

DPSS Capstone Project

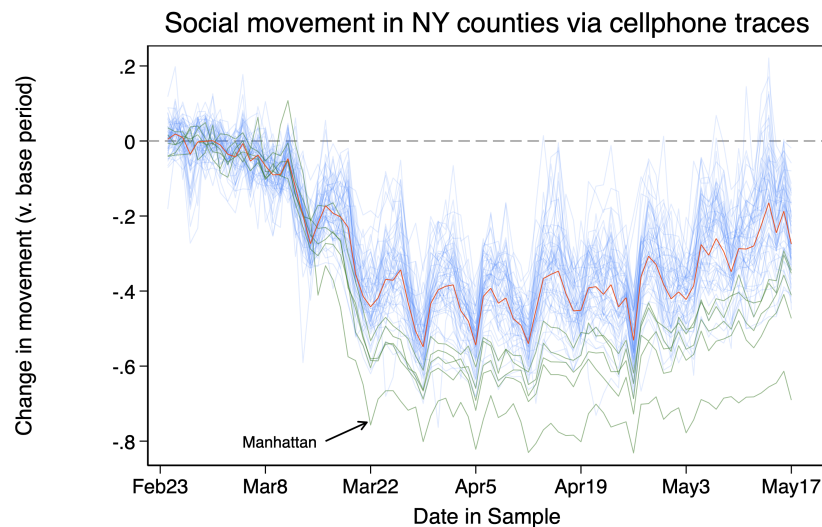
The Economic Impact of Retail Mask Policies

In this Capstone Project, you will study how the roll back of mask mandates during the COVID-19 pandemic impacted economic activity in the United States.

1. Compile a list of 25 major US companies that reversed their mask requirements in their stores in May 2021. You should generate a table with two columns: company name (1) and date of reversal (2). You will use this list later (Monday)

Since the scale of the data required to study all reversals is too large for this project, we will focus on one of the most important retailers in the United States: Walmart. Walmart reversed their mask requirements on May 18 (the change was announced on May 14). You will have access to 14 days of data on foot traffic in Walmart stores before and after this policy change.

2. Produce a time series plot of average foot traffic (by day) in Walmart stores during the 28 day period noted above. Consider using a piping operator or equivalent collapse command. Mark sure to clearly label the axes. (Tuesday)
3. Next, make a time series plot of average foot traffic (by day) for each state where a Walmart is located. If possible, consider overlaying these figures in a single plot. (Wednesday) Here is an example:



4. Create a new variable called **post**. Set this variable equal to 0 before the policy change and equal to 1 after the policy change. Use a linear regression, where your dependent variable is foot traffic (store visits) and your independent variable is **post**. Interpret the effect associated with this new variable. (Thursday)
5. Using the county fips code for each store, use a join to merge information about Republican vote share in 2020 and vaccine hesitancy. Now run three regressions. Use the same dependent variable except for regression (1) use **post** and **post** \times **trump_vs**. For (2) use **post** and **post** \times **vaccine_hes**. For (3) use **post**, **post** \times **trump_vs**, and **post** \times **vaccine_hes**. How does the effect of the policy reversal differ in counties that are more Republican? How about high vaccine hesitancy counties? Are these two effects distinct from one another? (Friday)

Your final submission (as a PDF) should include a your figures as well as any detailed answers associated with each task above. Upload your list of company policy reversals as a csv.