### The Impact of Low Census 2020 Self-Response in Sub-county Regions of Fresno County

Fresno County Briefing Edward Kissam

November 15, 2022

1

Historical census undercount of FWs: What will Census 2020 data show for farmworker communities?

- Gabbard, Kissam, and Martin (1993) 50% undercount in 1990
- Kissam and Jacobs (2006) 30% undercount in 2000
- Kissam (2010) about 9% undercount in 2010
- Local undercount higher than PES-based official national-level estimate of Hispanic undercount which is 4.99%

Key Factors Contributing to Census Undercount in Low-Income Hispanic-Majority Neighborhoods and Communities

- Census Master Address File (MAF) omits many low-visibility/hidden housing units (back houses, backyard trailers, converted garages)--probably about 3% of all addresses. They have virtually no opportunity to be counted.
- Extra individuals and families in Doubled-up/"complex" housing units are usually not included in a primary household's census response. SJVCRP research suggests maybe 10% of people in low-income areas live in these situations.
- More than one-quarter low-income Latino HH's don't have their own postal address: 13% PO Box only, 12% mailbox shared with another HH, 3% no way to get mail.
- Census tracts with lower proportion of HH's with broadband connectivity had much lower Census 2020 response rates. "Digital literacy" an issue too.
- Census tracts with higher % of non-citizens had lower Census 2020 response rates

#### Why does Self-Response Matter? Lower response is correlated with higher omissions

**2020** Census Omission Rates by Tract Self Response Rates

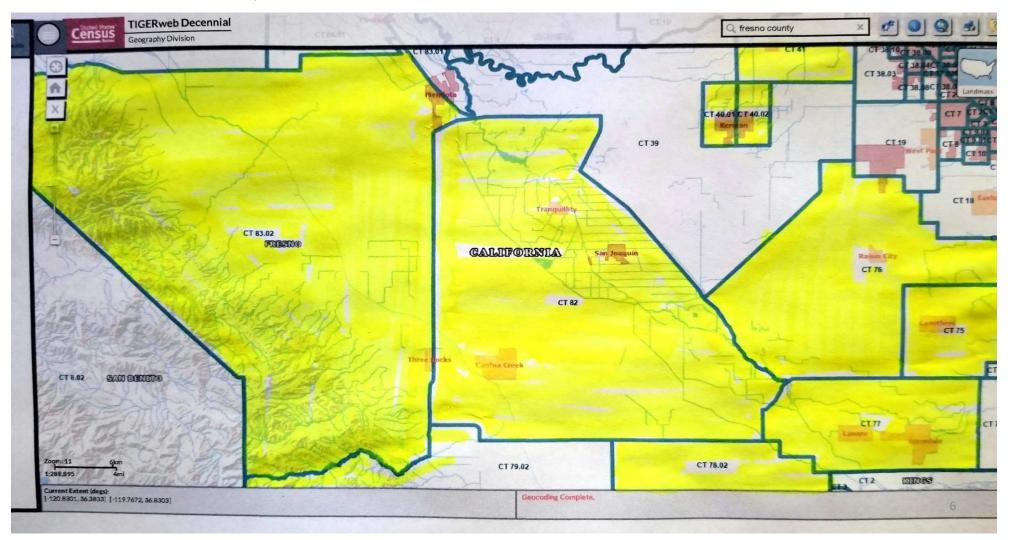


2020 Self-Response Rate Decile

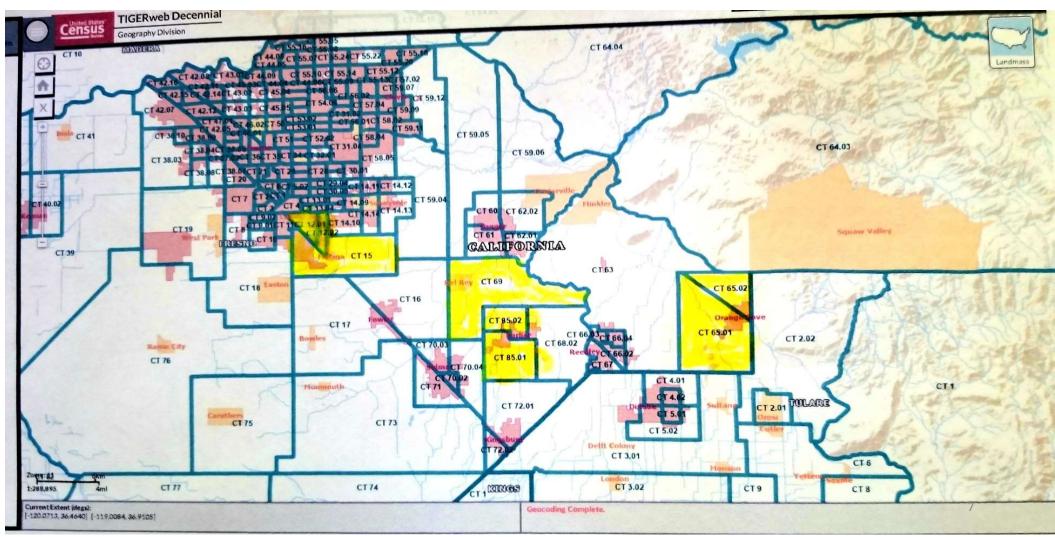
#### Geographic Variation In Census 2020 Self-Response in "Easy-to-Count" and "Hard To Count" Sub-County Regions of Fresno County

- In Fresno County, (pop ~1 million, 53% Hispanic), overall Census 2020 self-response was 2.2% higher than in 2010--suggesting that California's \$187 million investment in GOTC had paid off.
- But self-response <u>decreased</u> by 5\_percentage points from 2010 levels in sub-county areas with high concentrations of low-income Latino immigrant and farmworker HH's: West Side and the East Side "census tract clusters" /county sub-regions
- In the quintile of census tracts with the highest HTC score, self-response was on the average 19.6 percentage points lower than in the quintile with the lowest HTC score.
- In the Westside census cluster (12 tracts, population ~72,000, av. HTC score=79.3) and in the Eastside cluster (10 tracts, population ~48,000, av. HTC score=89.8), self-response was 12 percentage points [%] lower than in the average Fresno County tract: 56.3% in the Westside and 58.6% in the Eastside areas.
- These HTC areas make up about 12% of Fresno County and include several incorporated municipalities (Firebaugh, Mendota, Huron, Kerman, Riverdale, Parlier, Orange Cove). Low self-response and resulting undercount in both Census 2020 and the ACS will likely result in their receiving less revenue than they deserve for the entire 2021-2030 decade.

#### Fresno County Hard-to-Count Areas--Westside



#### Fresno County Hard-to-Count Areas: Eastside



### Structural Correlates of Variations in Self-Response

- "Structural" characteristics of neighborhoods and communities appear to be more important in explaining low self-response than presumed responsiveness of one racial/ethnic group or another.
- This is, of course, inevitable in a Hispanic-majority county such as Fresno County where there is great socioeconomic diversity within the Hispanic population
- As expected, the California hard-to-count (HTC) score composed of 15 ACS-derived indicators of enumeration difficulty for a tract correlates very well with tract-level selfresponse in Fresno County
- Characteristics contributing most to lower self-response included one that's not part of the current California HTC index (% non-citizens) and one that is (% HH's with broadband connection).
- American Community Survey (ACS) response rates are very low in these hard-to-count sub-county regions: 34.4% in the cluster of Westside tracts, and 31.1% in the cluster of Eastside tracts. ACS weighting seeks valiantly to compensate--but it is unclear how adequate this is.
- Presumed sample bias in the ACS, along with differential undercount in hard-to-count areas strongly suggest that variations in self-response will result in inequitable allocation of funding that relies on decennial census-derived and ACS-derived data.

# Did Non-Response Followup (NRFU) "Cure" The Problem of Low Self-Response in Hard-To-Count Communities in 2020?

- The Census Bureau's national-level PES evaluation of Census 2020 data quality showed that the bottom decile of tracts in terms of self-response had 10.7 % omissions while the tracts in the top decile in terms of self-response had only 3.3% omissions--a gap of 7.4 percentage points.
- Does low self-response "translate" into census undercount at the same rate in Fresno County as in the nation as a whole? We don't know yet--it depends on quality of non-response followup (NRFU).
- NRFU and post-processing relied on administrative records and hot-deck imputation sought to compensate for omissions but there is surely a statistically significant undercount in the lowest HTC decile of Hispanic-majority tracts. No reason to think NRFU worked particularly well in HTC tracts.
- Further analysis is needed to determine the exact extent to which Census 2020 undercount in hardto-count sub-areas of Fresno County such as the Westside and Eastside communities but it surely exceeds the official PES-based estimate of a 4.99% undercount of Hispanics.
- Nonetheless, the undercount in Hispanic-majority communities that are <u>both</u> low-income and have higher-than-average concentrations of non-citizens is likely to be higher than the official nationallevel estimate for overall Hispanic undercount.

## NRFU was probably less successful in overcoming the problem of low self-response in Fresno County than in the nation overall

- Undocumented individuals and mixed status families are more likely to live in low-visibility
  housing units that did not receive an invitation to respond or a mailed questionnaire. The Census
  Bureau's analysis shows higher-than-average omissions of housing units from the address list in
  "other" types of housing and Update-Leave areas.
- About half of the non-citizen heads of household in the HTC areas are undocumented (lack SSNs) and, therefore, if they do not respond, are not found in the administrative records the Census Bureau uses for imputing HH size.
- SJVCRP research in 2018 indicated extreme reluctance to participate in proxy interviews to provide census enumerators with information about neighboring households. Only 1 out of 5 survey respondents were willing to do that and many of those who would said they didn't really know enough to provide reliable answers.
- With low self-response and a reduced pool of "donor" HH's available for hot-deck imputation in low-response Hispanic majority tracts in Fresno County, the big gap between non-citizens' and citizens' response lead to a systematic downward bias in whole-person imputations--because the citizen HH's most likely to respond are smaller than the mixed-status and undocumented households least likely to respond.

## Conclusions

- Looking only at national and state levels of self-response obscures the actual patterns of selfresponse in smaller area geographies where there continue to be deep pockets of low selfresponse in HTC tracts and a very high likelihood of resulting inequity.
- Self-response is correlated with broadband connectivity. Improvement in response rates in HTC Tracts that was achieved from 1990 to 2010 reversed between 2010 and 2020—at least in California and in Fresno County.
- Despite California's proactive "Get Out The Count" efforts, self-response in HTC Hispanicmajority tracts was consistently lower than in easier-to-count tracts.
- While attention has focused on state-level analyses of differential undercount, fiscal equity and political equity require acknowledgement and response to systematic undercount in hard-to-count sub-county regions (such as Fresno County Westside and Eastside communities).
- Decennial census undercount and sample bias in American Community Survey response due to high levels of non-response combine to give rise to inequitable distribution of federal, state, and county funding for programs/services in the communities that most need help.