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## Supplement of

## Declines and peaks in $NO_2$ pollution during the multiple waves of the COVID-19 pandemic in the New York metropolitan area

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## **Supplementary Material - Figures**

Figure S1: Total new COVID-19 cases per day in New York City, collected by the NYC Health Department from March 2020 to May 2021. (Data from: <a href="https://github.com/nychealth/coronavirus-data/tree/master/trends#data-by-daycsv">https://github.com/nychealth/coronavirus-data/tree/master/trends#data-by-daycsv</a>)

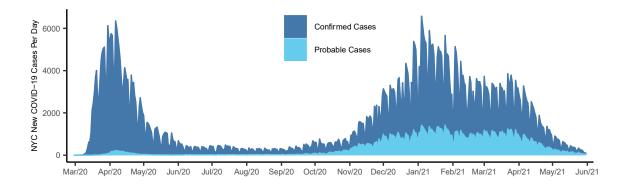


Figure S2: Percent (%) change in daily total bridge and tunnel traffic from the equivalent day in 2019, from March 2020 – May 2021. Data from MTA.

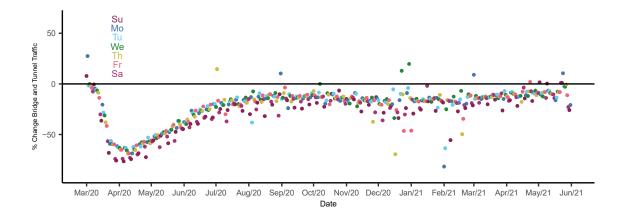


Figure S3: Annual average OMI tropospheric NO2 column, oversampled to  $0.1 \times 0.1$  degrees, after filtering out data affected by the row anomaly, cloud fractions > 0.3, surface albedo > 0.3, solar zenith angles > 80 degrees, and the 5 rows at the edges of the swath that contain very large pixel sizes. The New York City spatial average shown here is equivalent to the box shown in Figure 2.

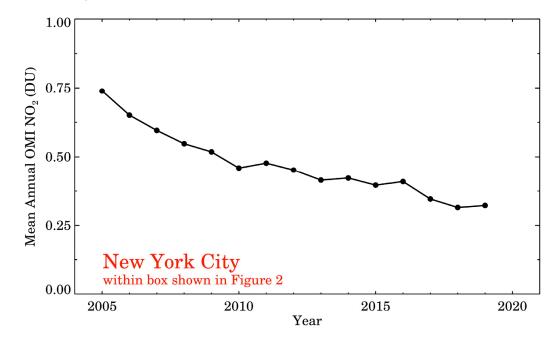


Figure S4: (Upper panel) Daily percent (%) change in the total number of requests for driving directions from Apple maps in New York City (blue), Middlesex County, NJ (green), and New Haven, CT (pink). (Lower panel) Daily percent (%) change in total number of requests for driving directions in New York City colored by day of week. Percentage change is calculated from a baseline of Feruary 13<sup>th</sup>, 2020.

