



**STATE OF NORTH CAROLINA**  
**OFFICE OF STATE BUDGET AND MANAGEMENT**

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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,

As the North Carolina Governor's Census Liaison and State Demographer of North Carolina and on behalf of the North Carolina State Data Center (NC SDC), we are pleased to respond to the August 4, 2020 *Federal Register Notice* (Notice), requesting comments on the upcoming 2020 Census Count Question Resolution (CQR) operation.

Complete and accurate Census data are the foundation of funding, services, and planning for all North Carolina communities; and the Count Question Resolution (CQR) is the only tool available for those local jurisdictions to correct 2020 Census data. Given the challenges already encountered during the 2020 Census enumeration combined with wholesale change to the disclosure avoidance system applied to results of the decennial counts, we strongly recommend several changes to the proposed 2020 CQR program. These suggestions include:

- Empowering Federal-State Cooperative for Population Estimates (FSCPE), State Data Center (SDC), and Census Information Center (CIC) representatives to submit count questions on behalf of state, tribal, and local governments;
- Changing all phrasing of "housing and associated counts" to "housing and population counts" in order to allow for corrections of implausible household population values;
- Allowing CQR participants to request a review of demographic characteristic values for blocks containing group quarters facilities;
- Clarifying how household and associated population counts will be corrected as a result of geocoding or boundary errors and how the disclosure avoidance system will or will not impact population for "sending" and "receiving" geographic areas;

- Allowing CQR participants to review the use of administrative records as employed to determine housing unit occupancy status and impute household size; and
- Providing a mechanism for allowing participants to review and correct select confidential records.

In producing 2020 Census data, the Census Bureau will employ new methods of privacy protection, collectively known as the Disclosure Avoidance System (DAS). While census block housing unit counts and group quarters counts will be held invariant, total populations will be subject to the DAS. DAS goes beyond the basic noise infusion of differential privacy 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 induced noise (see CNSTAT's [Workshop on 2020 Census Data Products: Data Needs and Privacy Considerations](#), Dec. 11-12, 2019; [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 ways prior censuses could not – increasing the need for closer scrutiny of population and housing counts for local areas. For the remainder of this letter, we provide more detail regarding the suggestions outlined above.

### ***Empower FSCPE/SDC/CIC representatives to submit CQRs***

The overwhelming majority of our local governments are small (59 percent of our municipalities had populations of less than 2,500 in 2019) – many having limited staff and expertise to review and evaluate the results of the 2020 Census for their jurisdictions. This is not a new problem, but the implementation of a new DAS will make it even more challenging for these small local governments. To address this, we strongly encourage the Census Bureau to empower FSCPE (Federal-State Cooperative for Population Estimates), SDC (State Data Center), or CIC (Census Information Center) representatives to make CQR submissions on behalf of tribal, state, and local governments. Adding outside experts with knowledge of census data and procedures will help ensure equity in program participation and a more complete review of 2020 Census count quality.

### ***Change phrasing from “housing and associated population counts” to “housing and population counts”***

DAS explicitly breaks population and housing unit counts into separate and unassociated counts. The 2020 Census will be the first time this separation has been applied, and we firmly believe that all phrasing in the Notice referring to “housing” or “housing counts” and “associated population”, should instead make reference to “housing” or “housing counts” and “population counts” clearly stating that the two are separate counts. This change should be applied to all communications regarding CQR procedures. Such a modification would permit CQR participants to address implausible scenarios where household sizes and population counts are exceedingly discrepant with housing counts that may be entirely accurate.

***Allow CQR participants to request a review of counts and demographic characteristics for blocks containing GQ facilities***

We recommend the expansion of the CQR program to allow officials to request a review of the counts and demographic characteristics for Group Quarters facilities, or at least for select types of facilities. Iterations of the DAS demonstration data have shown implausible values for some group quarters facilities – such as counts of females in all male facilities and older populations living in facilities serving juveniles. Without this capability, implausible values for these facilities will impact the demographic characteristic data for the political geographies in which these facilities are located and risk public confidence in other data reported by the US Census Bureau.

***Clarify how households and associated populations will be corrected for cases with geocoding and boundary errors***

We suggest the methodology for handling accepted changes for boundary and geocoding related cases be made clearer. We are not sure if the housing and population will be the same for the sending and receiving geographies or if the population may differ as a result of DAS procedures. Thus, all CQR program materials should clearly state how housing and associate population will be impacted as the result of the change within the context of the DAS.

***Allow CQR participants to review the use of administrative records***

The Notice states: “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.” While the 2020 Census will rely on the use of administrative records to a degree far exceeding past censuses; 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, we strongly encourage the Census Bureau to allow CQR participants to review the use of administrative records as employed to determine occupancy status. False vacancies, produced via administrative records, constitute “erroneous exclusions” potentially at odds with local records. CQR participants could correct egregious errors using local data sources if given an opportunity to review the use of administrative records used to determine occupancy status.

Similarly, the process of count imputation opens the possibility of “erroneous exclusions” in population coverage at odds with “census records”, which would show household size to be indeterminant. Consequently, we strongly encourage 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 errors using alternative data sources.

***Provide a mechanism for review and correction of select administrative records***

Without a detailed understanding of backend processing, CQR participants cannot assess and substantiate “processing errors” impacting count quality issues addressable through CQR.

Therefore, we strongly encourage the Census Bureau to establish a process, similar to the 2020 Census Count Review Program, where participants are granted Special Sworn Status (SSS) to view confidential 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 Non-Response Follow-Up (NRFU) operations:
  - Proxy response counts and
  - 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; and
- Volume of Administrative Record enumeration.

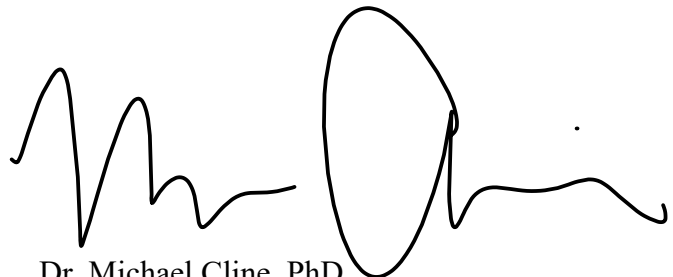
The Count Review process provides an excellent case study in how the Census Bureau has effectively used outside expertise to improved data quality. By relying upon the expertise of tribal, state, and local officials, the Census Bureau can save critical resources and further enhance data quality.

We recognize and clearly acknowledge how the COVID-19 pandemic, hurricane, and scheduling issues have presented unique challenges in obtaining an accurate decennial census count in North Carolina. However, such circumstances only serve to highlight the importance of the count quality that CQR helps ensure. As respective members of the State Data Center and Federal-State Cooperative for Population Estimates partnerships, we are committed Census partners and support complete and accurate Census data. Thank you for your time and careful consideration of these critical issues.

Sincerely,



Robert Coats  
North Carolina Governor's Census Liaison



Dr. Michael Cline, PhD  
State Demographer of North Carolina