

RapidTO: Eglinton East Bus Lane

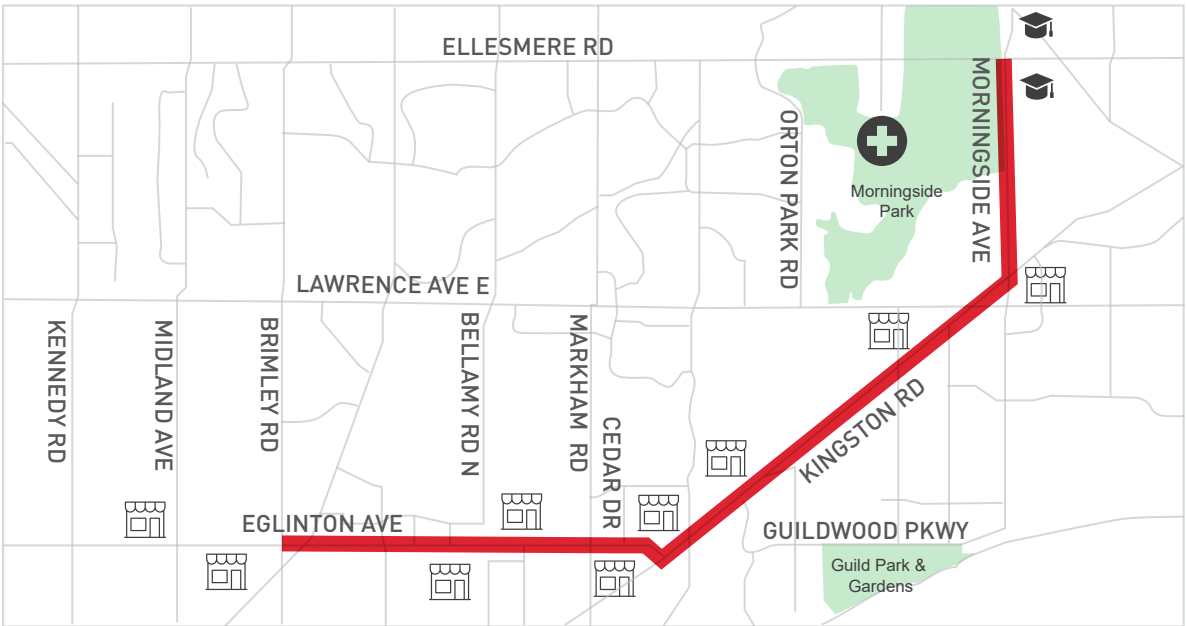
Baseline to May 2021



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.

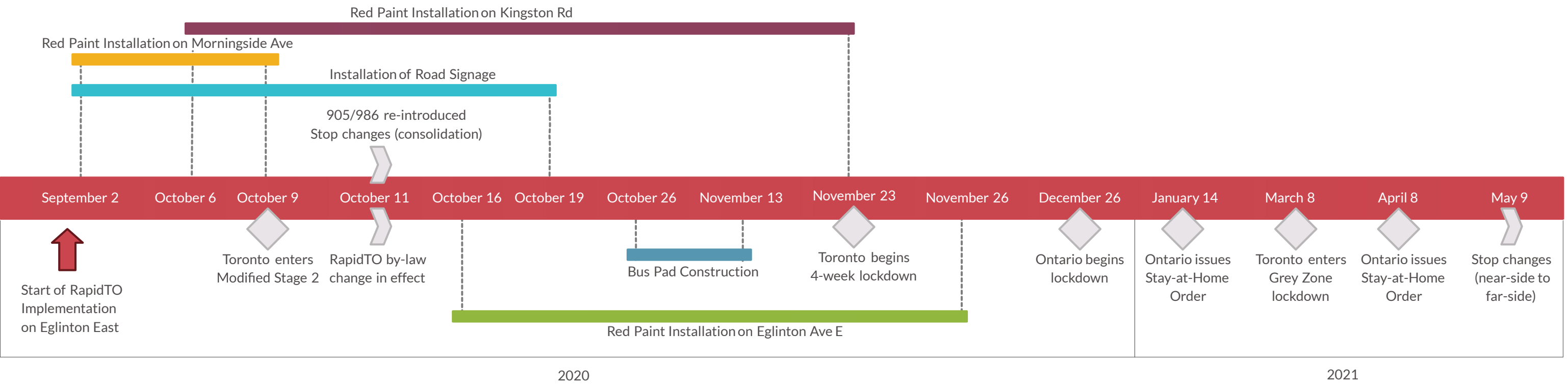
The Eglinton East bus lane, which spans 8.5 km and includes parts of Eglinton Avenue East, Kingston Road and Morningside Avenue, is the first RapidTO bus priority project in operation. It is also among the TTC's most heavily used transit route, serving several Neighbourhood Improvement Areas and playing 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 Bus Lane

Eglinton East RapidTO - Project Timeline



Baseline to May 2021 Highlights



COVID-19

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 2 minutes 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



12%

Reliability across all four routes has improved by an average of 12% compared to the October 2019 baseline, with the 116 Morningside improving by 19%.

TRANSIT RIDERSHIP



The COVID-19 pandemic has significantly impacted ridership (boardings), changing as restrictions evolve.

RapidTO boardings is following the same trend as systemwide bus boardings.

CAR TRAVEL TIMES



Average travel times along the RapidTO roadway are lower than the Fall 2019 baseline, and comparable to conditions during the month prior to the RapidTO by-law coming into effect.

CAR VOLUMES

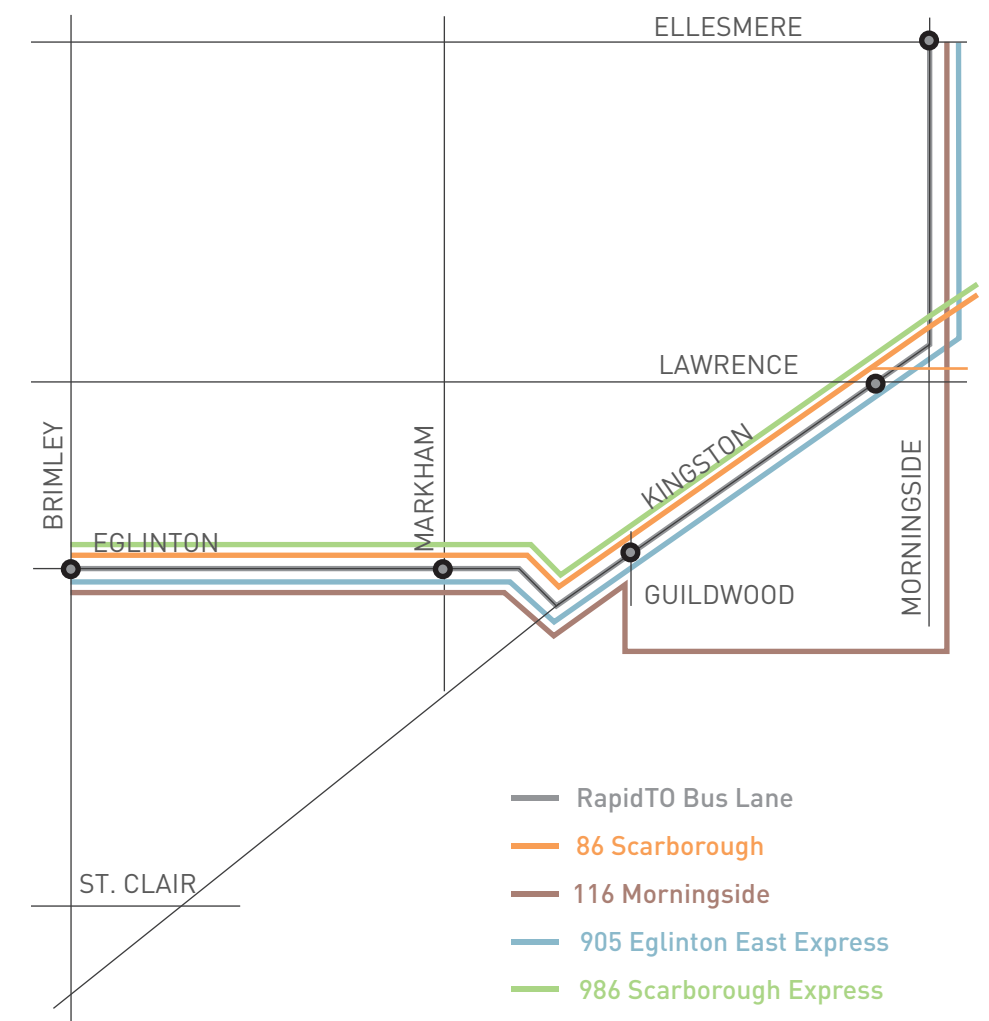


Volumes are lower on both the RapidTO roadway and alternate routes relative to the baseline period, driven largely by the presence of increased restrictions due to the COVID-19 pandemic.

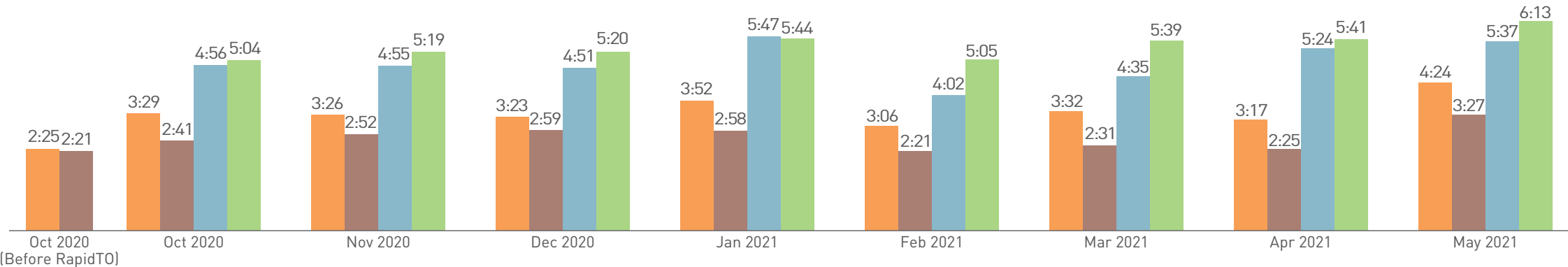
The exception to this is volumes in December on Brimley Road on which bike lanes were removed at the start of the month.

ROAD NETWORK

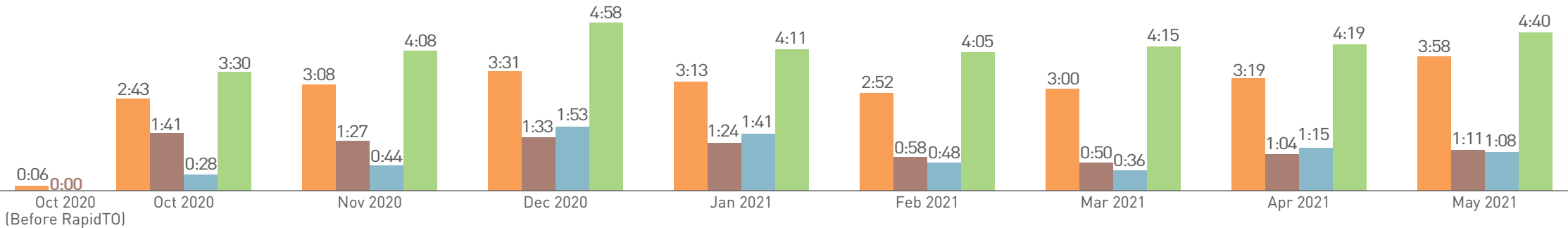
There is no indication of traffic infiltration on alternate roadways such as Lawrence Avenue East and St. Clair Avenue East. Volumes along these roadways are lower than comparable baselines and follow the trend of the RapidTO roadway volumes.



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 ▶▶

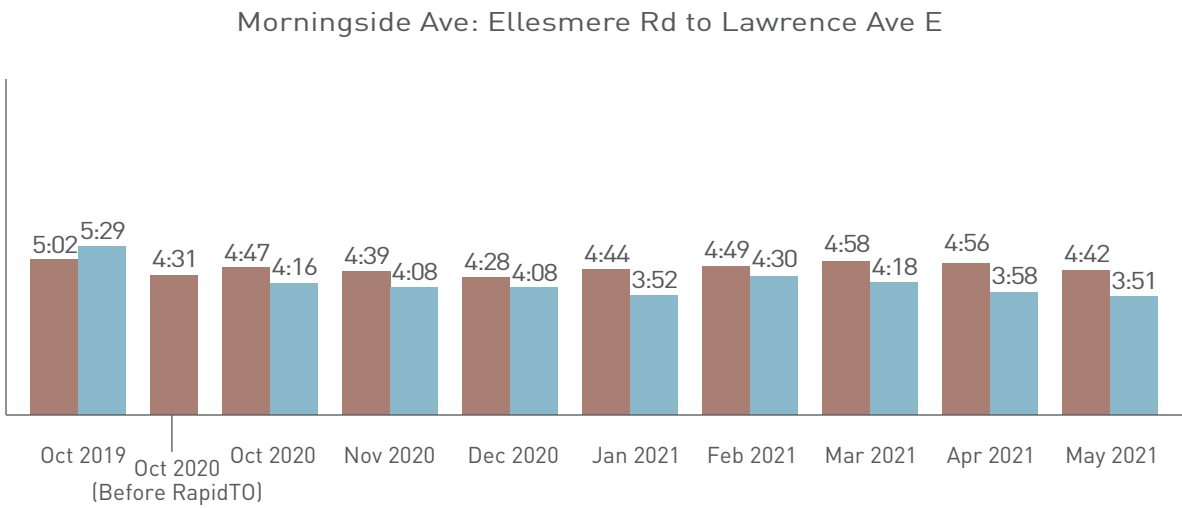
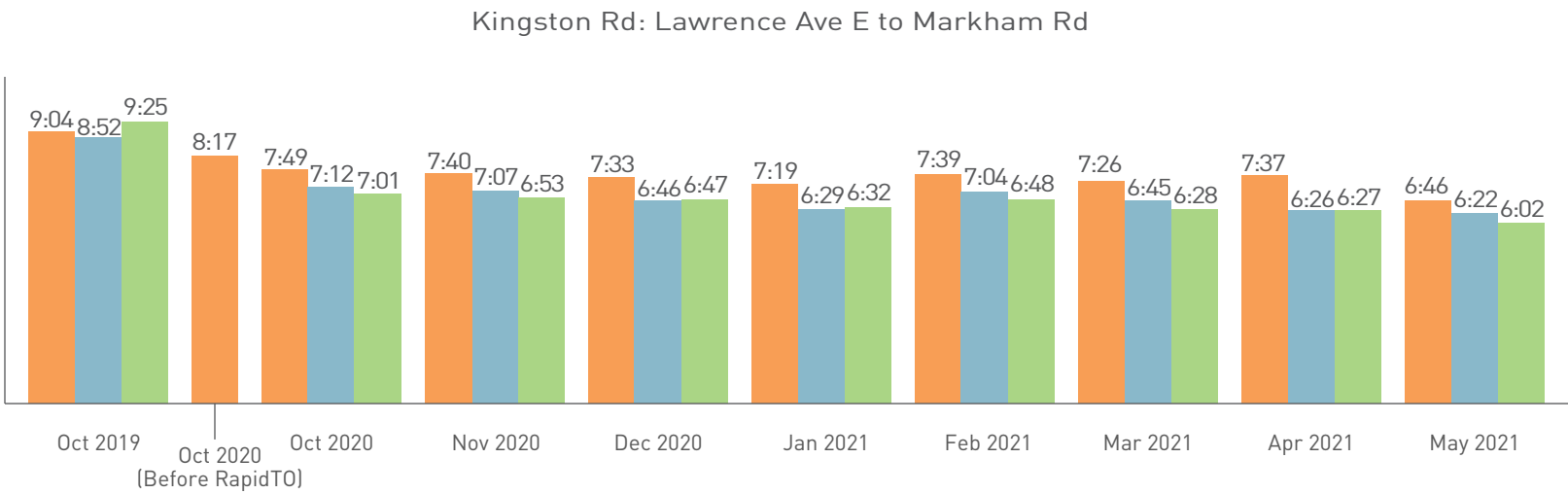
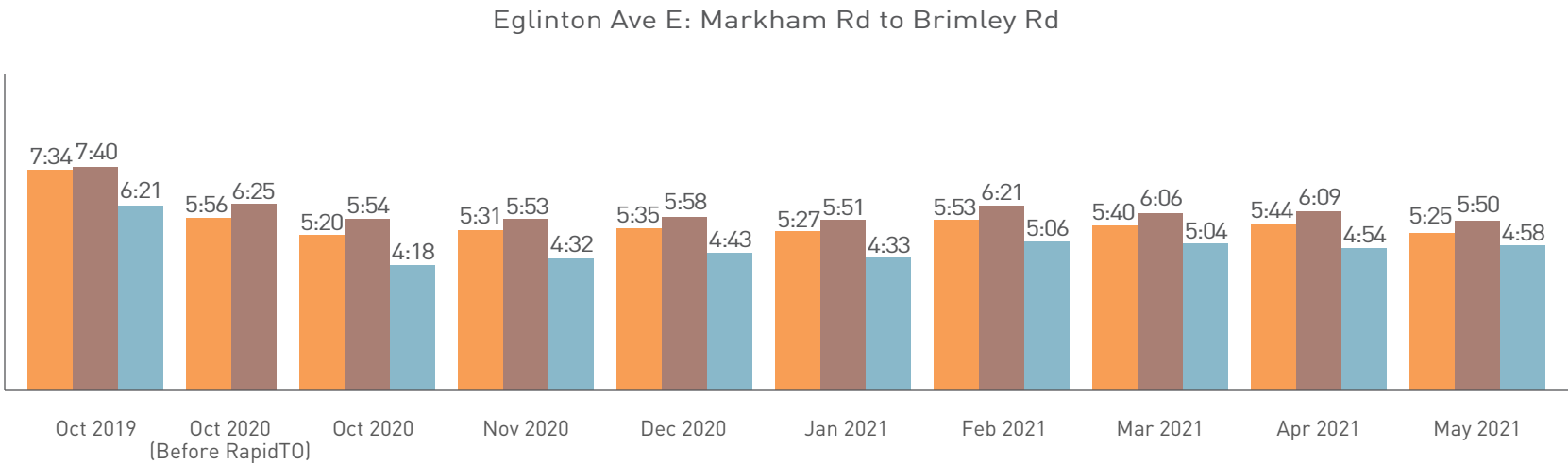


Transit Travel Times Savings:

- 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 1 to 2 minutes compared to just prior to installation (some travel time savings due to COVID-19).
- Average travel time savings as a result of RapidTO were significant in the PM Peak, varying from about 1 minute to 4 minutes 40 seconds saved compared to both the October 2019 Baseline and just prior to installation (no travel time savings due to COVID-19).
- 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.

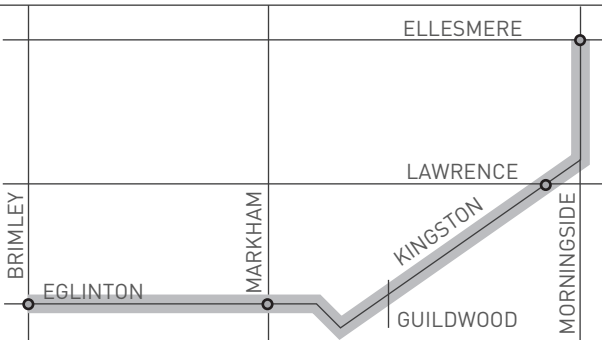
Transit Travel Times (Westbound)

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



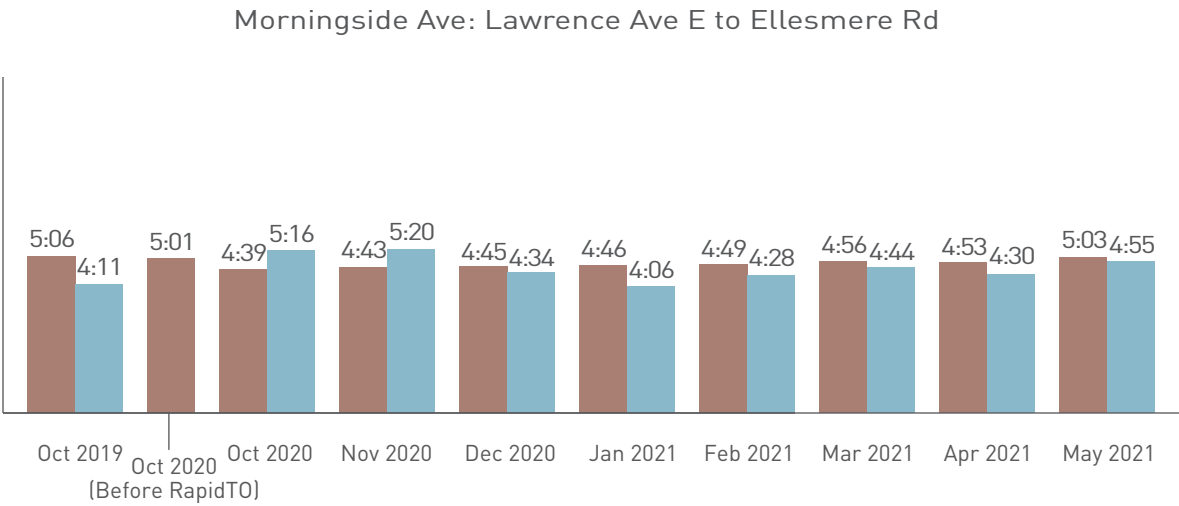
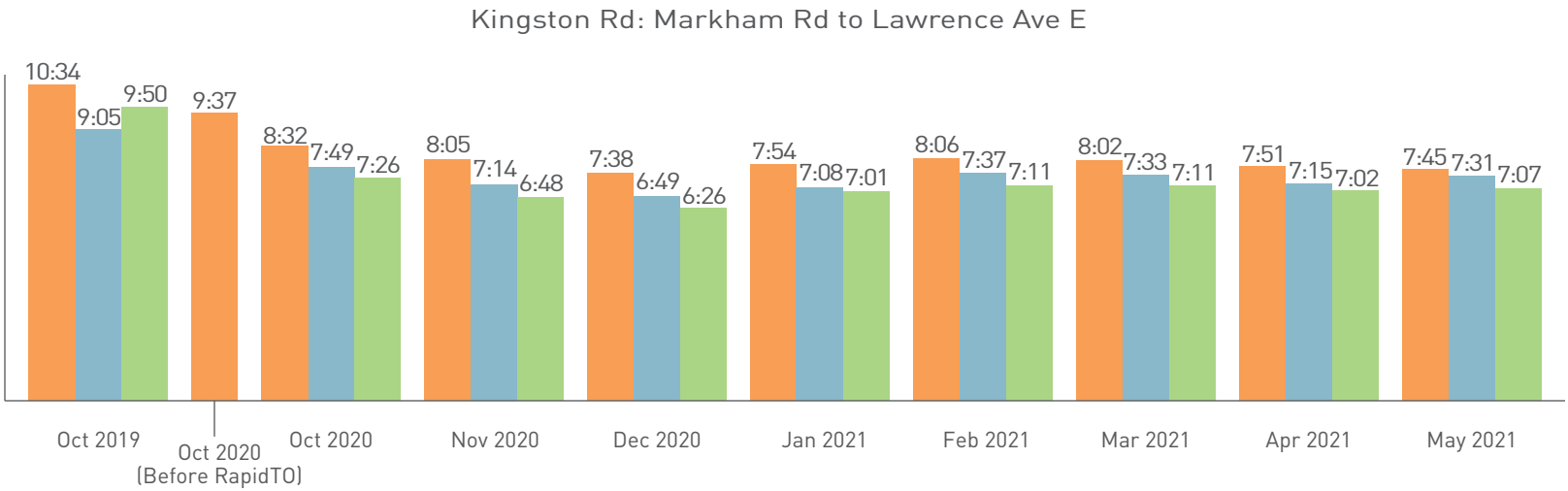
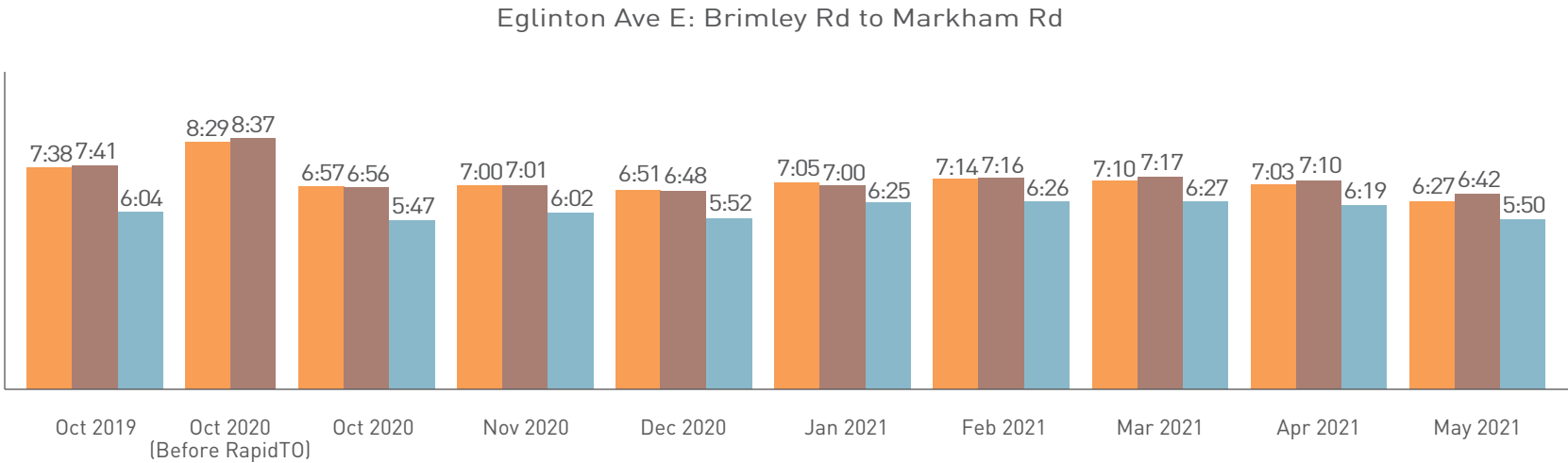
Transit Travel Times:

- The average reduction in travel time was calculated for each RapidTO route across RapidTO segments.
- The segment of Eglinton between Markham and Brimley had four westbound stops removed on the 86 and 116. The segment of Eglinton and Kingston between Lawrence and Markham had four westbound stops removed on the 86, one westbound stop added on the 905 and two westbound stops removed on the 986. The segment of Morningside between Ellesmere and Lawrence had one westbound stop removed on the 116 and one westbound stop added on the 905.
- The segment of Eglinton between Markham and Brimley had three westbound stops relocated (near-side to far-side) on the 86 and 116 and two westbound stops relocated on the 905. The segment of Eglinton and Kingston between Lawrence and Markham had five westbound stops relocated on the 86 and three westbound stops relocated on the 905.
- 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, TTC's bus GPS tracking system.



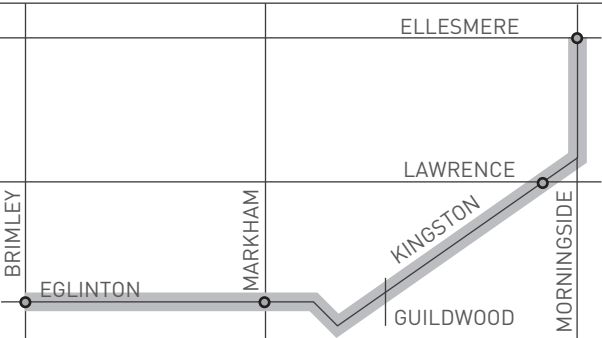
Transit Travel Times (Eastbound)

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

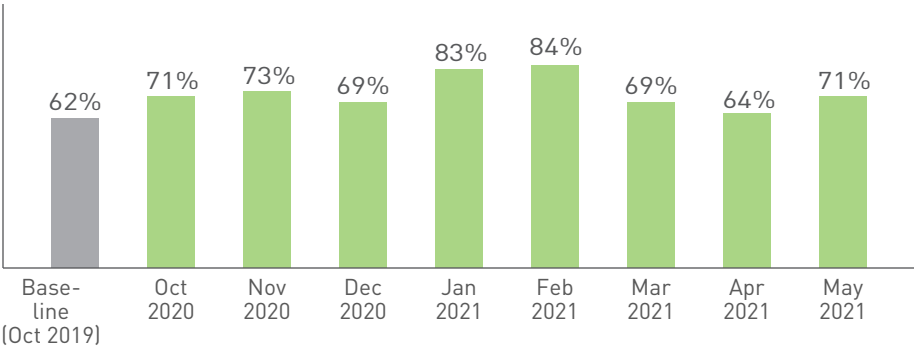
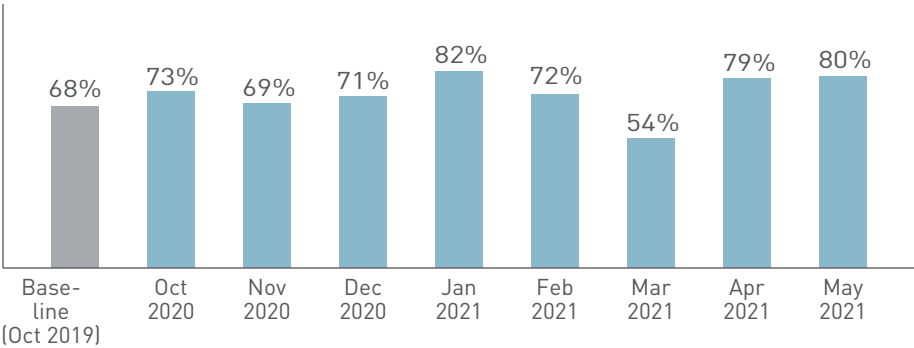
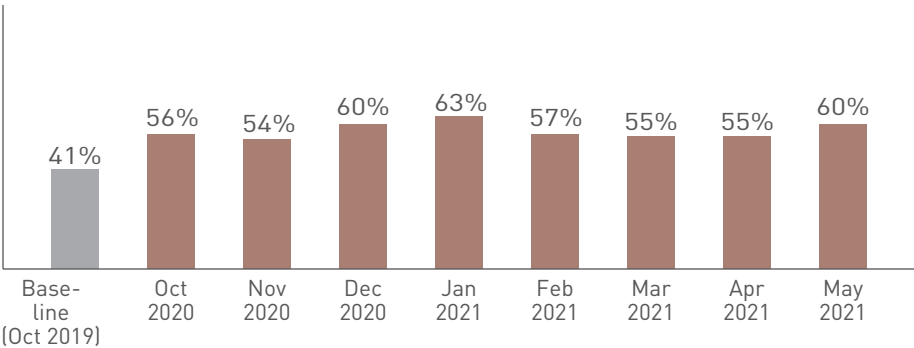
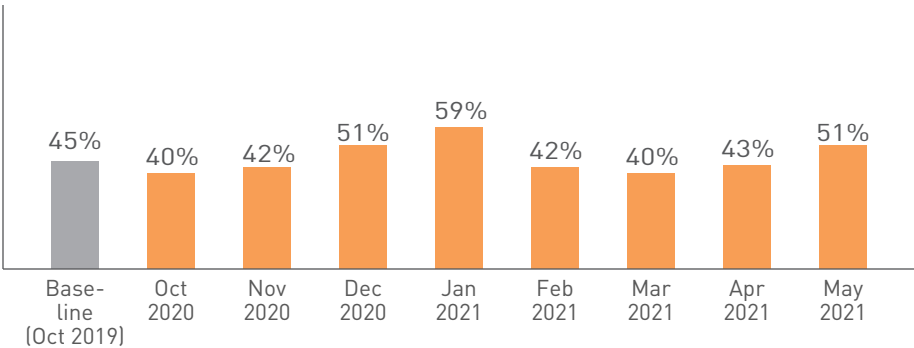


Transit Travel Times:

- The average reduction in travel time was calculated for each RapidTO route across RapidTO segments.
- The segment of Eglinton between Brimley and Markham had four eastbound stops removed on the 86 and 116. The segment of Eglinton and Kingston between Markham and Lawrence had four eastbound stops removed on the 86, one eastbound stop added on the 905 and two eastbound stops removed on the 986. The segment of Morningside between Lawrence and Ellesmere had one eastbound stop removed on the 116 and one stop added on the 905.
- The segment of Eglinton between Brimley and Markham had one eastbound stop relocated (near-side to far-side) on the 86, 116 and 905. The segment of Eglinton and Kingston between Markham and Lawrence had three eastbound stops relocated on the 86 and two eastbound stops relocated on the 905 and 986.
- Red paint was installed on Morningside Ave between September 2 - October 9, prior to the RapidTO launch.
- Travel time data was obtained from VISION, TTC’s bus GPS tracking system.



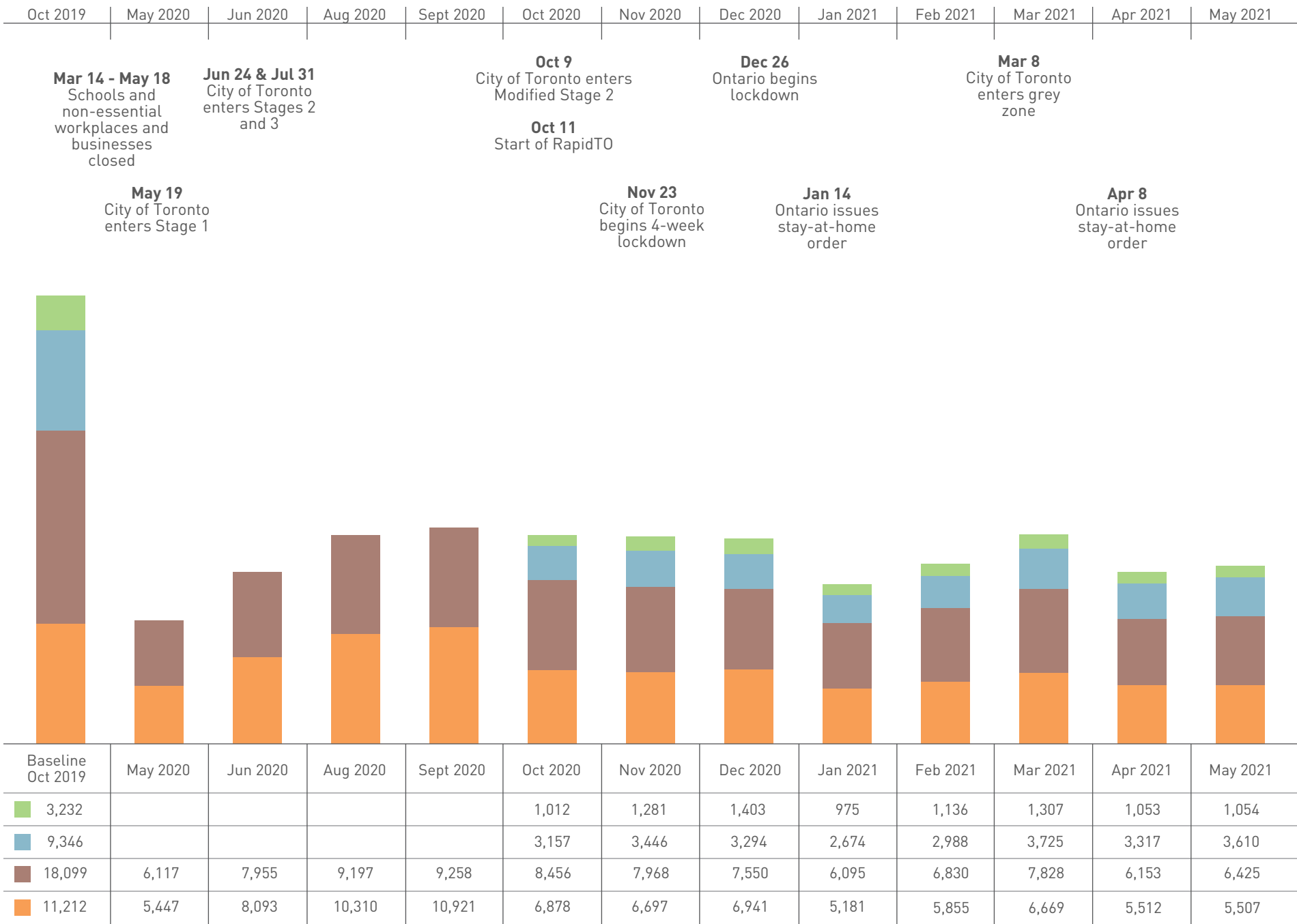
Transit Wait-Time Reliability - % of Arrivals within ±50% of Average Scheduled Headway



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. - 6:30p.m.), at Eglinton Avenue East and Markham Road in the Eastbound direction.

All Day RapidTO Bus Lane Boardings by Route



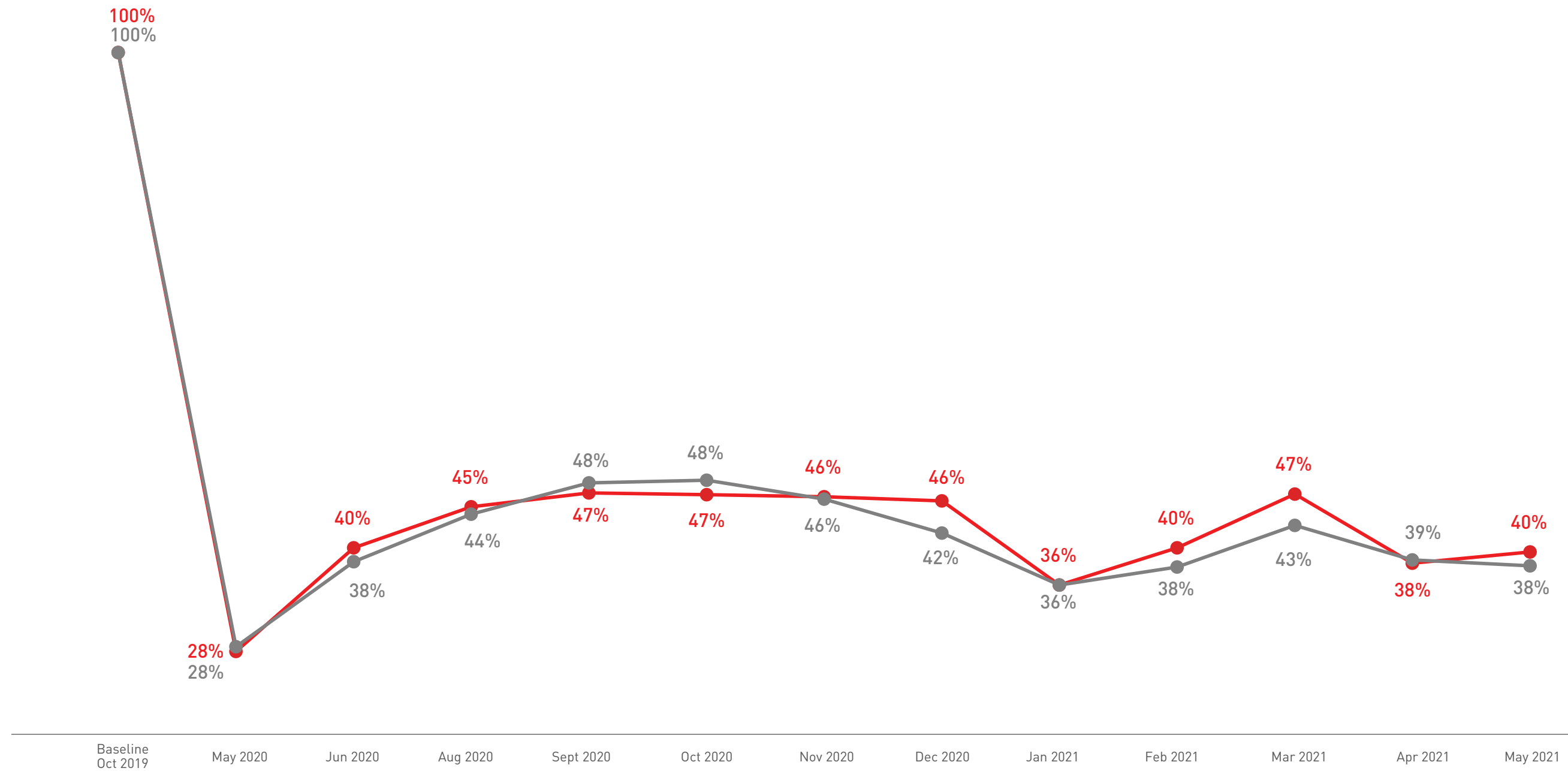
Transit Ridership:

- The COVID-19 pandemic has significantly impacted ridership, changing as restrictions evolve.
- RapidTO boardings are following a similar trend as systemwide bus boardings (see page 8).

Methodology:

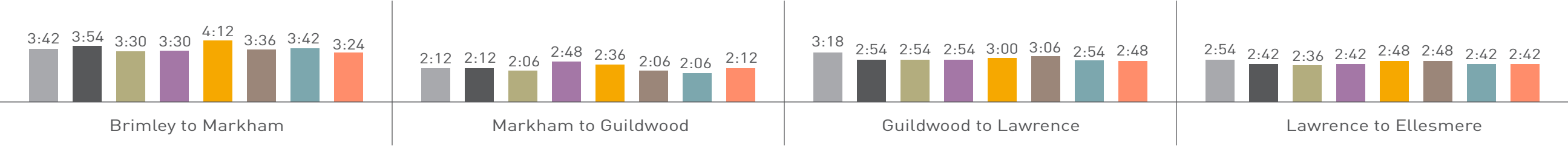
- Average weekday customers who travelled on RapidTO segments of the 86, 116, 905, and 986 routes, including Eglinton Avenue East between Kennedy Road and Brimley Road.
- This excludes those who travelled only within segments that did not have any transit priority (e.g. a few stops along Guildwood Parkway on the 116 Morningside).
- All boardings are obtained from APC (Automated Passenger Counter) data.
- The TTC suspended express bus routes at the start of the pandemic.

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

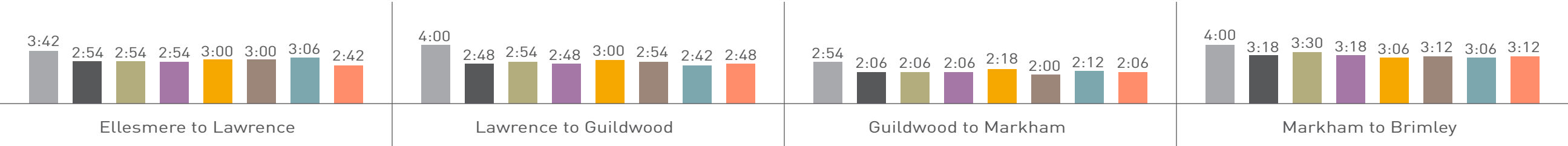


Average Car Travel Times (Mins)

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

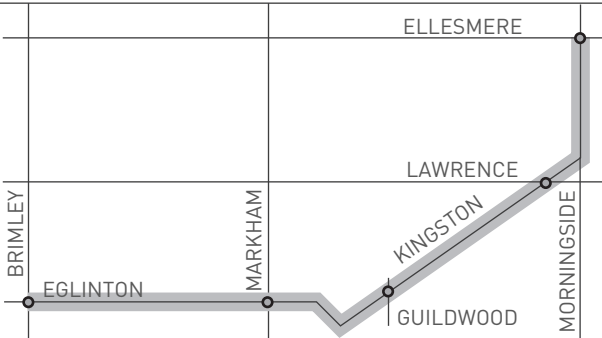


<< Westbound



Average Car Travel Times:

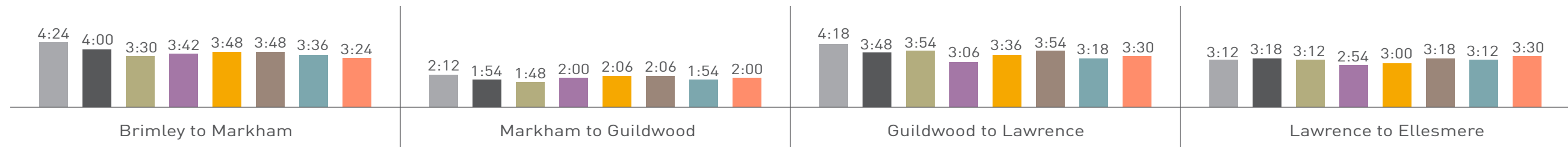
- Data collection occurred against a backdrop of significant changes in background traffic conditions due to COVID-19 restrictions on businesses and schools.
- Average travel times along the RapidTO roadway are lower than the Fall 2019 baseline and comparable to conditions during the month prior to the RapidTO by-law coming into effect.
- Car travel times are determined using aggregated speed data from a third-party GPS probe data provider.
- There is no indication that travel times have been impacted on alternate roadways such as Lawrence Avenue East, although this will continue to be monitored as travel restrictions are lifted.



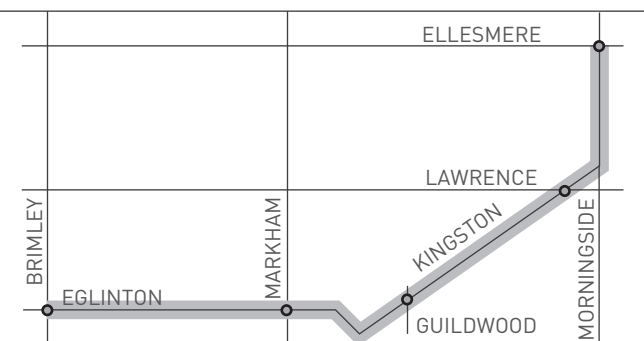
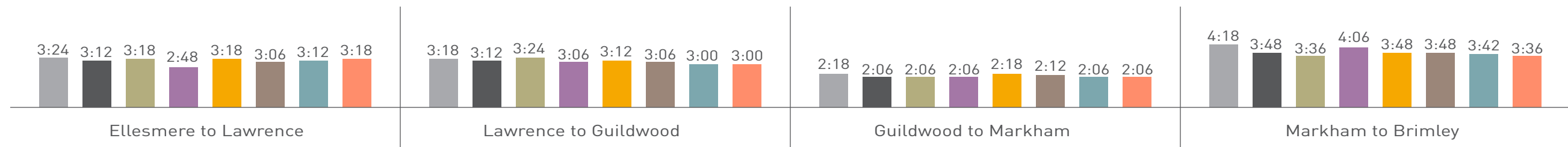
Average Car Travel Times (Mins)

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

Eastbound ➡➡

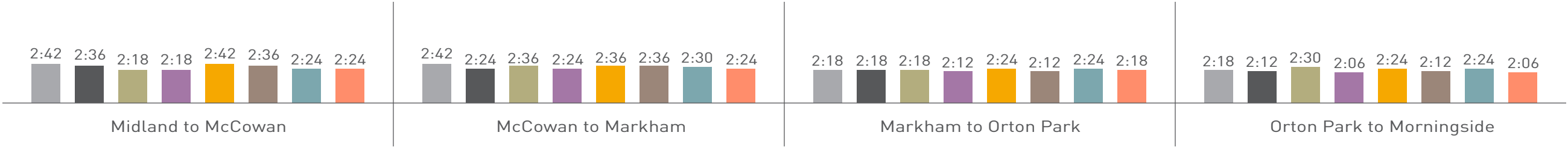


Westbound <<

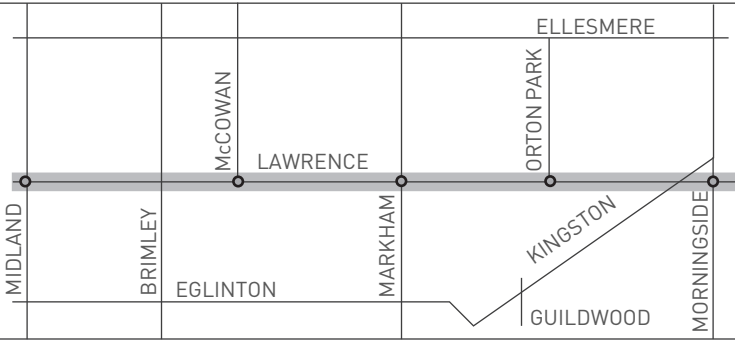
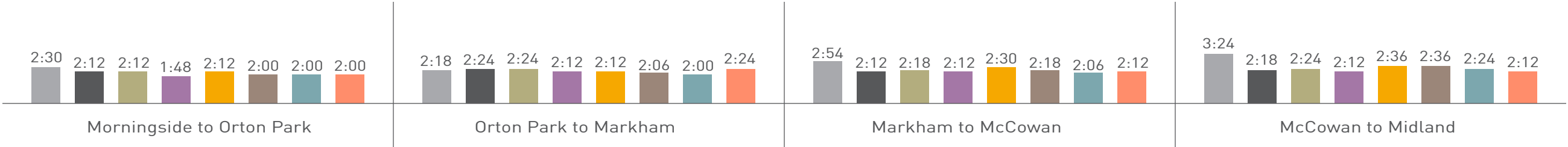


Average Car Travel Times (Mins)

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

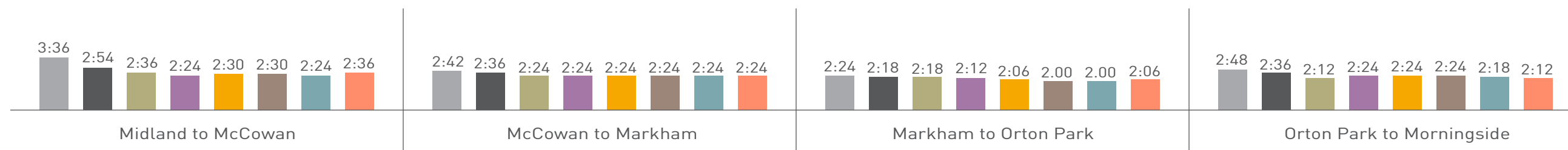


<< Westbound

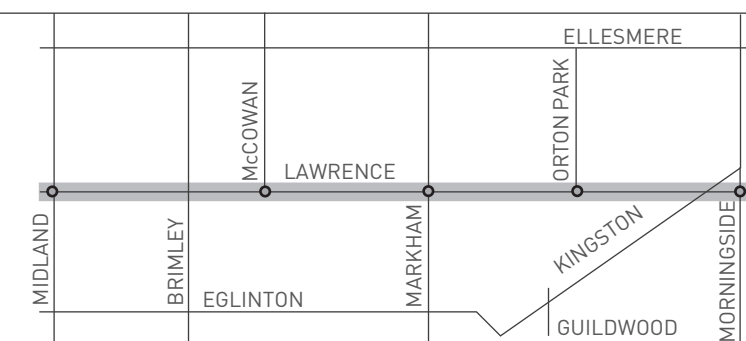
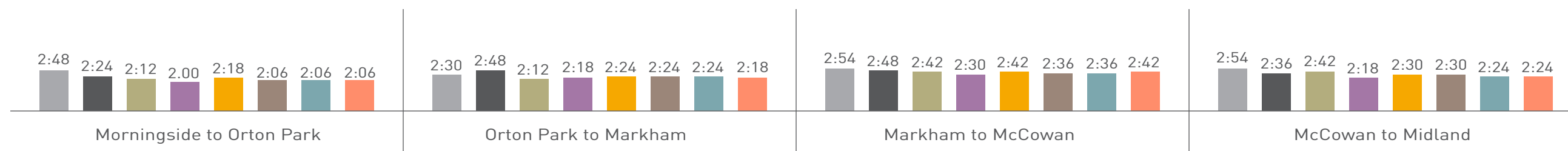


Average Car Travel Times (Mins)

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

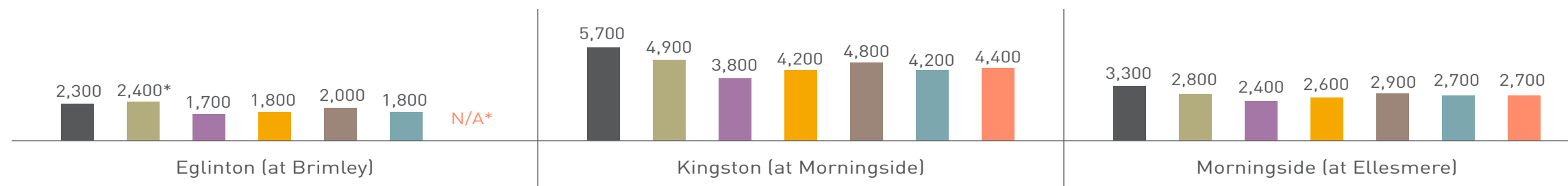


Westbound <<

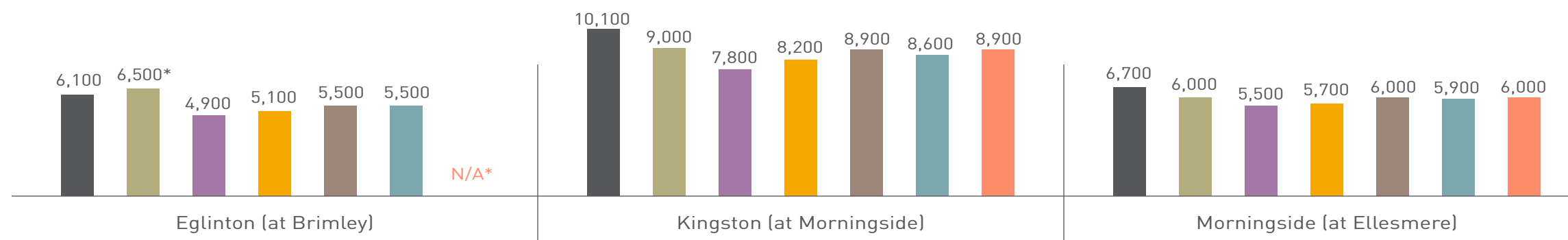


Average Two-Way Car Volumes

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

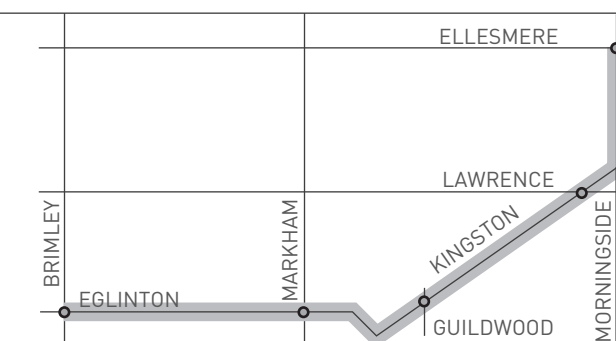


Weekday | P.M Peak Period (3-7 P.M.)



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 are lower on both the RapidTO roadway and alternate routes relative to the baseline period, driven largely by the presence of increased restrictions due to the COVID-19 pandemic. The exception to this is volumes in December on Brimley Road on which bike lanes were removed at the start of the month.
- There is no indication of traffic infiltration at alternate roadways such as Lawrence Avenue East and St. Clair Avenue East. Volumes along these roadways are lower than comparable baselines and 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 May 2021

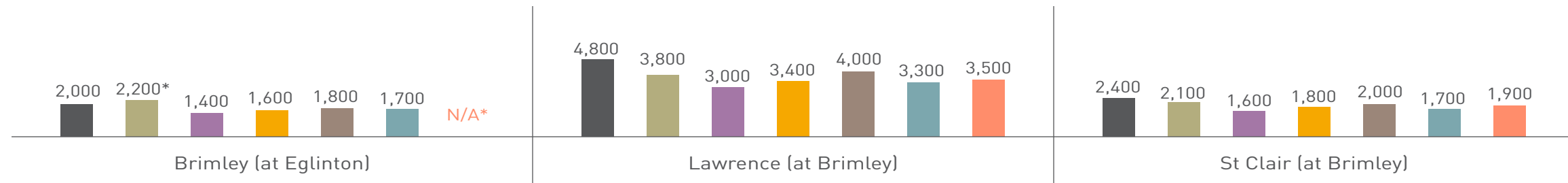
Before (Sept 8 to Oct 9)
 December 2020 (Dec 1 to Dec 23)
 January 2021 (Jan 4 to Jan 29)
 February 2021 (Feb 1 to Feb 26)
 March 2021 (Mar 1 to Mar 31)
 April 2021 (Apr 1 to Apr 30)
 May 2021 (May 3 to May 31)

*Bike lanes at Brimley were removed around this time.

N/A* A technical issue with the count station at Eglinton and Brimley has resulted in missing data for May.

Average Two-Way Car Volumes

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



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

