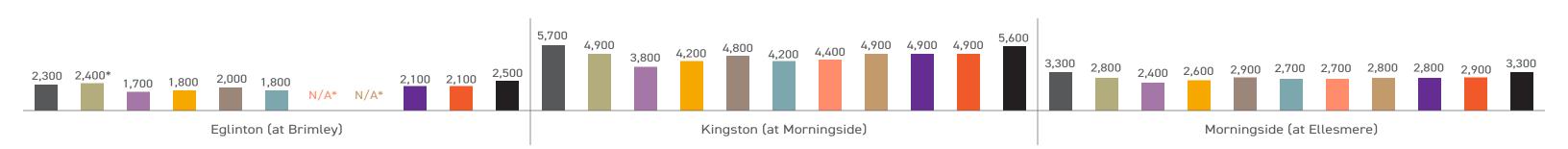




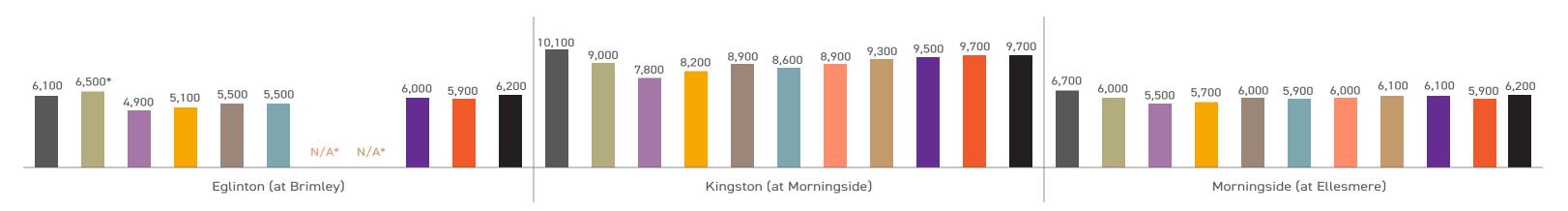
### Average Two-Way Car Volumes



# RapidTO Roadway Weekday | A.M Peak Period (6-9 A.M.)

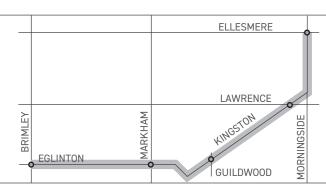


#### Weekday | P.M Peak Period (3-7 P.M.)



#### **Average Two-Way Car Volumes:**

- · Data collection occurred against a backdrop of significant changes in background traffic conditions due to COVID-19 restrictions on businesses and schools.
- · Volumes rose in September with the return to school on both the RapidTO roadway and alternate routes such that they are now higher than the pre-installation period along many segments.
- There is no indication of traffic infiltration at Lawrence Avenue East, St. Clair Avenue East and Brimley Road. Volumes along these roadways follow the trend of the RapidTO roadway volumes.
- · Volumes are collected using a set of permanent multimodal video counters installed at intersections that provide continuous turning movement counts.
- Not all permanent counting stations were installed prior to the full implementation of the RapidTO bus lanes. As a result, the Before periods vary by intersection and may be influenced by installation activities that took place prior to October 11.



### Eglinton East Bus Lane Baseline to September 2021







(Sept 1 to Sept 30)



around this time.

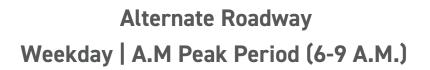
\*Bike lanes at Brimley were removed

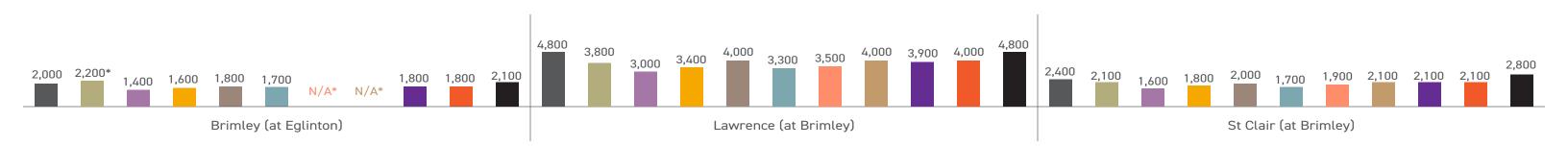




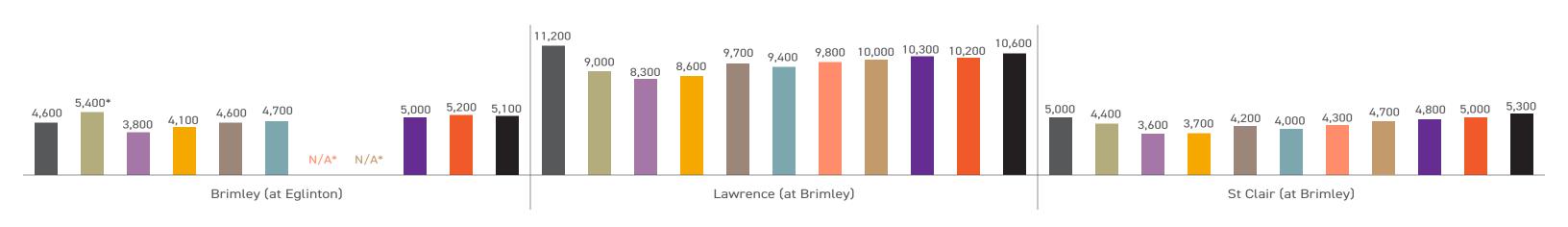
### Average Two-Way Car Volumes







#### Weekday | P.M Peak Period (3-7 P.M.)



(Jul 1 to Jul 30)

(Sept 1 to Sept 30)



around this time.