Census Scientific Advisory Committee Meeting

Director's Remarks as Prepared for Delivery

September 29, 2022

- Good morning, and thank you for joining us for this meeting of the Census Scientific Advisory Committee. The work that the CSAC conducts is so important. I thank you for sharing your time and expertise with us today.

New/Departing Members

- Since we last met, we've had several new members appointed to this committee. I want to take a moment to recognize and acknowledge them:

  ◦ **Claire Bowen** (principal research associate and lead data scientist, Urban Institute)

  ◦ **Mainak Mazumdar** (chief data and research officer, Nielsen Company)

  ◦ **Ronald C. Prevost** (research professor, Georgetown University)

  ◦ **Rogelio Saenz** (professor, Department of Demography, University of Texas at San Antonio)

  ◦ **Seth Spielman** (director of metrics and data science at Microsoft and visiting professor of geography, University of Liverpool)

  ◦ **Chad Syverson** (George C. Tiao distinguished service professor of economics, University of Chicago Booth School of Business)

  ◦ **Deepinder S. Uppal** (chief technology officer and public sector director, Vertical Innovations TIBCO Software, Inc.)

  ◦ **Gwynne Evans-Lomayesva** (doctoral student, University of Pennsylvania)

- On behalf of everyone at the Census Bureau, thank you for your participation on the Census Scientific Advisory Committee. Advisory committees are an integral part of our processes at the Census Bureau, and I appreciate your help in finding solutions to our challenges.

- I also want to acknowledge two members who have departed since our last meeting, Lester Mackey and Jessica Hullman, and thank them for their contributions in helping Census Bureau accomplish its mission.

Transformation and Modernization/2030 Census

- As this committee knows, the 2020 Census faced significant challenges not the least of which was a once-in-a-century global pandemic. But during these challenging times, one thing always held through and it holds now: We can overcome challenges when we help each other, when we work together toward a common good.

- To follow up on our Spring 2022 discussion, the Census Bureau is committed to our enterprise Transformation and Modernization as we work to plan and develop its three anchors (Employee-Driven Initiative, Continuous Innovation, and Business Ecosystem) to support current and future programs.

- We all know each census takes years of planning and preparation and counting every person living in the United States is incredibly complex.

- We have begun researching how to improve five areas that will enhance the science of census taking:

  - **Data collection.** We want to enhance our data collection to effectively reach and count everyone, including historically undercounted populations.
  - **Counting people in group quarters.** We want to modernize how we count people living in group quarters such as correctional facilities, nursing homes and in college or university student housing to address their complex and evolving living situations.
  - **Data processing.** We want to integrate data processing with data collection to more quickly address issues and improve data quality in real time.
  - **Our infrastructure for operations.** We want to improve our infrastructure—tying spaces, people, and IT together—to be an even more effective foundation for implementing the 2030 Census.
  - **Continuous data collection and assessment of coverage and quality.** We want to leverage existing data sources and seek new ones to continuously measure the population. This will help us more efficiently and effectively conduct the census and count missing people.

- To learn from the 2020 Census, we are doing a deep dive on 2020 Census data quality. This involves evaluating operational quality metrics, analyzing the results of the 2020 Demographic Analysis and Post-Enumeration Survey, thoroughly reviewing census operations, and asking outside experts to independently review our work.

- We're also working with federal statistical agencies and other stakeholders on topics that could affect what the 2030 Census asks about. One key step is that OMB is reviewing the standards that guide how the census collects race and ethnicity data—which Ron will talk more about in a moment.

- The Census Bureau is also actively engaged with federal statistical agencies and other stakeholders on measuring sexual orientation and gender identity in surveys. Whether we would add or change a question on the census would involve extensive testing, review and evaluation to ensure the change is necessary and would produce quality, useful information for the nation.

- Additionally, on August 17 we released a Federal Register notice asking for public input on the design and planning of the 2030 Census. Our country is becoming more diverse, and we want to make sure our statistics continue to capture that diversity. To do that, we are listening to diverse voices.

- We're especially interested in learning what we can improve for 2030—and ways we can boost participation in communities of color, rural communities, and tribal lands.

- We particularly asked to hear recommendations on five topics:

  - Reaching and motivating everyone to respond to the census.
  - Technology.
  - New data sources.
  - How we contact respondents.
  - Respondent support.

- I encourage you to spread the word about this opportunity and to submit ideas yourself!

- We expect to decide on the initial operational design for the 2030 Census in 2024. From there, we will continue to develop our detailed operational plans and conduct tests as needed through 2027. And we plan to begin our final preparations for the 2030 Census in 2028.

2022 Economic Census

- Speaking of census, I also want to update you on the 2022 Economic Census, for which we've just started respondent outreach. There are a lot of exciting changes to this Economic Census.

- For one thing, we've made a lot of content changes to reflect changes in the economy, including asking about business technologies and NAPCS changes including cryptocurrency, electric vehicles, and cannabis.

- An expansion of industry coverage is also underway for 2022. In collaboration with USDA, Census is working to collect data on support activities for crop production and animal production as these non-farm business establishments are not included in the Census of Agriculture.

- In 2017, the Economic Census went to all electronic reporting. For 2022, we will leverage email and additional electronic capabilities such as email only opt in, enhanced self service capabilities, easier access to FAQs, and welcome emails that provide information on how data are used and assist with reporting.

- Additionally, machine learning and natural language processing techniques are being employed to automate industry and product classification coding. We conducted a pilot test was conducted to test the new systems in which approximately 37,000 businesses were asked to test respondent interaction with the new functionality in a production environment. Results from the pilot test were used to improve the usability, speed, accuracy, and throughput of the systems. Together, these new tools are expected to reduce respondent burden, improve the efficiency of analytical review, and increase data quality.

Differential Privacy

- Lastly, I want to touch on differential privacy and data protection. The Census Bureau, like all official statistical agencies in the U.S., has strong protections around privacy and confidentiality. It's our responsibility as ethical stewards of public data to ensure that privacy is not violated.

- As you know, statistical agencies are facing disclosure threats which over time can only grow in sophistication. Our obligation to protect our data means we need to get ahead of these threat— not just for today but for the coming years.

- And, strong privacy protections are critical to ensure strong response rates. The most common feedback we receive from respondents is that they fear how their data will be used or shared.

- At the same time, data access can be a critical component of achieving data equity goals. Those goals are meant to serve those same marginalized communities that are most at risk from data sharing, so it's important that we are thoughtful about how to meet our privacy and confidentiality obligations while still pursuing opportunities for more effective equity assessments.

- For our 2020 Census data products, we're using a new disclosure avoidance methodology involving differential privacy. This approach addresses our 21st century confidentiality threats which over time will only grow in sophistication.

- And because of our obligation to protect census data, we believe this approach gets ahead of these threats—not just for today but for the coming years.

- It's a methodology that most would agree is much more advanced than the data swapping methods used in the last decennial. And I think we all agree that differential privacy is far more protective against disclosure than previous methods.

- Now, we know that differential privacy operates by adding noise to census tabulation cells, and it does so in a measured and a transparent way. But it does come at a cost of dampening some of the granularity that data users have come to enjoy and expect in the past.

- Implementation takes time as well as user input to hone-in on the right balance of granularity and accuracy while still preserving confidentiality.

- Stakeholder feedback is a critical part of that process. But we believe that differential privacy, in combination with the other tools, can meet the dual objectives of disclosure avoidance and data granularity and accuracy to meet most data user needs.

- And as I mentioned, we are conducting ongoing engagement and discussions about our research and findings with partners and stakeholders who identify needs and data gaps that may be missed if it were not for their feedback.

Conclusion

- We have a full day today, so I'll wrap up my remarks. On behalf of everyone at the Census Bureau, thank you for your active participation on the Census Scientific Advisory Committee. I welcome committee recommendations that will enhance our Transformation and Modernization. I look forward to an engaging discussion with you, and again, thank you for joining us for the fall CSAC meeting.