

Transportation During Coronavirus in NYC: Executive Summary

The COVID-19 pandemic and the shutdown of non-essential business transformed mobility in, through and around New York City. This report provides a detailed analysis of the way in which the transportation systems in New York City and the surrounding region were affected by the pandemic and curtailed economic activity through May 31, 2020.

1. Prior to the COVID-19 pandemic, New York City Transit carried 5.5 million subway riders on a typical weekday, or 2.5 times the total ridership of all other U.S. subway systems combined. On April 12th, 2020, subway ridership had dropped 96% to 213,424, its lowest point during the pandemic, and likely the lowest number in 100 years.
2. Of the modes, commuter rail suffered the greatest losses at up to 97.9% less than 2019 levels; this was followed by subways at 91.7% and buses at 78.3%. Vehicular traffic volume on bridges and tunnel crossings fell by the least amount, hitting 65.5% below 2019 levels and rebounded at a faster pace by the end of May.
3. The closing of non-essential activities in New York City on March 22nd, 2020, hurt Manhattan's Central Business District, leading to the decline of most commuter travel, reductions in subway and bus usage, commuter rail ridership, Citi Bike usage, and pedestrian activity.
 - a. Travel to the fifty subway stations in Manhattan south of 61st street declined to 43.3% and 4.4% of 2019 levels in March and April 2020, respectively. Grand Central Station saw the greatest decline, with April 2020 ridership 96.6% below 2019 levels.
 - b. Bridge and tunnel vehicular crossings into the Manhattan Central Business District experienced major declines between February and April 2020, falling by a total of 70.2%.
 - c. Citi Bike ridership decreased substantially in Midtown, with trips ending in Midtown 70.5% lower in April 2020 than in April 2019. Overall, Citi Bike trips in April ending in CBD neighborhoods fell 67.7% from 2019 levels.
4. From the outset of the pandemic, essential workers, an estimated 25% of NYC's workforce, depended on subways and personal vehicles, lacking sufficient access to rapid transit and micromobility options in their neighborhoods. On a normal day, essential workers account for 38% of transit commuters.
 - a. This report draws on the definition of essential workers established by the New York City Office of the Comptroller, which includes direct-service employees in the grocery, pharmacy, transit, delivery & storage, cleaning, healthcare, and social services industries.
 - b. Essential workers relied on the subways throughout the pandemic: Manhattan experienced the greatest decline in subway ridership, falling 93.4% from February 2020 levels. The Bronx experienced the least decline in ridership, falling 80.6% between February and April 2020.
 - c. With the overnight closure of the subway system, essential workers relied more on buses and other services such as the MTA Essential Connector program, which provided 18,870 trips in May.
 - d. Private companies such as Citi Bike and Revel mopeds offered free or discounted memberships to essential workers, and expanded their service areas. In April, 12% of Revel rides were made by essential workers.
5. As vehicular trips on New York City streets fell by 84%, traffic speeds rose 27%.
 - a. The most significant drop in vehicle miles traveled occurred in Manhattan, where drivers traveled 93% less in April 2020 than they had in January 2020.

- b. Bridge and Tunnel Crossings: by April, vehicle traffic on MTA crossings fell by 61.3% and Port Authority fell by 57.3% from February levels, which was less of a decline than other modes. Moreover, these bridge and tunnel crossings are rebounding more quickly than other commuter modes. By June, traffic volumes were estimated at about 70 to 80% of normal.
6. Several benefits of reduced traffic emerged:
 - a. During the NYS on PAUSE order, bus speeds throughout New York City were 15% higher than those in 2019. In Manhattan, bus speeds were 30% higher, due in part to reduced vehicle traffic.
 - b. In March and April 2020, vehicle crashes dropped to one-quarter of 2019 levels; pedestrian injuries reduced by approximately 80% during this time period.
 7. Ridership in taxis and for-hire-vehicles declined substantially after the March 16th, 2020 school, bar, and restaurant closures: taxi pickups dropped 86.8% and for-hire vehicle pickups declined 60.8% by April 16th.
 8. Cycling was a relatively popular and resilient mode during the NYS on PAUSE order; Citi Bike ridership rebounded back to 2019 levels by late May.
 9. Commuting from suburban and exurban New York City fell sharply once non-essential workplaces were closed. Ridership on trains to New York City, including Metro-North, Long Island Railroad, New Jersey Transit, and PATH, reached as low as 2.1% of pre-pandemic levels.
 10. Tourism from across the nation and globe declined precipitously as air travel was cut sharply: passenger counts across LaGuardia, Newark, and John F. Kennedy airports fell 98.4% below 2019 levels.

In June, New York City began its phased reopening. Subway ridership hit its highest levels since the start of the pandemic on June 10th at 851,241 riders. However, vehicle travel seems to be recovering more quickly: between April and May, subway ridership increased 28.5% while MTA crossings increased by 54.6%, Port Authority cross-

ings increased by 55.3%, and daily vehicle miles traveled increased by 78.9%. The chasm suggests there may be an overwhelming influx of vehicles without short and long-term measures to reduce traffic and encourage mass transit.

Confronting death and disease, drastic budgetary cuts, and a curtailed workforce, New York's transportation leaders adopted public health measures and safety procedures that required cutting back subway service for four hours every night. This has proven to be a bold but necessary policy. The MTA maintained subway, bus and rail service, unlike most transit systems across the United States, many of which shut down. The PATH has provided vital service for bringing essential workers into New York City throughout the pandemic. The New York City Department of Transportation developed the open streets and outdoor dining plans, and the Taxi and Limousine Commission mobilized taxi drivers to deliver meals to homebound New Yorkers.

The report's recommendations include:

- **Ensure a Safe Return to Mass Transit:** The subway and bus system is fundamental to New York City's economy. Deploying advanced technologies to meet safety standards, the MTA has made progress on vital capital projects throughout the spring of 2020.
- **Implement Congestion Pricing:** The law to implement congestion pricing in order to reduce traffic and fund mass transit is essential.
- **Reconsider the Curb:** The city's efforts to devote more street space for dining, biking, and walking should be expanded.
- **Accommodate and Encourage Micromobility:** Bike commuting should be made safer with more protected bike lanes and better enforcement to keep them free of vehicles.
- **Improve Planning with Coordinated Data:** Transportation agencies in the New York Region should require relevant and consistent data be provided to them for analysis and agile planning.

These and the report's other recommendations are explained in full starting on Page 74 of this report.