Testimony

Before the Committee on Oversight and Reform, House of Representatives

For Release on Delivery
Expected at 10:00 a.m ET
Wednesday, February 12, 2020

2020 CENSUS

Operations Are Underway with Challenges Remaining

Statement of J. Christopher Mihm, Managing Director, Strategic Issues

and

Nick Marinos, Director, Information Technology and Cybersecurity

Chairwoman Maloney, Ranking Member Jordan, and Members of the Committee:

We are pleased to be here today to discuss the operational status of the 2020 Decennial Census. After many years of research, planning, and testing, in January the U.S. Census Bureau (Bureau) kicked off the 2020 Census count of the population with the enumeration of remote Alaska, with Census Day (April 1) on the horizon.[1]

In the coming months, the success of census operations, in part, relies on the Bureau's preparations, including: recruiting and hiring a sufficient work force; building public commitment and trust to ensure participation by developing community partnerships and combating disinformation; developing and testing information technology (IT) systems; and protecting the privacy of respondent data. The Bureau is actively managing these efforts, but faces significant risks that could adversely impact the cost, quality, schedule, and security of the count.

We added the 2020 Decennial Census to our high-risk list in February 2017, and it remains on our high-risk list today. Over the past decade, we have made 112 recommendations specific to the 2020 Census to help address these risks and other concerns. The Department of Commerce has generally agreed with these recommendations and has taken action and made progress to address them. However, as of February 2020, 28 of the recommendations have not been fully implemented of which six are designated priority recommendations.[2]

At your request, our testimony today will describe the cost and progress of key 2020 Census operations critical to a cost-effective enumeration, as well as major trends or early warnings that may require Bureau or congressional attention to ensure a successful head count.

---

[1]April 1, 2020, is Census Day and is the reference date for where and If a person should be counted for the decennial census.

[2]Priority recommendations are those that GAO believes warrant priority attention from heads of key departments or agencies. They are highlighted because, upon implementation, they may significantly improve government operations, for example, by realizing large dollar savings; eliminating mismanagement, fraud, and abuse; or making progress toward addressing a high-risk or fragmentation, overlap, or duplication issue.

The information in this statement is based primarily on work we are releasing today, entitled *2020 Census: Initial Enumeration Underway but Readiness for Upcoming Operations Is Mixed*.[3] For that work, we reviewed, among other things, Bureau planning documentation; Bureau-provided data on cost and progress of key operations; goals as outlined in Bureau plans; and information, such as executive-level system status reports and dashboards from our ongoing work on the readiness of the Bureau's IT systems, and the Bureau's status in addressing cybersecurity risks. More detailed information on our objectives, scope, and methodology can be found in the issued report.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Bureau Has Generally Executed Early Operations on Schedule but Faces Challenges Going Forward

The Bureau Has Generally Executed Early Operations on Schedule

As part of its early operations, in October 2019 the Bureau completed its In-Field Address Canvassing Operation, where temporary field staff verify and update selected addresses across the country. The Bureau also met its target dates for opening its Questionnaire Assistance Contact Centers, where respondents can call to ask questions or provide their census data by phone. Additionally, it launched its advertising campaign designed to use print, social media, and television to, among other initiatives, spread the word about the 2020 Census. Further, despite initial delays, it has

---

[3]GAO, *2020 Census: Initial Enumeration Underway but Readiness for Upcoming Operations Is Mixed,* GAO-20-368R (Washington, D.C.: Feb. 12, 2020).

opened all 248 Area Census Offices that will be used to manage the decennial at the local level.

The Bureau Is Behind in Meeting Recruiting Goals for Upcoming Operations

The Bureau is behind in its goal to recruit more than 2.6 million applicants nationwide for upcoming operations. In addition, 202 of 248 Area Census Offices fell short of their individual recruiting targets as of early February 2020. As depicted in figure 1, as of February 3, 2020, the Bureau has recruited more than 2.1 million applicants. This falls short of its interim target to reach more than 2.5 million applicants by the same date.

Figure 1: Census Bureau Progress on Recruiting as of February 2020

Recruiting Goals (in thousands)
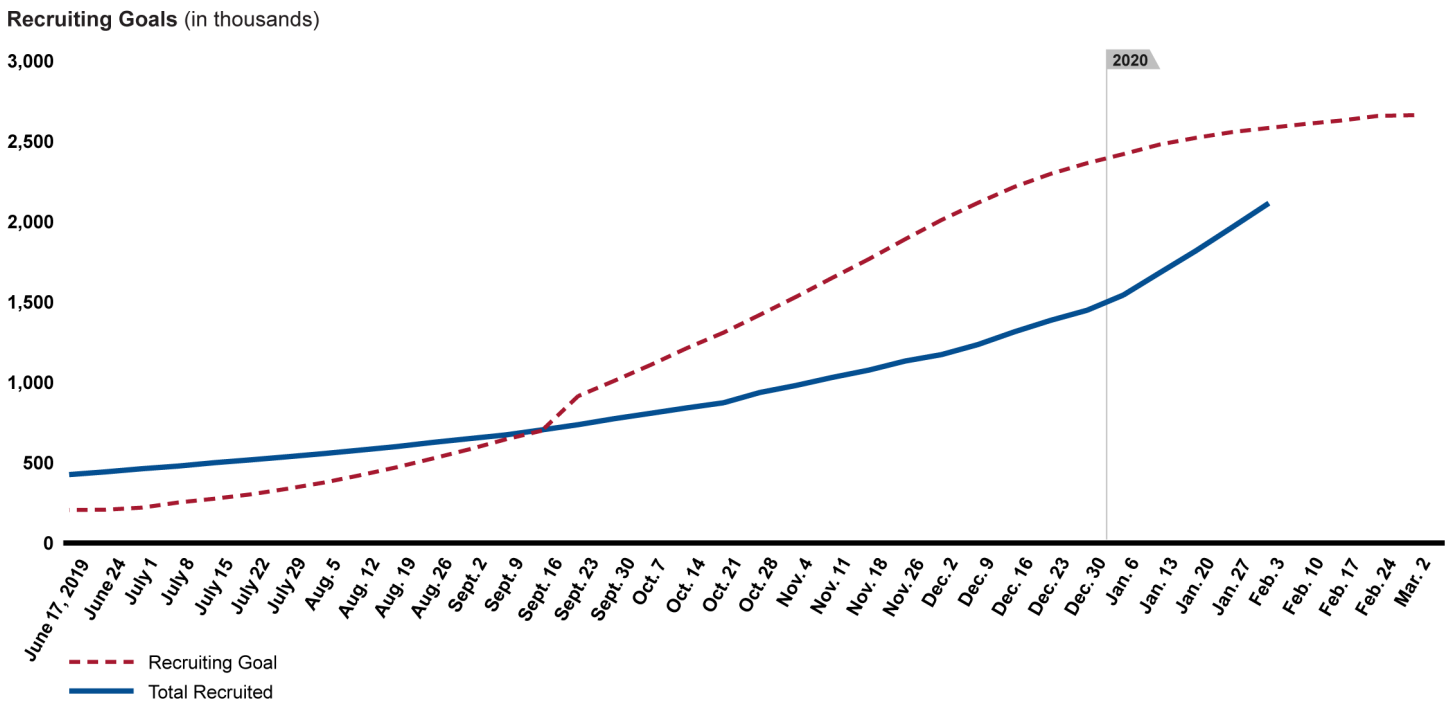
Source: GAO analysis of Census Bureau Unified Tracking System Data. | GAO-20-367T

Notes: In September 2019, the Census Bureau increased its total recruiting goal from approximately 2.2 million to more than 2.6 million and increased its interim goals accordingly.
The Census Bureau began tracking recruiting progress in June 2019.

In December 2019, Bureau officials told us that the recruiting numbers had plateaued but that they expected the number of applicants to increase in 2020 in response to various recruitment activities they implemented in late 2019. If the Bureau does not recruit sufficient applicants, it may have difficulty hiring enough staff to complete its

upcoming operations within its scheduled timeframes. In turn, this could delay subsequent operations, add to costs, and adversely affect data quality.

The Bureau has similarly not met hiring goals for some Area Census Office positions. The Bureau has exceeded its goal for hiring recruiting assistants and office operations supervisors, but has not yet met its goals for hiring clerks. The Bureau had hired 6,537 office clerks as of early February 2020, short of its then-interim goal of 7,500. The Bureau anticipates hiring most of the remaining clerks closer to March 1, 2020, by which point it hopes to have 9,874 on-board. Hiring sufficient clerks is particularly important since clerks assist with on-boarding the 320,000 to 500,000 enumerators needed for upcoming data collection operations.[4]

The Bureau Missed Interim Milestones for Establishing Community Partners

The Bureau is forming partnerships through its Community and National Partnerships to reach hard-to-count populations. According to the 2020 Census Partnership Plan, partnerships are crucial in educating the public and maximizing survey response rates, particularly for hard-to-count populations, such as persons with disabilities and persons experiencing homelessness.

Bureau management reports provide the number of community partners and participating organizations by sector and audiences served, as well as the number of events the partners have sponsored. The Bureau's goal for 2020 is to have 300,000 community partners by March 2020. As of mid-January 2020, the Bureau had established relationships with 172,061 community partners, and as of early February had increased this total to 238,982 (See figure 2). These partners include media outlets, nonprofits, and healthcare organizations.[5]

While the quality of partners ultimately matters more than the quantity, Bureau officials told us that their interim goal for was to have approximately 200,000 community partnerships in place by January 1, 2020, and 250,000 in place by February 1, 2020.

[4]To conduct data operations on schedule, the Bureau's conservative estimate for the optimal number of enumerators is 500,000. The Bureau's estimate for the most likely number of enumerators needed is 320,000.

[5]The Bureau also had established relationships with 642 national partner organizations by this date.

Figure 2: Number of Active Community Partners
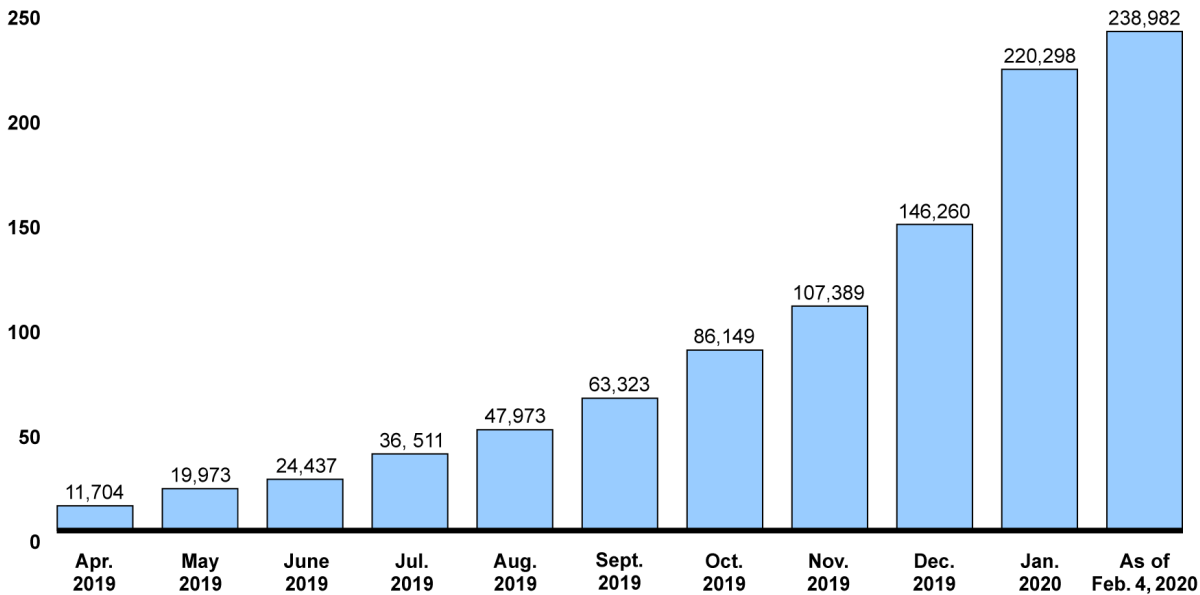
Source: GAO analysis of Census Bureau management reports. | GAO-20-367T

The Bureau Is at Risk of Missing Near-Term Schedule Milestones for IT Systems Testing and Needs to Quickly Address Concerns Related to the Readiness of Its Internet Response System

The Bureau is significantly changing how it intends to conduct the census during this decennial, in part by re-engineering key census-taking methods and infrastructure, and making use of new IT applications and systems.[6] Most notably, the Bureau plans to offer an option for households to respond to the survey via the internet and enable field-based enumerators to use applications on mobile devices to collect survey data from households.

To conduct the 2020 Census, the Bureau plans to utilize 52 new and legacy IT systems and the infrastructure supporting them. As of January 2020, the Bureau had made progress in executing work against its revised schedule by deploying the systems for five of the 16 operational deliveries. However, five of the remaining 11 operational deliveries were at risk of not meeting key near-term milestones planned for completing performance and scalability testing and/or integration testing by April

---

[6]GAO, *2020 Census: Bureau Needs to Take Additional Actions to Address Risks to a Successful Enumeration*, GAO-19-685T (Washington, D.C.: July 24, 2019).
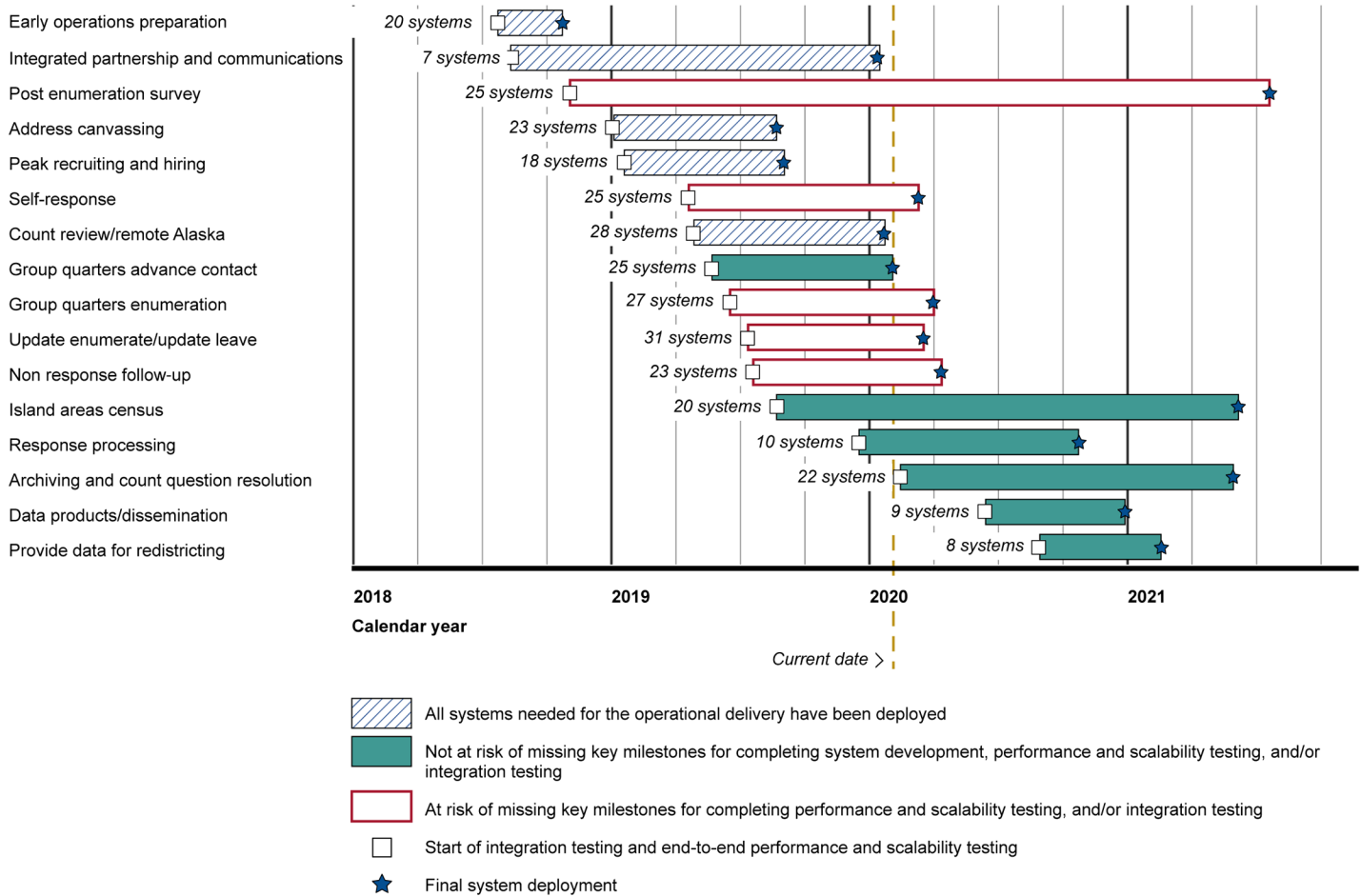
2020.[7] These five operational deliveries are the post enumeration survey, self-response, group quarters enumeration, update enumerate/update leave, and non-response follow-up.[8] Figure 3 presents an overview of the status for all 16 operational deliveries, as of January 2020.

---

[7]According to the Bureau's 2020 Census Operational Plan, the purpose of performance and scalability testing is to ensure that systems will scale to meet the workloads, or volumes, of the 2020 Census.

[8]The post-enumeration survey is intended to provide estimates of 2020 Census net coverage and components of coverage for housing units and people in the United States and Puerto Rico, excluding remote Alaska.

Figure 3: Status of 16 Operational Deliveries for the 2020 Census, as of January 2020

2020 Census operational deliveries

2020 Census operational deliveries		
Early operations preparation	20 systems	
Integrated partnership and communications	7 systems	
Post enumeration survey	25 systems	
Address canvassing	23 systems	
Peak recruiting and hiring	18 systems	
Self-response	25 systems	
Count review/remote Alaska	28 systems	
Group quarters advance contact	25 systems	
Group quarters enumeration	27 systems	
Update enumerate/update leave	31 systems	
Non response follow-up	23 systems	
Island areas census	20 systems	
Response processing	10 systems	
Archiving and count question resolution	22 systems	
Data products/dissemination	9 systems	
Provide data for redistricting	8 systems	

2018   2019   2020   2021
Calendar year

Current date ⟩

- ▨ All systems needed for the operational delivery have been deployed
- ▮ Not at risk of missing key milestones for completing system development, performance and scalability testing, and/or integration testing
- ▭ At risk of missing key milestones for completing performance and scalability testing, and/or integration testing
- ☐ Start of integration testing and end-to-end performance and scalability testing
- ★ Final system deployment

Source: GAO analysis of Census Bureau data. | GAO-20-367T

Note: The 52 systems being used in the 2020 Census are to be deployed multiple times in a series of operational deliveries (which include operations such as address canvassing or self-response). That is, a system may be deployed for one operation in the 2020 Census (such as address canvassing), and be deployed again for a subsequent operation (such as self-response). As such, additional development and testing may occur each time a system is deployed.

These five at-risk operational deliveries add uncertainty to a highly compressed time frame over the next 2 months.

The Bureau recently identified a scalability issue that was preventing it from meeting its testing goal of enabling up to 600,000 users to access the primary internet response system (known as the Enterprise Censuses

and Surveys Enabling Platform–Internet Self-Response, or ECaSE–ISR) at the same time without experiencing performance problems.[9] As a result, in February 2020 the Bureau decided to use its backup system to manage internet responses for the 2020 Census. Late design changes, such as the shift from one system to another, can introduce new risks, in part, because the backup system was not used extensively in earlier operational testing.

Going forward, the Bureau must effectively manage the at-risk operational deliveries to better ensure that it meets near-term milestones for completing IT systems testing, and is ready for the major operations of the 2020 Census. Further, since the internet response system is scheduled to be available to the public in March 2020, it is critical that the Bureau quickly ensures the readiness of the system it has decided to use, including fully testing the system before it is deployed.

The Bureau Faces Significant Cybersecurity Challenges in Securing Its Systems and Data

Our prior and ongoing work has identified significant challenges that the Bureau faces in securing systems and data for the 2020 Census.[10] Specifically, the Bureau continues to face challenges related to addressing cybersecurity weaknesses, tracking and resolving cybersecurity recommendations, and addressing numerous other cybersecurity concerns. For example, the Bureau had made progress in addressing open corrective actions needed to remediate deficiencies, known as plans of actions and milestones (POA&Ms), as of the end of December 2019, but more work remains.

Specifically, we reported in April 2019 that the Bureau did not always address POA&Ms in accordance with its established deadlines.[11] Thus, we recommended that the Bureau take steps to ensure that identified corrective actions for cybersecurity weaknesses are implemented within

---

[9]The Bureau stated that it was at testing at five times the expected internet self-response user load of 120,000 concurrent users, for a total of 600,000 concurrent users, to minimize risk.

[10]See, for example, GAO, *2020 Census: Further Actions Needed to Reduce Key Risks to a Successful Enumeration*, GAO-19-431T (Washington, D.C.: Apr. 30, 2019); and *2020 Census: Continued Management Attention Needed to Address Challenges and Risks with Developing, Testing, and Securing IT Systems*, GAO-18-655 (Washington, D.C.: Aug. 30, 2018).

[11]GAO-19-431T.

prescribed time frames. We have ongoing work that will continue to evaluate the Bureau's progress to fully implement this recommendation.

Regarding tracking and resolving cybersecurity recommendations received from agencies such as the Department of Homeland Security (DHS), we recommended that the Bureau implement a process for documenting, tracking, and executing appropriate corrective actions to remediate the cybersecurity findings.[12] In the fall of 2019, the Bureau had developed a process for tracking IT-related recommendations from DHS. More recently, the Bureau had begun implementing that process, and provided us with a spreadsheet that it is using to track the status of these recommendations. We have ongoing work that is intended to monitor the Bureau's continued progress in implementing this process of tracking the status of the recommendations.

Further, the Bureau faces other challenges related to, for example, managing disinformation from social media, ensuring contingency plans are in place, and protecting the privacy of respondent data. Specifically, Bureau officials stated that, during the address canvassing operation, rumors were shared across social media platforms about the address canvassing operation or the staff performing it. The Bureau determined that the rumors created safety concerns for staff who were legitimately working to confirm addresses. To help address this challenge, Bureau officials stated that they plan to inform the public of the risks associated with disinformation from social media through its education and communication campaigns, among other things.

In addition, the Bureau needs to finalize its contingency planning efforts for its internet response capability. For example, in August 2019, the Bureau developed a contingency plan for its internet response system; however, the Bureau has not yet finalized this plan. Further, as noted earlier, the Bureau recently made a decision to change the system that it intends to use as the primary system to provide the internet response capability. Given that internet response for the 2020 Census starts in March 2020—approximately 1 month away—it is important that the Bureau expeditiously finalize and test the contingency plan for its internet response capability and ensure that the plan reflects the approach the Bureau has recently decided to implement.

---

[12]GAO-19-431T.

Regarding protecting the privacy of respondent data as required by statute,[13] the Bureau plans to apply a disclosure avoidance technique, known as differential privacy, to its publicly-released statistical products to protect the confidentiality of its respondents and their data.[14] As of November 2019, the Bureau had tested this technique using data collected during the 2010 Census and 2018 End-to-End Test. We have ongoing work monitoring the Bureau's progress as it works to implement differential privacy for the 2020 Census.

In conclusion, while the Bureau has completed its first major field operation—in-field address canvassing—and is preparing for data collection, the Bureau faces considerable challenges and uncertainties in implementing key upcoming operations, including (1) recruiting and hiring of field staff; (2) building its partnership program; (3) completing testing of its IT systems; and (4) protecting the security of its systems and data.

Going forward, continued leadership attention and congressional oversight will be vital for ensuring that risks are managed, preparations stay on track, and the Bureau is held accountable for implementing the enumeration, as planned. Without timely and appropriate actions, the challenges previously discussed could adversely affect the cost, accuracy, schedule, and security of the enumeration. We will continue to assess the Bureau's efforts and look forward to keeping Congress informed of the Bureau's progress.

---

[13]13 U.S.C. § 9.

[14]Differential privacy is a disclosure avoidance technique aimed at limiting statistical disclosure and controlling privacy risk. According to the Bureau, differential privacy provides a way for the Bureau to quantify the level of acceptable privacy risk and mitigate the risk that individuals can be reidentified using the Bureau's data. Reidentification can occur when public data are linked to other external data sources. According to the Bureau, using differential privacy means that publicly available data will include some statistical noise, or data inaccuracies, in order to protect the privacy of individuals. Differential privacy provides algorithms that allow policy makers to decide the trade-off between data accuracy and privacy.

Chairwoman Maloney, Ranking Member Jordan, and Members of the Committee, this completes our prepared statement. We would be pleased to respond to any questions that you may have.

Staff Acknowledgments

In addition to the contacts named above, Lisa Pearson, Jon Ticehurst, Kate Sharkey, (Assistant Directors), Devin Braun, Andrea Starosciak (Analysts-in-Charge), Christopher Businsky, Alan Daigle, Stephen Duraiswamy, Alexandra Edwards, Rebecca Eyler, Margaret Fisher, Franklin Jackson, Keith Kim, David Matcham, Kerstin Meyer, Cynthia Saunders, Peter Verchinski, Jarenda Williams-Jones, and Timothy Wexler made significant contributions to this report.