



UNITED STATES DEPARTMENT OF COMMERCE  
U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

April 19, 2021

Dear Honorable Tribal Leader:

As we continue to process the data for the 2020 Census, I respectfully request your tribe's participation in a national tribal consultation webinar on Wednesday, May 19, 2021 at 3:00 - 4:30 PM Eastern Daylight Time.

This will be an opportunity for the U.S. Census Bureau to inform the tribes on the status of the 2020 Disclosure Avoidance System (DAS). The Bureau has been meeting with tribes since 2019 providing updates, and this letter is informing you of a new set of demonstration data to be released by April 30, 2021. These demonstration data known as Privacy-Protected Microdata Files (PPMFs) and Detailed Summary Metrics will be an opportunity for tribes and researchers to review and analyze and provide the Census Bureau with input before the Data Stewardship Executive Policy Committee makes final decisions about the settings and parameters of the DAS for the production run of the P.L. 94-171 redistricting data product in June 2021.

We would like your input after your review of the PPMFs and Detailed Summary Metrics. If you would like the assistance of staff to help you with these demonstration data, please let us know and we can provide some time to discuss these data in detail with you. Deadline for input is Friday, May 28, 2021.

If you have any questions prior to the webinar or consultations, please contact our Tribal Affairs Coordinator, Dee Alexander, at 301 763-9335, or [OCIA.TAO@census.gov](mailto:OCIA.TAO@census.gov).

Sincerely,

Ron S. Jarmin  
Acting Director

Enclosures

**National Webinar**

Date	Time	Call-in Information
Wednesday, May 19, 2021	3:00 – 4:30 p.m. Eastern Daylight Time	Call-in Number: 1-888-972-4304 Audience Passcode: 4071470

WebEx Login Link:

<https://uscensus.webex.com/uscensus/onstage/g.php?MTID=eb7bb8735ddcf8a4debfd568ee4591082>

## BACKGROUND INFORMATION

The U.S. Census Bureau's mission is to provide quality statistical information about the nation's people, places, and economy. It is the Census Bureau's goal and legal duty to protect all of the information you provide. That's why it is critical that we use the most up-to-date confidentiality protections available.

To keep pace with quickly evolving technology and the risks it brings, the 2020 Census and future data products will use new protection methods designed specifically for the digital age. These methods are based on a relatively new concept called "differential privacy." The switch to these new methods is the most significant modernization of our methods to protect confidentiality in decades.

### ***The Disclosure Avoidance System (DAS)***

A new DAS is needed to defend against new threats posed by today's technology: growing computing power, advances in mathematics, and easy access to large, public databases. Combined, these changes could allow sophisticated users to identify common data points between our published statistics or between our statistics and outside databases. They could use these common threads to potentially identify the people or businesses behind the statistics. Our research shows that the risk of successful re-identifications using previous protection methods would be unacceptably large. We are committed to applying better and stronger protections with each advance in data science.

The traditional disclosure avoidance techniques that we used in the 2010 Census relied on "swapping" characteristics in the underlying data for a subset of households in different geographic areas. In this era of Big Data, these methods are insufficient. The amount of noise required using traditional disclosure avoidance techniques would make our published data unfit for most uses.

With the new method, precisely calibrated amounts of statistical uncertainty, or "noise", is added to the statistics that we publish. This allows us to precisely control the amount of noise that we need to meet our confidentiality requirements. Furthermore, by documenting the properties of this noise, we can help data users determine when published estimates are suitable, or accurate enough, for their specific applications. We call this assuring "fitness for use."

For more information, please see: [Disclosure Avoidance and the 2020 Census.](#)

## ***Evaluating and Improving the DAS***

The Census Bureau's mission is "to serve as the nation's leading provider of quality data about its people and economy." As an agency, we take this responsibility seriously. In achieving this mission, however, the Census Bureau also has a legal obligation to protect the confidentiality of personal data. Any statistical technique used to protect confidentiality (including differential privacy and traditional techniques like "swapping") will affect the quantity and quality of statistics we release. As we develop and improve the 2020 DAS, we are relying on input from our data users to help ensure our 2020 Census data products retain the same high quality and utility upon which the Nation has come to depend.

In October 2019, the Census Bureau released a set of 2010 demonstration data products generated by running 2010 Census data through an interim version of the DAS that will be used for the 2020 Census. This allowed data users to compare the originally released 2010 Census data with the same data protected using differential privacy with specific, public parameter settings and identify where and how the DAS may need to be improved to meet the public's data quality needs. As we have implemented additional improvements based on the feedback from our data users' analyses of these demonstration data, we have been releasing [Detailed Summary Metrics](#) that evaluate these improvements against a variety of accuracy measures that reflect priority uses of census data. We have also released additional [2010 Demonstration Privacy-Protected Microdata Files](#) (PPMFs) in July, September, and November 2020 that are the underlying protected, individual-level records used to calculate the Detailed Summary Metrics. Together, these demonstration products have allowed our data users to evaluate our ongoing improvements and to provide feedback based on those evaluations.

Over the 16 months since our first release of DAS demonstration data products using the 2010 Census, we have benefited greatly from engagement with and input from our data users. With each subsequent release of demonstration data, we have received extensive actionable feedback from the data user community; feedback that has informed ongoing DAS system improvements and design changes.

Throughout this process, however, we maintained the conservative privacy-loss budget (PLB) set for the initial demonstration data product. While we recognize that this decision to hold the PLB constant across the demonstration runs meant that the resulting data would have substantially more noise (error) than should be expected in the final 2020 Census data products, holding the PLB constant enabled us and our data users to home in on the elements of the algorithm that were causing systemic distortions that needed to be addressed. We acknowledge that this has unfortunately led some of our data users to expect comparable amounts of noise in the final 2020 Census data. By April 30, we will release another set of PPMFs and Detailed Summary Metrics for our data users to evaluate before the Census Bureau's Data Stewardship Executive Policy (DSEP) committee sets the final PLB and DAS parameters for the 2020 Census P.L. 94-171 redistricting data product. These demonstration

data will feature a higher PLB and system parameter optimization informed by the hundreds of full-scale DAS experimental runs we have been performing over the last several months.

The resulting data will more closely approximate the expected accuracy and fitness for use of the final 2020 Census redistricting data product. More importantly, these demonstration data will enable our data users to provide critical fitness-for-use analyses that will inform DSEP's decision-making.

### ***Upcoming Policy Decisions***

Protecting the confidentiality of our respondents in the data that we publish impacts the accuracy and granularity of the published data. One of the primary advantages of techniques that rely on differential privacy is that this trade-off can be made in a precise and transparent manner. This trade-off is represented as the global “privacy-loss budget” (PLB). Much like a monetary budget, the lower the PLB, the less disclosure risk (with a corresponding decrease in data accuracy); the higher the PLB, the greater the data accuracy (but with less overall protection against disclosure). Differential privacy also permits us to prioritize accuracy for important data use cases, at any given level of protection, by allocating larger shares of that global privacy-loss budget to those tabulations that support the most important use cases. The development and improvement of the 2020 DAS has, until now, focused on algorithmic design—ensuring that the system behaves as it is intended to and permits this degree of precision calibration of accuracy and confidentiality through parameter setting.

In June 2021, the DSEP will decide the PLB and system parameters that will be used for the production run of the redistricting data product.

### ***Ensuring Accuracy for American Indian and Alaska Native (AIAN) Tribal Data***

In response to feedback we have received about the previously released demonstration data from tribal leaders and AIAN data users identifying inaccuracies in the population counts for AIAN tribal areas, the Census Bureau researched and implemented some notable improvements to the DAS specifically designed to improve the accuracy of data for AIAN tribal areas. Our own internal evaluations of these data, along with the extensive feedback we have received from our data users, have shown that earlier versions of the DAS TopDown Algorithm yielded notable distortions in population counts for legal and political geographies that are not included in the algorithm's geographic processing hierarchy. In addition to numerous algorithmic improvements that we have made to address this issue for all geographies, the new demonstration data will reflect additional improvements designed specifically to improve the accuracy of data for AIAN tribal areas.

This new version of the DAS incorporates a dedicated allocation of PLB for the total population of all AIAN tribal areas within each state. Additionally, the algorithm includes a geographic hierarchy specifically for AIAN tribal areas. Together, these changes have significantly reduced the errors observed in earlier demonstration data for AIAN areas.

### ***Previous Tribal Consultations and AIAN Data User Engagement***

The Census Bureau recognizes the special trust relationship that the United States has with federally recognized AIAN tribes, and we understand the importance of providing accurate population counts for AIAN communities and geographies. To ensure that we are addressing AIAN tribal leader concerns, we have had numerous engagements with tribal leaders and AIAN data users throughout the development process.

Over the past two years, the Census Bureau has held four formal tribal consultations on this topic: two national tribal consultation webinars (September 25, 2019 and February 18, 2021); an in-person tribal consultation at the Alaska Federation of Natives annual convention (October 16, 2019); and an in-person tribal consultation at the National Congress of American Indians annual convention (October 21, 2019). We have also conducted five additional tribal listening sessions for tribal leaders and AIAN data users. The Census Bureau has also solicited and received AIAN data use cases and fitness-for-use assessments from five federal agencies (including the Indian Health Service, the Centers for Disease Control, and the Departments of Justice, Labor, and Housing and Urban Development), nine individual tribes and tribal authorities, the National Congress of American Indians, and well-respected academic researchers specializing in AIAN data.

### ***Tribal Feedback Requested***

The prior tribal consultations were for the Census Bureau's knowledge in ensuring that we fully understand how the tribes intend to use data at varying levels of geography from the redistricting (P.L. 94-171), Demographic Profiles, and Demographic and Housing Characteristics files. This information has helped the Census Bureau to ensure that AIAN tribal needs are met when decisions on the privacy-loss budget for 2020 Census data products are made.

It is important to note that the Census Bureau recognizes that some of the most critical Census data used by AIAN tribes are the tabulations formerly included in the AIAN Summary File. The data protection mechanism for these data tabulations is still under development, and the Census Bureau intends to conduct additional tribal consultations specifically focused on accuracy and confidentiality of those detailed tribal data. We are committed to engaging with tribal leaders and AIAN data users about the design and fitness for use of these 2020 Census data products.

## How to Submit your Input and Comments

Tribal leaders are encouraged to submit comments and feedback after your review of the PPMFs and Detailed Summary Metrics released by April 30, 2021. Deadline for comments is Friday, May 28, 2021.

1. **Submit your comments by mail.** Send comments to:

Dee Alexander, Tribal Affairs Coordinator  
Office of Congressional and Intergovernmental Affairs  
U.S. Census Bureau  
Washington, DC 20233

*NOTE: Sending comments by mail may result in a delay in the Census Bureau receiving them due to limited staffing in the Census Bureau headquarters. We encourage you to consider another method of delivery. If you do need to use mail, please let us know to watch for the mailing.*

2. **Submit your comments by email.** Send comments to:

[OCIA.TAO@census.gov](mailto:OCIA.TAO@census.gov) or [dee.a.alexander@census.gov](mailto:dee.a.alexander@census.gov)

3. **Submit your comments by fax.** Send comments to:

301-763-3780

*NOTE: If you decide to fax comments, please call the Tribal Affairs office at 301-763-6100 to let us know to watch for your submission.*

4. **Bring your comments** to the consultation meeting.