ENSURING AN ACCURATE AND AFFORDABLE 2020 CENSUS

HEARING

BEFORE THE SUBCOMMITTEE ON FEDERAL WORKFORCE, US POSTAL SERVICE AND THE CENSUS OF THE

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

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ENSURING AN ACCURATE AND AFFORDABLE 2020 CENSUS

Wednesday, September 11, 2013

House of Representatives, Subcommittee on Federal Workforce, U.S. Postal Service, and the Census, Committee on Oversight and Government Reform,

Washington, D.C.

The subcommittee met, pursuant to call, at 9:31 a.m., in Room 2154, Rayburn House Office Building, Hon. Blake Farenthold [chairman of the subcommittee] presiding.

Present: Representatives Farenthold, Walberg, Collins, Lynch, Norton, and Clay.

Also Present: Representative Maloney.

Staff Present: Molly Boyl, Parliamentarian; Lawrence J. Brady, Staff Director; Caitlin Carroll, Deputy Press Secretary; John Cuaderes, Deputy Staff Director; Adam P. Fromm, Director of Member Services and Committee Operations; Linda Good, Chief Clerk; Michael R. Kiko, Staff Assistant; Jeffrey Post, Senior Professional Staff Member; Laura Rush, Deputy Chief Clerk; Scott Schmidt, Digital Director of Digital Strategy; Peter Warren, Legislative Policy Director; Jaron Bourke, Minority Director of Administration; Courtney Cochran, Minority Press Secretary; Kevin Corbin, Minority Professional Staff Member; Yvette Cravins, Minority Counsel; Devon Hill, Minority Research Assistant; Jennifer Hoffman, Minority Press Secretary; and Mark Stephenson, Minority Director of Legislation.

Mr. FARENTHOLD. The subcommittee will come to order. As is normal, we will begin the hearing by reading the Oversight Committee mission statement. We exist to secure two fundamental principles: First, that Americans have a right to know the money Washington takes from them is well spent; and second, Americans deserve an efficient, effective government that works for them. Our duty on the Oversight and Government Reform Committee is to protect these rights. Our solemn responsibility is to hold the government accountable to taxpayers, because the taxpayers have the right to know what they get from their government. We will work tirelessly in partnership with citizens watchdogs to

We will work tirelessly in partnership with citizens watchdogs to deliver the facts to the American people and bring genuine reform to the Federal bureaucracy. This is the mission of the Oversight and Government Reform Committee.

At this time, I'll recognize myself for an opening statement. The costs of the decennial census has gone up 680 percent per house-hold since 1960, and the 2010 Census was almost twice as expen-

sive per household as the 2000 Census. The 2010 Census reached \$14.7 billion in cost. If the recent trends hold true, the 2020 Census could cost the American taxpayers \$25 billion or more. This is simply unacceptable.

As government watchdogs, it's our job to make sure the American taxpayers' money is being used appropriately and efficiently.

The purpose of today's hearing is to find ways the Bureau can achieve significant cost savings without impacting the quality and integrity of the count. The most obvious of these is adding an Internet response option to the Census, which is now being offered on a nationwide basis for the American Community Survey. Without getting into the pros and cons of the community survey, it does show that technology can be better used to gather Census data.

We should also look at the digitalization of follow-up efforts for those who do not self-respond to the Census. In fact, new technology has created an opportunity to completely redesign the model. Through the Bring Your Own Device model, the Census Bureau has the opportunity to have its temporary field staff simply download a secure application to a smart phone that will not only allows them to record response information, but also has live updates with which house they should visit next and possibly GPS data, directions, adjusting for traffic and many other things. Collecting Census data, there should be an app for that.

Another issue with respect to cost savings is expanding the use of administrative records. What are the cost savings of this and what are the privacy issues associated with inter-governmental data sharing? Administrative records do help improve data accuracy and reduce the need for multiple nonresponse follow-ups.

A redesign mapping project focusing on continuously tracking changes and partnering with the public and private geospatial entities and perhaps even the Postal Service could meet—I'm sorry could eliminate the need for a nationwide canvass in upcoming years.

We also face challenges from public distrust of the government in light of recent scandals currently being investigated by the full committee. The IRS targeting of groups based on political ideology; the NSA's rampant data collection and leaks; the administration spokeswoman, Susan Rice, misleading the public after the Benghazi attack all have had effects making the American public more distrustful of the government and also less likely, I believe, and based on the information that's coming into my office, less likely to participate and cooperate with the government.

Take Lois Lerner. She's probably costing the taxpayers money because people are fearful how their personal information revealed to the Census service might be used against them, so they're not filling out their survey, meaning the government has to send out people to follow up with them. How will all of these affect the response rate and accuracy in 2020? Add to that the detailed and, in my opinion, intrusive questions asked on the American Community Survey, and we're facing additional challenge that potentially add costs.

Finally, we must address in a cost-effective manner the question of accuracy, especially dealing with non-traditional households: the homeless, those living in the shadows and non-English speakers. We cannot craft solutions to problems like homelessness and undocumented residents if we do not have accurate data.

New cost saving ideas are attainable, while regaining the public trust might be more difficult. A National Academy of Sciences panel has stated that a realistic goal is for the 2020 Census to cost less than the 2010 Census on a per-household basis. I think that's doable and I support this goal, and I challenge the Census Bureau and the entire government to make this happen. The Census coming in under budget would send a strong signal to the American people about the stewardship of their tax dollars, and perhaps be a way we can regain some of the trust between the government and the governed.

With this in mind, I hope this hearing starts a dialogue between the committee and the Census Bureau so that we can make the 2020 Census a cost-effective success.

And with that, I'd like to welcome our witnesses and thank you for appearing before us. We will now recognize the distinguished ranking member, the gentleman from Massachusetts, Mr. Lynch, for his opening statement.

for his opening statement. Mr. LYNCH. Thank you, Mr. Chairman. At the outset, I'd also like to congratulate Director Thompson on being confirmed as the 24th director of the United States Census Bureau. We look forward to working with you and your staff as we continue to examine Census operations.

I'd like to also thank Mr. Goldenkoff and Ms. Cha of the Government Accountability Office for helping this committee with its work today. Thank you.

This is a critical moment for the United States Census Bureau. While the next decennial Census may be 7 years away, the agency is already in the midst of researching, testing and implementing a variety of technological and procedural reforms designed to better ensure a 2020 Census that maximizes cost containment without compromising data quality.

I would note that these important initiatives come on the heals of a 2010 Census that according to GAO, and as the chairman has pointed out, was the most expensive U.S. Census in history at a cost of approximately \$13 billion. Now, that was a 56 percent increase and an \$8 billion cost increase from the 2000 Census, so the rate of increase is alarming.

Chief among the lessons learned from the 2010 Census that GAO has consistently identified as key areas for reform is the need for the Bureau to reexamine its approach to how it takes the Census. In particular, 2010 witnessed the Bureau employing the same mailout, mail-back and door visit Census form process that it has been using since 1970, despite a population that has become increasingly demographically diverse and significantly concerned about personal privacy. If I were a cynic, I would—I would suggest that we might shift the responsibility of the Census over to the NSA since they seem to be taking—keeping track of everybody anyway. But according to the GAO, this basic design of the decennial Cen-

But according to the GAO, this basic design of the decennial Census is no longer capable of a cost-effective enumeration, and without changes, future enumerations could be fiscally unsustainable.

To its credit, the Census Bureau is already making changes to reform its approach to Census taking, and I'm greatly encouraged by its responsiveness to the recommendations issued by GAO. Specifically the Census Bureau is currently examining whether it could achieve meaningful cost savings by utilizing State and local agency administrative records, including driver's license and school documentation to identify persons associated with a particular household address.

In addition, the Census Bureau is researching the viability of electronic data collection and technology receptive promotional methods, including the use of email, text messaging and social networking sites. Moreover, the agency is testing the feasibility of using its monthly housing and population "American Community Survey" data as a basis for conducting smaller and more frequent Census-related tests throughout the decade in place of broader, more expensive and one-time-only tests that have defined previous decennial Census-taking cycles.

I would also interject that I know Mr. Chaffetz and I had discussed in the previous Congress the opportunity to utilize the United States Postal Service, because postal workers go to each and every home in America 6 days a week, and that does replicate in a way the door-to-door survey that the Census conducts, albeit we would be using existing employees who go door to door on a regular basis and might have a better feel for the number of residents in a particular household.

As reported by GAO in January of this year, the various reform initiatives underway at the Census Bureau and particularly the agency's expanding use of technology must be accompanied by a corresponding effort to implement effective information security policies and protocols. I share the chairman's concern regarding the current lack of comprehensive security programs at the Census Bureau that includes identified security risks, up-to-date security management program policies, meaningful information, security training for Census employees, and effective incidence response guidance. However, I am confident that the Bureau will continue to work with GAO to take the necessary steps to enhance its agency-wide security program and implement proper safeguards against the unauthorized use or disclosure of sensitive personal information.

Additionally, I'd like to note that the Census Bureau, like every other Federal agency, is already feeling the impact of the sequestration and is currently operating with a budget that is 13 percent less than the administration's request for 2013. Coupled with chronic underfunding over the past several years, the agency is facing a variety of difficult decisions that pose a challenge to its mission, from reduction in field tests and increased reliance on existing data, to delays in planning for the 2020 decennial Census and the suspension of the country's economic Census. Importantly, these and other Census activities are mission critical and result in data that is used to determining funding allocations for community services, infrastructure and neighborhood improvements as well as public health and educational program and forecasting economic and employment conditions.

These efforts are essential to our national economy and policymaking, and I'd urge my colleagues to keep the importance of the Census Bureau's mission in mind as we continue to examine Census operations.

Mr. Chairman, I thank you for holding this important hearing and I look forward to the discussion these and other issues will come up today with today's witnesses. I yield back the balance of my time.

Mr. FARENTHOLD. Thank you, Mr. Lynch. Our other members will have 7 days to submit opening statements for the record. We will now introduce and recognize our panel.

The Honorable John Thompson is the director of the United States Census Bureau. I add my congratulations as well on your confirmation. Mr. Robert Goldenkoff is the director of Strategic Issues Group at the U.S. Government Accountability Office. And our technical expert here is Carol Cha. She's the director of IT Group at the United States Government Accountability Office. Welcome.

Pursuant to the committee rules, all witnesses will be sworn in before they testify. Will you all please stand up and raise your right hand. Do you solemnly swear or affirm that the testimony you are about to give will be the truth, the whole truth and nothing but the truth?

Let the record reflect that all the witnesses answered in the affirmative. You all may be seated.

In order to allow time for discussion, we'd particularly like to ask our questions up here and feel like we get the information we're most interested in, we would ask that you would limit yourself to around 5 minutes with your statement. We have in the record and hopefully everybody up here has reviewed the written material that was provided to us. And so if you would limit yourself to 5 minutes. We've got the little traffic light system in front of you. The green light means you're good to go, the yellow light means you're running out of time, so hurry up, and the red light means stop. There will be no tickets issued, but I will start looking sternly at you when the red light comes on. So we will get underway.

We will now start with Mr. Thompson. Mr. Thompson.

WITNESS STATEMENTS

STATEMENT OF JOHN THOMPSON

Mr. THOMPSON. Thank you, Chairman Farenthold, Ranking Member Lynch, and members of the subcommittee. I am pleased to have the opportunity to appear today before the subcommittee to discuss 2020 Census operations. I'll make a brief statement. I will ask that my full statement be added for the record. Let me also say that I am delighted to return to the Census Bureau as director, and I'm looking forward to working with the committee.

A democracy needs credible, objective and timely information, and the decennial Census is one of the important sources of this information. The 2020 Census will continue this tradition, but as with each Census, we must consider new opportunities with respect to information technology.

I believe current plan activities will support a Census that is significantly less costly and will deliver faster results than the 2010 Census. I can pledge the best efforts of the dedicated public servants of the agency, but we must also ask the Congress for its support to ensure the Census Bureau can face these challenges.

Among the most promising options we are researching to accomplish our goals are, first, re-engineering the field data collection operations; second, making better use of information previously collected by Federal and State agencies; third, using the Internet as the primary self-response option; and fourth, drawing on geographic tools and data sets to eliminate the need to physically canvass large portions of the United States.

One of the major opportunities to reduce costs lies with applying operations research methods to work management and route planning. We are exploring techniques to take advantage of automation to conduct our field work more efficiently, including routing our interviewers, accounting for optimum times to visit, tracking travel distances and traffic, and other factors to minimize extensive travel and wasted visits.

We are also exploring adaptive design techniques that will help us supply statistical methodology to do our work smarter. The objective of this effort is to re-engineer our field management processes, thereby reducing both the hours that our interviewers will spend on collecting the data from households that do not take advantage of the self-response option and reducing the infrastructure required to support these efforts.

In addition to our efforts to re-engineer the field data collection, we are looking at other alternatives to reduce the non-response follow-up workload. One of the promising innovations is the use of data people have already given to the government to enumerate households that do not return Census questionnaires. These data range from information about vacant units collected by the U.S. Postal Service, to information that is collected by various Federal and State agencies to administer and support the programs.

We also have important opportunities to reduce the non-response follow-up workload by improving self-response. The traditional way of responding through the mail, then following up through an interview is inefficient. The Internet in contrast is becoming an increasing important tool for self-response.

For the 2020 Census, the Census Bureau is actively testing strategies to encourage and motivate the use of the Internet as the primary response option. The geographic support services initiative at the Census Bureau is directed at obtaining the highest quality address and geospatial data.

We are looking to expand partnerships with tribal, State and local governments as well as with the private sector. These partnerships will be critical in allowing the Census Bureau to develop a more focused address canvassing program that will allow the Census Bureau to avoid re-canvassing large areas of the country for which there are no changes or which—or for which information can be obtained from an alternative source.

Finally, I would like to note that all these options are buttressed by the Census Bureau's efforts to more effectively integrate IT services and systems. Instead of building different IT systems that serve single programs or even single Census operations, we are building systems to share across the enterprise. We have also virtualized our servers, building a private cloud environment which we're using to deliver a virtual desktop infrastructure, or VDI, that allows us to decouple a user's device from any sensitive data. This capability allows us to dramatically increase our telework program. Now employees can use their devices and we do not need to furnish equipment. We believe this capacity puts us in the strong footing to consider Bring Your Own Device, or BYOD, as a real possibility for the 2020 Census.

In the 2010 Census, we used a custom-built mobile device and custom-built software to run on that device. Now we have a team working not only on the technological considerations and security requirements, but also the personnel policies that would have to accompany a BYOD approach for 2020 based on utilization of off-theshelf technology and software.

Finally, the budget requested for FY 2014 includes an increase of \$150.7 million for the 2020 Census. The Census Bureau will need this to conduct the necessary research and testing efforts to prepare for 2020 at this point. The work in fiscal 2014 is critical to meet our schedule to produce analyzed data in time for key decision-making. The next 2 years represent an extremely critical period in the 2020 planning development cycle. We cannot delay the work to begin developing our major systems in fiscal year 2016, therefore, our preparations for this effort over the next 2 fiscal years are of the highest priority.

To meet these challenges will require the best efforts of the Census Bureau, and we are looking forward to working with the Congress so they can provide the support to meet these challenges successfully.

Thank you very much, and I would be happy to respond to questions.

Mr. FARENTHOLD. Thank you, Mr. Thompson.

[Prepared statement of Mr. Thompson follows:]



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Prepared Statement of John H. Thompson Director

U.S. Census Bureau

"Ensuring an Accurate and Affordable 2020 Census"

Before the Subcommittee on Federal Workforce, U.S. Postal Service and the Census

11 September 2013

Chairman Farenthold, Ranking Member Lynch, and members of the Subcommittee, thank you for the opportunity to appear today before the Subcommittee to discuss the 2020 Census operations. It has been a little over a month since I was confirmed as Director, and I am still conducting an initial assessment of 2020 Census operations to date. Therefore, my comments today are preliminary.

A democracy needs credible, objective and timely information on the growth of its population, the changing characteristics of its communities, and in the United States, we have relied on the decennial census as one of the important sources of this information. The Census Bureau is proud to serve the nation by providing these data. We are committed to ensuring the continued availability of high-quality information that sustains our democracy by informing decision makers and the public on the important issues facing our society and nation.

The 2020 Census will continue in this tradition, but as with each census we must consider the unique challenges of the era and – at the same time – the new opportunities with respect to information and technology. There are unprecedented challenges facing the U.S. Census Bureau as it plans for the 2020 Census. Public participation and support for censuses and surveys is declining, which seemingly contradicts the increasing demands for timely, small-area social and economic statistics. There also is the real prospect of flat or declining budgets to accomplish our mission. I believe that our current planning activities will support a new census design that will

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fundamentally change the way in which censuses are taken in the United States. We are working toward a design that has the potential to produce significantly less costly and faster results that are of similar or better quality than in previous censuses. I can pledge the best efforts of the dedicated public servants of the agency, but we must also ask the Congress for its support to ensure the Census Bureau has the resources to carry out these objectives.

At this time, among the most promising options to meet these challenges are:

- 1. Taking advantage of technology and operations research methods to reengineer the field data collection operations reducing both the infrastructure required to support these operations and the actual hours that enumerators spend collecting the data.
- 2. Making better use of information previously collected by federal and state agencies to further reduce the dependence on in-person visits for data collection.
- 3. Using the Internet as the primary self-response option.
- 4. Drawing on the extensive array of emerging geographic tools and data sets to eliminate the need to physically canvass large portions of the United States to update the address list to support the 2020 Census.

In researching these options, the Census Bureau has accepted the Congressional directive to significantly reduce the cost of the 2020 Census, and we are re-examining fundamental assumptions about how to count people, most importantly how to enumerate those individuals and households that do not respond to the census. In 2010, approximately 47 million addresses did not respond to the census after receiving a form, and the Census Bureau visited each of these addresses multiple times to determine whether the addresses were vacant or how many people were living at these addresses. By far, the field data collection component and non-response follow-up operations are the most costly of the census.

In 2010, as in the prior censuses, the Census Bureau created a massive national infrastructure of 494 local census offices and hired more than 600,000 temporary employees. We are looking for ways to reduce this footprint, thereby reducing costs associated with space acquisition and other infrastructure, and to further re-envision the field data collection activities.

A significant opportunity to reduce costs lies with case management and route planning. We are looking to the private sector as an example as we also explore techniques to take advantage of automation to more efficiently route our interviewers to addresses, accounting not only for optimum times to visit, but distances, traffic, and other factors to minimize travel and wasted visits. In addition to the application of more current field operations methods, we are exploring adaptive design techniques that can also help us work smarter. Adaptive design refers to the use of previously collected census and survey data, as well as administrative records, to predict individuals' or households' response patterns and preferences in order to increase the likelihood of response and even to determine the optimum time to visit addresses when we need to conduct non-response follow-up. For example, if prior experience tells us that no one is home during the morning, we would not visit that house during the morning.

In addition to efforts to re-envision the field data collection, we are looking at other alternatives to reduce the non-response follow-up workload and to effectively enumerate the people living at these non-responding addresses. One of the promising innovations is the use of data people have already given to the government—administrative records—to enumerate households that do not return the census questionnaire. These data range from information about vacant units collected by the U.S. Postal Service mail-delivery operations to information collected by various federal and state agencies used in their programs, including Internal Revenue Service, Social Security, and Medicare/Medicaid records. The Census Bureau is currently pursuing agreements with federal and state agencies to use records for the 2020 Census. Early research indicates that the potential exists to reduce this non-response follow-up workload significantly by effectively using the information already reported by people to other government agencies. It will not eliminate expensive non-response visits, but could reduce them considerably.

We also have opportunities to reduce the non-response follow-up workload by improving selfresponse. The United States population is increasingly diverse, and the general public's willingness to participate in government surveys is declining. Traditional procedures that offer only mail response, followed by an interview are inefficient. The Internet, in contrast, is becoming an increasingly important tool for self-response. The American Community Survey (ACS) has already implemented a standard Internet survey response tool, which is being used by hundreds of thousands of Americans. Since the Internet response option became available in January of this year, approximately 55 percent of those who completed the survey using a selfresponse option have used the Internet to respond to the ACS. The 2012 Economic Census and various other Census Bureau surveys also offer an Internet response option to businesses and households. The Internet provides a secure and accessible means of answering a census or survey rather than filling out a form and mailing it in, or even in some instances having to send a field representative to the door.

For the 2020 Census, the Census Bureau is working towards an Internet option, but we are also considering other tactics to encourage higher participation rates from a diverse population, incorporating mail, telephone, and other response options that may emerge. As part of our research efforts to increase self-response rates, we will test several tactics. This approach will offer respondents more options under the assumption that a robust strategy will improve respondent engagement and reduce costs.

- Pre-Registration: the Pre-registration is a separate portal and operation from data collection and is launched in a time period ahead of Census Day. This goal of this tactic is to engage respondents and invite them to preregister and tell us their preferred method of communication (cell, text, e-mail, mail, etc.) so that we can reach out to them quickly and easily during the Census data collection phase in the manner that is most convenient for them.
- Internet with No Initial Contact: this is an Internet option where the respondent is
 motivated by our communications campaign to respond to the Census when we
 are ready to "go-live" with our internet data collection website. This option

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radically changes the response options available to the public since the respondent does not need an initial contact delivery or UserID. Sometimes mailing packages do not make it to the respondent or the respondent inadvertently throws out the information. This option allows them to respond anyway. However, this does put the onus on the Census Bureau to correctly identify their address on our list without a UserID so that we don't waste resources or the respondent's time with additional mailings or visits.

- Mail-Internet Push Invitation: on our "go-live!" date, we will mail a letter or
 postcard along with a UserID, to announce data collection, advertise the data
 collection website, and request respondents to log on and complete their
 questionnaire.
- *Telephone Questionnaire Assistance (TQA)*: TQA will support respondents who cannot access the Internet in the "push" timing of the 2020 self-response phase and allow them to respond by telephone with or without a UserID.

We are also working with National Institute of Standards and Technology (NIST) on another potential cost-saver associated with self-response to the census. NIST is leading a public-private partnership to develop an Identity Ecosystem, in response to the National Strategy for Trusted Identities in Cyberspace (NSTIC) initiative signed by President Obama in April 2011. The Identity Ecosystem is an online environment that will enable individuals to validate their identities securely but with minimal disclosure of personal information. If this effort proves successful and the Census Bureau is able to use the Identity Ecosystem, we could further reduce the cost for self-response. We would not need to build a new, separate secure authentication identity infrastructure for the 2020 Census, and maintain appropriate levels of security. In addition to reducing the infrastructure costs, the Identity Ecosystem will make it easier for the public to use the same credentials they are using to communicate with other government agencies.

The last example of a strategy we are pursuing to reduce the cost of the 2020 Census is the Geographic Support System Initiative, which supports the Census Bureau's goals of obtaining the highest quality address and spatial data, improving the data coverage, and expanding partnerships with tribal, state, and local governments, as well as commercial entities and academic communities. The Census Bureau is building on existing partnerships and establishing new ones. These partnerships are critical because these organizations are creating geospatial data and are frequently the most authoritative sources for accurate address and road feature information. These partnerships and the development of quality indicators to assess geospatial coverage of the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) system will be integral in allowing the Census Bureau to assess the feasibility of conducting a more focused address canvassing program. By focusing on areas of change and new development, rather than conducting a costly, inefficient nationwide address canvassing program, literally re-walking areas of the country for which there are no changes or areas which local governments have already provided accurate information, the Census Bureau can further reduce the overall cost of the 2020 Census.

Finally, I would like to note that all of these options are buttressed by Census Bureau's efforts to more effectively integrate Information Technology (IT) services and systems. We have given

our IT organization enterprise-wide authority. Instead of building different IT systems that serve single programs, or even single operations, we are building systems to share across the entire Census Bureau whenever feasible. The benefits of this approach are streamlined organizational efficiencies through centralized operational infrastructure; more efficient resource allocation allowing the Census Bureau's program areas to focus on the core mission; improved operational effectiveness; and improved cost efficiencies through reducing costs associated with redundant IT resources. We have established new governance, which ensures policy, standards, and guidelines are in line with the Census Bureau's strategic priorities. The challenge is to consistently query each IT investment and activity to ensure the Census Bureau is getting the best value and meets the mission goal.

This approach is delivering results, as we are taking advantage of both public and private cloud opportunities. We have used the public cloud to efficiently manage peak load demand at our website for the key statistical data releases. We have consolidated our data centers and virtualized our servers, building a private cloud environment to maximize usage of processing power and achieve economies of scale. We are using this private cloud to deliver a virtual desktop interface (VDI) that allows us to decouple a user's device from any sensitive data, and allowing access to the private cloud through virtualization. This capability has allowed us to dramatically increase our telework program without having to provide government-furnished equipment (GFE) to our headquarters employees.

Moreover, we believe this capability puts us on a strong footing to consider "bring your-own device" or "BYOD" as a real possibility for the 2020 Census. In the 2010 Census, we used a custom-built mobile device and custom-built software to run on that specific piece of hardware. The consumerization of IT, specifically around the public's adoption of smartphones and tablets, provides fertile ground that the Census Bureau needs to leverage for the future. We have a team working on not only the technological considerations and security requirements, but also the personnel policies that would have to accompany a BYOD approach. The team is looking at the impact of consumer mobile devices on the 2020 Census. This includes a broad continuum of options from GFE to BYOD, and combinations thereof. If we are to have the options space available to us late in the decade, allowing us to implement BYOD where feasible, and the flexibility to offer government-furnished devices on the occasions where we must, we must understand the challenges presented by commercial mobile devices. This includes developing applications that run across operating systems (i.e., iOS, Windows and Android), on different sized devices and under different hardware constraints (i.e., hardware profiles). To be successful we must enforce security, processes, technical standards and reusable architectures that work in both a BYOD and a GFE environment. To date we have tested in the field an enumeration application that runs on different operating systems and on different sized devices. We are learning how to code once and deploy to many of these systems and devices. Staff are also engaged in the development of the Census Bureau Privacy Policy supporting BYOD. We have established an enterprise-wide Mobile Device Infrastructure Design Pattern and are actively working on an enterprise-wide Mobile Device Software Design Pattern. The Census Bureau is constantly reviewing the literature on the adoption and penetration of Smartphones and Tablets, and the public's attitudes about bringing their personal technology and data plans to the workplace.

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Maintaining data security is a fundamental priority in the development and maintenance of all of our IT systems. We are actively working on the issues identified in the GAO report, *Actions Needed by Census Bureau to Address Weaknesses*, GAO-13-63, issued in December 2012. Of the eleven issues identified in this report, nine are closed and the remaining two are scheduled for closure on September 27 and September 30. A status report along with artifacts supporting the closed issues was delivered to GAO during the week of August 19, 2013. A separate limited use report, *Actions Needed by Census Bureau to Address Weaknesses*, GAO-13-62SU, contained more detailed observations, which the Census Bureau is also addressing. The Census Bureau has developed and assigned formal Plans of Actions and Milestones (POA&Ms). These POA&Ms are being tracked by the Office of Information Security (OIS) and the status is reported regularly to the Census Bureau CIO and the executive leadership through internal Balanced Scorecard reports and briefings. These activities are on track and the Census Bureau has made improvement of its IT security program and infrastructure a priority.

As I close, I would like to reflect on the experience of the last several budget cycles. The Census Bureau is adjusting its planning to meet the requirements of reduced funding, and at the same time carrying out essential planning work. These challenges are inspiring the Census Bureau to innovate, and seek out new technologies and methods. However, budget uncertainty is also causing significant concerns for the 2020 Census program as we enter that period during which it is crucial to conduct tests so that we can begin applying new technologies and methods to the census operations. We have already delayed planned research and testing activities to later years, and this has resulted in eliminating or postponing field tests planned for FY 2013 until 2014. This means the schedule has tightened for developing, testing, and implementing systems and programs for the actual 2020 Census, which significantly increases the risk the Census Bureau will not be able to incorporate major innovations and make departures from an outdated traditional census design.

The budget request for FY 2014 includes an increase of \$150.7 million from the FY 2013 appropriation level post-sequestration for the 2020 Census, which the Census Bureau will need to support four field tests and other research and testing efforts to effectively develop the new enumeration methods, new field operation processes, more cost-effective IT systems, and the geospatial initiative discussed in this testimony. This work in FY 2014 is critical to meet our schedule to produce and analyze data in time to define requirements and develop systems for a large integration test scheduled for April 1, 2015. The tests are our final opportunity to generate the evidence necessary to make key design decisions related to the cost savings innovations planned for the 2020 Census. FY 2014 and FY 2015 represent an extremely crucial period in the 2020 census planning and development cycle. In FY 2016, we must begin developing major systems for the 2020 Census. We cannot further delay the critical research that will help us make key design decisions for these challenges will require the best efforts of the Census Bureau. We are looking forward to working with the Congress for support to meet the challenges successfully.

Thank you and I look forward to answering your questions.

Mr. FARENTHOLD. Before we go on to Mr. Goldenkoff, I see the gentlelady from New York, Ms. Maloney, has joined us. She is not officially a member of this subcommittee, so at this point, I'd like to ask unanimous consent that she be authorized to participate in this hearing. Without objection, so ordered.

We do have two other speakers at the table. It's my understanding that on behalf of the GAO, Mr. Goldenkoff will speak and Ms. Cha is here because they realized some of us up here are tech geeks and might want to get a little more into the weeds than might otherwise happen. So at this point we'll—we'll recognize Goldenkoff from the GAO.

STATEMENT OF ROBERT GOLDENKOFF

Mr. GOLDENKOFF. Thank you. Chairman Farenthold, Ranking Member Lynch, and members of the subcommittee, I appreciate the opportunity to be here today to discuss the progress the Census Bureau is making in controlling the cost of the 2020 enumeration.

As you well know, the fundamental challenge facing the Census Bureau is how to cost-effectively count a population that is growing steadily larger, more diverse, increasingly difficult to find, and less willing to participate in the decennial.

The cost of counting each housing unit is no longer fiscally sustainable. In 2010 dollars, the Bureau spent around \$16 to enumerate each housing unit in 1970, compared to \$98 in 2010. Much like running up a down escalator, with each decade, the Bureau has had to invest substantially more resources simply to match the results of previous enumerations.

In our past work, we noted that to control costs while maintaining accuracy, actions were needed in at least three areas: first, the Bureau needs to transform itself into a high performing organization; second, the Bureau needs to re-engineer key Census-taking operations; and, third, the Bureau needs to strengthen its IT management and security practices.

Joining me this morning, as was already mentioned, is Carol Cha, director of GAO's IT acquisition management team. And our remarks will focus on the status of the cost containment initiatives within each of those three areas. Specifically, we'll highlight the progress the Bureau has made to date and what still needs to be done going forward.

I would also like to take this opportunity to welcome John Thompson back to the Census Bureau as its newest chief executive and wish him every success going forward. John's experience, both inside and outside the Bureau combined with the new 5-year fixed term of office for the Census director should help provide the expertise and continuity of leadership that will be important for keeping decennial preparations on track in the years ahead.

Overall, we found that the Bureau's plans for controlling enumeration costs show promise if effectively implemented. At the same time, the Bureau's plans contain a number of open questions that will need to be addressed for a successful head count in 2020. For example, in the area of organizational transformation, the Bureau has restructured its entire decennial directorate in order to improve collaboration and communication across its divisions, improve operational efficiencies, and instill a more innovative culture. The Bureau is also developing agency-wide standards, guidance and tools in such areas as risk management and IT investment to reduce duplicative efforts across the Bureau.

These and other actions the Bureau has taken are all important steps forward, however, several initiatives require additional attention. For example, in response to our recommendations, the Bureau has created a cost estimation team reporting to the director and recently hired an individual to lead that group. Going forward, it will be important for the Bureau to finalize its cost estimating policies, procedures and guidance, as we have already recommended, in order to develop reliable cost estimates for 2020.

With respect to re-engineering key Census-taking activities, the Bureau is researching a number of operational changes that may yield significant savings. As John already mentioned, key among these are using the Internet as a self-response option and replacing certain enumerated collected data with administrative records.

To be sure, the new Census-taking methods the Bureau is considering have the potential to reduce costs. As one example, the Bureau estimates that administrative records could save up to \$2 billion by reducing the need for certain labor intensive door-to-door visits by Census workers. However, the Bureau has never used these methods at the scale needed for the decennial, if at all, which entails a degree of operational risk; thus, as the countdown to 2020 continues, it will be important for the Bureau to effectively design, test and implement these new approaches on schedule with an eye toward ensuring they will generate the needed cost savings, function in concert with other Census operations, and work at the scale needed for the national head count.

I will now turn to my colleague, Carol, who will discuss the Bureau's progress in strengthening IT management and security practices.

STATEMENT OF CAROL CHA

Ms. CHA. Chairman Farenthold, Ranking Member Lynch, members of the subcommittee, thank you for inviting us to testify today.

The Bureau currently has a number of research and testing activities that are underway, and plans to use those results to select the IT investments to support the 2020. The technology options being explored collectively represent a dramatic leap from 2010 and, thus, a greater amount of risk for the Bureau. And at this time, the Bureau has not yet achieved the level of institutional maturity needed to reliably bring these solutions to bear.

Accordingly, we have recently initiated work to evaluate the status and plans for the various IT options, which include, as Robert had mentioned, the use of the Internet, a possible use of a Bring Your Own Device model, or BYOD, to enable enumerators to use their own smart phones or other mobile devices to perform field data collection and other activities, as well as the implementation of enterprise-wide IT services such as delivering Bureau-wide storage servers and communication services via the cloud to—in an effort to improve scalability and reduce complexity.

And while these options offer the potential for greater efficiency and effectiveness, that potential is dependent in large part on the Bureau's having well-established IT management and security controls. IT controls that, if effectively implemented, significantly enhance the ability to deliver these solutions within cost, schedule and performance targets, as well as to ensure the protection of the information that they contain.

Our work on the 2010 Census highlighted the mismanagement, major cost, schedule and performance issues associated with the acquisition of several critical IT investments. Many of these problems were caused by weaknesses in IT governance, requirements management and IT workforce planning. For example, in the case of the FITCA handheld computers, functional requirements increased by thousands due in part to a lack of a robust requirements process.

Additionally, our work earlier this year on the Bureau's IT security posture showed that while the Bureau had taken steps to safeguard the information and systems that support its mission, it had not effectively implemented appropriate access controls to protect those systems from intrusion. Accordingly, we have made numerous recommendations aimed at strengthening and improving the Bureau's IT management and security capacity.

To the Bureau's credit, it has made measurable progress to address the areas of IT governance and security; however, more work remains.

It will be critical for the Bureau to stay aggressive in its push to fully implement our remaining open recommendations. By doing so, the Bureau will be better positioned to deliver its planned IT solutions in a predictable and consistent manner and to ensure the adequate protection of these systems.

In summary, on behalf of Robert and myself, the Bureau is making progress along a number of fronts to secure a more cost-effective enumeration, with efforts aimed at transforming the organization, improving the cost-effectiveness of Census-taking methods, as well as strengthening its IT practices; however, a high degree of risk and uncertainty exists, and it will be critical for the Bureau to further define its roadmap for 2020 and to set clear executivelevel decision points to improve its ability to manage those risks as well as achieve desired outcomes.

In addition, your continued oversight will also remain vital to help ensure that the Bureau's on path to a more efficient Census.

Thank you, and we look forward to addressing your questions.

[Prepared statements of Mr. Goldenkoff and Ms. Cha follow:]

GAO	United States Government Accountability Office Testimony Before the Subcommittee on Federal Workforce, U.S. Postal Service, and the Census, Committee on Oversight and Government Reform, House of Representatives
For Release on Delivery Expected at 9:30 a.m. EDT Wednesday, September 11, 2013	2020 CENSUS Progress Report on the Census Bureau's Efforts to Contain Enumeration Costs
	Statement of Robert Goldenkoff Director, Strategic Issues Carol R. Cha, Director Information Technology Acquisition Management Issues

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Highlights of GAO-13-857T, a testimony, before the Subcommittee on Federal Workforce, U.S. Postal Service and the Census, Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

At \$13 billion, 2010's headcount was the costliest in U.S. history. Thus, over the next few years, the

fundamental challenge facing Bureau leadership will be designing and implementing a census that controls the cost of the enumeration while maintaining its accuracy.

This testimony focuses on progress the Bureau is making in three areas key to a more cost-effective enumeration (1) transforming the Bureau into a higher-performing organization; (2) improving the costeffectiveness of census-taking operations; and (3) strengthening IT management and security practices. This testimony is based on completed work that included an analysis of Bureau documents, interviews with Bureau officials, and field observations of census operations in urban and rural locations across the country.

What GAO Recommends

GAO is not making new recommendations in this testimony but reports on the status of past recommendations that the Bureau strengthen its IT management, develop policies and procedures for its cost estimates, and integrate its 2020 Census planning. The Bureau generally agreed with GAO's findings and recommendations and is taking steps to implement them.

View GAO-13-857T. For more information, contact Robert Goldenkoff, 202-512-2757. goldenkoffr@gao.gov or Carol R. Cha at 202-512-4456 or chac@gao.gov. 2020 CENSUS

September 11, 2013

Progress Report on the Census Bureau's Efforts to Contain Enumeration Costs

What GAO Found

In preparing for the 2020 Census, the U.S. Census Bureau (Bureau) has launched several initiatives aimed at organizational transformation, some of which show particular promise. For example, the Bureau is attempting to develop Bureau-wide, or "enterprise," standards, guidance, or tools in areas such as risk management and information technology (IT) investment management to reduce duplicative efforts across the Bureau. Although the Bureau has made progress in these and other areas, if the Bureau is to transform itself to better control costs and deliver an accurate national headcount in 2020, several areas will require continued oversight: cost estimation, integrated long-term planning, and stakeholder involvement. For example, while the Bureau has made progress with long-term planning by implementing some elements of GAO's recommendation that it develop a road map for 2020 planning, it still needs to pull together remaining planning elements, such as milestones for decisions and estimates of cost, into its roadmap.

The Bureau is researching several key operational initiatives that may yield significant cost savings. However, while these initiatives have the potential to reduce costs, the Bureau will be employing them in ways that are new for 2020 and thus entail some operational risk. Key among these are using the Internet as a self-response option, targeting only certain addresses for field verification as the Bureau builds its national list of addresses, and replacing enumeratorcollected data with administrative records under certain circumstances. Bureau tests conducted in 2011 showed that adding an Internet response option to the census could increase its overall response rate, which could save money, since Bureau field staff would need to visit fewer households, which is its largest and most costly census field operation. In addition, the Bureau has estimated that it could save up to \$2 billion if it uses administrative records in 2020 to reduce the need for related costly and labor-intensive door-to-door visits by Bureau employees.

Additionally, the Bureau is exploring technology options for census operations that collectively represent a dramatic leap from 2010. These options include the possible use of a "bring your own device" model to enable enumerators to use their own mobile devices for field data collection. Given the role of information technology in conducting the census, while controlling cost and protecting privacy, it is essential that the Bureau strengthen its ability to manage these investments, as well as its practices for securing the information it collects and disseminates. The Bureau faces several long-standing IT challenges that, if effectively addressed, will significantly enhance its ability to acquire these solutions within cost, schedule, and performance targets. For example, effective workforce planning is essential to ensuring organizations have the proper skills, abilitized its IT workforce plans. Additionally, in January 2013, GAO reported that controls over access to the Bureau's T systems contained deficiencies. Without adequate system access controls, the Bureau cannot be sure that its information and systems are protected from intrusion.

United States Government Accountability Office

Chairman Farenthold, Ranking Member Lynch, and Members of the Subcommittee:

We are pleased to participate in today's hearing to discuss the U.S. Census Bureau's (Bureau) preparations for the next enumeration. Although Census Day 2020 is still more than 6 years away, research and testing activities for the decennial have been progressing for some time, and the Bureau will be making key design decisions in 2014 and 2015. Our reviews of the 1990, 2000, and 2010 enumerations underscore the importance of early planning and strong and continuing congressional oversight to reduce the costs and risks of the national headcount as well as to keep the entire enterprise on track.

At \$13 billion, 2010's headcount was the costliest in U.S. history. Thus, over the next few years, the fundamental challenge facing Bureau leadership will be designing and implementing a census that simultaneously controls the cost of the enumeration while maintaining its accuracy.

The basic design of the enumeration-mail out and mail back of the census questionnaire with in-person follow-up for nonrespondents-has been in use since 1970. A key lesson learned from 2010 and earlier enumerations is that this design is no longer capable of cost-effectively counting a population that is growing steadily larger, more diverse, increasingly difficult to find, and reluctant to participate in the census. The Bureau is well aware that reforms are needed, and plans to significantly change the methods and technologies it uses to enumerate the population. However, the Bureau has never before employed many of these methods at the scale being considered for 2020, if at all, which adds a large degree of risk. Moreover, the Bureau's past efforts to implement new approaches and systems have not always gone well. As one example, during the 2010 Census the Bureau planned to use handheld mobile devices to support field data collection for the census, including following up with nonrespondents. However, due to significant problems identified during testing of the devices, cost overruns, and schedule slippages, the Bureau decided not to use the handheld devices for non-response follow-up and reverted to paper-based processing, which increased the cost of the 2010 Census by up to \$3 billion and significantly added to its risk as it had to switch its operations to paperbased operations as its backup.

As the Bureau launched its preparations for 2020 earlier this decade, we noted that controlling census costs while maintaining accuracy hinged on

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the Bureau addressing challenges in three key areas: (1) transforming the Bureau into a high-performing organization; (2) improving the costeffectiveness of census-taking operations; and (3) strengthening information technology (IT) management and security practices. With this as backdrop, our remarks this morning will focus on the Bureau's plans for 2020, paying particular attention to the status of cost-containment initiatives within each of these three areas. In particular we will discuss where the Bureau has made progress, and management challenges and open questions that the Bureau will need to resolve going forward.

In summary, we found that the Bureau is progressing along a number of fronts to secure a more cost-effective enumeration. For example, the Bureau's organizational transformation efforts, which includes efforts to improve its workforce in order to help the Bureau become more results oriented.

At the same time, innovative enumeration methods such as the use of administrative records to assist with enumerating people, use of the Internet to collect data, and targeted address canvassing might help to control costs, but a number of operational uncertainties remain, such as ensuring privacy and information security with some of the new approaches. Likewise, the Bureau's ability to effectively and efficiently acquire the technological solutions supporting 2020 will be largely dependent on having established, mature IT management controls, an area of long-standing concern to us.

The information in our testimony is based on our previous reports on the 2010 Census, as well as the Bureau's planning efforts for 2020.¹ For this work, among other things we analyzed key documents such as budgets, plans, procedures, and guidance for selected activities; and interviewed cognizant Bureau officials at headquarters and local census offices. In addition, for the work on the 2010 Census, we made on-site observations of key enumeration activities across the country including both urban and less populated areas. To obtain information on various management and organizational reforms that could help the Bureau become more accountable and results oriented, we reviewed our prior work on government-wide reexamination, as well as leading practices and attributes in the areas of IT management, organizational performance,

¹See related GAO products at the end of this statement.

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	collaboration, stewardship, and human capital. ² More detail on our scope and methodology is provided in each published report that this testimony is based on.
	We provided the Bureau with a summary of the information included in this statement, and Bureau officials provided technical comments, which we included as appropriate. We conducted the work that this testimony is based on 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.
Background	The decennial census is mandated by the U.S. Constitution and provides data that are vital to the nation. This information is used to apportion the seats of the U.S. House of Representatives; realign the boundaries of the legislative districts of each state; allocate billions of dollars in federal financial assistance; and provide social, demographic, and economic profiles of the nation's people to guide policy decisions at each level of government.
	Although the complexity, cost, and importance of the census necessitate robust planning, recent enumerations were not planned well. Our prior work has found shortcomings with managing, planning, and implementing IT solutions in the 2000 and 2010 enumerations that led to acquisition problems, cost overruns, and other issues. As a result, we placed both
	² See for example: GAO, Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies, GAO-06-15 (Washington, D.C.: Oct. 21, 2005); 21st Century Challenges: Reexamining the Base of the Federal Government, GAO-05-3255P (Washington, D.C.: February 2005); Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity, GAO-04-394G (Washington, D.C.: March 2004); Comptroller General's Forum, High-Performing Organizations: Metrics, Means, and Mechanisms for Achieving High Performance in the 21st Century Public Management Environment, GAO-04-343SP (Washington, D.C.: Feb. 13, 2004; and Human Capital: Key Principles for Effective Strategic Workforce Planning, GAO-04-39 (Washington, D.C.: Dec. 11, 2003).

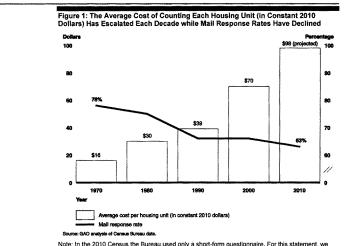
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enumerations on our list of high-risk programs.³ For example, leading up to the 2010 Census, we found that the lack of skilled cost estimators for the 2010 Census led to unreliable life-cycle cost estimates, and some key operations were not tested under census-like conditions.

As shown in figure 1, the cost of enumerating each housing unit has escalated from around \$16 in 1970 to around \$98 in 2010, in constant 2010 dollars (an increase of over 500 percent). At the same time, the mail response rate—a key indicator of a cost-effective enumeration—has declined from 78 percent in 1970 to 63 percent in 2010. In many ways, the Bureau has had to invest substantially more resources each decade just to try and match the results of prior enumerations.

³GAO, Information Technology: Significant Problems of Critical Automation Program Contribute to Risks Facing 2010 Census, GAO-08-550T (Washington, D.C.: Mar. 5, 2008) and High-Risk Series: Quick Reference Guide, GAO/HR-97-2 (Washington, D.C.: February 1997).

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Note: In the 2010 Census the Bureau used only a short-form questionnaire. For this statement, we use the 1990 and 2000 Census short-form mail response rate when comparing 1990, 2000, and 2010 mail-back response rates. Census short-form mail response rates are unavailable for 1970 and 1980, so we use the overall response rate.

Beginning in 1990, we reported that rising costs, difficulties in securing public participation, and other long-standing challenges required a revised census methodology—a view that was shared by other stakeholders.⁴ Since then, we and other organizations—including the Bureau itself—have stated that fundamental changes to the design, implementation, and management of the census must be made in order to address operational

⁴See for example, GAO, 2000 Census: Progress Made on Design, but Risks Remain, GAO/GGD-97-142 (Washington, D.C.; July 14, 1997), and Decennial Census: Preliminary 1990 Lessons Learned Indicate Need to Rethink Census Approach, GAO/T-GGD-90-18 (Washington, D.C.; Aug. 8, 1990).

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and organizational challenges.⁵ In response, the Bureau has stated that containing costs and maintaining quality will require bold innovations in the planning and design of the 2020 Census. The Bureau has also stated its goal is to conduct the 2020 Census at a lower cost per housing unit than the approximately \$98 per housing unit cost of the 2010 Census (in constant 2010 dollars) while still maintaining high quality.

The Bureau's Plans for Controlling Enumeration Costs Show Promise, but Key Challenges Need to Be Addressed

Transforming the Bureau into a High-Performing Organization

The Bureau's experience with the 2010 and prior enumerations has shown that lack of proper planning and not following leading practices in key management areas can increase the costs and risks of later downstream operations. For example, in a self-assessment in October 2008, the Bureau found that its organizational structure made overseeing a large program difficult and hampered accountability, succession planning, and staff development. Moreover, leading up to the 2010 Census, we reported that internal organizational, planning, funding, and human capital challenges jeopardized the Bureau's overall readiness.

In preparing for 2020, the Bureau has launched several initiatives aimed at organizational transformation, some of which show particular promise if successfully implemented.

 Organizational restructuring. The Bureau's organizational transformation took a significant step forward in July 2011 when it created a 2020 Census Directorate that included the office responsible for the American Community Survey, supporting the Bureau's objective to rely on that nation-wide survey as a "test bed"

⁵GAO, 2020 Census: Sustaining Current Reform Efforts Will Be Key to a More Cost-Effective Enumeration, GAO-12-905T (Washington, D.C.: July 18, 2012).

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for cost saving innovations for the 2020 Census. The Bureau is undertaking an organizational transformation of its entire decennial directorate in order to improve collaboration and communication across its divisions, improve operational efficiencies, and instill a culture that, according to the Bureau, encourages risk-taking and innovation without fear of reprisal. The Bureau believes such change is necessary so that it can more effectively control costs and enumerate the population for 2020.

- Enterprise solutions. The Bureau is attempting to develop Bureauwide, or "enterprise," standards, guidance, or tools in areas such as risk management, project management, systems engineering, and IT investment management in order to reduce duplicative efforts across the Bureau.
- Better workforce planning. As the Bureau reexamines how it will plan the 2020 Census, it is also reviewing the employee skills and competencies needed to make that happen, in part by a formal analysis comparing its needs to its in-house capabilities.

The Bureau has made progress in these areas and others. However, they will require continued oversight if the Bureau is to transform itself to better control costs and deliver an accurate national headcount in 2020.

Cost Estimation

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Our prior work has highlighted the need for the Bureau to develop more accurate and rigorous cost estimates for census operations.⁶ The Bureau uses the life-cycle cost estimate as the starting point for the annual budget formulation process and, according to our Cost Estimating and Assessment Guide, a reliable cost-estimating process is necessary to ensure that cost estimates—particularly for large, complex projects like the 2020 Census—are comprehensive, well documented, accurate, and credible.⁷ In January 2012, among other actions, we recommended that the Bureau finalize guidance, policies, and procedures for cost estimation

⁶GAO, 2010 Census: Census Bureau Should Take Acton to Improve the Credibility and Accuracy of Its Cost Estimate for the Decennial Census, GAO-08-554 (Washington, D.C.: June 16, 2008).

⁷GAO, GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs, GAO-09-3SP (Washington, D.C.: March 2009).

in accordance with best practices prior to developing the initial 2020 lifecycle cost estimate. $^{\rm 8}$

In response to our recommendation, the Bureau has created a cost estimation team reporting to the Director. The team intended, among other things, to standardize guidance and training in cost estimation throughout the Bureau. The Bureau recently took the important step of hiring an individual to lead that group. However, until the Bureau finalizes its cost-estimating policies, procedures, and guidance, as we recommended, it runs the risks of developing unreliable cost estimates for 2020.

Integrated Long-term Planning

The Bureau's progress thus far with early planning is noteworthy given its long-standing challenges in this area. In December 2010,⁹ we recommended that the Bureau develop a roadmap for 2020 that integrates performance, budget, methodological, schedule, and other information that would be updated as needed and posted on the Bureau's website and other social media outlets. We also recommended that the Bureau develop a mechanism that allows for and harnesses input from census stakeholders and individuals. The Bureau agreed with our recommendations and brought together some of these elements in an annual fiscal year update of its "business plan," which it issued to Congress in concert with its budget submissions for each of the past 2 years. However, as the approach for 2020 takes shape, the Bureau needs to fully implement our recommendation to pull together remaining planning elements, such as milestones for decisions and estimates of cost into its tactical plan or roadmap.

In addition, we recommended in November 2009 that the Bureau improve its use of a master activity schedule for 2020 to include levels of resources and take other steps that would support systematic analyses of

⁸GAO, Decennial Census: Additional Actions Could Improve the Census Bureau's Ability to Control Costs for the 2020 Census, GAO-12-80 (Washington, D.C.: Jan. 24, 2012).

⁹GAO, 2010 Census: Data Collection Operations Were Generally Completed as Planned, but Long-standing Challenges Suggest Need for Fundamental Reforms, GAO-11-193 (Washington, D.C.: Dec. 14, 2010).

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the risk to the schedule.¹⁰ The Department of Commerce did not comment on that recommendation in its response to that report, but the Bureau has since developed an integrated schedule covering its early research and testing activity that we are reviewing as part of ongoing work. Implementing additional steps such as those we have recommended will help ensure the Bureau's reform initiatives stay on track, do not lose momentum, and coalesce into a viable path toward a more cost-effective 2020 Census.

Stakeholder Involvement

Ensuring active stakeholder involvement and buy-in is critical to highperforming organizations. For example, over the past decade we have reported on the importance of congressional outreach to secure early agreement between the Bureau and Congress on the Bureau's fundamental approach for its next decennial.¹¹

In response to these reports and recommendations that we made, the Bureau has taken several steps forward. For example, in July 2012, the Bureau issued a plan for 2020 Census communications and stakeholder engagement, describing roles and responsibilities, among other elements. In December 2012, the Bureau began quarterly reviews intended to provide internal and external census program stakeholders, including congressional staff, officials from the Office of Management and Budget, and the Department of Commerce and its Office of Inspector General, with a broad and timely status of planning and development projects thereby facilitating strategic guidance and information sharing.¹² These are important strides by the Bureau to ensure its research and planning are transparent. However, the challenge remains for the Bureau to identify tradeoffs among cost, quality, privacy, and security that may arise in the Bureau's proposed approaches, and raise these tradeoffs with stakeholders.

¹⁰See GAO, 2010 Census: Census Bureau Has Made Progress on Schedule and Operational Control Tools, but Needs to Prioritize Remaining System Requirements, GAO-10-59 (Washington, D.C.: Nov. 13, 2009).

¹¹See GAO, 2020 Census: Additional Steps Are Needed to Build on Early Planning, GAO-12-626 (Washington, D.C.: May 17, 2012), and 2010 Census: Cost and Design Issues Need to be Addressed Soon, GAO-04-37 (Washington, D.C.: Jan. 15, 2004).

¹²We also attend these reviews as observers at the Bureau's invitation.

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Improving the Cost-Effectiveness of Census-Taking Operations The Bureau's current research and testing phase represents a critical stage in preparing for a cost-effective 2020 Census. Bureau management will use the results of ongoing research and testing to shape the next decennial census as it determines what new operations will be a part of the 2020 Census design, which operations need to be revised, and how to mitigate remaining risks.

The Bureau may be able to use its research initiatives during the next couple of years to attain significant cost savings. Key among these are three new operational changes being considered—using the Internet as a self-response option, targeting only certain addresses for field verification as the Bureau builds its national list of addresses, and replacing enumerator-collected data with administrative records under certain circumstances. All three initiatives have the potential to reduce costs. However, the Bureau will be employing them in ways that are new for 2020, and they thus entail some operational risk. Going forward, the Bureau needs to ensure they will (1) produce needed cost savings, (2) function in concert with other census operations, and (3) work at the scale needed for the national headcount.

Using the Internet to Collect Responses

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Tests conducted by the Bureau in 2011 showed that adding an Internet response option could increase the overall response rate for the census. The 2011 test results, coupled with the increased prevalence and accessibility of the Internet, led Bureau officials to commit to providing an Internet response option for the 2020 Census. If this option can help achieve an overall increase in the response rate, it can save money, since Bureau field staff would need to visit fewer households during nonresponse follow-up (NRFU), which is the largest and most costly census field operation.¹³ Furthermore, testing has shown that the cost of an Internet survey is low compared to a mail survey, which incurs printing and postage costs. Moreover, web survey responses are generally available more quickly and are of better quality than responses from a mail survey because there is no lag time, as the responses are captured in real time, and there are reminders to prompt the respondent if a

¹³During NRFU the Bureau sends enumerators to collect data from households that did not mail back their census forms. NRFU procedures instruct enumerators to make up to six attempts to contact a household. The 2010 Census NRFU operation cost \$1.6 billion.

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help reduce the amount of time and money spent on following up on late or incomplete census forms.

Targeting Address Canvassing

In the 2010 and earlier censuses, the Bureau mounted a full address canvassing operation, where field staff travelled virtually every road in the country to update the Master Address File (MAF) and the associated mapping database called TIGER (Topologically Integrated Geographic Encoding and Referencing). This labor-intensive effort was one of the more expensive components of the 2010 Census. It required 140,000 temporary workers to verify 145 million addresses (by going door-to-door) at a cost of \$444 million, or 3 percent of the \$13 billion total cost of the 2010 Census. For the 2020 Census the Bureau would like to reduce workload and cost by targeting the address canvassing operation to areas most in need of updating.

Administrative Records

Administrative records are a growing source of information on individuals and households. The Bureau has estimated that it could save up to \$2 billion if it uses administrative records to reduce the need in 2020 for certain costly and labor-intensive door-to-door visits by Bureau employees, such as collecting data in person from nonrespondents, supporting quality control, or helping to evaluate the quality of the census.¹⁴ For purposes of the decennial census, the Bureau is considering administrative records from government agencies, including tax data and Medicare records,¹⁵ as well as commercial sources to identify persons associated with a particular household address. During the 2010 Census, the Bureau made limited use of administrative records. For example, the Bureau used U.S. Postal Service files to update its address list, and it used federal agency records (such as those from the Department of Defense) to count military and federal civilian employees stationed outside of the United States.

 $^{14}\mathrm{The}$ amount of and quality of administrative records the Bureau is able to collect will affect the amount of cost savings it is able to realize.

 ^{15}The Bureau's access to and use of administrative records is governed by agency-specific statutes. For example, the Bureau has access to tax data under 26 U S C. § 6103(j)(1) "for the purpose of, but only to the extent necessary in, the structuring of censuses … and conducting related statistical activities."

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Depending on the results of ongoing research, Bureau officials plan to build a composite of quality administrative records from various sources (i.e., federal agencies, state and local governments, and commercial sources) that it can use to reduce or replace costly field work. Successful use of such a database presents challenges the Bureau will need to address. For example, as we reported in 2012, while the Bureau has access to some federally collected data, it does not have access to all of the federally collected administrative data that could potentially help it reduce the cost of the 2020 Census.¹⁶ Further increasing the Bureau's access to records may involve negotiations with states or other federal agencies, potential statutory changes, and discussions of personal privacy protections, and most likely it would be a time-consuming process. In addition, the use of administrative records may present difficult decisions about tradeoffs between cost and quality, which the Bureau is actively researching to inform.

Strengthening IT Management and Security Practices

Additionally, the Bureau is exploring technology options for census operations that collectively represent a dramatic leap from 2010. These options include the possible use of a "bring your own device" model to enable enumerators to use their own mobile devices for field data collection. Given the role of information technology in conducting the census, while controlling costs and protecting privacy, it is essential that the Bureau strengthen its ability to manage these investments, as well as its practices for securing the information it collects and disseminates. The following represent long-standing IT challenges that, if effectively addressed, will significantly enhance the Bureau's ability to acquire these solutions within cost, schedule, and performance targets.

IT Governance

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The Bureau lacks a sufficiently mature IT governance process to ensure that its investments are properly controlled and monitored. Implementing a governance framework and system development methodology are challenging tasks that can be aided by having robust implementation plans. Such a plan is instrumental in helping agencies coordinate and guide improvement efforts. In September 2012,¹⁷ we reported that while

¹⁶GAO, 2020 Census: Initial Research Milestones Generally Met but Plans Needed to Mitigate Highest Risks, GAO-13-53 (Washington, D.C.: Nov. 7, 2012).

¹⁷GAO, Information Technology: Census Bureau Needs to Implement Key Management Practices, GAO-12-915 (Washington, D.C.: Sept. 18, 2012).

the Bureau developed the Enterprise Investment Management Plan, which was to be applied to all investments, the plan did not contain guidelines for the membership of investment review boards or the frequency of board meetings, and it omitted cost and schedule performance thresholds for escalating issues to higher-level boards. Accordingly, we made recommendations to address these weaknesses. The Bureau agreed, and in response to our recommendations, in June 2013, program officials provided us with an updated plan, which was finalized on September 28, 2012. However, while the plan now states that investment review boards should meet at least monthly, the plan does not specify thresholds for escalating cost, risk, or impact issues. The Bureau needs to take action in this key area as we previously recommended to ensure that its senior executives have adequate insight into project health to make timely decisions.

Requirements Management

Proper requirements management remains a long-standing challenge for the Bureau. The Software Engineering Institute states that a disciplined process for developing and managing requirements can help reduce the risks of developing or acquiring a system. Unfortunately, the Bureau has had difficulties with this in the past, as illustrated by the problems it had in managing requirements during the 2010 census, which were largely responsible for the Bureau's abandonment of its handheld enumeration devices and increased the cost of the census by up to \$3 billion. In September 2012, ¹⁸ we reported that the IT and 2020 Census directorates had independently drafted new requirements, instead of developing a Bureau-wide requirements management plan, despite our prior recommendation. To address the Bureau's recurring weaknesses in requirements management, we therefore recommended that it establish and implement a consistent requirements development and management process across the Bureau. Bureau officials agreed with the recommendation and in response, in August 2013, program officials stated that they began using a new life-cycle management tool to manage requirements Bureau-wide. While this is a good start, it remains to be seen whether the Bureau will fully implement the new tool and institutionalize the requirements management process. Until the Bureau

¹⁸GAO-12-915.

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fully implements our recommendation to establish a consistent requirements development and management process across the Bureau that has clear guidance for developing requirements at the strategic mission, business, and project levels and is integrated with its new system development methodology, it will not have assurance that the IT systems delivered for 2020 will actually meet user needs.

IT Workforce Planning

As discussed earlier in this statement, effective workforce planning is essential to ensure organizations have the proper skills, abilities, and capacity for effective management. The Bureau has not yet finalized its IT workforce plans. In 2012, we reported that the Bureau had taken limited steps to develop IT human capital practices, such as inventorying critical competencies among its IT staff.¹⁹ Yet many key steps remained to be implemented. In particular, the Bureau had not developed a Bureau-wide IT workforce plan, identified gaps in mission-critical IT occupations, skills, and competencies, or developed strategies to address gaps. Accordingly, we recommended that the Bureau establish a repeatable process for performing IT skills assessments and gap analyses that can be implemented in a timely manner. The Bureau agreed with the recommendation, and in response, in June 2013, Bureau officials stated that they plan to complete a skills and needs assessment for the Bureau's IT workforce by the end of this month. Officials also reported that they have a workforce planning team that has developed a strategic workforce planning process and implementation plan. While the Bureau has taken certain steps to improve its IT workforce planning processes, going forward it will be important for it to fully establish a repeatable process for performing skills assessments and gap analyses, as we recommended, that can be implemented in a timely manner and better enable managers to address any skills gaps in preparation for the 2020 Census.

IT System Security

Critical to the Bureau's ability to perform its data collection and analysis duties are its information systems and the protection of the information they contain. A data breach could result in the public's loss of confidence in the Bureau, thus affecting its ability to collect census data. Access

¹⁹GAO-12-915.

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controls are designed and implemented to ensure the reliability of an agency's computerized information.²⁰ Access controls that are intended to prevent, limit, and detect unauthorized access to computing resources, programs, information, and facilities, are referred to as logical and physical access controls. Inadequate design or implementation of access controls increases the risk of unauthorized disclosure, modification, and destruction of sensitive information and disruption of service.

In January 2013, we reported that the Bureau's IT systems' access controls contained certain deficiencies.²¹ For example, the Bureau did not adequately control connectivity to key network devices and servers, identify and authenticate users, or limit user access rights and permissions to only those necessary to perform official duties. An underlying reason for those weaknesses was that the Bureau had not fully implemented a comprehensive information security program to ensure that controls were effectively established and maintained. Accordingly, we recommended that the Bureau take several actions, such as clearly documenting its assessment of common controls for information systems before granting an authorization to operate and fully developing an incident response plan. In response to the report, the Bureau indicated it would work to identify the best way to address our recommendations. The Bureau reported that it has efforts under way to address our recommendations; however, more work remains. For example, according to Bureau officials they have been working to better track assessments of their common controls as part of a new risk management process. They expect to complete the transition to the new process by the end of this month. While the Bureau has recently taken key steps to address its IT security weaknesses, certain steps remain. Having adequate controls over access to its systems, as we recommended, would help the Bureau to better ensure that its information and systems are protected from intrusion.

²⁰Access controls include those related to (1) protection of system boundaries, (2) identification and authentication, (3) authorization, (4) cryptography, (5) audit and monitoring, and (6) physical security.

²¹GAO, Information Security: Actions Needed by Census Bureau to Address Weaknesses, GAO-13-63 (Washington, D.C.: Jan. 22, 2013).

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Concluding Observations	The Bureau is moving forward along a number of fronts to secure a more cost-effective 2020 enumeration. Significant research is already under way, and the Bureau is responding to our past recommendations. A little more than 6 years remains until Census Day 2020. While this might seem like an ample amount of time to finalize the Bureau's planning process and take steps to control costs, past experience has shown that the chain of interrelated preparations that need to occur at specific times and in the right sequence leave little room for delay or missteps.
	Thus, as the Bureau's 2020 planning and reform efforts gather momentum, the effectiveness of those efforts will be determined in large measure by the extent to which they enhance the Bureau's ability to control costs, ensure quality, and adapt to future technological and societal changes. Likewise, Congress can hold the Bureau accountable for results, weigh in on key design decisions, provide the Bureau with resources the Congress believes are appropriate to support that design, and help ensure that the gains made to date stay on track. The Bureau's initial preparations for 2020 are making progress. Nonetheless, continuing congressional oversight remains vital.
	Chairman Farenthold, Ranking Member Lynch, and Members of the Subcommittee, this concludes our statement today. We would be pleased to respond to any questions that you may have.
Contacts and Acknowledgments	If you have any questions concerning this statement, please contact Robert Goldenkoff, Director, Strategic Issues, at (202) 512-2757 or goldenkoffg@gaa.gov; or Carol R. Cha, Director, Information Technology Acquisition Management Issues, at (202) 512-4456 or chac@gao.gov. Other individuals who made key contributions include Ty Mitchell and Shannin G. O'Neill, Assistant Directors; Robert Gebhart; Nancy Glover; Lisa Hardman; Vernetta Marquis; Aku Pappoe; Dan Webb; and Timothy Wexler.

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Mr. FARENTHOLD. Thank you very much, and I'll take the first stab at it, recognizing myself for 5 minutes of questioning.

Mr. Thompson, the number we hear is \$16 per household. I assume the typical suburban or urban household is not your problem in that dollar amount. I got my Census form in 2010, filled it out and mailed it back. I couldn't have cost \$16.

Where are your high dollar problems and what—do you have any specific thoughts on how you address those?

Mr. THOMPSON. I do, Congressman. A lot of the cost in the Census is built up in the infrastructure required to collect the information from respondents that, not like you, don't respond and are very difficult to get to respond. So to the degree that we can reduce that infrastructure by using some of the operations research methods, by using administrative records, as you suggested before, that's where we're going to really reduce the cost, and then we can apply some additional methods to make the way that the interviewers work more efficient and effective.

Mr. FARENTHOLD. Now, is the \$16 a current number, or wasn't 2010 substantially higher than that? Do you know?

Mr. THOMPSON. My good colleague here, who estimated the cost, said it was much higher.

Mr. Goldenkoff. It was \$100.

Mr. THOMPSON. Yeah.

Mr. GOLDENKOFF. About \$98 per housing unit.

Mr. FARENTHOLD. So it's close to \$100 in—on the last Census, when historically it's been more like 16.

Mr. GOLDENKOFF. Yes. That's the average overall, but it's been going up every single decade.

Mr. FARENTHOLD. Okay. Is your microphone on?

Mr. GOLDENKOFF. Sorry. It was \$100 on average per housing unit in 2010, and I think that was up from around \$70 per housing unit in—in 2000.

Mr. FARENTHOLD. Okay. All right. Let's talk—you're talking a little bit about technology. I'm happy to wee you brought a laptop, Mr. Thompson. Maybe you're atypical of a government that doesn't seem to be able to compute its way out of a paper bag.

You're talking about a cloud-based system. Are you developing your own cloud-based system or are you outsourcing to a private company that has an existing cloud infrastructure?

Mr. THOMPSON. Right now we are building our own cloud system, but we are in consultation with private sector experts to build that. We have to—right now we have to build our own, because we believe that is the best way to maintain the security of the Census information.

Mr. FARENTHOLD. In that case, so that brings up my next question, actually, with respect to security. As you talk about using other records that the government has to ease your job, that creates a level of information sharing between—between agencies and the obvious technical and privacy associate—issues associated with that. In light of the information that is leaking out from Mr. Snowden at the NSA, how—are we opening a can of worms there with respect to privacy that we need to be worried about, and do you feel you can access that data from other agencies without specific congressional authorization? Mr. THOMPSON. That's—those are certainly good points. So let me start by saying that we are actively researching the use of administrative records to improve the Census. We'll take in information from other agencies. We give no information back out of the Census Bureau. Once we have the information, we protect it internally and nothing—nothing leaves the Bureau.

Mr. FARENTHOLD. Now, that's what the NSA thought, too.

Mr. THOMPSON. Well, let me also say that you mentioned security issues. And security is—I think is one of the most important issues in assuring the public that their information is confidential, and that's one of the reasons I was really glad to see when I came on that the GAO was looking at the Bureau's IT security. IT security is an ongoing challenge.

Mr. FARENTHOLD. I'm kind of short on time. So do you feel—do feel like you're going to need congressional authorization to do some of this stuff, yes or no?

Mr. THOMPSON. I think we'll need the help of the Congress in some instances.

Mr. FARENTHOLD. All right. And let me go to Ms. Cha for a second on a technical issue. We hear a lot of discussion about needing to gear up now, but in terms of Internet time, if we're looking at a do-it-yourself, do—how much of this work can we do now, how much do we have to wait until we're a little closer because we don't know what devices are going to be in vogue or what—you know, what new technology will be developing in that time frame?

Ms. CHA. Mr. Chairman, thank you for the question. Well, as I mentioned earlier, the Bureau is undertaking a number of exploratory measures to look at what technology is available. I think what's important to be mindful of is that the Bureau focus on institutionalizing those IT management and security controls at this time in order to be in a position to effectively deliver those solutions, whether—my understanding from Director Thompson is that the current plan is to start the development planning work for systems—

Mr. FARENTHOLD. And do you agree with—I'm sorry. Do you agree with Director Thompson that an in-house system is necessary and as cost-effective as, say, outsourcing to Amazon or RackSpace or some company like that for the cloud services that already has a big infrastructure in place? Ms. CHA. Well, Mr. Chairman, we haven't done the work associ-

Ms. CHA. Well, Mr. Chairman, we haven't done the work associated with that, so it's hard for me to say. Once we get that information and get a clearer sense of this—of the roadmap that they intend to—to craft, we'll be in a better position to comment.

Mr. FARENTHOLD. Yeah. I just worry about large capital expenditures in a high tech area that changes for a Census that is done once every 10 years.

I've already gone a little bit over my time, so in fairness, I will recognize Mr. Lynch for 6 minutes and 17 seconds.

Mr. LYNCH. Thank you, Mr. Chairman. I don't think I'll need that, but I do want to ask, the impact of sequestration, I realize that you do work over the 10-year Census period to get us to a point that we deliver the Census at the end of that period as accurately as possible. And I know in March of 2013, we got a letter from Secretary of Commerce Rebecca Blank, who warned that—she was Acting Secretary, actually, but she warned that sequestration could, and I want to quote from her letter, she said, "it could force the agency to delay the economic Census," which is the once-every-5-year survey that forms the basis for a wide range of economic indicators, from GDP to unemployment rates.

Sequestration also could force the Bureau to conduct fewer field tests and increase their reliance on existing data, and delay evaluation programs and operational design decisions until 2015. Census advocates also say that the budget cuts will lead to a less-informed government and create a more expensive 2020 enumeration and endanger data that business, researchers and State and local governments utilize.

So let me ask you, Director Thompson, do you agree with the advocates that the across-the-board cuts to the Census can yield some damaging and negative results that can affect not only the government policymaking, but also economic decision-making in the private sector?

Mr. THOMPSON. Congressman, I do agree with that. The Bureau, because of the limitations in 2013, had to move several tests back to 2014. These include testing adaptive design methodologies, which are statistical ways to make the non-response follow-up more efficient, as well as ways to minimize the number of visits that you would make to households, and to test administrative records and reducing the workloads. That's been moved back to 2014. Also some of the products on the economic Census have actually been delayed.

So 2014 is a critical year, and without adequate funding, we'd be forced to make decisions between what to do, what not to do. These would involve the tests I just mentioned; it could also involve tests that would allow us to reduce—to reach our goal of doing a targeted canvassing. So funding for the Census Bureau in this time is very critical.

Mr. LYNCH. All right. I understand it will accommodate some of these sequestration effects. The Bureau discussed reducing contract work and discussed not filling vacancies that are being created through attrition. Can you further describe the Bureau's plan to address those type of cuts and reductions going forward?

Mr. THOMPSON. Well, I could, but I think it would take a long time as—at the hearing. As we went over the various scenarios, it could—

Mr. LYNCH. Well, let's talk about the trends.

Mr. THOMPSON. But—but in a general sense, as I said before, the big issue would be without the adequate funding, we would be in a position where we would be deciding what research and development to do for 2020 and what research and development not to do. And 2016 is the year—is a key year for us to begin developing the systems for the 2020 Census, and we would be developing those systems without as much information as we would use, we would not be building in the cost-saving methods that we would. So that we're putting the program more and more at risk by pushing things further into the decade.

Mr. LYNCH. Let me ask you, I know from my own experience that especially with phone lines, you know, fewer and fewer people have phone lines, and I know that you—the traditional way has been to, you know, call in, follow up and—but now place is less important, but no one—you know, we have one because we just don't get rid of it, but a lot of people don't have phone lines anymore and so place, address is less important to the American consumer.

Are you having—are you having trouble with that or have you developed a—a way of dealing with that that doesn't reduce your accuracy in terms of tracking people?

Mr. THOMPSON. Yeah. This is—this is another topic we could talk about for a long time, because I used to deal with this with my previous company that I worked at. We did the biggest telephone survey for the Federal Government.

Mr. LYNCH. Were you with the CIA?

Mr. THOMPSON. No. This was the scientific survey. I'm sorry.

Mr. LYNCH. Oh, okay.

Mr. THOMPSON. And—but these—these are—these are—these are really, really important issues, because cell phones, as you say, are not address-based, so you have to do more probing interviews to determine where a residence is. And there are ways you can do this. They're more expensive. You also can't use auto dialing techniques to call cell phones, because they're protected under various acts, so that makes it more expensive, too, but—but there—there—there's methodology to deal with it; it's just more expensive and more time-consuming, and the response for dialing cell phones is lower than for land lines.

Mr. LYNCH. Yeah. Yeah. Okay. With the remaining time, if I could ask representatives from GAO, do you see what the implications could be for the Census by way of the sequestration cuts?

Mr. GOLDENKOFF. Yeah. It's—it's the sequestration cuts themselves, the—as well as uncertainty in funding that comes from a continuing resolution and, you know, a lot of this is congressional policy, so I don't want to weigh in there, but the fact is is that the Census Bureau has essentially scrapped its approach, its old approach for taking the Census, these tried and true methods, and it's trying something new for 2020.

And so past experience has shown that upfront research and testing, these early investments in research and testing are critical to stave off cost increases down the road. So to the extent that budget cuts and uncertainty in funding forces the Bureau to put off a lot of the decisions and testing into the future, it just puts the entire operation at risk.

Mr. LYNCH. Thank you. Mr. Chairman, I yield back.

Mr. FARENTHOLD. Thank you very much. At this time we'll recognize the vice chair, Mr. Walberg, for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman. And thanks to the panel for being here.

Certainly around Census time, probably one of the greatest glut of emails, phone calls, letters, contacts we receive is about, why, you know, why does the Census do this to us? And specifically about questions.

But let me go back to a train of questioning the chairman began to some degree, and that's on the historic cost, \$16 per household. And you've indicated that that has been growing consistently over the time, and this past being \$100 per household.

What's the driving force behind, Mr. Thompson, the cost, as you see it? And then Mr. Goldenkoff, I want to ask you the same.

What's the driving cost behind that consistent increase in the cost per household?

Mr. THOMPSON. Let me take this from a couple perspectives. In some censuses, the 2000 Census, which I was intimately involved in, a big component of the increase in costs was a lack of agreement on the design until late in the game. And if you couple that late in the decade. And if you couple that with the growing pressures on the Census Bureau to count everyone as accurately as possible, or to count them—the population very accurately, that's driving the cost up. For the 2010 Census, looking at that, there are forces on the

For the 2010 Census, looking at that, there are forces on the Census Bureau to provide an accurate count, the population is becoming much more diverse, and the big problem is, at least in my view, was that the Bureau was using methods to do this, to try to produce this count, that were essentially generated in 1970, and it's—and as—as Mr. Goldenkoff said, as previous Director Grove says, those methods are unsustainable for taking censuses in the future.

So it's a combination of the population becoming much more complex, much more diverse, pressures on the Census Bureau to produce extremely accurate data, and using methods that are no longer up to the task.

Mr. WALBERG. Mr. Goldenkoff, your response.

Mr. GOLDENKOFF. Those were all accurate statements and things that GAO has said in years past. Basically as the population has become more diverse, the Census Bureau has to conduct more operations to ensure everyone is counted accurately. You have people living in basements and converted attics and in sheds in backyards, people living in cars. If everybody filled out their Census form when they received it, we could probably—the Census Bureau could do a very cost-effective Census, but of course they don't, and it's the field operations, it's the constant follow-up operation, a lot of redundant operations that are needed that if you don't catch someone in one operation, you'll get them in a second operation or a third or a fourth.

So everything that John has said is true, but I'll add one more aspect to this. It's all well and good to have these redundant operations, but what I think the Bureau needs to do a better job of is determining the return on investment of each one of those Censustaking operations. For example, to develop an accurate address list, something in the neighborhood of around a dozen separate operations were used. Some of those add accuracy, some of those actually may create more noise.

Mr. WALBERG. Could the—just jumping in there. With the lists and maps as well, would the private sector be able to accomplish an assist for us at a far more accurate and reduced cost simply because we know there are lists out there? I mean—

Mr. GOLDENKOFF. Well, yes and no. I mean, first of all, probably the most accurate lists in terms of where mailboxes are located comes from the Postal Service, and the Bureau is already using that.

Where the challenge comes in is the people who live in unconventional housing units, and that's where some amount of address where the address canvassing comes in where the Bureau goes door to door looking for clues that people might be living in a basement or in an attic or in the shed in the backyard or possibly in the car. There are homeless people out there. People are very mobile. So it's really not clear if the private sector has a better address list.

Mr. WALBERG. Are we asking too much, our questioning process. Are we obtaining a greater amount of information than really is required? Is that part of the cost?

Mr. GOLDENKOFF. Well—go ahead.

Mr. WALBERG. Mr. Thompson. Mr. THOMPSON. I—well, I believe that the information we collect on the decennial Census is extremely critical, and I could go over the uses of it. It's used for basically enforcing civil rights. It's used for redistricting purposes.

I will also say that we provide that information, the topics in the 7 year to the Congress, and then we provide the actual questions in the 8 year to make sure that we are in agreement with the Congress before we take the Census on the—on the content of it.

Mr. WALBERG. Well, I guess that—that's—that's, again, a great concern of my constituents and many people, that we are committing acts of intrusion beyond what seems to be necessary to people. And, of course, when we're talking about costs, I think it's a question that ought to be addressed as well. Are we collecting absolutely necessary information, are we going overboard in certain cases, and are we providing information that actually gives help? So I see my time has expired. I yield back.

Mr. FARENTHOLD. Thank you very much. We'll now go to Ms. Maloney for 5 minutes.

Mrs. MALONEY. Thank you very much. And congratulations Mr. Thompson, on your new role as Director of the Census Bureau. I was very pleased to have sent a letter supporting your nomination during Senate confirmations, and I was very pleased that Congress last year passed legislation that included a provision that I had authored under separate legislation for a long time that makes the director of the Census a presidential term appointment of 5 years, subject to the confirmation of the Senate, and this is very important, so that the director is tied to the needs of the Census and not to an election calendar.

And I agree with your testimony today that credible, objective and timely data on population growth is fundamental to a democracy, incredibly important for fair representation and fair distribution of hundreds of billions of dollars in Federal aid.

And your testimony today on the escalating cost, now up to roughly \$100 a survey, I'm really pleased to hear that you're looking at new initiatives to cut those costs, including using the Internet as a self-response option and replacing the door-to-door collection with administrative records under certain circumstances.

But relying on the Internet, it potentially could save a great deal of money, but not everyone has access to an Internet or-and people don't know how to use it, particularly the elderly and certain populations. So is there a risk of an undercount in specific populations as we rely or move to relying on an Internet response?

Mr. THOMPSON. Well, Congresswoman, you're hitting a very important point in terms of how we have to take the Census in the United States; that is, there's no one method that will be the right method for each segment of our diverse population. The Internet is a—is a vehicle that can be used to enumerate a large part of our population, in my opinion, and it will save—it will result in a lot of resource savings. That doesn't mean we're going to do away with the mail for everyone, or we're going to not have to go visit them and talk to them with interviewers that speak in language or various other methods, but we have to realize that if we can make savings in one area, we can use those savings to target methods to make sure that every part of our diverse population is counted. Mrs. MALONEY. And what's the update on these operations? Are

Mrs. MALONEY. And what's the update on these operations? Are you—do you have a lesson plan or a plan of how you're going to use the Internet that's been produced and are you putting that into effect, or where does it stand?

Mr. THOMPSON. So right now we are in the process of doing research on a small scale that's aimed at how we can motivate our response to the Internet. We're looking at some various other options, which would include a pre-registration so people might sign up in advance to do the Census, but we're—we're in the beginning stages of doing that work, and that's what we really need to—we need to focus on that if we're going to be able—and get the funding to do it.

Mrs. MALONEY. Okay. Can you elaborate on your testimony on the \$2 billion projected savings if you use administrative records in 2020 to reduce the door to door? And exactly how would that work? And certainly saving money is necessary, but—but are there risks to increasing your reliance on administrative records, and what can you do about these records, and what particular types of records would the Bureau seek? Who would have access to these records, and what type of information would the Bureau seek to verify on relying on administrative records?

Mr. THOMPSON. Well, I think the 2 billion figure was mentioned by Robert, and I need to get straight with him on exactly where it came from, but—but I would—I would stipulate that there are significant savings to be realized by using administrative records. And the Census Bureau has used—we have used administrative records before on a small scale, as was noted, we've used Postal Service records, we've used military records to count the military overseas. And the Secretary of Commerce has really broad discretion in acquiring administrate records working with other agencies.

The big thing is—one of the big things is deciding on some issues as to would you use administrative records in lieu of at least trying one contact on non-response follow-up? That's something that we need to talk about, need to really understand and get widespread buy-in on as to whether that—that would be acceptable. That would probably offer the greatest savings. There are other options for using administrative records.

I will—I will say that when the Census Bureau gets records from anywhere, the Postal Service, any source of administrative records, we keep those records confidential. We do not give information back out of the Census Bureau. In fact, within the Census Bureau, only those individuals that need to actually access the records have access to them, and we—to the extent we can, we take identifying information off of the records. We have used records in our research so far from a variety of sources, from HUD, from Social Security, the Indian Health Service, the CMS. We—we are looking to really work with the Congress to get endorsement that this is the right methodology, that there is support for this methodology throughout the decade.

Mr. FARENTHOLD. Thank you very much. We'll now go to the gentleman from Georgia, Mr. Collins.

Mr. COLLINS. Thank you, Mr. Chairman. This—being new to from this position, looking at this the first time as I've started digging into this with my committee in the committee side, but also my staff, this is an interesting area that often gets overlooked with all the headlines and everything else in the world. And as I—as I made a statement during all this, I said a lot of times the big stuff will take care of the big stuff, but it's the things like this that really matter to people, because it's amazing how many questions we get on this and how many issues, and especially from a cost perspective.

I want to ask some questions that sort of—are not random, but sort of rapid fire, and then some just from my own case. Mr. Goldenkoff, you had said that people are less willing to participate. I'm going to come back to that statement here in just a moment, but I have a question that I just haven't found. What is the percent of non-response follow-up? What is—what is the percent of those who—Ms. Cha, anybody who wants to answer this real quickly.

Mr. GOLDENKOFF. In 2010, it was—the response rate was in the low 60 percent, I believe.

Mr. COLLINS. So 60 percent did it the normal, proper way. They get the envelope in the mail, they respond, they turn it back in and—

Mr. GOLDENKOFF. Exactly. It was like 60-plus. Something like 63.

Mr. THOMPSON. You have a nice chart in your—in your prepared statement.

Mr. GOLDENKOFF. Yeah, I do.

Mr. COLLINS. And I may—I may just be missing the number. Out of curiosity, I've asked.

Mr. Goldenkoff. 63.

Mr. COLLINS. Just curious. And—because the question was just raised on the Internet. What is the highest percentage of demographics that actually turned it in the proper way?

Mr. Goldenkoff. I——

Mr. COLLINS. Age demographics.

Mr. THOMPSON. So the characteristics of those that don't return the questionnaires—

Mr. COLLINS. No. I want to know the ones that do.

Mr. THOMPSON. That don't return the questionnaire, tend to be more minority, more—

Mr. COLLINS. No, no. I want to know those who do.

Mr. THOMPSON. They tend to be more non-minority, more owner than—

Mr. COLLINS. Elderly? Senior adult, 45 and over? 55 and over? 65 and over? Because I have—I have a purpose of the question. I'm not trying to lead you—

Mr. THOMPSON. No, no, no, no.

Mr. COLLINS. —a rabbit hole here.

Mr. THOMPSON. I believe—I believe in the research that I—that I've done that the elderly do respond at a higher rate than—than than the young. That—

Mr. COLLINS. Because one of the concerns is if we use the Internet, the elderly will be, you know, disenfranchised, then we'll then we're turning it on the proper way and they're going—they tend to be more responsive to this. And—and that's why—I'm not trying be tricky. I was just trying to—you know, as we look at the honest answers here and looking at it as we go forward.

Mr. GOLDENKOFF. The Internet is just an additional method, it's not that the other methods are being tossed. It's just one more method that people can use.

Mr. COLLINS. But many times—

Mr. GOLDENKOFF. It's another option.

Mr. COLLINS. But many times when this conversation comes up, we throw—this comes up in a lot of other areas that we're undercounting, we're doing these kind of things based on—and so I just wanted to get that out there.

I want to follow up also—I wish I had far more time than this, but we'll get into, I'm sure, more—

Mr. FARENTHOLD. The second round.

Mr. COLLINS. Mr. Chairman, we'll get this. I want to go back to the one that we get a lot, and it's balancing privacy and effectiveness. And especially in the ACS, this is where we get a lot of questions. And I follow up on the—Congressman Walberg's questions as well. Are we asking, you know, too much? And I think—well, I'm interested in what you said, that you're going to bring the questions to Congress. Do we see these? Does that come in the form of legislation or is that just merely informational?

Mr. THOMPSON. We submit the questions to the Congress. It's if the Congress wants to take action, they would have to enact legislation.

Mr. COLLINS. Okay. So you're just bringing this for informational purposes, and if there—if there was need to be changed, then okay. Thank you for that.

Mr. GOLDENKOFF. Mr. Collins, on the ACS, those questions at least initially, you know, it evolved from the Census long form. They were—they were tied to legislation.

Mr. COLLINS. Oh, I get it. But mostly we're not using the long form anymore, we're using the short form, we're taking it more, you know, frequently. And these are questions that come in, and then, of course, you get into the, as you said earlier, less willing to participate, and especially in this environment that we're currently in, which will probably get not a lot better as far as people trusting the government and trusting the information to be held. These are the kind of questions we get in our office all the time.

And, you know, one of the issues that, you know—you know, given the public's increased skepticism here, I think we've got to do a better job of how we, you know, ask the questions and are we properly asking, and then also doing away or de-emphasizing, because I've looked into this, there's been one prosecution for not turning in your Census data, yet we have it on there and it is in law and I understand that, and the threat is if you don't turn this in, we're going to prosecute you. I think a little less emphasis on that when people call, it would probably help a great deal, because the next thing they do is they call my office and say, I'm not sending this stuff in. They don't need to know this. Are they going to prosecute me?

So maybe more of a follow-up than anything else. The questions that come from there, however, as we do this, the ability to save money, the ability to look at this, I am very concerned, as the chairman is, that we're developing software, we're developing the platform process now that could really be outdated in 6 to 7—you know, 6 years, 7 years as we start again. What's the thought process that went into that, not just laying groundwork, as you said, but I'm concerned that even the answers you get now may be outdated even in 2 or 3 years. So what is being taken into account there?

Ms. CHA. Well, I can't speak on the Bureau's behalf, but I can tell you that high performing organizations, what they do is they typically have an internal team that is tasked with looking at and keeping up with the key technological trends, and to anticipate and identify those disruptive technologies that may affect their core business, and then develop options for—for actually implementing them into their business.

Ms. CHA. So, and that is occurring in both the Federal and the private sector space. So that is just one example in the Federal sector. When you look at the Department of Transportation, they do have certain major programs, for example, that have a technology scan and assessment group that, for example, looks at technology options for deploying things such as connected vehicles, for example. So those things are occurring, but I think Director Thompson would be in a better position to talk about what they are doing to ensure that they stay abreast of the current— Mr. COLLINS. Mr. Chairman, we'll come back to that but this is

Mr. COLLINS. Mr. Chairman, we'll come back to that but this is the question because before this committee in particular, we hear more problems, and I think, Mr. Chairman will agree and the ranking member as well, we hear more concerns on IT mismanagement and expenses almost than any other thing that we do. And so it is really concerning to me when I say we're going to build our own system. So I will refer back to the chairman and we'll continue on.

Mr. FARENTHOLD. Thank you very much. You know the Lord works in mysterious ways. Mr. Collins brought up the American community survey. I realize this committee had a hearing on that last year, but oddly enough, guess what I got in the mail last month? Guess what phone call I got last week, very threatening nature, by the way, because I had not yet filled it out because I wanted to go through this hearing first.

I do think at some point we'll review that, and I expect Mr. Collins and I would love to visit with you specifically about that, and if we determine that everything wasn't covered last year, we may jump into that again. It may be time to review what we are asking. And when you are asked questions like what your mortgage is, how much your electric bill is? I understand some of the purposes of these and the committees that would want them, but it's not raised well to the American people, and it's an issue that I get a lot. That is obviously out of scope of this hearing. We were talking about costs. But I do think it remains an issue that a lot of our constituents are concerned about.

So let me go on with a couple of questions. We talked a little bit, Mr. Thompson, and actually I'm going to take this to the GAO because this was before your time, the electronic slate program that was, we paid to develop custom hardware and software for the enumerators last time around in 2010. It's my understanding that that never really worked beyond them being able to enter their time. From practical purposes, they weren't able to put a lot of data in that. Is that consistent with your findings or have you investigated the success of that at all?

Ms. CHA. Well, in looking at the major systems that were acquired for 2010, that does seem to be consistent. So for example with the FITCA handheld computers which was customed developed hardware and software, ultimately the Bureau delivered a half-baked solution that ran into significant cost overruns and ultimately at the end of the day required that manual workaround in order to meet the immutable 2010 deadline, and that ultimately led to a \$3 billion increase to the ultimate cost.

Mr. FARENTHOLD. And I commend that mistake to you, Mr. Thompson and Ms. Cha as a consideration with respect to really something cloud-based and less done in house. Computer technology doesn't have a 10-year life span. Technology changes so quickly that you really are potentially buying a computer system that will be used for one Census when maybe renting something through a cloud service might be worth looking at.

You talked a little bit about statistical methodology. There is no proposal in your statistical methodology that does away with we're going to try to count everyone. We're not going to make assumptions like when somebody does a phone poll of X number of likely voters, they extrapolate the whole country. We really are going to try to do what the Constitution requires, is that correct?

Mr. THOMPSON. Yeah, exactly, Congressman. I was very clear in my confirmation hearing about that is that that is not a technique that I think is appropriate for taking the decennial Census.

Mr. FARENTHOLD. And then with respect, you also talked about changing methodology with respect to how you get hold of nonresponders. What do you see as your number one or number two failures in areas and how do you—groups meet, bridge, you know, people who live in cars or undocumented residents, where are your big failures and what are your top one or two ideas for addressing that?

Mr. THOMPSON. So our research has showed that the people that are less likely to be counted or harder to count tend to be minority, they tend to be highly mobile, they tend to be maybe more renters and in unusual living situations. So the effort has to be—and they are and it is more expensive to count those individuals. So my goal is to find ways to count a, the big part of the population which is relatively easier to count, a lot more cost effectively, thereby freeing up resources that we can then target to counting.

Mr. FARENTHOLD. At some point, I would like to get from you, and if you could maybe do that in writing based on time considerations, what you consider to be your top five counting problems and your top five proposed solutions, and they may not necessarily jibe. It is kind of the 80/20 rule you might be able to, your solutions might be for a problem that is a little further down the line, but it is an easier solution. But I want to see what your biggies are. And can you tell me a little about, you're spending a lot of time and effort on geospatial data, there is a lot of that already out there and it doesn't change that much, obviously you get new houses built, but they don't move, and at what point are we doing something that there is no longer a need for but there is such a marketplace for with GPS's in everybody's cars and the prevalence of Google Maps, at what point is this geospatial data collected and maintained by the government a worthwhile deal or something that the private sector has taken it over, we have ceded it and it is done.

Mr. THOMPSON. Well, you are talking about something that is very dear to my heart in terms of targeted canvassing. That is we don't have to build everything. We can buy it, we can get it off the Internet, we can work with private companies. We don't have to do it all ourselves and that is why it's exciting now to look to foreign partnerships with the private sector to get information that will— I'm stumbling and I'm sorry—that will allow us to not have to canvass all of the country.

Mr. FARENTHOLD. And finally, I hope Mr. Lynch will explore some of the postal, he mentioned in his opening statement, the possibility nobody knows the area better than the postal worker who walks it every day. I think there is a huge opportunity for that. Understanding that postal workers are paid a lot more than Census workers, so we've got to factor that into the costwise equation. But I know Mr. Lynch brought it up. If he doesn't ask the question I will.

And then finally my last question is, you mentioned the need for Congressional action with respect to possibly authorizing sharing of data, and Mr. Collins brought up the possibility of amending the questions both on the short form Census and the American Community Survey.

The sooner we do that the better I think in your preparing.

At some point, could you also let us, send a letter to this committee with some of the changes that you think you would like to see in legislation? Because we actually probably move slower than you do.

With that, I will recognize Mr. Lynch for a second round of questioning.

Mr. LYNCH. Thank you, Mr. Chairman. I will follow up on that point. Back in September, 2011, GAO recommended that the Secretary of Commerce and the United States Postal Service consider a couple of things: One, expanding their current collaborative efforts to include recruiting mail carriers or retired mail carriers for the 2020 Census. And the second thing that they talked about was assessing whether strategies can be developed to reduce undeliverable as addressed mail in the Census.

So, Mr. Goldenkoff, you want to take a crack at this and just see where we are, what those—I did read the GAO reports but I want to get this on the record. Where are we with those efforts of collaboration? Mr. GOLDENKOFF. Well they are ongoing it is my understanding as was already mentioned, the partnerships that the Bureau wants to form for the geospatial data, the GSSI which will allow for a rolling updating of the address list throughout the decade, instead of doing it in the 2 years before the Census basically taking one large bite all at once, do it in smaller increments, and that will be very helpful for targeted address canvassing. There are other opportunities for collaboration with the Postal Service that the Bureau will need to explore, particularly as it gets several year down the road.

For example, of the roughly 600,000 enumerators that were hired to do nonresponse follow-up, only 2,400 were postal workers. And if the Bureau had perhaps done a more targeted approach to actually, a targeted recruitment of postal workers they could have gotten a lot more. And as you said, these are people who know the neighborhoods, they know how to deliver stuff. This is what they do for a living. They know the complexities of the different neighborhoods. They already have the background checks done. So that's an option there as well.

Use of postal facilities that the Postal Service doesn't need, the Postal Service has a lot of extra space. Perhaps the Census Bureau can use some of those for their local Census office. There might be some opportunities there as well.

Mr. LYNCH. Right. I know that in the GAO report that I read, it had a dollar figure of \$41 an hour for an urban postal worker excuse me, an urban mail carrier, a letter carrier, and I think it was \$34 for a rural letter carrier. But the retirees, obviously, would be a lesser cost. They've already got their pension, they've already got retiree health benefits. I'm just curious if, you know, in looking—the Postal Service has already put out several early retirement programs, incentives to get postal workers to retire.

Many of those workers have expressed a desire to continue working part-time or in some capacity. This might offer us an opportunity if we worked through the postal workers with their unions to actually recruit some of those postal workers, letter carriers that they might want to supplement their income but they wouldn't have the full range of benefits that you know an active letter carrier currently requires.

Mr. GOLDENKOFF. And that's where the trade-offs seem to be taken into account, the cost benefit. You mentioned the hourly wage rates for the mail carriers of \$34 and \$41 depending if they were rural or urban. That compares with \$15 per hour on average for a Census enumerator. So you see there's a huge cost difference. And to the extent that some enumeration takes place in the evenings, on weekends, postal workers I guess would be making additional money for overtime, for example, working on Sundays.

So you can see how the cost increase can be significant if they are doing it as part of their postal job as opposed to being employed directly as a temporary employee by the Census Bureau.

Mr. LYNCH. I just question the efficiency of someone walking into a neighborhood they have never been in before and they're supposed to find people as opposed to the efficiency of a letter carrier that has been down that street, knocked on that door, been in that house a thousand times.

Mr. GOLDENKOFF. You're absolutely right and that's why if they were hired as supplemental income, just sort of on their own, not through their postal employment, but just as anybody else, but it was targeted recruitment, there could be both not only cost savings there, but also it could be done more efficiently.

Mr. LYNCH. What about reducing the number of undeliverable as addressed mailings? Mr. Thompson or Ms. Cha, as well, if you any thoughts on how we go about that, or Mr. Goldenkoff.

Mr. GOLDENKOFF. What we were getting at there is some forms just because of the nature of the address, the Postal Service can't find the particular address, and so the, using Postal Service records, for example, those can be eliminated before they get sent out

The other thing I want to say too is that to the extent that there is this partnership going on, it doesn't necessarily have to be a oneway flow of benefits. The Postal Service can make use of Census information to improve their operational efficiencies as well, and there has been some cases of that in 2010.

Mr. LYNCH. Thank you. I see my time has expired. I yield back. Mr. FARENTHOLD. Thank you and we are bumping up against the time we need to get to the 9/11 ceremony remembrance. I know Mr. Collins had about 1 minute more he wanted to take and Ms. Norton you walked in.

Are you guys able to wait until we are done with the 9/11 remembrance on the Capitol steps and we'll reconvene then? We can't miss the 9/11 event. I believe the House Members were supposed to report there at 10:45 so. We'll, if you guys are willing to hustle over there, we'll go ahead.

And Mr. Collins, if you can keep it to a minute and with your closing we'll go and give Ms. Norton and Mr. Clay a chance.

Mr. COLLINS. I'm going to give a lesson, this is something, as I said a few minutes ago, it was very interesting and my office we are going to be very involved, I want to echo the chairman's sentiment. Think now about what you need from Congress. Think now about what you want to bring before us to change. Get it to us now so we can have the input and we are not in a last minute. That is the main thing that I want to emphasize and my office and my staff will be willing to work with you. Please do so. Thank you and I yield back.

Mr. FARENTHOLD. Thank you. We'll recognize Ms. Norton now, the gentlelady from the District of Columbia.

Ms. NORTON. I simply want to ask about the value or lack thereof of the community survey. Has it increased the accuracy of the Census, this monthly survey? You use it as a base for the Census.

Does it increase the costs if you didn't have it or if it is vol-

untary, would it be valuable any longer? Would it cost any less? Mr. THOMPSON. So, thank you for the question, Congresswoman Norton.

The American Community Survey replaced the decennial Census long form to provide that valuable information.

Because the American Community Survey is taken on a rolling basis, the information it provides is more current and therefore more accurate than the decennial Census long form. The American Community Survey is therefore a very valuable resource for planning programs, administering programs. And it is used by a variety of stakeholders, city planners, the private sector.

Ms. NORTON. Does it increase the cost significantly, I mean, if it were voluntary?

Mr. THOMPSON. Oh—yeah, if the American Community Survey was made voluntary I think Dr. Groves—it would increase the cost. My recollection is that Dr. Groves in his testimony last July indicated that the costs might go up by as much as \$60 million a year.

Ms. NORTON. Has it decreased the undercount? Has it had an effect on the undercount?

Mr. THOMPSON. The American Community Survey Census is providing more current information. The information can be used for better planning and thus reduce the undercount to some degree.

Ms. NORTON. Thank you, Mr. Chairman.

Mr. FARENTHOLD. And we'll go to Mr. Clay now.

Mr. CLAY. Thank you so much, Mr. Chairman. I will be as brief as possible.

Mr. Thompson, on March 15th of this year, I, along with several Members of Congress, transmitted a letter to the Census Bureau urging the Bureau to define a national solution to ensure that incarcerated individuals are counted at their last legal residence. The U.S. Supreme Court issued a decision in June of 2012 upholding a Maryland law that tabulates prisoners as residents of their home addresses for the purpose of redistricting. However, since the current Census Bureau policy designates a prison cell as a residence it prevents populations of more than 1,500 Federal and State prisons that are largely male, urban and African American or Latino from being counted as residents of their home community.

These incarcerated individuals normally have no ties to the prison location, cannot vote, and most often, return to their home communities upon release. Our letter urged the Bureau to count these individuals at their last legal home address to prevent districts housing prisoners from being overrepresented.

Can you share your thoughts on counting the prison population?

Mr. THOMPSON. Congressman, at least I, at the Census Bureau, take the rules that we use to count individuals very seriously. After each Census and before each Census, the Census Bureau works with the variety of stakeholders to try to ensure that the rules they use to count people are the most appropriate for that Census. And for the 2020 Census, we have not made our decision yet. And my opinion on this will be based on consultations with stakeholders to try to adopt rules that will be most appropriate to count people. So I'm looking forward to talking with you and other stakeholders on how to count not just the prison population but other components for population.

Mr. CLAY. And be aware that several States have implemented laws like the one upheld by the U.S. Supreme Court for Maryland that allows for you to count prisoners from their home districts. Because when you think about it, it skews the redistricting process when you count prisoners in prisons who are not there permanently.

I know in my home State of Missouri, they are able to create State representative districts because of prison populations in rural areas, and it skews the entire process. So I want you to be aware, and I look forward to working with you and sharing our views about this issue.

about this issue. So Mr. Chairman and Mr. Thompson thank you and I yield back. Mr. FARENTHOLD. Thank you very much. I apologize. We are going to have to rush out here. We really do want to participate in the 9/11 ceremony. I would like to thank the panel and the wit-nesses, and we are adjourned. [Whereupon, at 10:50 a.m., the subcommittee was adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

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WRENCE J. BRADY STAFF DIRECTOR Opening Statement Rep. Stephen F. Lynch, Ranking Member

Subcommittee on Federal Workforce, U.S. Postal Service and the Census Committee on Oversight & Government Reform Hearing on "Ensuring an Accurate and Affordable 2020 Census"

September 11, 2013

Thank you, Mr. Chairman.

At the outset, I'd like to congratulate Director Thompson on his recent confirmation as the 24th director of the United States Census Bureau – I look forward to working with you and your staff as we continue to examine census operations. I'd also like to thank Mr. Goldenkoff and Ms. Cha of the Government Accountability Office for helping this subcommittee with its work today.

This is a critical moment for the United States Census Bureau. While the next decennial census may be 7 years away, the agency is already in the midst of researching, testing, and implementing a variety of technological and procedural reforms designed to better ensure a 2020 census that maximizes cost containment without compromising data quality. I would note that these important initiatives come on the heels of a 2010 census that, according to GAO, was the most expensive U.S. census in history at a cost of approximately \$13 billion – that's a 56% and \$8 billion cost increase from the 2000 census.

Chief among the lessons learned from the 2010 census that GAO has consistently identified as key areas for reform is the need for the bureau to reexamine its approach to how it takes the census. In particular, 2010 witnessed the bureau employing the same "mail-out," "mail back," and "door-visit" census form process that it has been using since 1970 despite a population that has become increasingly demographically diverse and significantly concerned about personal privacy. According to GAO, this "basic design of the decennial census is no longer capable of a cost-effective enumeration" and "without changes, future enumerations could be fiscally unsustainable."

To its credit, the bureau is already making changes to reform its approach to census-taking and I am greatly encouraged by its responsiveness to the recommendations issued by GAO. Specifically, the census bureau is currently examining whether it could achieve meaningful cost-savings by utilizing state and local agency administrative records, including driver's licenses and school documentation, to identify persons associated with a particular household address. In addition, the census bureau is researching the viability of electronic data collection and technology-receptive promotional methods, including the use of email, text messaging, and social networking sites. Moreover, the agency is testing the feasibility of using its monthly housing and population "American Community Survey" as a basis for conducting smaller and more frequent census-related tests throughout the decade in place of broader, more expensive, and one-time only tests that have defined previous decennial census-taking cycles.

As reported by GAO in January of this year, the various reform initiatives underway at the census burcau, and particularly the agency's expanding use of information technology, must be accompanied by a corresponding effort to implement effective information security policies and protocols. I share the Chairman's concerns regarding the current lack of a comprehensive security program at the census burcau that includes identified security risks, up-to-date security management program policies, meaningful information security training for census employees, and effective incident response guidance. However, I am confident that the burcau will continue to work with GAO to take the necessary steps to enhance its agency wide security program and implement proper safeguards against the unauthorized use or disclosure of sensitive personal information.

Additionally, I would note that the census bureau, like every other federal agency, is already feeling the impact of sequestration and is currently operating with a budget that is 13% less than the administration requested for fy2013. Coupled with chronic underfunding over the past several years, the agency is facing a variety of difficult decisions that pose a challenge to its mission – from a reduction in field tests and an increased reliance on existing data to delays in planning for the 2020 decemnial census and a suspension of the country's economic census. Importantly, these and other census activities are mission critical and result in data that is used to determine funding allocations for community services, infrastructure and heighborhood improvements, and public health and educational programs, as well as forecast economic and employment conditions. These efforts are essential to our national economy and policymaking and I would urge my colleagues to keep the importance of the census bureau's mission in mind as we continue to examine census operations.

Mr. Chairman, I thank you for holding this important hearing and i look forward to discussing these and other issues with today's witnesses. I yield the balance of my time.