

October 5, 2020

Dr. Robin A. Pennington  
Supervisory Mathematical Statistician  
U.S. Census Bureau  
Decennial Census Management Division  
4600 Silver Hill Road  
Washington, DC 20233

RE: Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; 2020 Census Count Question Resolution Operation. Federal Register Vol. 85, No. 150/Tuesday, August 4, 2020, pp. 47162-47165.

Dear Dr. Pennington,

On behalf of the Montana Department of Commerce's State Data Center (MTSDC), this letter is in response to the August 4, 2020 *Federal Register Notice* (FRN), requesting comments on the upcoming 2020 Census Count Question Resolution (CQR) operation.

Given the Census's impact on good governance, the use of the Decennial counts in funding and program guidance, and the impact of the Decennial data on the production of other Census programs and products, MTSDC strongly believes that accurate 2020 Census data are of paramount importance to our state. Further, recognizing that "CQR is the only decennial operation by which corrections to the 2020 Census data can be made," this letter expresses several concerns MTSDC has about the CQR process as proposed to account for and address the issues that may impact 2020 Census count quality.

The FRN states (as corrected in the August 14, 2020 Supplementary Notice) that "The CQR does not revise the population counts sent to the President by December 31, 2020, which determine the apportionment to the U.S. House of Representatives or revise the population counts relating to differential privacy, which is the new mathematical approach developed to protect the identity of individual respondents in the 2020 Census population counts." The FRN further states that "Coverage corrections are limited to census processing errors, i.e., erroneous exclusions of housing identified as existing in census records as of April 1, 2020." The notice goes on to state that correction action to the count are limited to only two case types - boundary cases and count cases:

“The Census Bureau describes the resulting corrective action for the two CQR case types as follows:

- Boundary cases may correct the inaccurate recording of boundaries, legally in effect on January 1, 2020, and update the housing counts for the blocks affected by the boundary correction if the government unit supplies the required individual address records for the affected block(s). Boundary changes effective after January 1, 2020, boundary corrections submitted without individual address records, and boundary corrections that do not affect counts are out of scope for CQR.
- Count cases with geocoding issues may correct inaccurate geographic locations or placement of housing and associated population within the correct government unit boundaries and 2020 census tabulation blocks.
- Count cases with coverage issues may result in the addition of specific housing and associated population identified during the census process, but erroneously included as duplicates or excluded from enumeration. Coverage corrections are limited to census processing errors, i.e., erroneous exclusions of housing identified as existing in census records as of April 1, 2020.”

In producing 2020 Census data, the Census Bureau will again use record swapping as it did in 2010; but will also employ the Disclosure Avoidance System (DAS) based on a methodology referred to as Differential Privacy. While census block housing unit counts and group quarters counts will be held invariant, total populations will be subject to the DAS. This represents a departure from the process used to produce 2010 Census data, when block-level total population counts were also held invariant

DAS goes beyond the basic noise infusion to mask identity that is used in standard differential privacy applications and uses corrective post-processing to produce a final microdata file. Post-processing will be used, in part, because differential privacy can produce certain impossible scenarios, such as negative counts. The Census Bureau and demographic experts agree that post-processing can produce far more error than differentially private noise (see CNSTAT’s Workshop on 2020 Census Data Products: Data Needs and Privacy Considerations, Dec. 11-12, 2019; and the Census Bureau blog *Modernizing Disclosure Avoidance: What We’ve Learned, Where We Are Now*, John M. Abowd, March 13, 2020). Consequently, using the DAS opens the possibility of processing error impacting population counts in way prior censuses could not.

For the Census to achieve the participation rates necessary for its products, the public must be confident in the confidentiality of the responses. MTSDC supports all the privacy protections afforded to every Census participant under Title 13 of U.S. Code and the Bureau’s processes. However, given that 2020 Census block-level total population counts will be subject to the DAS, which in turn creates the possibility of processing error, the Census Bureau should remove the FRN’s clause excluding population counts “relating to differential privacy.” Population count review should be allowed under CQR.

Further, because DAS opens up the possibility of processing error affecting population counts, and because DAS explicitly decouples population and housing unit counts, MTSDC firmly believes that all FRN phrasing referring to “housing” or “housing counts” and “associated population”, should instead make reference to “housing” or “housing counts” and “population counts.” This modification would permit CQR participants to challenge implausible scenarios where household sizes and population counts are exceedingly discrepant with housing counts that may be entirely accurate.

Another concern for MTSDC is the capacity of all potential CQR participants to conduct a thorough review of boundary and count cases, within the purview of the CQR program. To address this, we strongly encourage the Census Bureau to empower FSCPE (Federal-State Cooperative for Population Estimates) or SDC (State Data Center) representatives to make CQR submissions on behalf of tribal, state, and local governments rather than limited to the governments themselves. This will help ensure equity in program participation and a more complete and well-informed review of 2020 Census count quality.

Our next concern is the subsection of the FRN which reads “Coverage corrections are limited to census processing errors, i.e., erroneous exclusions of housing identified as existing in census records as of April 1, 2020.” To meet budgetary constraints, the 2020 Census will rely on the use of administrative records to a degree far exceeding past censuses; however, Census Bureau testing has shown the use of administrative records can incorrectly overstate the count of housing unit vacancies (Keller, A., 2016, “Imputation research for the 2020 Census”, *Statistical Journal of the IAOS*, 32(2), 189–198).

Given the frequency of false vacancies, and the clear correlation between such false vacancies and an undercount, MTSDC strongly encourages the Census Bureau to allow CQR participants to review the use of administrative records as employed to determine occupancy status. MTSDC contends that false vacancies, produced via administrative records, constitute “erroneous exclusions” potentially at odds with local records, that would show occupancy status for specific housing units as occupied. Given an opportunity to review the use of administrative records used to determine occupancy status, CQR participants could potentially correct egregious errors using local data sources.

The process of count imputation also creates the possibility of “erroneous exclusions” in population coverage at odds with “census records”, that would show household size to be indeterminant. Consequently, MTSDC strongly encourages the Census Bureau to allow CQR participants to review count imputation, as used to determine household size. Given an opportunity to review count imputation, CQR participants could potentially correct egregious errors using alternative data sources.

For Montana, the review of the use of administrative records in count imputation is particularly important in reservation areas. In a final report on *Administrative Records & Third Paper Data* by the National Advisory Committee found “Administrative records databases better “cover” the white population than racial minority populations and are also more likely to produce cross-database response agreement for the white population than for racial minority populations.

Such problems are particularly pronounced for the American Indian and Alaska Native (AIAN) populations.”

Based on reviews of the microdata files provided by the DAS working group, MTSDC has found, in lower population counties within the state, the count by age and sex were drastically different. The FRN process limits count case challenges “to census processing errors, i.e., erroneous exclusions of housing identified as existing in census records as of April 1, 2020.” Counts with a high degree of accuracy by population characteristics (sex, age, ethnicity, and race) are all critical to proper funding especially to minority groups, enforcement of the voting rights act, and the redistricting process. The FRN provides no mechanism for challenging population characteristic counts even though the DAS process result show the errors for small geographies may be substantial. MTSDC encourages the Census Bureau to provide a mechanism for review through the FSCPE Count Review process that could at a minimum identify and hopefully address significant population characteristic count errors due to DAS.

Ultimately, without a detailed understanding of post-end processing, it is infeasible for CQR participants to assess and substantiate “processing errors” impacting count quality issues addressable through CQR. Therefore, MTSDC strongly encourages the Census Bureau to establish a process, akin to the 2020 Census Count Review Program, whereby participants could be granted Special Sworn Status (SSS) to view confidential decennial census records. These records should include the following sources at a census block level:

- Original DMAF housing unit universe (at time of mailout)
- Volume of Non-ID responses
- Counts obtained via NRFU operations
  - Proxy response counts
  - Household member response counts
- Vacancies determined during NRFU
- Deletions determined during NRFU
- Counts of Housing Units and Population dropped via de-duplication
- Count of vacancies, and housing units, where occupancy status was determined using administrative records
- Volume of count imputations
- Count of housing units deleted during In-Office Address Canvassing
- Count of housing units deleted during Field Address Canvassing
- Volume of Administrative Record enumeration
- Administrative Record sources

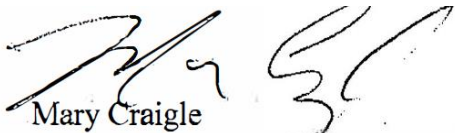
Given such an arrangement, the Census Bureaus can effectively “outsource” the identification of processing errors – relying upon the expertise of tribal, state, and local officials to save critical resources and further enhance count quality.

We recognize and clearly acknowledge how the COVID-19 pandemic and scheduling issues, have presented unique challenges in obtaining an accurate decennial census count.

However, such circumstances only serve to highlight the importance of the count quality that CQR helps ensure. The MTSDC as the U.S. Census Bureau's premier local partner, is committed to assisting the Bureau in meeting its mission is to provide timely, relevant, and quality data about the people and economy of the United States.

Thank you for your time and careful consideration of these critical issues.

Sincerely,

A handwritten signature in black ink, appearing to read "Mary Craigle", is written over a faint, larger signature that appears to be "Steve Bullock".

Mary Craigle

Montana State Data Center – Montana Department of Commerce