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## The Unanticipated Effect of Covid-19 on House Apportionment

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Abstract:	<p>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-19 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.</p>

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**The Unanticipated Effect of Covid-19 on House Apportionment****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-19 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. As New 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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> The census's own pre-census estimates suggested that New York lost over a million residents to other states over the course of the decade.<sup>4</sup> 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

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<sup>1</sup> Denise Lu, "It Only Takes a Few People to Change Your State's Congressional Seats". May 1, 2021. *New York Times*, <https://www.nytimes.com/interactive/2021/05/01/us/politics/2020-census-congress-seats.html>.

<sup>2</sup> Kristin Koslap, "How Apportionment is Calculated". April 26, 2021. *United States Census Bureau*, <https://www.census.gov/newsroom/blogs/random-samplings/2021/04/how-apportionment-is-calculated.html>

<sup>3</sup> See Peter Lane Taylor, "COVID-19 Set America's Housing Market on Fire. That Could Alter U.S. Politics for A Generation." March 11, 2021. *Forbes*, <https://www.forbes.com/sites/petertaylor/2021/03/11/covid-19-set-americas-housing-market-on-fire-that-could-alter-us-politics-for-a-generation/?sh=2f58002b39de>; Peter Lane Taylor, "South Florida's Real Estate Market Is Now Officially in Super-Boom Mode." February 19, 2021. *Forbes*, <https://www.forbes.com/sites/petertaylor/2021/02/19/south-floridas-real-estate-market-is-now-officially-in-super-boom-mode/?sh=78a8edc75fc0>; Alexander Tanzi and Wei Lu, "Even Before Covid 2,600 People a Week Were Leaving New York City". December 5, 2020. *Bloomberg Wealth*, <https://www.bloomberg.com/news/articles/2020-12-05/even-before-covid-2-600-people-a-week-were-leaving-new-york-city>.

<sup>4</sup> Landon Allison and John Pullano, "How bad have New York state's recent population losses been?". January 26, 2021. *PolitiFact*, <https://www.politifact.com/factchecks/2021/jan/26/james-tedisco/how-bad-have-new-york-states-recent-population-loss/>.

800,000 (4.5%).<sup>5</sup> 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,<sup>6</sup> 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 27<sup>th</sup> 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.<sup>7</sup> And it was.

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<sup>5</sup> "Census Bureau to Release 2020 Census Population Counts for Apportionment". April 26, 2021. *United States Census Bureau*, <https://www.census.gov/newsroom/press-releases/2021/2020-census-apportionment-news-conference.html>; Robert Gebeloff, "Why New York State's Population Growth Surprised Experts". May 4, 2021. *The New York Times*, <https://www.nytimes.com/2021/05/04/upshot/census-new-york-surprise.html>.

<sup>6</sup> Hansi Lo Wang, "Census Bureau Gets 4th Trump Appointee In 3 Months as Count Nears End". September 30, 2020. *NPR*, <https://www.npr.org/2020/09/30/916526935/census-bureau-gets-4th-trump-appointee-in-3-months-as-count-nears-end>.

<sup>7</sup> Jesse McKinley, "New York City Region is Now an Epicenter of the Coronavirus Pandemic". March 22, 2020. *The New York Times*, <https://www.nytimes.com/2020/03/22/nyregion/Coronavirus-new-York-epicenter.html>.

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.<sup>8</sup> 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.<sup>9</sup> 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 were certainly not the only factor affecting apportionment, but it alone was enough to cost New York a seat. This result reinforces the well-known finding that very small changes in population counts can lead to a loss or gain of a congressional seat when reapportionment takes place.

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.<sup>10</sup> We thought it might be possible that changes in the distribution of COVID-19 death rates since April 1, 2020 might have given us some different apportionment results if the apportionment base was taken to be the initial population counts minus COVID-19

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<sup>8</sup> Data source: Centers for Disease Control and Prevention, <https://data.cdc.gov/Case-Surveillance/United-States-COVID-19-Cases-and-Deaths-by-State-o/9mfq-cb36/data>.

<sup>9</sup> Estimates are likely far lower than official reports suggest. Becky Sullivan, "New Study Estimates More Than 900,000 People Have Died of COVID-19 in U.S.". May 6, 2021. *NPR*, <https://www.npr.org/sections/coronavirus-live-updates/2021/05/06/994287048/new-study-estimates-more-than-900-000-people-have-died-of-covid-19-in-u-s>.

<sup>10</sup> David Leonhardt. "Red America's COVID Problem." *New York Times*, June 28, 2021. [Red America's Covid Problem - The New York Times \(nytimes.com\)](https://www.nytimes.com/2021/06/28/us/politics/red-america-covid-problem.html)

deaths; we reran the apportionment subtracting COVID-19 deaths since April 1, 2020 as an adjustment to the census numbers. But we find that nothing changes from the official apportionment, including New York losing a seat and Minnesota gaining it.

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