Regional Travel Impacts of COVID-19

The COVID-19 Pandemic and subsequent mitigation efforts, such as social distancing guidelines, stay home orders, and mandatory closure of businesses, has had a dramatic effect on travel patterns in the Houston-Galveston region over the last several months.

Vehicular Travel

The Houston-Galveston Area Council’s Transportation Department monitors regional travel volumes with a platform that collects travel data from GPS capable devices. Figure 1 illustrates the percentage of daily Vehicle Miles Traveled (VMT) as compared to the baseline date of March 6. Following the issuance of a federal emergency declaration on March 13 and declaration of Texas public health disaster on March 19, there was a sharp decline in daily VMT throughout the region.

With the March 19 Texas public health disaster declaration came prohibition of groups larger than 10, closure of gyms, bars, and schools, and change to takeout only at restaurants. From this date onward, the region sustained traffic volumes significantly lower than baseline as mitigation measures continued.
Regional vehicular travel declined by up to 75% of baseline volumes through the end of April, when the statewide stay home order expired. Since initiating Phase I of the reopening of Texas on May 1, there has been a steady rise in regional travel. However, even as most businesses reopened to some capacity as Phase II began on May 18, travel in the region remained still approximately 50% lower than pre-pandemic volumes through the end of May. June, July, and August saw increased levels of vehicular travel, but overall regional travel remained 10-30% lower than baseline levels. It was not until September 4, the Friday of Labor Day weekend, that travel volumes were equal to or greater than the baseline volume. Typically a heavy travel day in years past, this day still barely surpassed baseline daily vehicle miles traveled. Through the remainder of September, travel volumes have hovered around 80% of pre-COVID volumes.

Travel Speed

As a result of decreased vehicular volumes, travel speeds throughout the region have increased, as seen in Figure 2. Comparing the first Monday of March, before the region’s first case of COVID-19, to the third Monday, after state and federal emergency health declarations, most major freeways experienced congestion-free speeds.

Transit Ridership

Transit agencies in the Houston-Galveston region continued operations amid the pandemic with numerous mitigation measure taken to reduce the spread of COVID-19. Examples of

![Figure 2: Freeway Speeds Before & After COVID-19](http://traffic.houstontranstar.org/map_archive/)

Houston TranStar, [http://traffic.houstontranstar.org/map_archive/](http://traffic.houstontranstar.org/map_archive/), May 2020
such measures include temporary suspension of fare collection, blocking seats to ensure social distancing of passengers, operator use of personal protective equipment, and enhanced cleaning of service vehicles. The seven transit providers in the region averaged a year-over-year decline of 25% during March; however, by April, year-over-year regional transit ridership declined by nearly 60%, as seen in Figure 3. During the first full month of statewide stay home measures, The Woodlands experienced the most dramatic decline in ridership with a 96% decrease compared to April 2019, while Harris County was the least impacted with only a 9% decrease. In May, ridership trends were similar to April, with some services like The Woodlands Express, METRO, Connect Transit, and Fort Bend Transit experiencing a slight uptick in ridership, yet others experienced slightly less ridership. In June, the cumulative decrease in transit ridership for the seven transit providers in the region was only 43%; however, in the following months, ridership has decreased again to levels half of what they were for the same months in 2019.

**Figure 3: Percent Decrease in Monthly Transit Ridership 2019 to 2020**

*Data unavailable for select months*

**METRO Star Vanpool**

Prior to the pandemic, METRO Star, the regional vanpool program operated 532 vanpool routes (February 2020). During March, many routes suspended operations when Harris County and the City of Houston issued Stay Home, Work Safe orders and employers
responded by closing offices and having many employees work from home. However, essential workers in healthcare, government and other industries have continued to rely upon vanpool for their commute. As of June 10th, STAR has 168 active vanpool routes and 276 vanpools on hold. 91 vanpools have terminated due to rider loss from layoffs, work furloughs, employer benefit policy changes and other COVID-19 related reasons, resulting in loss of ridership.

METRO Star has responded by offering special financial programs to assist vanpool groups that have lower ridership at this time. One example is METRO Star’s “Hold My Van” program that gives workers the option of not riding (and not paying) until they return to work. This helps vanpoolers avoid financial burdens associated with a service they may not need right now.

The METRO Star team is committed to making vanpool participants feel comfortable and safe as they return to work, which is why they have implemented a plan for distributing vanpool sanitizing kits to all active groups to promote routine disinfection of frequently touched surfaces in the vehicle. They have also provided tips for vanpool groups to encourage social distancing during their commute. These procedures have been positively received by vanpoolers who are getting back on the road.

As in prior emergency situations, vanpool groups have proven resourceful and cooperative in addressing challenges and operating safely. Vanpoolers are finding ways to ensure cleanliness onboard the vans, practicing social distancing, and safe operating strategies.

Active Transportation

As evident by lower vehicular travel volumes throughout the region, congestion from single occupant vehicles decreased almost overnight due to Stay Home, Work Safe orders and remote work environments. Because there are fewer cars on roads, and the fact that gyms fully closed and remained at limited capacity for months, there has been a tremendous increase in active transportation modes, such as walking and bicycling. Using a software platform called Eco-Visio, the Houston-Galveston Area Council tracks pedestrian and bicyclist activity at four permanent counter locations along major hike and bike trails in the region: White Oak Trail, Brays Bayou Trail, Columbia Tap Trail, and MKT Trail. (The MKT Trail has been omitted from this data analysis due to maintenance of the counter as well as trail closures due to repairs from recent fire damage to the trail bridge.) The increase in trail users has been consistent across all three permanent counter locations, as shown in Figures 4, 5, and 6. Compared to the same months in 2019, 2020 pedestrians and bicyclist volumes along these trails has increased significantly.
Figure 4: White Oak Trail at 34th Street

Figure 5: Brays Bayou Trail at Wheeler/Spur 5

*Data unavailable*