

Small Populations and the ACS: Sampling Variability and Reliability

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Represents a continuing channel of communication between the Census Bureau and race and ethnic communities, focusing on:

- strategies to reduce the undercount
- data collection and enumeration strategies
- geographic and data products for AIAN, NHPI
- tabulation of race and ethnic data
- data dissemination and outreach/promotion

NAC advice and recommendations are reported directly to the Census Director

Working Group on Small Populations in the ACS

GOALS:

1. Identify strategies for research, experimentation and testing that increase ACS data quality for 'small populations'
2. Identify strategies that increase the efficiency of ACS data collection for 'small populations'
3. Identify strategies to demonstrate to 'small populations' that ACS data are reliable

Process

- Conducted monthly phone meetings with...
 - Census Subject Matter Expert (SMEs)
 - External experts
 - National Academy of Science Panel on Small Areas and Small Populations
- Reviewed reports, briefs, documentation and literature on the ACS
- Examine 5-Yr estimates on 'small populations'

Small Population Defined

“Any defined group of people including but not limited to tribal/indigenous, racial/ethnic, economic, cultural, gender, age, language, and residential unit that cannot be currently studied in the ACS because of high sampling variability that result in unreliable or highly volatile estimates year over year”

Few Examples

- American Indian/Alaska Natives
- Asian Americans
- Native Hawaiian and Pacific Islanders
- Middle Eastern and Northern Africans
- Same sex couples
- Children with disabilities
- English language proficiency
- Rural populations

Key Issues/Challenges

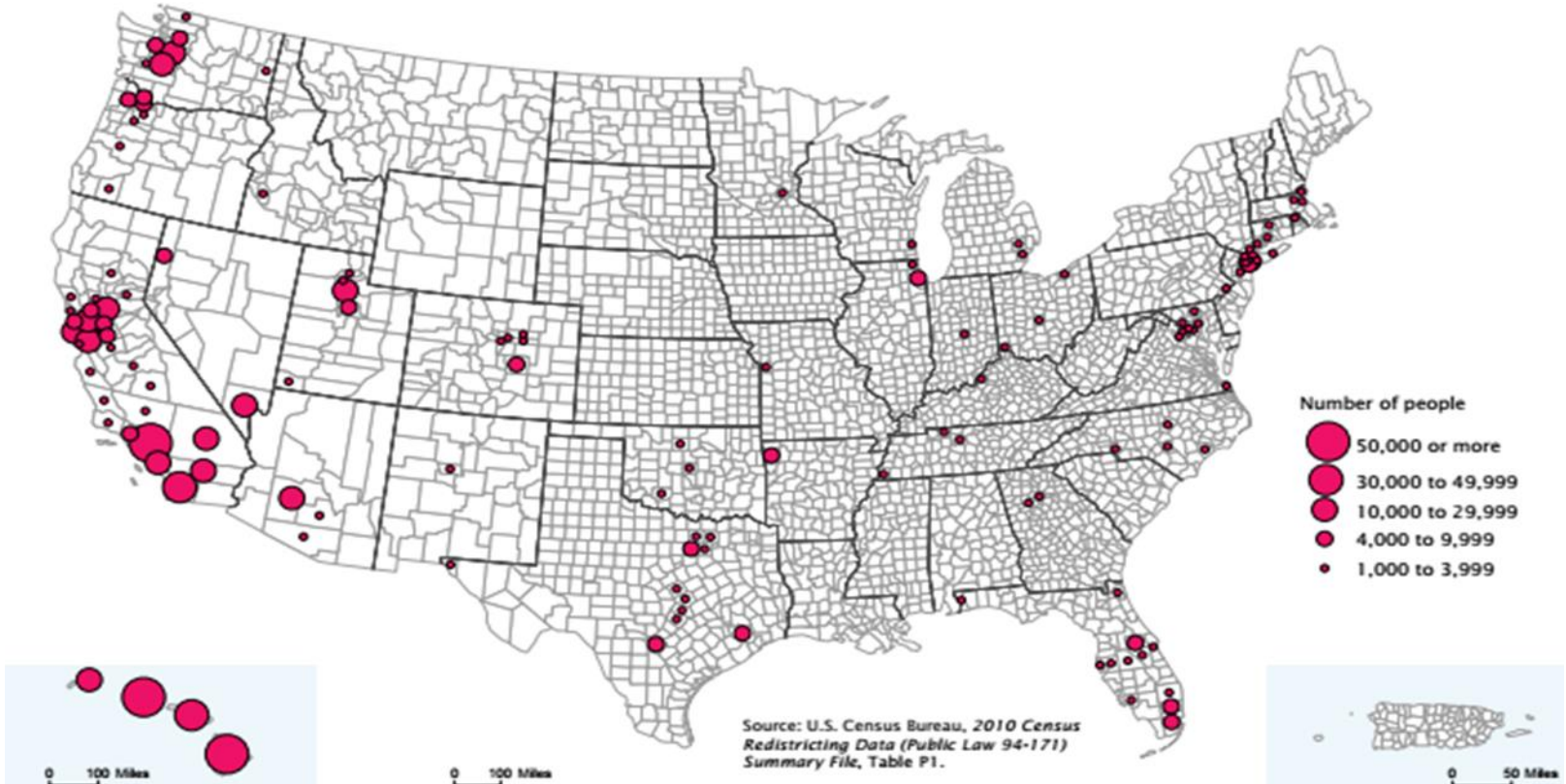
- Sampling design may not capture households of 'small populations'
- Sampling units for 'small populations' in the ACS may not be representative of subpopulations
- Oversampling 'small populations' is very costly. The lack of reliable data on small populations and communities comes at an even higher cost

NHPI by County 2010



Figure 2.
Native Hawaiian and Other Pacific Islander Alone or in Combination by County: 2010

(Counties with a Native Hawaiian and Other Pacific Islander population of at least 1,000 are included in the map. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/pi94-171.pdf)



Distrust in Government

... and concerns about confidentiality and privacy



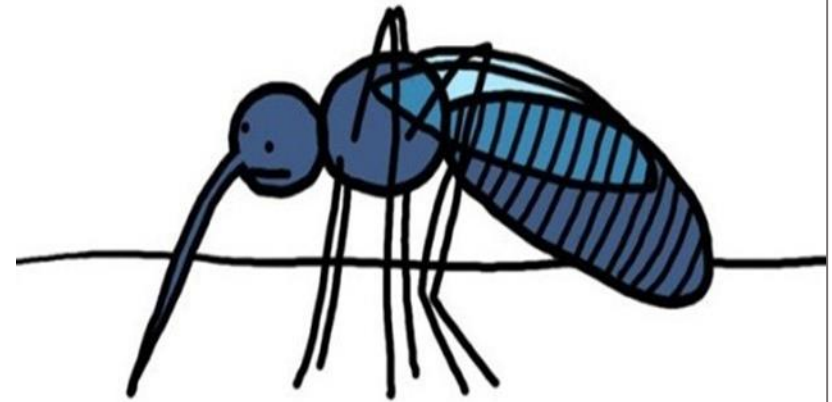
Distrust in Research

Helicopter Researcher



Mosquito Researcher

Sorry, mosquito...



EVERYBODY HATES YOU.

Data Suppression



. - * Entry in estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated.....

Recommendations

- Adjust the ACS sampling frame and survey sampling methods to be more inclusive and representative of 'small populations'
- Include questions that reflect all small and underrepresented populations (for example, MENA and sexual identity)
- Enforce Executive Order 13175 to assure accurate and robust estimates on AIAN enrolled in federally recognized tribes, as well as non-federally recognized tribes is collected

Recommendations

- Develop awareness and cultural education on “small populations” for the Census Bureau Headquarters and Regional Office staff
- Partner and outreach to small population non-governmental community organizations, Tribal leaders’ and stakeholders
- Explore new and emerging communication and technological innovations to improve data collection and coverage for ‘small populations’
- Support the implementation of the combined R&E question to achieve a complete enumeration of all specified ‘small and emerging populations’

Conclusion

- The ACS is innovative and provides statistically reliable and timely information on the US population, including 'small populations'
- We invite your thoughts and suggestions for further research, experimentation, testing to increase ACS data quality, as well as increase the efficiency of ACS data collection for 'small populations'

Acknowledgement

SPACS Working Group
US Census Bureau

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