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Persistent Shortfalls and Racial/Class Disparities: 2020 Census Self-Response Rates

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Authors

Ong, Paul Ong, Jonathan

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PERSISTENT SHORTFALLS AND RACIAL/CLASS DISPARITIES 2020 CENSUS SELF-RESPONSE RATES PAUL ONG AND JONATHAN ONG AUGUST 18, 2020



Asian American Studies Center



Center for Neighborhood Knowledge



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FOREWORD

The 2020 Census will reshape the next decade and landscape of the United States, most likely by exacerbating racial inequality and the gap between the rich and the poor, as the middle class continues to shrink. The 2020 Census will be used to decide how approximately \$1.5 trillions of dollars in federal funding will go to states and communities each year for important services such as healthcare, schools and libraries, public transportation, welfare benefits, and much more.¹

For example, estimates show that for every person uncounted, California could lose \$1,000 a year for 10 years. That's as much as \$10,000 per person in funds lost over the next decade.² According to a PricewaterhouseCoopers study, at least \$1.5 billion dollars was lost due to uncounted residents in California after the 2000 census.³ The 2020 Census results also determine how many seats in Congress each state gets.

The UCLA Asian American Studies Center (AASC) was designated in 2001 as an official Census Information Center (CIC) in partnership with the U.S. Bureau of the Census. The CICs provide local and community access, training and technical assistance on census data for research, planning and decision-making for underserved communities. Thus, we are pleased to collaborate with the Center for Neighborhood Knowledge and Ong & Associates on this important analysis of 2020 Census response rates. In the following report, Paul Ong and Jonathan Ong utilize data from the U.S. Census Bureau COVID Tracking Project to reveal that the neighborhoods with low self-response rates are also the same disadvantaged hard-to-count neighborhoods most affected by COVID-19 in terms of economic and health disparities. They also show how low-income and minority neighborhoods and how that gap widened significantly in 2020. If we are to address and serve the communities where resources are urgently needed, we need to ensure these communities are counted.

¹ https://gwipp.gwu.edu/counting-dollars-2020-role-decennial-census-geographic-distribution-federal-funds

² https://gwipp.gwu.edu/sites/g/files/zaxdzs2181/f/downloads/IPP-1819-3%20 CountingforDollars_CA.pdf

³ https://www.reuters.com/article/us-usa-census-states/worried-about-undercount-states-and-cities-spend-to-promote-2020-census-idUSKCN1MB25C

To date, 93 million households, nearly 63 percent of all households in the U.S. have responded to the 2020 Census. In 2010, 74 percent of households in the United States filled out and mailed back their 2010 Census questionnaire, matching the final mail participation rate achieved in the 2000 Census. Due to the COVID-19 pandemic, the 2020 Census has faced immense challenges to ensuring a complete and fair enumeration. A directive issued July 21, 2020 from the Trump administration will make 2020 Census population data collection even more difficult by cutting operations short by one month. The Census Bureau must now end field data collection by September 30, 2020. The authors of this report predict the 2020 Census will be flawed with severe undercounts of people of color and low-income individuals. They sense it will be critically important to start developing methods to adjust the 2020 Census counts in order to develop a more accurate statistical picture of America and its people.

AASC is forever grateful to Professor Paul Ong for our long-time research partnership. He has served as founder and senior editor of our *AAPI Nexus Journal: Policy, Practice, and Community* publication, chair of our faculty advisory committee, and lead scholar for the Center's numerous research projects focusing on racial equity, housing, voting, and education, to name a few. At a time when ethnic studies scholars are examining ways to reimagine America, create an inclusive society, and rebuild public power, Professor Ong's research provides significant insight: adjustments to the 2020 Census final count of the U.S. population is fundamental to ensuring fair political representation, just resource allocations, and social equality.

> Melany De La Cruz-Viesca Associate Director, UCLA Asian American Studies Center Director, AAPI Community Development Census Information Center

ABSTRACT

This brief updates our previous brief documenting the magnitude and causes of racial and economic-class disparities in the 2020 Census self-response rates. The pandemic and other factors have created an unprecedented challenge in completing the enumeration, the once-a-decade effort to count every American for critically important political, economic and social reasons. The analysis examines changes from 2010 to 2020, and the spread between tracts with high response rates and tracts with low response rates. While the overall 2010-20 response gap has closed to three to four percentage points as of August 1, 2020, some communities have experienced more barriers to participating. Low-income and minority neighborhoods have experienced lower response rates in 2010 than more advantaged neighborhoods, and the gap widened in 2020. The problems faced by the 2020 Census create enormous challenges to having a complete and fair enumeration. In turn, racial and economic class biases threaten and undermine the goals of equal political representation and just allocation of resources. Unfortunately, there are now too many barriers to a complete and fair count. It is highly likely and unfortunate that the 2020 Census will be flawed with severe undercounts of people of color and low-income individuals. At this juncture, it is critically important to start developing methods to adjust the counts to develop a more accurate statistical picture of America and its people.

The 2020 Census enumeration is crucial for political, economic and social reasons. Constitutionally, the decennial census is required so that congressional seats can be reapportioned to account for geographic shifts in the population. The official count is also used for redrawing electoral district boundaries (i.e., redistricting) for congressional representatives, state legislators, and local officials. Equally important, the numbers are used for allocating public funds, enforcing laws (particularly voting rights), and for understanding demographic trends to plan for business, community, housing and economic development.

There are two major phases in the enumeration: the self-response phase and nonresponse follow-up (NRFU) phase. The first relies on individuals and households to respond to an invitation to complete the questionnaire online, or by telephone, or by mail. The Bureau introduced using the internet for 2020 as an innovative, cost-saving, and effective utilization of technology. A higher self-response rate would mean fewer homes to visit during the NRFU. What was not foreseen is the COVID-19 pandemic, which has significantly disrupted people's lives, social behavior, and the economy. The 2020 Census has also fallen victim to the pandemic, forcing the Bureau to extend the self-response phase and delay other operations.

In our previous brief, we documented both the size and potential causes of racial and economic class disparities in the 2020 self-response rates, and significant decline in the 2020 response rates for minority and poor neighborhoods relative to the response rates in 2010.⁴ That study examined data for June 1, 2020. This brief reports results based on data for August 1, 2020. Detailed description of the data and methodology can be found in the previous brief.

⁴ Paul Ong and Jonathan Ong. June 11, 2020. "Persistent Shortfall and Racial/Class Disparities, 2020 Census Self-Response Rate." UCLA Luskin School of Public Affairs and UCLA Center for Neighborhood Knowledge. UCLA Latino Policy & Politics Initiative and Center for Neighborhood Knowledge.

NATIONAL RESPONSE SHORTFALLS

We start with the overall national response rates, which are shown in Figure 1. The graph shows that prior to March 24,⁵ the 2020 response rates (blue line) are higher than the 2010 rates (gold line). However, starting in the last week of March, the 2020 rate fell increasingly further behind the 2010 rate. The appearance of the gap coincides with a growing awareness of the COVID-19 crisis and the implementation of shelter-in-place mandates. The gap grew, topping out in late April at over 12 percentage points. Since that time, the overall gap has partially closed.

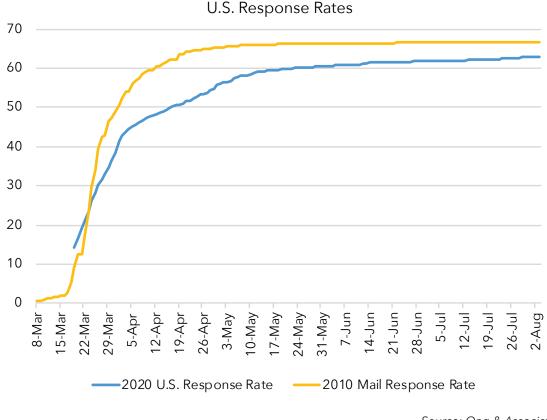


Figure 1. 2010 and 2020 Census Response Rates

Source: Ong & Associates

Data assembled from U.S. Census Bureau data COVID Tracking Project

⁵ Unfortunately, we do not have 2020 rates prior to March 19, which the Census Bureau stated is not available to this project.

By late April, there was some progress in narrowing the gap, albeit slow progress. This can be seen by the blue line in Figure 2. By mid-May, the overall gap was approximately seven percentage points behind where we were in mid-May 2010; however, even if the change in the self-response rate in late May could have been maintained, it would have taken two or more months to catch up (see gold line).⁶ By early August, the gap was between three and four percentage points.

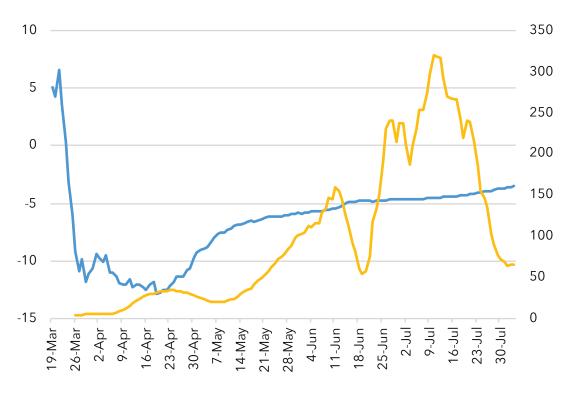


Figure 2. Inter-decennial Gap

2010-20 Gap (Blue) and Days Behind (7day Average)

Source: Ong & Associates, calculated from U.S. Census Bureau data.

[&]quot;Days Behind" is estimated by dividing the gap for any given date by the average daily increases 6 over the last seven reporting days. The line traces the seven-day moving average.

Along with the lagging self-response rates, there is also an increase in the variability among neighborhoods (census tracts). This can be seen in Figure 3.⁷ The brown line shows the distribution in 2010, which has a median of 67.7% and a mean of 66.1%. One way to analyze the variance or spread in response rates is to compare the two ends of the distribution. The rates at the 20th and 80th percentiles are 57.3% and 75.8%, yielding an 80:20 ratio of 1.32. The 2020 distribution has a median of 63.9% and a mean of 62.4%. The rates at the 20th and 80th percentiles are 50.7% and 75.0%, yielding a higher 80:20 ratio of 1.48. Taken together, the data show that the averages are lower in 2020 than in 2010, and that the 2020 spread is higher than for the previous decade. Much of the deviation is occurring at the lower end of the response rates. The 2010 and 2020 line segments above an 85% response rate are nearly identical; however, there are relatively more 2020 tracts with response rates less than a 60% response rate.

Distribution of Response Rates by Census Tracts 20 18 16 14 12 10 8 6 4 2 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 -2020 RR -----2010 RR

Figure 3. Distribution of Census Tracts by Response Rates

Source: Ong & Associates, calculated from U.S. Census Bureau data.

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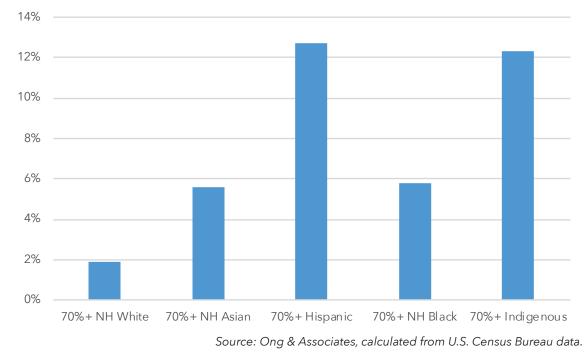
⁷ The analysis is based on tracts with non-zero response rates for both 2010 and 2020. The statistics are unweighted, that is, all tracts are treated equally. The horizontal axis is the response rate in increments of five percentage points, arrayed from the lowest to the highest. The vertical axis is the percentage share of all tracts.

The decennial response gap is associated with the enumeration strategies implemented for the 2020 Census. The impact can be seen in Figure 4. The second and third bars report the response rates by Type of Enumeration Areas (TEAs). TEA 1 is defined as those designated for "Self-Response," where residents receive mailed invitations to participate. The other categories require special delivery (e.g., physical drop off by a Census employee), which was suspended and delayed because of the pandemic. Because a tract can have more than one type of TEA housing units, the analysis compares tracts that are 100% TEA 1 with tracts that are less than 50% TEA 1. The first group is largely urban, while the second group is disproportionately rural (including American Indian tribal lands).⁸ The median for the latter tracts is six to seven times that for the former tracts, clearly showing the dramatic impact of the COVID-19 on the response rate of non-TEA-1 residents.

There is also a similar disparity when comparing tracts by types of information sent as a part of the Census Mail Contact Strategies (CMCS). Most tracts received an invitation in English without hard-copy questionnaires because the residents have good internet connection. It is assumed that they would be able to respond online. A minority group of tracts received additional information in Spanish information and a hard-copy questionnaires. These neighborhoods are assumed to both have linguistic barriers and be adversely affected by the digital divide. The median for the latter tracts is six times that for the former tracts. The pandemic appears to have created more barriers to participation for non-English-speaking households and/ or those without a good internet connection. A critical question is how different socioeconomic and demographic segments of the population are distributed into TEA and CMCS categories.

⁸ Akee, Randall; Ong, Paul M; Rodriguez-Lonebear, Desi. "US Census Response Rates on American Indian Reservations in the 2020 Census and in the 2010 Census." Technical Report, UCLA Center for Neighborhood Knowledge and UCLA American Indian Studies Center.

Figure 4. 2010-2020 Response Gap by Enumeration Strategies



2010-2020 Response Gap

RACIAL AND ECONOMIC CLASS DIFFERENTIAL IN SELF-RESPONSE RATES

Race and economic class have historically contributed to a differential undercount, which the Census Bureau defines as:

"The difference between the net undercount rate for a particular demographic or geographic domain and the net undercount rate either for another domain or for the nation."⁹

In more concrete terms, minority and low-income groups and neighborhoods are among the most adversely affected.¹⁰ While the strict definition of a differential undercount applies to the final tabulation, the self-response rate and the final count are directly linked. It is more challenging to successfully close out the enumeration for neighborhoods with significantly lower than average self-response rates, especially if the Census Bureau reduces resources and time for the NRFU phase.

The first analysis compares predominantly non-Hispanic (NH) White neighborhoods, NH Black neighborhoods, NH Asian neighborhoods, Hispanic neighborhoods and Indigenous neighborhoods.¹¹ Figure 5 shows the median values for 2010 and 2020 rates by neighborhood type. NH Asian places were roughly on par with NH White places in the previous decade but have fallen behind this year. Moreover, other analyses show that there are large differences among NH Asian neighborhoods, with

⁹ U.S. Census Bureau, "Coverage Measurement," https://www.census.gov/coverage_ measurement/definitions/. Accessed June 6, 2020.

¹⁰ U.S. Census Bureau, "Census Bureau Releases Estimates of Undercount and Overcount in the 2010 Census," May 22, 2012, https://www.census.gov/newsroom/releases/archives/2010_census/cb12-95.html. Other adversely affected groups include families with young children, limited English speakers, and non-citizens.

¹¹ The classification system for this brief is not identical to that for the previous brief. We classify a neighborhood by its predominant race, which comprise at least 70% of the population according to the 2014-18 American Community Survey. Indigenous populations include American Indians, Alaskan Natives, Native Hawaiians, and other Pacific Islanders. Because of the high proportion of people who are multi-racial, we use the inclusive counts of indigenous people (those who are of that race alone or in combination with another race.)

inner-city enclaves having noticeably lower response rates than suburban enclaves.¹² Both NH Black and Hispanic neighborhoods have significantly lower rates than NH White neighborhoods, and that difference increased between the two decades. By August of this year, the estimated median response rates are 69.1% for NH White, 49.7% for NH Black, and 50.1% for Hispanic. What is particularly dramatic is the decline for Hispanic neighborhoods (down 12.7 percentage points), which may be attributable to the stigma and fear associated with the controversial attempt to include a citizenship question on the 2020 census form.

by Neighborhood Type

Figure 5. Race and Median Response Rates

Median Census Response Rates

Source: Ong & Associates, calculated from U.S. Census Bureau data.

¹² Ong, Paul M; Ong, Elena; Ong, Jonathan. May 7 and May 12, 2020 "Los Angeles County 2020 Census Response Rate Falling Behind 11 Percentage Points and a Third of a Million Lower than 2010," Technical Report. UCLA Center for Neighborhood Knowledge.

Figure 6 provides an alternative view of the decennial change (the gap between 2010 and 2020). The results show that all four minority groups experienced a greater decline in response rates relative NH White neighborhoods. Hispanics and Indigenous populations have the largest temporal gap.

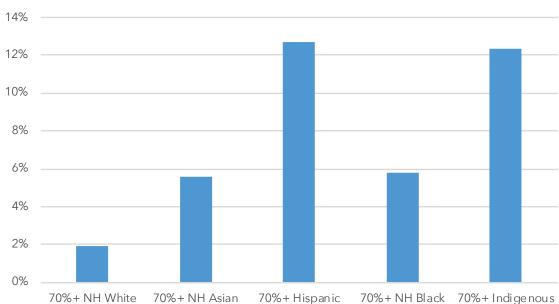


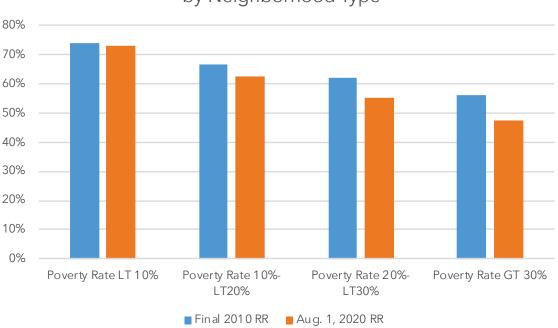
Figure 6. Response Gap by Neighborhoods

2010-2020 Response Gap

Source: Ong & Associates, calculated from U.S. Census Bureau data.

The second comparison involves neighborhoods classified by their poverty rate, which is the percent of the population below the federal poverty line (FPL). The FPL is adjusted for income and household size, but not for geographic differences in cost of living. In 2018, the cutoff was \$25,100 for a family or household of four.¹³ We create four categories: (1) neighborhoods with a poverty rates over 30%, (2) those with rates from 20% to 30%, (3) those with rates from 10% to 20%; and (4) those under 10%. Figure 7 shows the medians for 2010 and 2020 response rates for each of the neighborhood groups. Our findings show that response rates vary systematically with economic class, ranging from 73.2% for the most affluent to 47.4% for the poorest. Moreover, the 2010-2020 gaps also vary systematically by economic class, ranging from a less than one percentage point decline for the most affluent to a nine percentage point decline for the poorest.

Figure 7. Median Response Rates and Poverty Class



Median Census Response Rates by Neighborhood Type

Source: Ong & Associates, calculated from U.S. Census Bureau data.

¹³ U.S. Department of Health and Human Services, "2018 Poverty Guidelines," https://aspe.hhs. gov/2018-poverty-guidelines, accessed June 6, 2020.

IMPLICATIONS AND RECOMMENDATIONS

The problem with the 2020 enumeration has been known for months. On April 18, 2020, the *New York Times* reported that the COVID-19 crisis had seriously hampered self-reporting, causing the Census Bureau to adjust their timeline and initially prolong the collection process to counter any shortfalls.¹⁴ On May 7, 2020, we predicted the following possibility:

"While immediate actions will attenuate the response shortfalls and improve coverage, they are not likely to solve the undercount and differential undercount. The looming incomplete and imperfect enumeration is an unfortunate likelihood, a byproduct of one of the nation's worst public-health crises."¹⁵

Whatever adjustments made by the Census Bureau and other stakeholders have fallen short.

The updated analysis in this brief finds that the lagging and differential self-response rates have continued to create a major crisis in the ability to conduct a complete and unbiased 2020 enumeration. Although the self-response phase is just one part of the effort, problems and delays at this stage are producing nearly insurmountable hurdles. Lower self-response rates generate disproportionately more homes that must be visited during the abbreviated labor-intensive non-response follow up (NRFU) phase. This would add a great strain on the Census Bureau's limited budget and resources. Despite the need for a greater NRFU effort due to the lower selfresponse rates, the Census Bureau has decided very recently cut back on the time allotted to finish the enumeration.¹⁶ The compressed schedule is adding enormous and probably overwhelming burdens on Census workers and other stakeholders.

¹⁴ Michael Wines, "After Virus Delays, Census Must Scramble to Avoid Undercount," New York Times, April 18,2020.

¹⁵ Ong, Paul M; Ong, Elena; Ong, Jonathan. May 7 and May 12, 2020 "Los Angeles County 2020 Census Response Rate Falling Behind 11 Percentage Points and a Third of a Million Lower than 2010," Technical Report. UCLA Center for Neighborhood Knowledge, page 12.

¹⁶ See for example, "Michael Wines and Richard Fausset, Aug. 4, 2020, "With Census Count Finishing Early, Fears of a Skewed Tally Rise," https://www.nytimes.com/2020/08/04/us/2020-censusending-early.html

COVID-19 further compounds the challenges by creating barriers to face-to-face contacts because of a continued need for social distancing and other public-health precautions. Finally, the systematic low self-response rates in disadvantaged neighborhoods compound the problems because these are the same neighborhoods most affected by COVID-19.

At this point, it appears that a seriously flawed enumeration is unavoidable, one with a significant overall undercount and differential undercount that will disproportionately hurt the poor and people of color. Clearly, this unfortunate likelihood is a byproduct of one of the nation's worst public-health crises, exacerbated by ineffective actions. Given this looming outcome, it is imperative that we develop data and methods to enable us to adjust the count to produce a more accurate and unbiased numerical picture of America and its people. The Bureau's post-enumeration study will help,¹⁷ but it is also critically important for academic researchers to develop independent approaches. An adjustment is fundamental to ensuring fair political representation, just resource allocations, and social equality.¹⁸

Paul Ong is a research professor at the UCLA Luskin School of Public Affairs. Jonathan Ong is a researcher at Ong & Associates, a public-interest consulting firm. Affiliations are for identification purpose only, and authors are solely responsible for the content.

¹⁷ The Census Bureau will conduct what is known as the Post-Enumeration Survey, which is designed to identify biases in coverage and the counts. https://www.federalregister.gov/documents/2019/06/05/2019-11705/proposed-information-collection-comment-request-2020-census-post-enumeration-survey-person-interview and https://www.census.gov/coverage_measurement/post-enumeration_surveys/.

¹⁸ Any future efforts to adjust the official count for differential undercount will undoubtedly be challenged in the courts, which have not been supportive of such efforts. Nonetheless, adjustments can have other uses beyond reapportionment and redistricting.

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