Notes on mobility data for NYC

1) **Apple article**- Apple makes mobility data available to aid COVID-19 efforts

https://www.apple.com/newsroom/2020/04/apple-makes-mobility-data-available-to-aid-covid-19-efforts/

- Counted # of people based on number of requests made to apple maps for directions
- Clear decline in driving, walking and use of transit in the US was observed on March 15th
- According to the data file they referenced in their article which looked at trends in daily changes in requests for directions: Transit use, driving and walking was at an all time low on April 12th with 19.06, 37.42 and 34.2 requests, respectively.
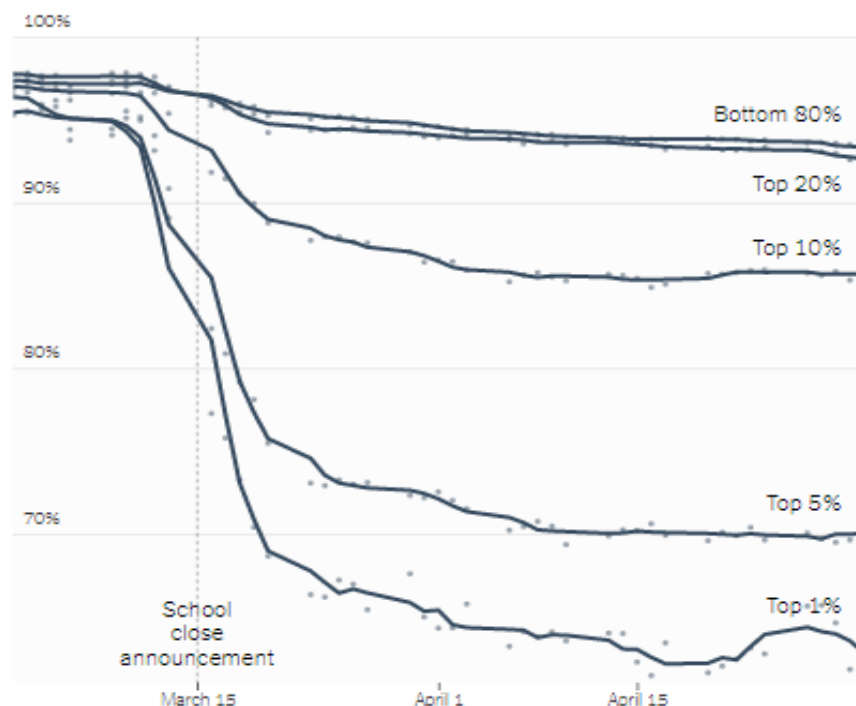
2) **NY times article -** The Richest Neighborhoods Emptied Out Most as Coronavirus Hit New York City

https://www.nytimes.com/interactive/2020/05/15/upshot/who-left-new-york-coronavirus.html

- Used mobile data to look at when residents left, percentage and demographics of people leaving. Data was collected from 140,000 residents
- Vast majority started leaving on March 15th after the Mayor announced he was shutting city schools.
- Based on income, the percentage of people who left the city were 20%-40% (Top 1% based on income), 20-30% (Top 5%), 10-15% (Top 10%) and 5% (Bottom 80%)
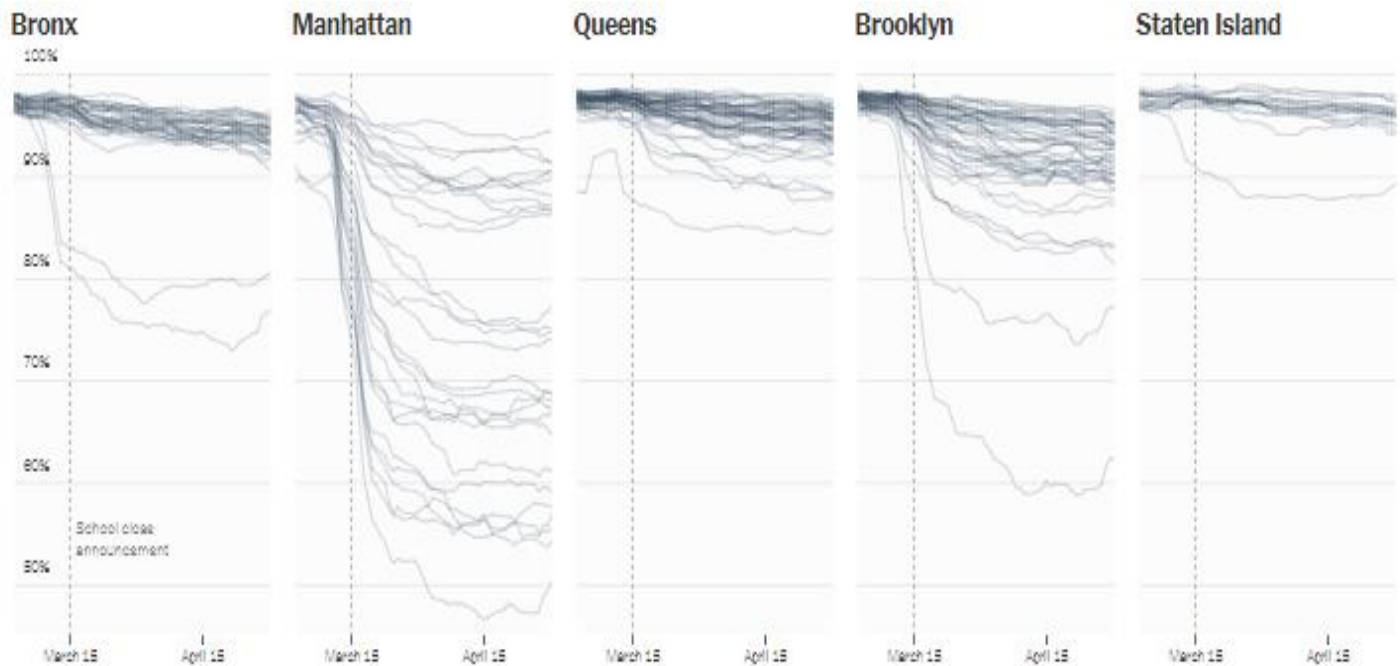
The highest-earning neighborhoods emptied first.

Percent of residents who were home, by income group of their census tract

Income percentiles reflect those in New York's five boroughs, by census tract
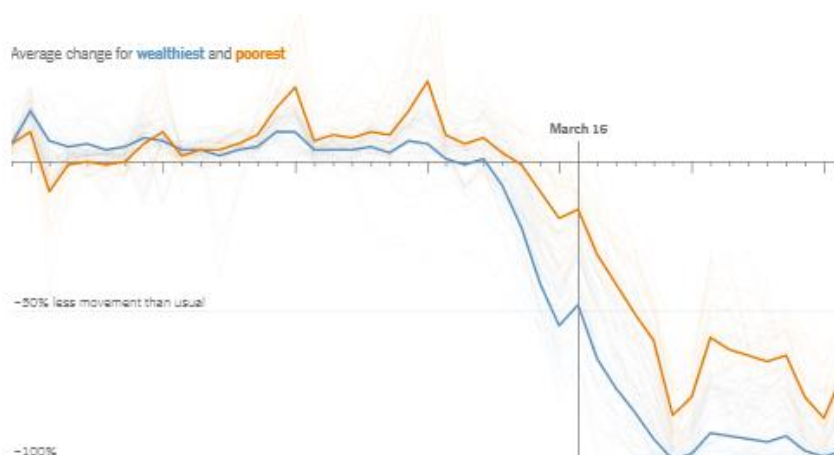
- Manhattan saw the greatest decline in residents on and starting March 15th, followed by Brooklyn. Bronx, Queens and Staten Island saw very decline. Associated this trend with the option of working from home for individuals in the higher income group.

3) **2nd NY article** - Location Data Says It All: Staying at Home During Coronavirus Is a Luxury
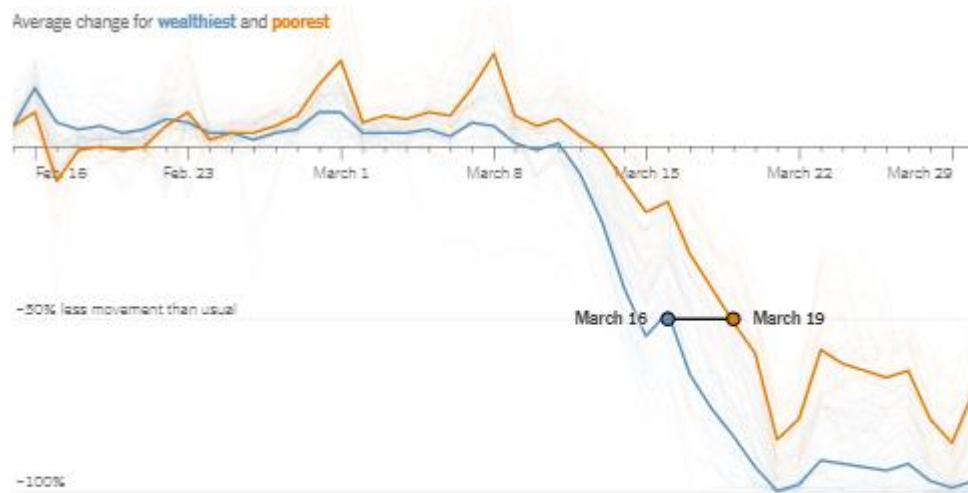
https://www.nytimes.com/interactive/2020/04/03/us/coronavirus-stay-home-rich- poor.html

- Wealthier people stopped communting sooner than people in low income class
- There was a decline in NYC metro on March 9th but starting March 16th there was a steeper decline because both high and low income class groups reduced moving

By March 16, when President Trump asked people to stay at home to slow the spread of the virus, those in the **wealthiest** and **poorest** areas were both moving less than usual.

- By March 16th, high income locations cut their movement in half but poorer areas didn't see this trend till March 19th

Average change for **wealthiest** and **poorest**

-50% less movement than usual

-100%

March 16 ——— March 19

But by that date, those in the **highest-income locations** had already cut their movement by nearly half. **Poorer areas** did not see a similar drop until three days later.

4) **Bloomberg article** - New York City Reopening Splits Along Lines of Wealth and Race

https://www.bloomberg.com/graphics/2020-new-york-city-reopening/

- When the state's shelter in place order went into effect on March 20th, movement in NYC came to a halt
- Mid July travel compared to the same time last year was down by 63%
- Within Manhattan it was down by 73% and trips to the Island were down by 90%
- Few miles south in Brooklyn's majority Black neighborhood, Brownsville, movement was 10% below pre-shutdown levels and 19% below in Crown Heights North
- In Prospect Heights where the median household income is 2-5 times higher in comparison, movement was down by 25%