

## Update on Travel Patterns in York Region during COVID-19 Pandemic

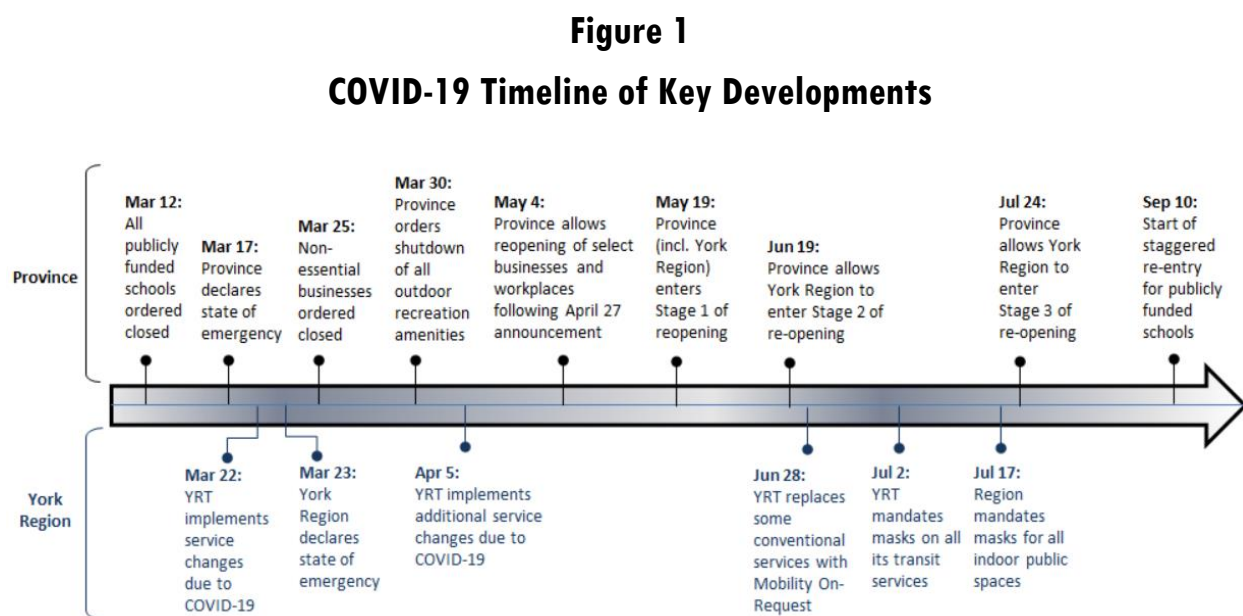
This provides an update on travel patterns observed in the Region during the COVID-19 pandemic further to the update to Council on [June 11, 2020](#).

### 1.0 Background

As physical distancing and health measures (the lockdown) were put into place at the beginning of the COVID-19 pandemic during late March and early April, daily traffic volumes on the Regional road network initially decreased by 50%. Similarly, transit ridership on York Region Transit services and GO Rail service reduced by 80% and 90% respectively. Truck traffic generally remained consistent during the lockdown.

### 2.0 COVID-19 Timeline of Key Developments

The timeline of measures implemented at the Provincial and Regional levels is summarized in Figure 1.



Effective July 2, 2020, transit travellers, including YRT/Viva riders, were required to wear a non-medical face mask or covering since transit agencies cannot guarantee physical distancing while using transit vehicles or facilities. On July 17, 2020, Council endorsed a recommendation from the York Region Medical Officer of Health instructing operators of indoor retail establishments and organizations to require their customers, employees and visitors wear a face mask or covering, subject to appropriate exemptions.

On July 24, 2020, York Region entered Stage 3 under the Province's re-opening framework. In Stage 3, nearly all businesses and public spaces were allowed to gradually re-open with public

health and workplace safety restrictions in place. Some higher-risk venues and activities remain closed until operations can be safely resumed.

### **3.0 Travel Patterns by Road**

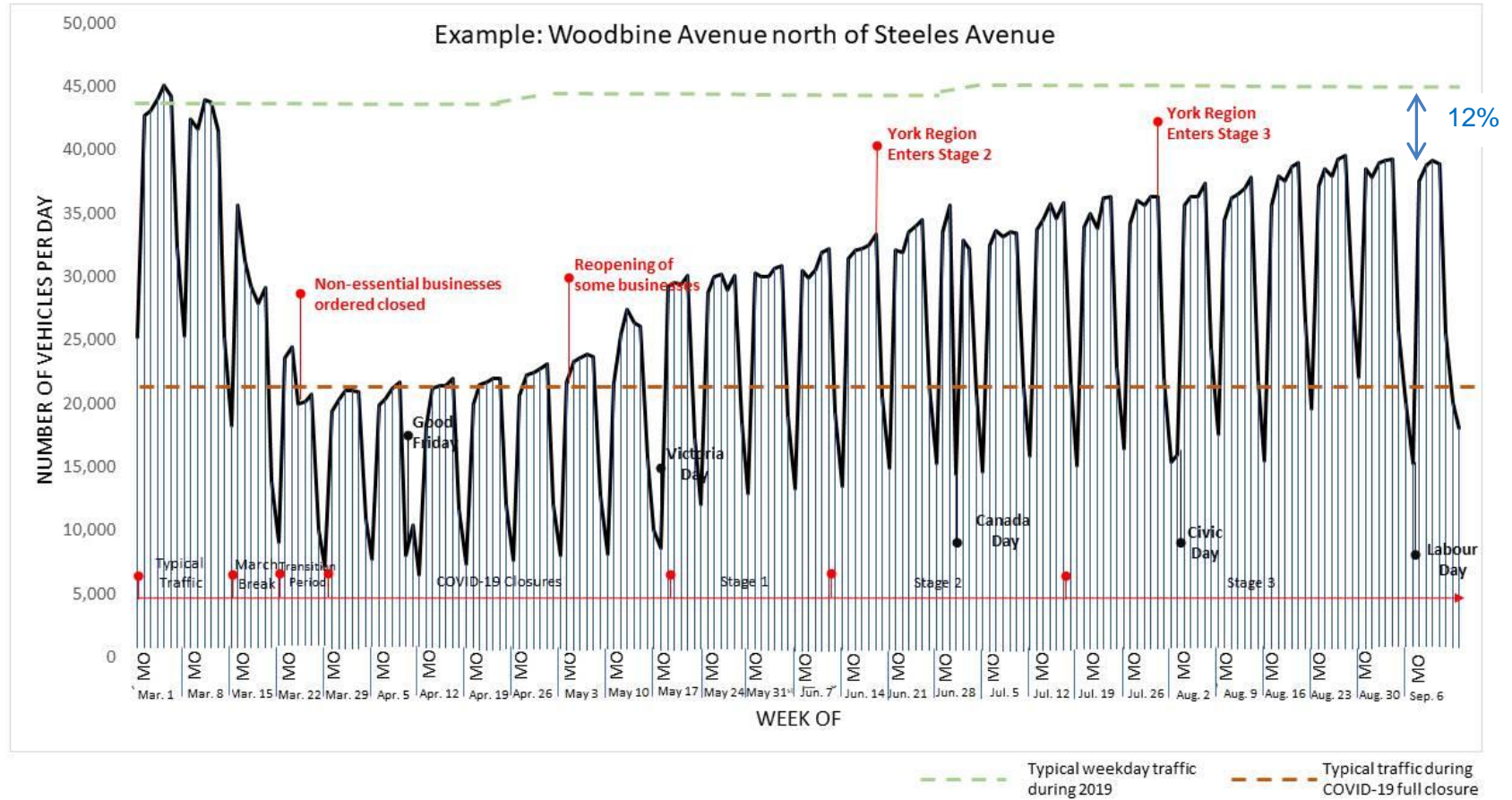
#### **3.1 Daily Traffic Volumes**

There are six permanent counting stations located across the Region monitoring daily traffic volumes. Figure 2 shows daily traffic volumes collected from early March to early September on Woodbine Avenue, north of Steeles Avenue, in the City of Markham. The other five counting stations have shown consistent traffic volume patterns.

Since early May, typical weekday traffic volumes have increased, in step with the gradual phases of reopening businesses in Ontario. In early September 2020, traffic volumes reached 88% of September 2019 volumes.

Based on research conducted by University of Toronto, approximately 70% of transit users in the GTA switched to private vehicles during the COVID-19 pandemic. While daily traffic volumes have been returning to normal, the additional traffic due to mode shift from transit may create extra pressure on the Regional road network. This trend is undesirable and needs to be monitored.

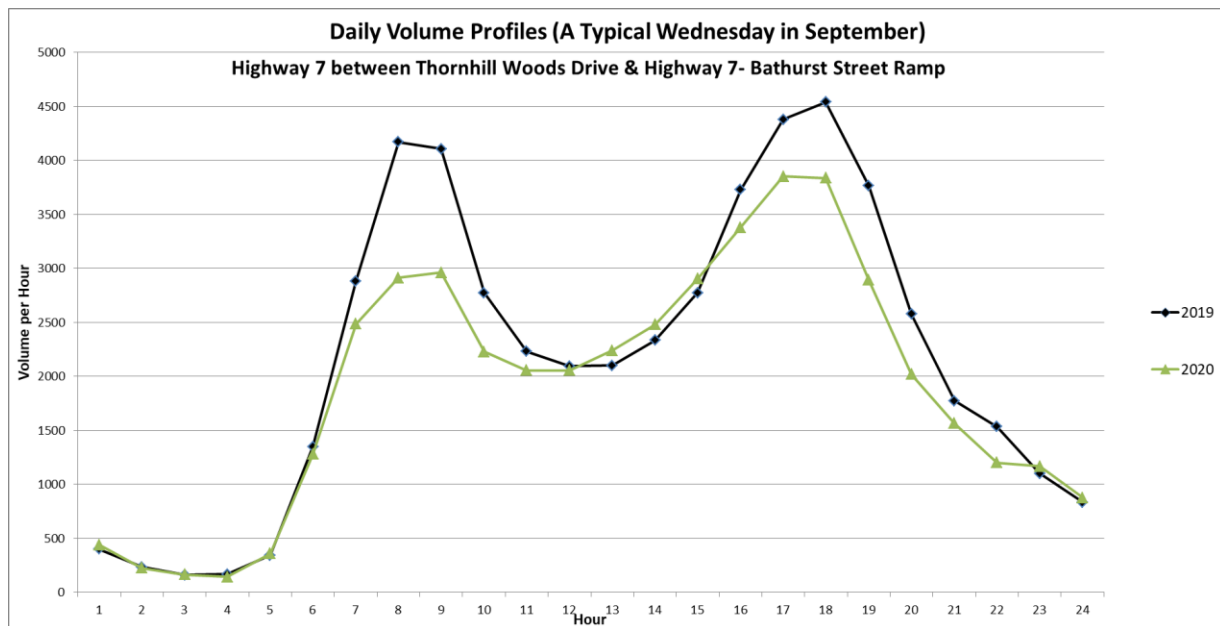
**Figure 2**  
**Daily Travel Volume Trend during COVID-19 Pandemic**



### 3.2 Traffic Volumes by Time of Day

Figure 3 shows a comparison of traffic volume profiles by time of day between a typical weekday in September 2019 and September 2020 on Highway 7 from Thornhill Woods Drive to the Bathurst Street on-ramp. In September 2020, while traffic volumes during midday appear to be gradually increasing or even exceeding, travel during rush hours are still well below September 2019 levels. In particular, the morning rush hour volumes in September 2020 are almost 30% lower than in September 2019. This may be the result of large numbers of people working from home during the pandemic.

**Figure 3**  
**Volume Profile before vs. during COVID-19 Pandemic**



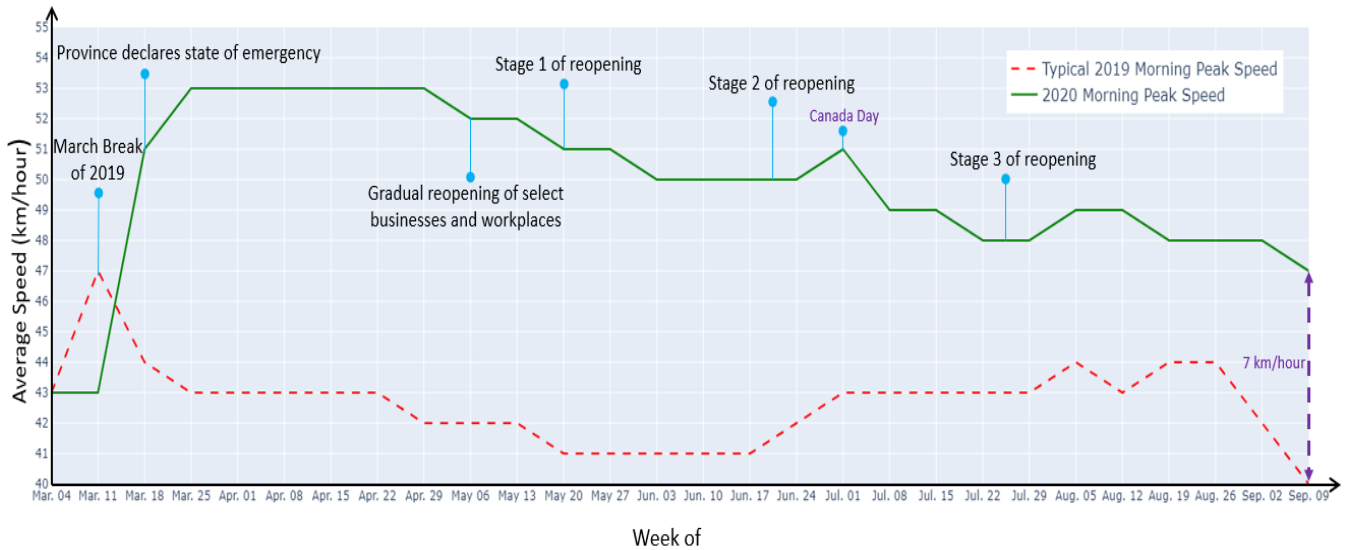
### 3.3 Average Vehicle Speed

With the Province gradually re-opening, traffic on Regional roads has increased and motorists have begun to experience delays. Based on data from Bluetooth sensors, travel delays during the week of September 9, 2020 have increased travel times by 20% during peak hours. However, delays are still less than the same time in 2019 when motorists would typically experience a 30% increase in travel times during peak hours due to travel delays.

As traffic volumes have changed during the pandemic, motorists have adjusted their vehicle speed. The Bluetooth sensor traffic speed figure (Figure 4) presents the average vehicle speed during the morning peak in the southern municipalities (Markham, Richmond Hill and Vaughan) from early March to early September 2020. The average vehicle speed prior to the pandemic was 43 km/h. Since the re-opening of businesses in early May, travel speed has been gradually decreasing with increased traffic volumes. In early September, the average vehicle speed

reached 47 km/h. The current speed is approximately 7 km/hr or 17% higher than the same time in 2019.

**Figure 4**  
**Morning Peak Speed Profile (Before vs. During COVID-19 Pandemic)**



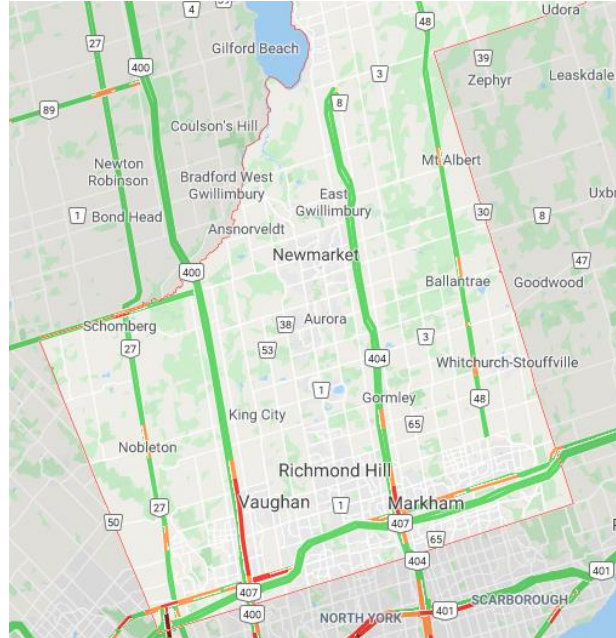
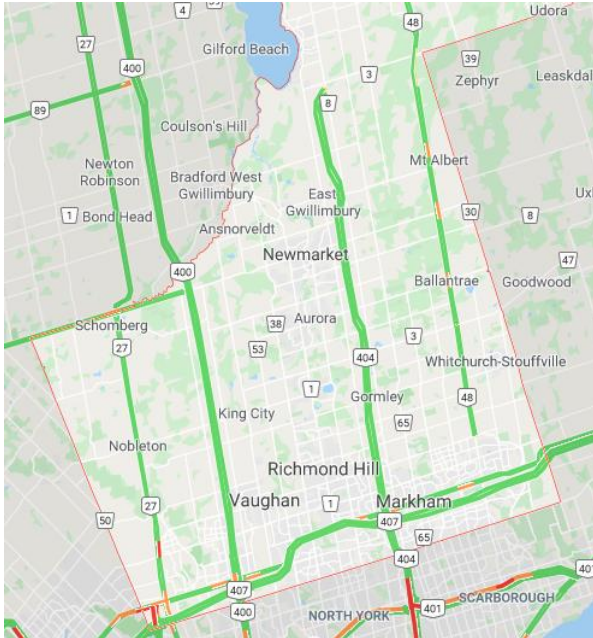
Note: Weekdays refer to Tuesday, Wednesday and Thursday of the week.

Comparison of vehicle speeds in August 2020 for travel on the highway network across the Region (Figure 5) shows the afternoon rush hour is getting busier than the morning rush hour. This may be attributed to morning rush hour traffic volumes being 30% lower than the pre-pandemic.

**Figure 5**  
**Highway Traffic Speed during Stage 3 of Reopening**

Morning Peak Hour Traffic (August 25, 2020)

Afternoon Peak Hour Traffic (August 25, 2020)



### 3.4 Truck Traffic

An assessment of 15 Automatic Traffic Recorder locations across the Region in August 2020 indicates that as daily traffic volumes on Regional roads were returning to normal, daily heavy truck percentage returned to the normal level of 3%.

In addition, truck percentages at individual locations are consistent with observed 2019 daily percentages. This distribution indicates normal truck travel routings have resumed with the re-opening of business across the Region.

### 3.5 Traffic Collisions

York Regional Police provided traffic collision data between March and June for 2019 and 2020, as summarized in Table 1.

**Table 1**  
**Collisions Before and During the COVID-19 Pandemic**

Total Collisions	2019	2020	Decrease
March	983	615	37%
April	929	345	63%
May	1,023	551	46%
June	1,106	744	33%

Generally, traffic collisions remain low in York Region during the COVID-19 pandemic compared to the same time last year. However, it has been observed traffic collisions have been increasing as a result of increased traffic volumes on Regional roads. In June 2020, there were 744 reported traffic collisions. This is approximately 33% lower than the same time last year.

While the overall number of collisions remains lower than pre-pandemic conditions, the incidence of dangerous stunt driving has been rising in the Region since the pandemic began. From March 1 to May 11, 2020, York Regional Police laid 306 charges for stunt driving for vehicles travelling in excess of 50 kilometres per hour over the speed limit, compared to 149 during the same period in 2019.

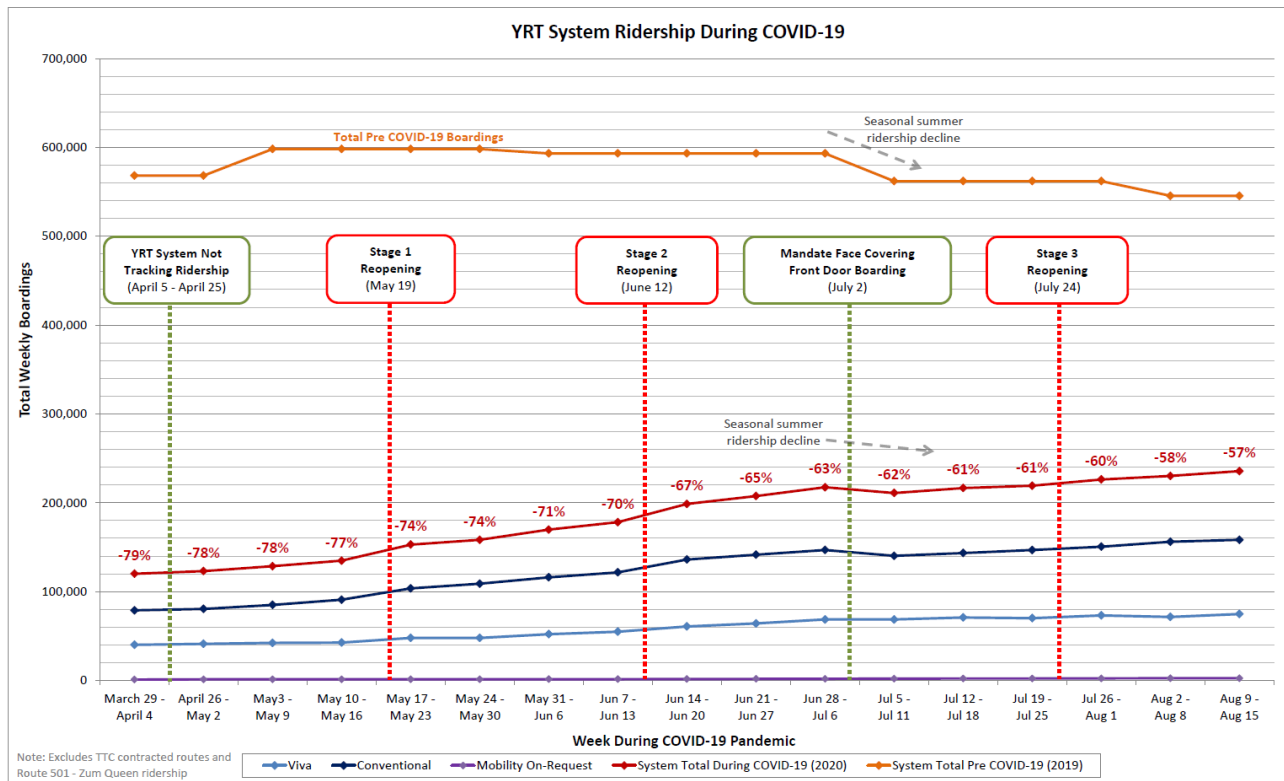
## **4.0 Travel Patterns by Transit**

### **4.1 York Region Transit Ridership**

The number of travellers using YRT services significantly decreased with the closure of all publicly-funded schools and non-essential businesses in March, 2020. Transit ridership decreased by approximately 80% across York Region. As a result, scheduled service changes were implemented to address decreased demand.

Since the phased reopening of the economy beginning May 19, 2020, YRT services have been experiencing a gradual ridership uptake. Weekly ridership trends on all YRT services are shown in Figure 6.

**Figure 6**  
**YRT/Viva Weekday Service - Ridership Impact of COVID-19**



System ridership on all YRT services in August 2020 reached 43% of August 2019 ridership. Viva and base routes, which operate along key corridors within the Region at a higher frequency, gained the highest increase. Ridership on these routes has reached approximately 50% of last year’s level. Local routes, including GO Shuttles and Express buses, are still 75% down.

Mobility On-Request Paratransit ridership was down approximately 80% by mid-August 2020 as day programs were cancelled and residents were asked to stay home during the pandemic.

Due to decreased demand, Mobility On-Request Conventional services continue to be expanded during the COVID-19 pandemic with 10 additional conventional routes replaced by Mobility On-Request services due to decreased demand.

Most Community Bus routes were replaced with Mobility On-Request services with earlier start times to address earlier opening of essential services, such as grocery stores. Mobility On-Request Conventional ridership is currently experiencing an approximate 96% return in weekly ridership over August 2019 as customers continue using the service to make connections with YRT Viva and base routes.



## **4.2 GO Rail Ridership**

During the COVID-19 pandemic, GO bus and rail ridership is 83% lower than the same time last year. To accommodate reduced passenger demand, all GO train lines in York Region continue to operate with reduced frequency (one train per hour for the peak direction during the peak periods). In addition, all trains are reduced to six coaches in response to reduced ridership.

## **5.0 Travel Patterns by Walking and Cycling**

Increased use of the public road network during the COVID-19 pandemic has prompted municipalities to explore opportunities to re-allocate road space to encourage more walking and cycling at safe physical distances. While data is limited, the ability for pedestrians and cyclists to safely distance from others does not appear to be an issue along Regional corridors. Some local municipalities have considered initiatives on local roads to provide additional space for active transportation and to facilitate access to businesses. The City of Markham, as an example, has implemented various initiatives, such as the closure of Enterprise Boulevard from Andre De Grasse Street to Main Street Unionville on Sundays and statutory holidays for pedestrians and cyclists.

In response to the COVID-19 pandemic, through the Region's Smart Commute Program, in partnership with the Town of Newmarket and the Cities of Markham, Richmond Hill and Vaughan, a series of walking, cycling and teleworking webinars were offered to help guide the community through active travel and healthy living. The focus of the webinars was to provide commuters and residents with the tools to navigate the Region safely using sustainable modes of transportation with a goal of encouraging these travel choices in the future.

The Region continues to work with the local municipalities and regional stakeholders on sustainable mobility initiatives.

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