**COMMUNICATION**

**The Unanticipated Effect of Covid-19 on House Apportionment\***

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**ABSTRACT**

It is well understood that even small differences in population can have a disproportionate impact on representation in the U.S. House of Representatives after a decennial census because of the peculiarities of rounding rules that require integer allocations. While the COVID-19 pandemic can be held responsible for accelerating the trend toward the increased use of mail-in balloting, and it affected the ability of the census to collect in-person information, here we call attention to an unanticipated effect of the pandemic on the electoral process that, as far as we are aware, has never previously been identified. By rerunning the apportionment numbers for all states under the assumption that deaths from COVID prior to the start of the Census had not occurred, we show that New York’s congressional delegation would not have lost a seat. New York was the only state whose House seat allocation was affected by disproportionate COVID-19 deaths.

After the 2020 Census apportionment data was released, politically attentive citizens learned that had only 89 more New Yorkers filled out a census form, the state would not have lost a seat in the U.S. House of Representatives. AsNew York Time’s columnist Denise Lu pointed out, 89 people is about the number of people in a NYC subway car at (pre-pandemic) rush hour.[[1]](#footnote-2) However, as Lu also points out -- with lots of historical details -- the way apportionment is calculated virtually guarantees there will be some states that come very close to nearly earning an additional seat, or losing one.[[2]](#footnote-3) As political scientists John Ferejohn and Mo Fiorina remarked many decades ago, closeness counts only in horseshoes and dancing (Ferejohn and Fiorina 1975).

The revelation that New York was shorted a seat by just 89 people came on the heels of claims about how COVID restrictions seemed to exacerbate the migration out of New York into sunbelt areas that had been happening throughout the decade.[[3]](#footnote-4) The census’s own estimates suggested that New York lost over a million residents to other states over the course of the decade.[[4]](#footnote-5) This out-migration led to expectations that New York would lose two seats after the 2020 apportionment. But, when the Census Bureau held a press conference to report the new apportionment total, what was actually announced was that New York’s population increased by 800,000 (4.5%).[[5]](#footnote-6) Of course, what counts for census-based apportionment is not population gain or loss, but relative population gain or loss vis-à-vis other states.

While there are a host of factors that plausibly affected New York’s congressional allotment in the 2020 census -- including interstate migration, inadequate census outreach,[[6]](#footnote-7) low rates of census compliance (especially by minorities), as well as the particular rule adopted for reapportionment of the U.S. House of Representatives in 1941 (Balinkski and Young, 1982; 2001; Owens 1921), we show that there is an indubitable villain that both Democrats and Republicans in New York can agree to blame; namely COVID-19. This villain alone was enough to cost New York its 27th seat which is 3.5% of its political clout. But it is only New York (on the losing side) and Minnesota (on the winning side) whose House delegation size was directly affected by the pandemic.

When we assert that COVID-19 may have cost New York a congressional seat, we are not talking about the pandemic’s effects on census administration and response rate, though such effects almost certainly existed. Rather, we are referring to deaths caused by COVID. Of course, it is not mere population loss that mattered rather, as noted earlier, changes in apportionment are about changes in the *relative* populations of the states. Because pandemic effects were not distributed across states in direct proportion to population, states which were hardest hit by the pandemic might have experienced an apportionment loss. Because New York was the epicenter of the pandemic when the census counts were taking place, if there were to be such an effect, it in is New York that it was most likely to be found.[[7]](#footnote-8) And it was.

We downloaded the data on the cumulative number of deaths attributed to COVID-19 prior to Census Day (April 1, 2020) for each state from the CDC website.[[8]](#footnote-9) After adding these deaths to the census apportionment population totals for each state (creating a counterfactual world in which COVID-19 did not cause any excess deaths), we reran the census apportionment using the same apportionment method mandated by Congress.[[9]](#footnote-10) While this is not a perfect measure of the effects of COVID on apportionment, since some deaths by COVID might nonetheless have occurred for other reasons, it gives us a very good baseline. What we find is that Minnesota, which had previously held onto its eighth district by just 23 votes, now has one of its seats instead apportioned to New York. Of course, differential rates of COVID deaths was certainly not the only factor affecting apportionment, but it alone was enough to cost New York a seat.

In the early phases of the pandemic the states that were most heavily hit were ones with substantial minority population concentrated in large cities. The deaths disproportionately occurred in states that voted for Joe Biden. Recently, death rates have been higher in mostly rural states that voted for Donald Trump, especially in states where the state government is under firm Republican control. By and large, these are the states where the vaccination rates are the lowest and past efforts to control the virus have been the least aggressive in terms of social distancing and mask requirements.[[10]](#footnote-11) Still, New York’s deaths were so significant at the beginning of the pandemic, its relatively lower rate of death since has only allowed other states to reach the same levels of per capita deaths. So, if we take the census results from April 2020 as given, but now subtract COVID-19 deaths between then and now, and rerun the apportionment using these reduced tallies, we find that there is no effect on the 2020 apportionment. One might also imagine that if a large percentage of residents remain unvaccinated and new deaths are disproportionately in several states, that these other states might have population lose that would have resulted in a loss of a seat. But we must also keep in mind that while small permutations in the data can cause a state to gain or lose a seat, it takes often much larger changes to affect many seats. We must also note some caution in interpreting our finding that New York would not have lost a seat least if been for COVID-19, since it is not clear how the U.S. Census Bureau dealt with deaths during the enumeration period. Self-response started on March 12, 2020, so those who passed away after registering a response to the census might have been counted when they should not have been. This potentially means that New York was further away from retaining its 27th seat than appeared from the final numbers. But, it also shows just how critical it was for states to have the highest response possible in order to ensure maximum representation in Congress.

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