

Social distancing in Anchorage using google mobility reports

By

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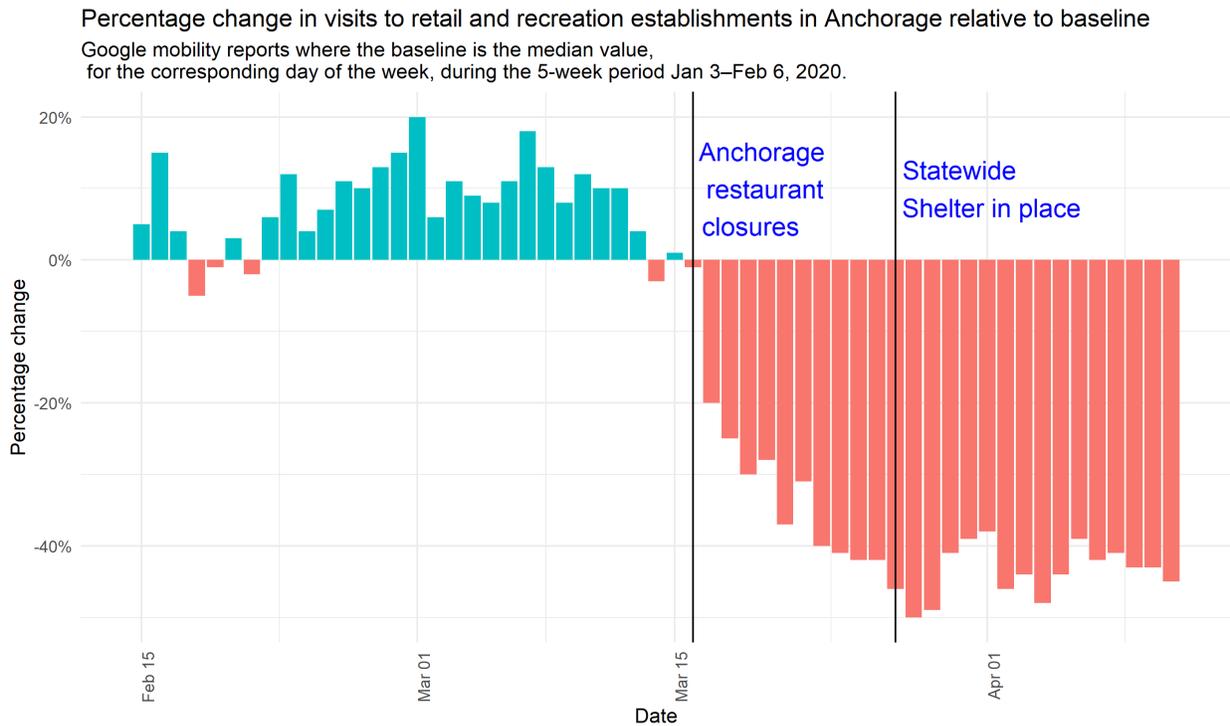
Below, I describe the changes in mobility patterns in Anchorage using data Google mobility reports¹ which capture how visits and length of stay at different places change compared to a baseline. The categories² are Grocery stores and pharmacies, Parks, Transit stations, Retail and recreation establishments, workplaces, and residential units. Activity levels in all settings except parks and residences are down. Retail and recreation establishments activity levels are down more than 40% relative to the baseline, while the decline in workplaces and grocery stores are 50% and 15%, respectively.

¹ These reports are based on anonymized cell phone data and are available here: <https://www.google.com/covid19/mobility/>

² The definitions for each category are provided at the end of the document.

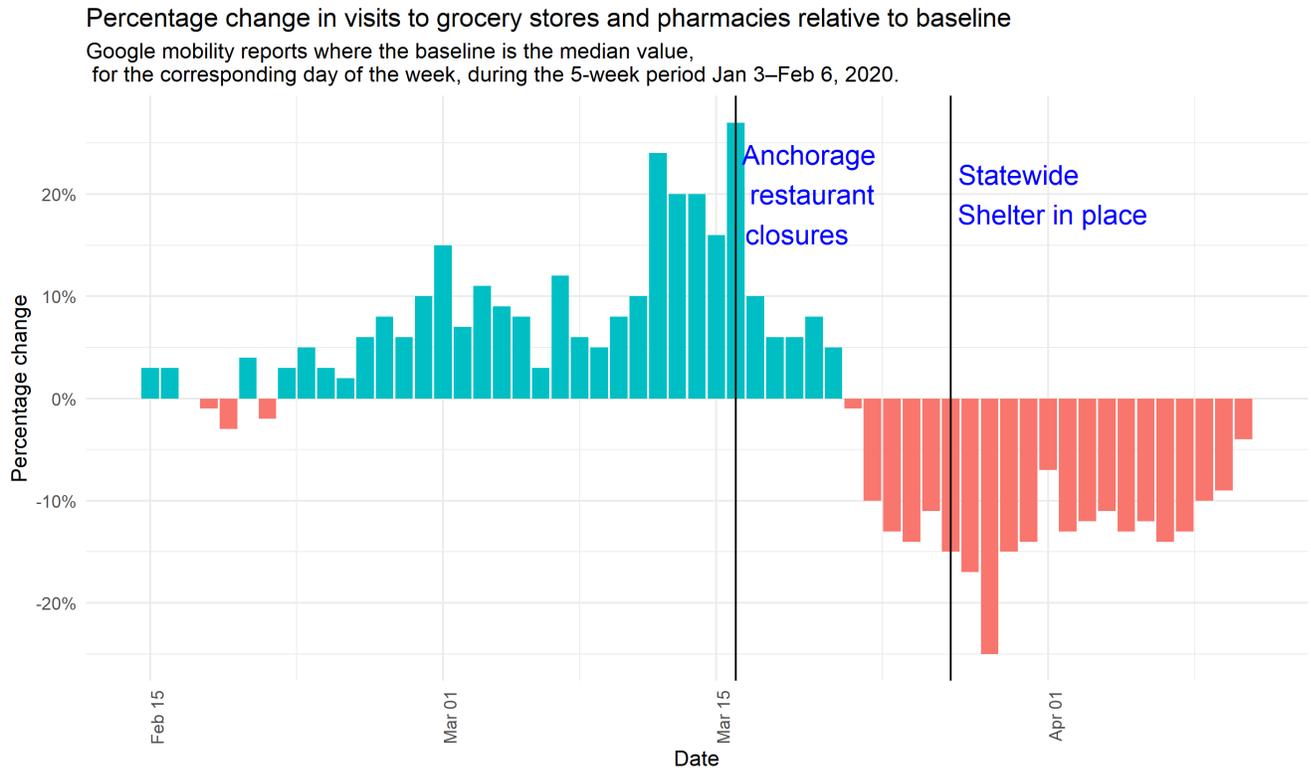
Retail and recreation establishments:

Relative to the 5-week period between January 3rd and February 6th, visits to retail and recreation establishments are down more than 40%. The declines, unsurprisingly, coincide with the mandated restaurants closures. The statewide shelter in place order imposed on March 27th does not seem to have changed the patterns of behavior for this category given that it came almost 2 weeks after the local order.



Grocery stores and pharmacies:

Visits to grocery stores were elevated for the first 15 days in March as people were stocking up on necessities. Starting around March 20th, visits to grocery stores dropped and have averaged about 15% below the baseline since then. A few days after the statewide shelter in place, the visits plummeted to about 25% below baseline but that seems to have been a temporary drop.

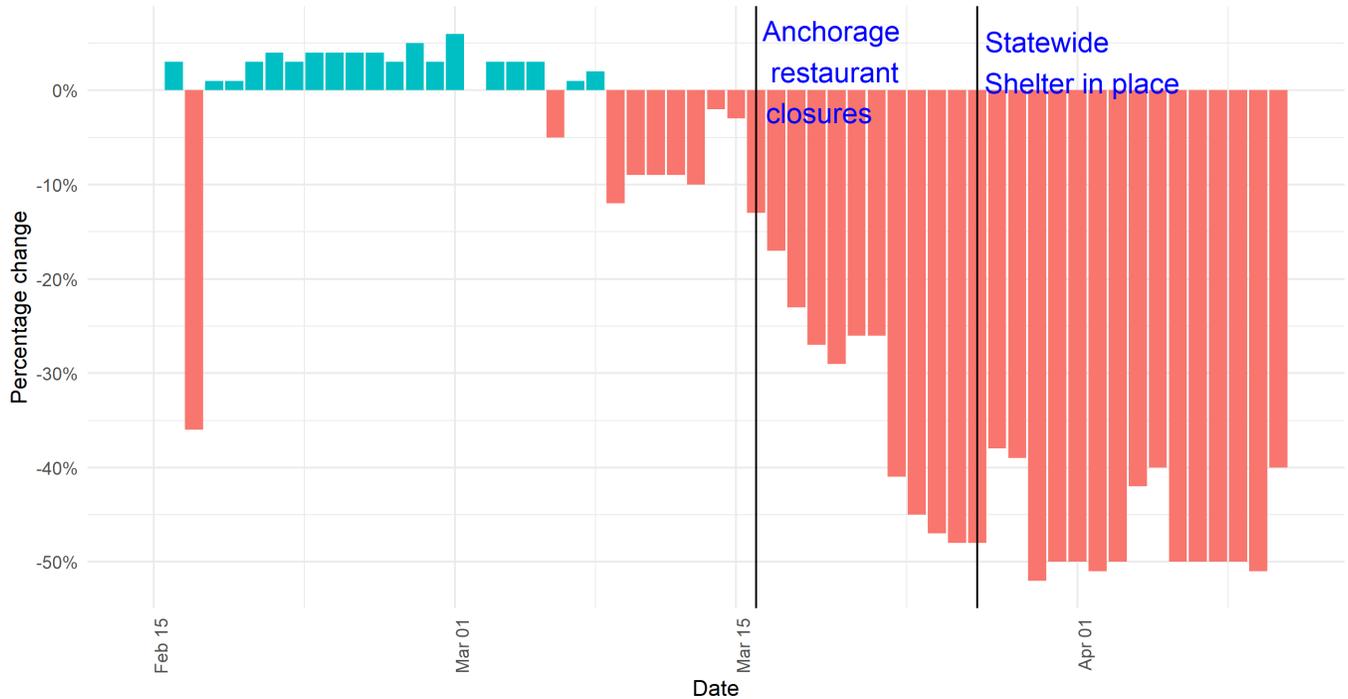


Workplaces:

The decline in visits to workplaces started almost a week before the local mandates. We see an acceleration right as the local orders went into effect. By March 27th, work place visits were almost 50% below the baseline. To get a sense of the drop, February 17- President's day- had a smaller drop in workplace visits than what we have been experiencing since around March 20th.

Percentage change in visits to workplaces in Anchorage relative to baseline

Google mobility reports where the baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

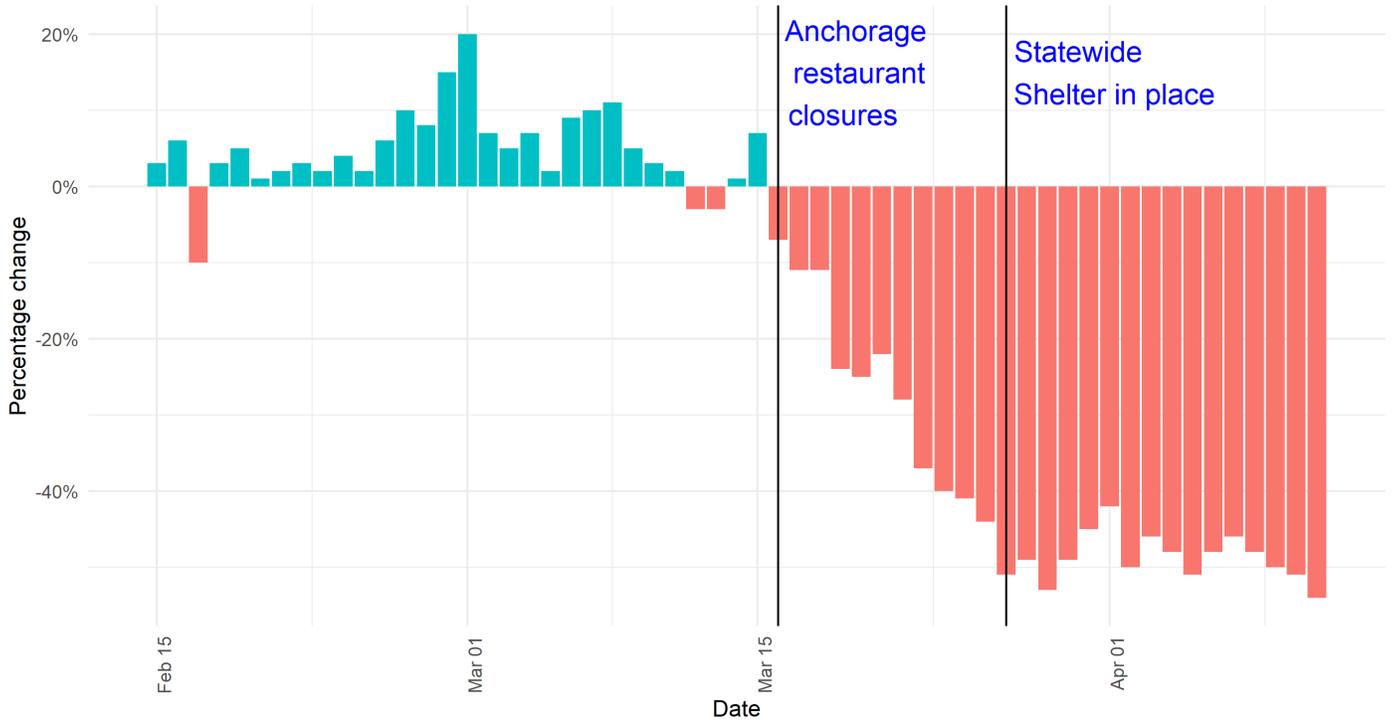


Transit stations:

Visits/time spent at transit stations has also dropped significantly since the local mandates went into effect. The decline started on March 16th and was gradual at first. Activity levels at transit stations is now 50% below the baseline.

Percentage change in visits/time spent at transit stations relative to baseline

Google mobility reports where the baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

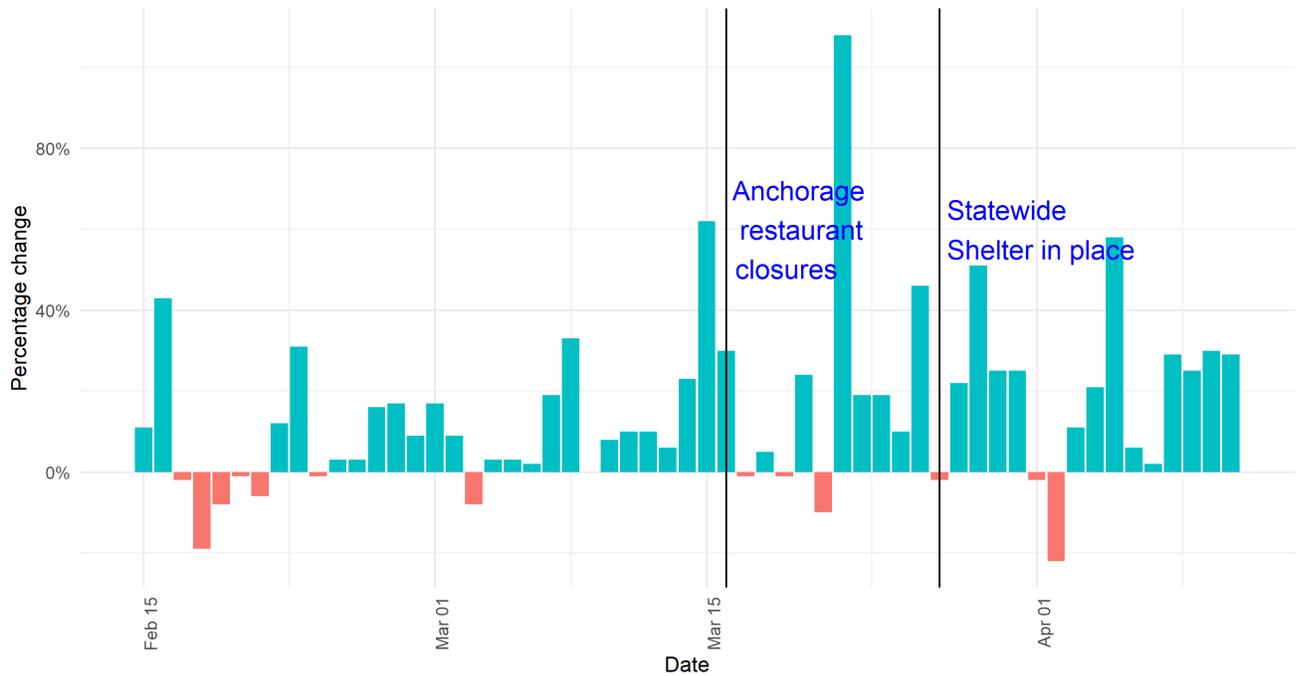


Parks:

Anchorage residents are spending more time in parks since the mandated closures. It is, however, important to note that the data below also captures seasonal usage of parks. Even in the absence of the pandemic, we would expect the number of visits/time spent at parks to be higher in March than January. The percentage change is relative the January 3rd-February 6th which means it is inclusive of both the closures as well as temperature warming.

Percentage change in visits/time spent at parks relative to baseline

Google mobility reports where the baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

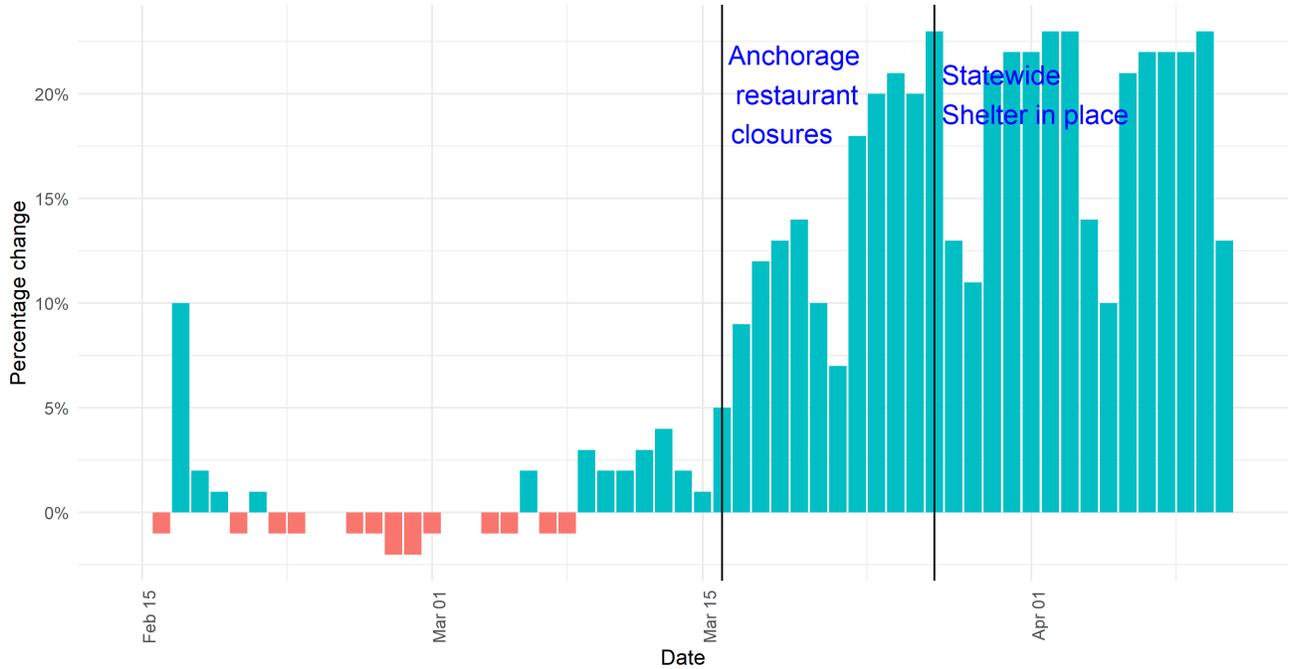


Residences:

Lastly, we show the change in visits/time spent at residences in Anchorage. Unsurprisingly, the local/state mandates and increase in the number of people working from home is reflected in the data. Relative to the baseline, visits/time spent at residences is about 25% higher.

Percentage change in visits/time spent at residences relative to baseline

Google mobility reports where the baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.



Definitions of the different categories

Grocery & pharmacy

Mobility trends for places like grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies.

Parks

Mobility trends for places like local parks, national parks, public beaches, marinas, dog parks, plazas, and public gardens.

Transit stations

Mobility trends for places like public transport hubs such as subway, bus, and train stations.

Retail & recreation

Mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.

Residential

Mobility trends for places of residence.

Workplaces

Mobility trends for places of work.