

**COUNTDOWN TO CENSUS DAY: PROGRESS
REPORT ON THE CENSUS BUREAU'S
PREPAREDNESS FOR THE ENUMERATION**

HEARING

BEFORE THE

FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT
INFORMATION, FEDERAL SERVICES, AND
INTERNATIONAL SECURITY SUBCOMMITTEE

OF THE

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HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
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TUESDAY, FEBRUARY 23, 2010

U.S. SENATE,
SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT,
GOVERNMENT INFORMATION, FEDERAL SERVICES,
AND INTERNATIONAL SECURITY
OF THE COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:32 p.m., in room SD-342, Dirksen Senate Office Building, Hon. Thomas R. Carper, Chairman of the Subcommittee, presiding.

Present: Senators Carper and Burriss.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Good afternoon, everyone. Welcome, one and all, especially to our witnesses and to those who are seated in our audience.

Today is the continuation of our oversight efforts relating to the 2010 Decennial Census, one of the few things that is actually spelled out in the Constitution that we are required to do, and we have been doing it for a long time.

I have a button that Dr. Groves gave me just a minute ago and it says, "United States Census 2010." The "United States" is in very small letters, but "Census 2010" is larger. It is going to try to count everybody. It is simple and it is important. Simple, easy, and important. In terms of messaging, that is a very good way to message.

But as many of you know, the road to the 2010 Census has been anything but easy, and this Subcommittee has held a number of hearings on many of the operational and organizational challenges that are threatening the success of this particular census. My guess is if we went back over time, we would find that none of them have been all that easy, and it is even more so given how many people live in our country today, how many different languages they speak, and how many different kinds of living arrangements that we have, and kids in one State and parents and families in other States and a lot of people who aren't related living in the same group housing facility.

While we are far from done, I think we can all take pride in the excellent work of Dr. Groves, his predecessor, Dr. Murdock, and the

career professionals at the Census Bureau who have worked very hard over the past several months to get the census back on track.

This year's census will be by far the most expensive in our Nation's history, even taking inflation into account. So far, the cost of the 2010 Census has been estimated to be about \$14.7 billion. That reflects an increase of a little over \$3 billion in just the last 2 years. And although there are only 37 days remaining until Census Day—is that when April first is?—Census Day, April 1, the 2010 Census has at long last begun in certain parts of the country.

The population tally officially began in late January in remote parts of Alaska and the Bureau is now revving up for full-scale operations. I don't know if Dr. Groves will say this in his testimony, but the amount of free publicity that the 2010 Census received by virtue of kind of the trek, if you will, that was taken through parts of Alaska by small airplane, by dog sled, or however folks got there to start counting people, a lot of coverage of that, free media, and very smart. I said, why are we starting in Alaska, and that really kind of answered my question because it is a great way to get the message out that we are starting and that every vote—not just every vote counts, but we want to make sure that every person counts.

Overall, things seem to be going according to plan. Recruiting is—and that is not to say everything is perfect, and we will hear about some of the things that aren't. In fact, we will probably focus more on the things that aren't perfect than the things that are going well. But I should point out that a number of things are going according to plan.

Recruiting is on track. There is a silver lining in every cloud. The cloud is our economy, the high unemployment. The silver lining is there is a lot of talent out there. People are anxious to work on the census who 10 years ago may not have had any interest in doing that, but today, they are signing up and we have got some very good talent coming to work on this.

But census questionnaires have been printed and are scheduled to be mailed out the middle of next month. Local census offices are opening and operational, and the advertising campaign is moving smoothly into its active phase.

However, given the sheer magnitude of such an undertaking as the Decennial Census, problems are to be expected. Investigations performed by GAO and the Commerce Department's Inspector General have raised concern that the Bureau is behind on testing and the full development of some of its key information technology systems. In December, the Bureau conducted two operational tests of the computer networks supporting decennial operations which revealed critical defects and IT performance problems. More recently, a quarterly report issued last week by the Commerce Inspector General noted that the Bureau wasted millions of dollars on workers who were hired and trained last year for temporary positions by the Census Bureau but never worked for the agency and others who overbilled for travel expenses.

In addition to the operational issues that I previously mentioned, undercounting remains a serious challenge for many communities throughout our country. In 2000, about 6.5 million people were missed, many of whom were minorities and children, and reaching

out to those who are historically hard to count is even more important when you consider that for every one percent of the population that does respond to the census, we are going to have to spend about \$85 million extra, I am told, to go door-to-door and get everyone signed up and counted. It is vitally important, then, that we do the necessary hard work now so that we can get an accurate, cost-effective count in 2010 that will serve us well in the next decade.

Sometimes people say to me, what can I do to help better ensure that kids coming out of our schools can graduate and read and write and do math and use technology? How can I, as one person, help? And I say, you can mentor. People say to me, what can I do in order to reduce our dependence on foreign oil and to do something that is good for the environment and our climate and I say, well, you can recycle. And people say to me, what can I do to reduce the budget deficit? I am just one person. What can I do? Well, everybody can fill out their census forms and turn them in, and to the extent that we do that, for every million people who are counted, that is \$85 million less we have to spend to go out and count them.

With that said, I look forward to the expert testimony that our distinguished panel of witnesses will provide today. It is my hope that today's proceedings will provide us with a clear assessment of the complications facing the Census Bureau, how Congress can best partner with the Bureau as it works toward achieving its goal of an accurate and cost-effective census in 2010.

And I want to welcome, again, our panelists, none of whom are strangers here. I am going to take just a moment and introduce each of them.

Dr. Robert Groves was nominated by President Barack Obama to be Director of the Census Bureau in April of last year. He was confirmed by the Senate in July of last year, an easy lift, as I recall. Dr. Groves is an expert in survey methodology and has spent decades working to strengthen the Federal Statistical System, improve its staffing through training programs, and keep it committed to the highest scientific principles of accuracy and efficiency. Having once served as Associate Director of the Census Bureau as a child—well, maybe not—Dr. Groves knows how the agency operates and what it needs to be successful and to successfully implement the Decennial Census and other related programs.

Todd Zinser serves as our Inspector General for the U.S. Department of Commerce. As Inspector General there, Mr. Zinser leads a team of auditors, investigators, attorneys, and administrative staff responsible for detecting and preventing waste, fraud, and abuse in the vast array of business, scientific, economic, and environmental programs that are administered by the Department of Commerce and its 13 bureaus. Mr. Zinser holds a Bachelor's degree in political science from Northern Kentucky University and a Master's degree in political science from Miami University. Is that Miami University in Oxford, Ohio?

Mr. ZINSER. Yes, sir.

Senator CARPER. Yes. As a Buckeye, I am always happy to welcome another Buckeye, and especially having a guy here from the University of Michigan at our table.

Robert Goldenkoff is the Director of Strategic Issues at the Government Accountability Office, where he is responsible for reviewing the 2010 Census and government-wide human capital reforms. Mr. Goldenkoff has also performed research on issues involving transportation security, human trafficking, and Federal statistical programs. He received his Bachelor of Arts degree in political science and Masters of Public Administration degree from the George Washington University.

Normally, we would swear you guys in and give you that oath, but since you have such honest faces, we will forego that this time and just go right to your testimonies. We indicate that we would like you to keep your testimonies to 5 minutes.

But welcome. Dr. Groves, why don't you go first?

TESTIMONY OF ROBERT M. GROVES,¹ DIRECTOR, U.S. CENSUS BUREAU, U.S. DEPARTMENT OF COMMERCE

Mr. GROVES. I am delighted to be here. It is great to see you again, Senator. I think the most important thing that I should start with is to reiterate what you said. The 2010 Census has indeed begun. We began in a little village in Alaska called Noorvik, 30 miles north of the Arctic Circle. We have to do Alaska first because many of the native villagers will disperse for hunting and fishing activities during the spring thaw.

Second, our advertisements are on the air. These are necessary to notify the American public that the census is coming and that we urge them to participate.

There have been a lot of things that have happened since we were last reporting to you and your Subcommittee. We have opened all the local census offices. They are up and running and staffed. As you mentioned, recruiting for field operations is really a wonderful story this decade for the Decennial Census.

What you didn't note is that we have just last week gone over the 200,000 mark in terms of partnership organizations that are working with us on a volunteer basis to get the word out among their constituents—

Senator CARPER. How does that compare with previous years? That seems like a lot of organizations to be part of the partnership.

Mr. GROVES. It was almost half this amount last decade.

Senator CARPER. So basically, you doubled. That is good.

Mr. GROVES. It is really amazing, and they are all over the country, small neighborhoods, big multinationals, and all sorts of things.

We have nearly 10,000 Complete Count Committees. These are local committees often appointed by local officials that help get the word out in their city and locale.

We are involved in two operations already. One is Group Quarters Advance Visit. This is a new thing we are doing this decade to help improve the counts in large institutions like prisons, assisted living facilities, and so on.

And then just last week, 10 million letters went out to houses throughout the country for the more rural parts of our measurement.

¹The prepared statement of Mr. Groves appears in the Appendix on page 36.

So a lot has happened. There are challenges that remain. I want to focus on those, with your permission. And before I talk about technical aspects, I want to talk about two things that have received some attention. One, hiring procedures, the background checks that we do on our staff, and then, two, the 2010 Census media campaign.

Since we last met with you, we have put in place additional procedures that we believe will assure both Congress and the public that we will be taking every measure possible to protect the American public during the phase where our census takers will visit individual households. Let me go through those a bit.

Two steps are the same as what we did in the 2000 Census during the application process. Each applicant is required to accurately disclose information about any conviction, imprisonment, probation, or parole in the last 10 years. Failure to disclose this information will disqualify an individual.

We then submit to the FBI database name, date of birth, Social Security number, and gender to do a record check in the FBI data set. This was done in 2000, as well. But in 2010, we are doing an extra couple of steps. For the 2010 Census, we will conduct a separate fingerprint check against the FBI database. We did this in a large operation before I got to the Bureau called Address Canvassing in the summer of 2009.

We learned in that first use of fingerprinting that some folks did not generate readable fingerprints. They tended to be older employees. They tended to be women. We have beefed up training. We worked with the FBI and OPM and we are beefing up the training of the fingerprinters and we are also using some FBI-recommended lotion to help the ridges of fingers stand out for older people to get readable prints. If we still have unreadable prints after this initial effort, we have just made the decision to reprint using electronic equipment that will be stationed in each of the 500 local offices. This is a decision we made over the last few weeks.

Senator CARPER. Would you just explain what you just said there?

Mr. GROVES. Yes. One thing that is clear is that a set of electronic equipment on which you can take fingerprints gets a better read rate from those who have very worn-down ridges on their fingers.

Senator CARPER. Those older women you were telling us about.

Mr. GROVES. I didn't say that. I believe they were older people and they also tended to be women—

Senator CARPER. Probably some older men, too?

Mr. GROVES. Yes. Actually, people who have worked in manual labor tend to suffer from this problem. We will take the first set—we take two sets of fingerprints using cards, normal ink. If we can't read those, then we will ask the staff member to come in and take electronic fingerprints. We think we can get the unreadable rate down to about 10 to 12 percent given that, and that is an improvement over our experience in Address Canvassing.

Senator CARPER. And for the 10 or 12 percent that we still don't get a good read on their fingerprints, what do we do with those?

Mr. GROVES. The news on those is that based on our applicant pool, about 16 percent of the applicants when we submit their

name and other identification generate an FBI record. There is some sort of history connected to their name and Social Security number there. When we do the added fingerprints—

Senator CARPER. And so they fall out in many cases?

Mr. GROVES. We look to see exactly, and I will say in a minute exactly how we handle those cases.

When we then fingerprint the people who pass the name check—those are the only ones we fingerprint—there is a little over a 99 percent chance that they will pass the fingerprints, too. We pick up about 0.5 percent on top of that 16 percent that have a criminal history. So even though the fingerprint check does pick up many, the biggest bang for the buck is the name check itself.

For the 2010 Census, we have sharpened the criteria for disqualifying applicants with prior criminal histories. We will now automatically disqualify any applicant whose screening indicates prior convictions or a pending charge for certain categories of crimes, such as murder, sex offenses, robbery, voter fraud, and other crimes that suggest a threat to public safety or to the integrity of the census data.

In addition, those who have been convicted or have charges pending involving crimes of dishonesty, burglary, theft, and vandalism are disqualified from employment, except when the person conclusively demonstrates that he or she doesn't present a threat. We will also use the e-Verify process to confirm employment eligibility.

Let me note that the safety of the American public and of our staff is of paramount concern to me during this process. I fully support these unprecedented improvements in the screening of applicants.

Let me turn to the Integrated Communications Campaign. We are buying paid media because the 2000 Census taught us that strategy succeeded in reversing a multi-decade-long decline in response rates. It worked.

In 2007, the Bureau contracted with a professional advertising firm that retained 12 subcontractors to research and design this program. We are advertising in 28 different languages and across eight major audiences. Based on experience and the research that preceded this effort, we are focusing our advertising on so-called hard to enumerate or hard to count populations.

When we enter into negotiations for media buys for national and local outlets, they follow industry practices of seeking added value from the media outlets. Examples of this term "added value" for the 2010 Census campaign include additional broadcast spots provided for free, celebrity endorsements, or mentions of the census in programming or through public service announcements.

In all, there were 2,100 requests for proposals that were issued for this media campaign, with over 61,000 media outlets responding, and each outlet engaged was asked to provide some added value. As of late January, the census team has negotiated almost \$30 million in added value from media outlets. This represents leveraging the taxpayer money on media by about 23 percent. We expect that will get up to about 25 percent. So in addition to paying for this, we are getting 25 percent extra value from these added value negotiations.

In a perfect world, I would note that where every resident was completely aware of the constitutional underpinnings of the census, there might not be a need to spend taxpayer money on advertising. I get that fact. Unfortunately, we don't live in such a world. The last census proved with little doubt among the profession that the value of paid media, it demonstrated that value because of this reversal of the decline in response rates. So we spend advertising money in an attempt to save salary costs on Non-Response Follow-Up activities.

Now, let me move to more technical topics. My full testimony reviews a lot of internal challenges. I want to focus on two or three that I am most concerned about. One has to do with a variety of IT systems. We have been conducting load tests of key components of the software that we will rely on to manage field operations. We ran a load test on December 3. It was partially successful. We weren't able to test one component of the system. We found defects in other parts that we were testing. This involved a national network, about 8,000 people in 400 offices banging on the system under a scripted set of protocols.

One glitch in that test prevented us from testing the payroll system. We discovered there is a network problem that we have now fixed and we are probably going to add hardware to that payroll system as a solution. Solutions were developed to address each of the glitches we found in the December test, and then we did another one on December 15.

The results of that test gave our technical folks and the independent assessment group that I appointed in August or so the belief that the basic infrastructure had the capability of handling the peak network traffic, but problems remain that I will review right now.

One has to do with a piece of software called the Paper-Based Operational Control System. What is this thing? This is a set of software that allows us to do the Non-Response Follow-Up activity, most importantly. After we receive all the questionnaires from mail returns, we will send out census takers. That system allows us to make assignments, keep track of the progress, and so on. This was a late add to the development when the handheld machines were chosen not to be used in 2008. It has been on the High-Risk List since that moment. It remains on the High-Risk List.

Let me tell you where we are on this. It is going to be released in three phases. Release one has been released. It is in production, supporting the activities of Remote Alaska Enumeration Group Quarters Advance Visit that is going on that I mentioned and a couple of other things. The performance of the system at this point is not taking the load that we would like.

Senator CARPER. Say that again. What do you mean by that?

Mr. GROVES. The current performance of the system in the offices in the production of these activities looks to be such that it will not accept the load that we are going to need to give it in a month or so. So we are working on the performance capabilities of the system right now. It is satisfactory for what we are doing right now. We are executing the programs that we need to. But if we needed to ramp up today to the level we are going to have to ramp up in May, it wouldn't support that, is our estimation. So that is a key

focus of everyone working on it, and it will probably be partially a software solution and partially a hardware solution.

The second iteration, the second release of the software was released Friday, on schedule. We are now getting the first glimmers of what happens when it is in production. Part of that will not be released—the Non-Response Follow-Up support won't be released until about March 22, about a month before we need it. So we are still working on that.

Then there will be a third iteration that will be released later for operations that are needed further down the line.

This remains a high-risk development, as I anticipated at our last hearing. I reported to you that this was one of my key concerns. It remains so, primarily because of the compressed time that is available to develop the systems and the hard deadlines we face. We can't move any of our deadlines.

So to aggressively mitigate and manage the risks, we have a steering committee that represents all the stakeholder divisions. A key component of the decision process that we are executing right now is a set of trade-offs. What are the core functions of the system that we need for the operations in May through July, to make sure those go? What are non-core functions that we can have work-arounds? That is the process we are using right now to manage this, and we want to make sure the right folks are at the table to contribute to those decisions and make sure they are wise ones.

This is really a daily management oversight task. We have appointed a new group based on the advice of this external assessment team that we have brought in that is helping watch the process to make sure deliverables day by day stay on schedule. If there are any impediments to getting something done, we get rid of those and fight through the bureaucracy.

Finally, I want to talk about cost estimation in the Non-Response Follow-Up phase. I promised you and the Subcommittee that I would do a scrub of this and we have done that. We finished our work. We focused on the Non-Response Follow-Up phase. It was budgeted at roughly \$2.7 billion, the May through July operations. I wanted to make sure that in addition to what was a top-down way of estimating the cost, that we did one that was bottom-up. We did that bringing in expertise from field operations.

We learned from them, from their viewpoint on the process, what were the sources of uncertainty. We had to estimate through that process the fall in response rates over the decade. Our surveys are losing about 5 percentage points over the decade of cooperation rates. The effect of the short form versus the long and the long form, the effect of the replacement questionnaire, the effect of the bilingual form. We also needed to re-estimate the vacancy rate, given the foreclosure issues in the country.

We did all of that, and then what we did next was to simulate about a thousand different scenarios, different combinations of things that might happen. When we finished that exercise, it was a comforting result, I can tell you. I feel much more comfortable that we are budgeted at a level that allows us to successfully complete the operations.

One indicator of that is that only 9 percent of these thousand different scenarios, a perverse set of combination of events—very low

return rates, bad productivity rates, higher vacancy rates—would produce—would be necessary for us to go into our contingency funds on Non-Response Follow-Up. So I feel better about that.

Let me conclude by noting that the pace is picking up. There are hundreds of important tasks that will be completed across all components of the Decennial Census program. Folks in Suitland and throughout the regions are working very hard, night and day, to make sure this is a good census. There is a lot to do and the pace is quickening.

I stated at the beginning of my testimony something that I believed when I entered this office and I still believe. The biggest risk to the 2010 Census is the uncertainty posed by the American public's response to the questionnaire, and we need your help and your continued help. We thank you for what you have done already to encourage everybody living in the United States to participate in this census to make it successful.

Thank you, Mr. Chairman.

Senator CARPER. Thanks very much for that testimony.

My staff and I met yesterday with the IG from the Commerce Department, Todd Zinser, and it was a very helpful conversation. Thank you for doing that yesterday.

And Dr. Groves, I just want you to know, a guy who has some roots in Ohio actually said some very nice things about someone who has some roots in Michigan. You should be comforted by that. Not ready to rest on any laurels, but he was very complimentary.

Mr. Zinser, please proceed.

**TESTIMONY OF TODD J. ZINSER,¹ INSPECTOR GENERAL, U.S.
DEPARTMENT OF COMMERCE**

Mr. ZINSER. Thank you, Mr. Chairman. Thank you for inviting us to testify today on the Census Bureau's progress and preparation for this year's decennial count.

Last week, we released our most recent quarterly report to Congress on the status of the 2010 Decennial Census. While our report and our testimony today discuss serious challenges currently faced by the Census Bureau, we are mindful and appreciative of the extraordinary efforts being made by a very dedicated staff at the Census Bureau to achieve a successful outcome. I would like to summarize our quarterly report in my testimony in four points.

First, the development of the Paper-Based Operational Control System remains a significant risk area. The Paper-Based Operational Control System is a critical computer system for managing numerous decennial operations, including the Non-Response Follow-Up operation. That operation is estimated to cost well over \$2 billion and is projected to require approximately 600,000 census takers to visit almost 50 million households during a 10-week period in May, June, and July.

We found that the development and testing of the system continues to suffer from setbacks that will reduce functionality and require the development of work-arounds to manage the Non-Response Follow-Up operation. The testing of the system is continuing to reveal critical defects. Schedule delays have also hin-

¹The prepared statement of Mr. Zinser appears in the Appendix on page 53.

dered the development of training manuals and technical support guides.

Our second point in the quarterly report concerns the Decennial Application Load Test carried out by the Census Bureau for each of the various computer systems that will support the Decennial. The tests attempted to simulate the expected demand on its computer systems. They showed that the networks and devices were able to successfully handle peak loads, but there were performance and functionality problems with two of the more critical systems, the Paper-Based Operational Control System, which I have mentioned, and the Decennial Applicant and Personnel Payroll System.

Our third point concerns budgeting and cost containment. We found that while Census reports staying within its budget during the most recent quarter we reviewed, spending among the local census offices remain a concern. We examined the 25 percent cost overrun experienced by the Bureau for its address canvassing operation last year and found wide disparities in wages and mileage reimbursement in some of the local census offices. For example, when we examined mileage costs incurred by local offices for the quality control operation for address canvassing, we found that costs among the offices ranged from less than 1 percent of their budgets to 878 percent of their budgets.

The 25 percent cost overrun for address canvassing indicates a problem with the original budget estimate, a problem managing the containment of costs, or perhaps some of both. In contrast, the Bureau reports that it spent only 59 percent of its budget for group quarters validation. Inaccuracies of this magnitude in estimated budgets, combined with wide spending variances among local census offices, indicates significant weaknesses in the Bureau's budget estimation and cost containment capabilities.

Which leads to our fourth and final point concerning the estimated budget for Non-Response Follow-Up. Census has projected a revised cost estimate of \$2.33 billion for the Non-Response Follow-Up operation, which is \$410 million less than the prior estimate. However, this is partially offset by an estimated 40 percent increase of \$137 million for the Vacant Delete Check operation, which is now projected to cost \$482 million.

In addition, the final costs of the Non-Response Follow-Up operation remain largely dependent on the mail response rate, which is a significant uncertainty. We would also add the unknown impact on operation costs of the Paper-Based Control System with reduced functionality and performance.

In brief, although much of the Bureau's plan is on track, the efficiency and accuracy of the Non-Response Follow-Up operation are at some risk because of the development problems with the Paper-Based Operational Control System and final Decennial costs remain uncertain.

That concludes my summary, Mr. Chairman. I would be happy to answer any questions you might have.

Senator CARPER. Good. I have some, and again, thanks so much for the work that you and your colleagues have done in the IG's office. We look forward to asking you some questions. Thank you.

Mr. Goldenkoff, welcome back. Thank you.

TESTIMONY OF ROBERT GOLDENKOFF,¹ DIRECTOR, STRATEGIC ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. GOLDENKOFF. Mr. Chairman, I want to thank you for the opportunity to be here today to provide an update on the Census Bureau's readiness for the 2010 Census.

As you know, just over 5 weeks remain until Census Day. The decade-long build-up to the Nation's largest peacetime mobilization has come to a close and the complex and costly business of data collection is now underway.

The road to Census Day has been a rocky one, fraught with operational setbacks and cost overruns. The hurdles the Bureau has experienced to date, including weaknesses in the Bureau's IT systems and uncertainty over the ultimate cost of the census, which is now estimated at around \$15 billion, led us to designate the 2010 Census a High-Risk Area in March 2008. As requested, I will update the Subcommittee on the state of the census, paying particular attention to, first, the rollout of key IT systems; second, the steps the Bureau has taken to revise its cost estimates; and third, the extent to which critical enumeration activities, particularly those aimed at hard-to-count populations, are on track.

Senator CARPER. Let me interrupt just for a second. Would you just go back a couple of sentences? You indicated a cost of, I think—

Mr. GOLDENKOFF. I said around \$15 billion.

Senator CARPER. OK.

Mr. GOLDENKOFF. It is about \$14.7 billion.

Senator CARPER. Thanks so much.

Mr. GOLDENKOFF. The Bureau's readiness for a successful head count is mixed. Mr. Chairman, it is deeply troubling that with Census Day right around the corner, key IT systems, notably the Workflow Management System, this Paper-Based Operational Control System (PBOCS) that we have been talking about, which is essential for the Bureau's field operations, and DAPPS, the Personnel and Payroll Processing System that will be used to pay more than a million temporary workers, continue to be plagued by performance problems.

When the Bureau held a critical load test this past December, the Workflow Management System experienced log-in problems, slow performance, and communication issues, while the Automated Personnel and Payroll System offered from server problems and sluggish performance. The Bureau is going to great lengths to address these issues, taking such steps as performing additional tests and purchasing new hardware, but the Bureau needs to move promptly. Just weeks remain before the systems need to support peak operations.

In addition, the Bureau revised its cost estimate from \$2.7 billion to \$2.3 billion for Non-Response Follow-Up, the largest and most costly field operation, where census workers go door-to-door to follow up in person with non-responding households. However, the Bureau's cost analyses are not complete. According to the Bureau, it continues to reexamine the costs of two other Non-Response Follow-Up related operations, so at this point, estimates of the ulti-

¹The prepared statement of Mr. Goldenkoff appears in the Appendix on page 71.

mate cost of Non-Response Follow-Up in the Decennial Census are still uncertain.

Other functions, however, are faring better. Key enumeration procedures are generally on track, past problems are being addressed, and some activities aimed at improving the participation of hard-to-count groups are more robust compared to similar efforts during the 2000 Census. For example, the Bureau plans to fingerprint employees to better screen its enormous temporary workforce. However, as you know, in earlier operations, a number of fingerprint cards were unreadable, which prevented the FBI from conducting a complete background check. In response to this issue, among other actions, the Bureau plans to improve training procedures on how to take fingerprints.

Efforts to boost response rates are also more aggressive compared to the 2000 Census. For example, the Bureau has increased staffing for its Partnership Program, which is an effort where the Bureau engages government and community leaders to gain their support for the census.

Likewise, the Bureau's plans to mail a second replacement questionnaire to census tracts that had low or moderate response rates in the 2000 Census should help enhance participation in 2010, as will plans to hand-deliver an estimated 1.2 million census forms in areas along the Gulf Coast that were devastated by recent hurricanes.

Moving forward, it will be important for the Bureau to quickly identify the problems affecting the key IT systems and test the solutions. Further, given the complexity of the census and the likelihood that other glitches might arise, it will be important for the Bureau to stay on schedule, monitor their operations with appropriate performance metrics, and have plans and personnel in place to quickly address operational issues.

Now, these operational considerations aside, I want to stress that the Census Bureau cannot secure a successful enumeration on its own. The public must also fulfill its civic responsibility to mail back their census questionnaires in a timely fashion. As we have already discussed, according to the Census Bureau, each percentage point increase in the mail response rate saves taxpayers around \$85 million and yields more accurate data compared to information collected by enumerators during Non-Response Follow-Up.

The bottom line, Mr. Chairman, is that in a few weeks, a key determinant of the success of the 2010 Census will be both literally and figuratively in the hands of the Nation's residents.

This concludes my prepared remarks and I will be happy to answer questions that you might have.

Senator CARPER. Great. Thanks so much.

Let me just go back and try to get a handle on a couple of points. One is the question in my own mind of how many temporary employees are we talking about hiring, like at the peak? I don't know if it is April, May, or June. At the peak, how many additional temporary employees will we have on the payroll?

I have heard 600,000. Mr. Goldenkoff just said over a million.

Mr. GROVES. Well, I think the reason it gets confusing is that for this entire fiscal year, it will be about 1.2 million jobs that we will

have filled, and they go in and out. So right now, we are doing an operation that will close out pretty soon.

Senator CARPER. Some of the people that might be hired, you brought on board, say, in February, might not necessarily be still there in March, April, or May?

Mr. GROVES. Right, and some of them—

Senator CARPER. And vice-versa?

Mr. GROVES [continuing]. Will be rehired for a new job that they will continue with the Bureau into July. The peak will be the May 1 through July 10 time period, where we will have between 600,000 and 700,000 people, and they will be the census takers who will visit individual households.

Senator CARPER. OK. Thanks for that clarification.

I am going to ask Mr. Zinser and Mr. Goldenkoff just to tell us what you think may be the—I bring this up in your shoes and in our shoes here on this side of the dais—what the most significant improvements that you have noted in the performance of the Census Bureau and their operation as we approach this count. What are you most encouraged about, each of you? Maybe give us two or three examples. And then give us two or three examples of what you believe we should continue to be concerned about, as you are.

So, first of all, the good news, and then the things we ought to continue to be concerned about and keep our eye on. That is the question.

Mr. ZINSER. Thank you, Mr. Chairman. I think one thing that we have consistently commended the Bureau for is taking on a more sophisticated or rigorous risk management approach to the Decennial. They have got a team that has been analyzing risks, coming up with mitigation efforts, and developing contingency plans, and in our report, we comment on that and we have looked at the four plans that they have completed and think that they have done a good job there.

I think that the other thing that probably carries over from one census to another that is a strength of the Bureau is their workforce. They have a highly dedicated workforce. You go out and meet the workforce in the local offices, they are very focused. They know their territories and they are committed to making this a successful census.

On the downside, I think the IT problems that we have all talked about, and Mr. Goldenkoff alluded to in his statement are far and beyond the most troubling aspects of this Decennial, going back to the decisions that had to be made on the hand-held computer and the problems that continue to plague the Bureau.

Senator CARPER. Give us one more.

Mr. ZINSER. One more negative?

Senator CARPER. Example of things to be troubled about or concerned about as we go forward.

Mr. ZINSER. Well, I think the cost controls. I think that, on the one hand, I think that cost controls are always an issue. I think they are especially so in these times, but I would like to see more done from the senior levels of the Census Bureau to emphasize cost controls within their local offices.

Senator CARPER. OK. Good. Thanks. Mr. Goldenkoff, first, the good news, and then—

Mr. GOLDENKOFF. I would agree with everything that Mr. Zinser has said and I would add to that. Very broadly, I think culturally, we would like to commend the Bureau for being much more open and much more transparent than it has been. GAO has had a relationship with the Census Bureau for a number of years. Certainly, I have been involved with the Census Bureau since 2000 and we have been very impressed with the outreach with Dr. Groves and some of his immediate predecessors over the last few years, and certainly since 2008, the Bureau has been much more open to outsiders, and outside advice. Dr. Groves and I, we get together on a regular basis to discuss not only issues with the 2010 Census, but also planning for the 2020 Census.

I think one of the things that is so important is the first step in dealing with a problem is recognizing that you have one, and I think that the Census Bureau is much more open to that, particularly in dealing with outside audit organizations. So that is definitely a plus I want to get out there, just the cultural change.

I would also say the ability to develop work-arounds very quickly when they have identified problems. The Census Bureau has a lot of expertise on board that they can quickly get to the heart of a problem and develop a solution quickly, and so we commend them for that.

Senator CARPER. OK. And the things that—some of the aspects of the census that keep you up at night or should keep us up at night?

Mr. GOLDENKOFF. IT issues would be No. 1, particularly with PBOCS. What we have seen is that they are facing people issues—

Senator CARPER. Paper-Based Operational Control System?

Mr. GOLDENKOFF. That is correct.

Senator CARPER. I just want to thank you, while I think of it, when I read the testimony of, I think it is Dr. Groves, there are a lot of acronyms in the testimony. I just want to thank you so much for not mentioning those. [Laughter.]

There was one sentence, or two sentences with five acronyms. I am just so grateful that you didn't use that sentence.

Mr. GROVES. Should I say, OK?

Senator CARPER. You may, as long as you spell it out. [Laughter.]

Mr. GOLDENKOFF. So, as I said, the operational control system, that is the nerve center of the census, the brains of the census, and there are some people issues there, staffing issues, hardware issues, software issues, scheduling issues, and so that is definitely something that is keeping us up at night, and I know it is certainly keeping the Census Bureau up at night, as well.

Senator CARPER. OK. Back to you, Dr. Groves. You have heard the good and the not-so-good. You don't have to respond to the good. You can, if you want. But focus on the concerns especially with the IT problems, the concerns that were raised with respect to the Paper-Based Operational Control System. You have talked about it already, but just come back and give us some reason to feel more assured, and also talk with us about—the point was made on focusing on cost controls. I think the comment was, like to see some more top-down concern or focus on cost control.

Mr. GROVES. On the IT side, I think there are—actually, we discussed this in the last hearing, I believe, how IT activities within a large government agency can be handled efficiently and how you can stay on the cutting edge and do developments that are needed in a way that are spending the taxpayers' money wisely and get in production in a timely fashion. Some of these are really big issues that deserve a hearing of its own, probably, at one point.

On this particular software development, I think it is important to separate pieces out and look at them separately. There is a system for the payroll and personnel processing that I think is logically viewed as a separate issue. It is running on its own network, a separate network from others. It was taken really lock, stock, and barrel from our contractor in 2008 when the decision was made not to continue with the handhelds and placed in Suitland. So it is a rather unique computer network.

Part of the problems in the load test that we found was there were basically glitches in that network so that when people were accessing and sending requests to that network, the network was actually idle. It wasn't even getting those requests. That was fixed with some approaches to the operating system. When that is up and running, its performance is still not satisfactory. So on that component of the problem, we will be installing some new hardware starting March 1, and the hope and belief of the technical experts, both working on the team at the Census Bureau and brought in from the outside, is that particular problem has a good shot of being solved with that operating system fix and the added hardware.

The Paper-Based Operational Control System is a separate issue, I think. That is new software being developed using this philosophy of agile programming that allows you to write separate little modules in one week cycle time. You do a little widget. You insert it in the overall whole. You test it. It is compatible with everything else that was in there before.

We are entering a phase now that often happens, in my experience in software development. You have the initial release and production. Whenever you put something in production, users find things that they don't like, things that don't work that everybody thought worked, but with a combination of commands don't work, and those begin to—those are communicated to the software development group and so they have a list of fixes that is adding up as users find these things. At the same time, that same team is developing new functions for the next release. So there is a competition for that precious resource of programming skills, and the management procedures we put in place is to deal with that.

Now, the one good thing that both of my colleagues mentioned about the staff of the regions is a component of the solution at this point in time, given where we are, and that is decisions to remove a function that someone wanted originally from this software and to have a work-around for it, some manual operation.

It is comforting to me, as I travel around the country talking to our regional folks, that they are quite confident they can handle this. In fact, on many of the functions we are talking about removing from the software to get time to fix the existing functions, they said, well, we did that in 2000 manually. We did it in 1990 manu-

ally. We know how to do that. It would have been nice to have this computer assistance, but we can live without it. So that is the good side of that.

The wisdom that is required in this process is to make those tradeoff decisions in a way that costs and efficiencies aren't hurt, but we give the programming staff time enough to do the functions that are really core. And as I said, this is a high-risk enterprise. What I can promise all of us is that it has the full attention of management up and down the line. But this is a high-risk enterprise.

Senator CARPER. OK. Thank you. Thanks for raising those points and for your response to them.

We have been joined by Senator Burris from Illinois. It is great to see you and thanks so much for joining us and for your attendance at many of our hearings. Senator Burris, you are recognized for a statement, if you like, and then questions.

OPENING STATEMENT OF SENATOR BURRIS

Senator BURRIS. Thank you, Mr. Chairman, and to the distinguished panel, I must say that having met with Director Groves recently on the various issues, I hope that things are moving as we had discussed, Director Groves, during our private meeting, especially in the area of the minority, underserved, or undercounted communities. I mean, that is a major concern of mine across the Nation.

Just for the record, I want it to be known that I was able to hook up the Chicago operation with Stan Moore and we had a major event there to kick off the necessity for having everybody counted. It was a very successful event. We had over 2,500 individuals who can contact or reach out to various sections, primarily in the African-American community in Chicago. And, of course, these are influential people that have access not only throughout the State, but throughout the Nation, in trying to make sure that some of our underserved and undercounted communities would be counted.

They really have not, to my estimation, Mr. Groves, seen the value of what that census count would do for that community. Not only does it take care of the congressional redistricting issues and all that, but they don't understand how it does relates to the redistribution of funds for various governmental programs. So we have been trying to get that message out and I am just hoping that will take place.

What I am also hearing, though, is a lot of backlash on the commercials that have been run and the expenditures. What are you all hearing about the amount of money that you are putting out in terms of trying to educate the voters—I mean, educate the citizenry that they should mail back that form when they get it?

Mr. GROVES. Well, we hear both praise and criticism, as you might imagine, Senator.

Senator BURRIS. Especially on the Super Bowl commercial?

Mr. GROVES. The Super Bowl commercial did appear to be noticed by several people in the country, both positively and negatively. I think the way we think about this is, first of all, my personal opinion on this is I wish we didn't have to spend a dime on advertising. I wish that every resident of this country knew that

the census was planned for this April and they couldn't wait to get their questionnaire in the mail.

We have been doing surveys of the American public over the past few months, and other people are doing them, too. There are some shocking results there. So there was a Pew Center survey that was done just a few weeks ago. It showed among people 18 to 29 years old, many of whom are established in their first household by themselves, they are out of the parents' household—

Senator BURRIS. Thank God. [Laughter.]

Mr. GROVES [continuing]. The 31 percent of them didn't know what this word "census" meant. And then the interviewer was instructed to say, well, a census is a count of everyone in the country. It is done every 10 years to reapportion the House of Representatives. Now that I have told you what it is, have you ever heard of that? And that 31 percent goes down only to 17 percent.

So we have a massive burden. You and I and everyone in this room know that the census is coming. We have known it for years. We know what it does and what it is about, but there are segments of our population that don't know anything about the census. And so we have to get the word out to them somehow, and this campaign that we are mounting has a lot of partner organizations that are trusted voices in communities all around the country. We have 200,000 of them now—it is a wonderful accomplishment, I think, on the part of the country—to get the word out.

But in the 2000 Census, we learned that if we did paid media, that worked. In the 1990 Census, we relied on Public Service Announcements. What happened was we made a lot of them, but they aired at three o'clock in the morning. Not very many people saw them. And so for the first time in 2000, we reversed a long-term trend of declining participation because of paid advertising.

The way I think about this is this communications campaign is going to spend about a dollar per person in the country. If that dollar per person encourages them to return the questionnaire, we save for each person about \$25 to measure them by sending somebody out. So that is the trade-off decision. If we can spend a little money to save a lot of money, this makes a lot of sense. And in the 2000 Census, that advertising campaign more than paid for itself, many-fold over.

The Super Bowl ad cost us 2.1 cents per viewer. That was the biggest audience in the history of this country. A hundred-and-thirteen million people saw that ad. Now, we can debate whether that was a good ad or not—

Senator BURRIS. Or whether they really related to it in terms of the census—

Mr. GROVES. That could be true, but in terms of—

Senator BURRIS [continuing]. Rather than a part of something about football.

Mr. GROVES [continuing]. Cost efficiency of getting the message out, it is hard to beat that. If we took out an ad in the *Washington Post*, it is about five cents per person.

Senator BURRIS. Yes.

Mr. GROVES. So I don't know a lot about advertising. I don't know what makes a good ad or a not-good ad. I do know that pur-

chasing on the Super Bowl is a pretty cost efficient way to get the word out.

That is a long-winded answer. I am sorry.

Senator BURRIS. No, I appreciate that, because that did generate a few more questions. I see that I am a little bit over my time here, but I was just concerned about the overall cost in terms of the budgeting. You did have some of it in your remarks in terms of per—so you based that on about 310 or 320 million in the population is what we are going? And then what would it cost to do the difficult part of the door-to-door? Has that been budgeted and projected as to how much that is going to cost us?

Mr. GROVES. Yes. It is hard to get the variable costs on this, but the number that seems to be most defensible is for every one percentage point of households that do not return the questionnaire, and we will have to go out and visit those, we will spend about \$85 million.

Senator BURRIS. Yes.

Mr. GROVES. So we are spending about \$300 million—

Senator BURRIS. In total.

Mr. GROVES. So if we can get four percentage points out of this through the advertising, it pays for itself.

Senator BURRIS. What about the various activities after the census is over and there has to be an undercount, or an assessment of the undercount. Do you all get involved in that? Sometimes there is litigation involved. What type of plans do you have to try to head some of that off?

Mr. GROVES. Well, as we all know, this decade, our design is guided by a Supreme Court ruling before the 2000 Census that said that the reapportionment will be done based on the counts that we are getting. So all of our counts right now are focused on getting the best counts we can. Every fiber of our being is focused on getting the word out and encouraging people to return the questionnaire, and then we will do non-response follow-up.

We, indeed, will do an evaluation of how well we did. There will be a large sample survey that will see whether—to estimate what proportion were missed, what proportions were double-counted. The results of that won't be ready until 2012 because it is a very complicated statistical matter, but we will have that. So the country will know through that and through other ways of knowing how well we did.

Senator BURRIS. Thank you, Mr. Chairman. I will wait for a second round.

Senator CARPER. Thank you, Senator. And again, thank you for being a faithful participant in these hearings and for adding your voice and presence.

Senator BURRIS. I am very much interested in this count, Mr. Chairman.

Senator CARPER. Yes. All of us should be.

Senator BURRIS. Absolutely. This is crucial, especially to the underserved communities.

Senator CARPER. Sure, it is.

In the testimony that we received a bit earlier, Senator Burris, we heard that participation of partnership organizations in this census as compared to 10 years ago, we are witnessing about al-

most a doubling of the partnership organizations that are active and involved this time as compared to a decade ago, which speaks very well.

There was some discussion of the paid advertising that is being used, and I was pleased to hear that the paid advertising is focused on the folks in our country who are the least likely to respond, the hardest to count. So that makes sense. You have some money to spend for advertising, less—rather than spending the money on the people we think are almost sure to be counted and to stand up and be counted, the idea of saying we are going to invest our money where it is going to be real hard to drag people out, it is sort of like getting people out to vote. We had get out the vote. This is like a get out the count kind of deal.

And the other positive here was just in terms of talent pool. We have some really smart, able people to work in the census, and we have had those before, but I don't think ever, maybe at least in recent years, to the extent that we have now. We have got some great talent. My hope is, with that kind of talent on board and people who are used to working hard and being productive, that we might actually surprise ourselves in their ability to get things done.

I want to ask a question, but I think you wanted to say something.

Senator BURRIS. Yes. I just wondered, on the advertising side, which I probably should have raised with Mr. Groves, in the advertising, have they really zeroed in on minority radio stations or minority TV stations with the advertising to make sure that there is a proportional commitment to these media outlets and get it—believe it or not, I know it is a little expensive, but some of the local newspaper ads, and you can probably get word out to your district offices to look for those weekly newspapers that you can put some advertising in that we might reach these communities that we are speaking of.

Senator CARPER. OK. Good.

I want to ask a question of Dr. Groves, if I could, just about out of this 600,000 to a million people that we have on board at the census, new people, temporary employees—we will say it is 600,000 people—how many of those folks will actually be enumerators and actually out there counting on a daily basis?

Mr. GROVES. That figure that I gave you, it is probably 680,000 or so, that is the enumerator count. That is the census taker count.

Senator CARPER. If I were to look for the months, say, April, May, June, would you say that on an average for those 3 months, we have 600,000 people counting as enumerators?

Mr. GROVES. As enumerators, right. Yes. They will be trained the last week of April. They will start work May 1, generally.

Senator CARPER. I tried to do some sort of like back-of-the-envelope math just to see how many folks they would need to count. Let us say they were counting—enumerating, if you will—20 days a month. And let us say they counted each of those 600,000 people, counted five people each day. Five people a day, 20 days in a month, that is 100 people. And we will say we have 600,000 people counting and each of them count in a month 100 people. When I multiply 100 times 600,000, I come up with 60 million people a month that the enumerators were able to be counting. If they are

doing that over 3 months, that would be 20 days a month of counting five people a day, that would be about 180 million people over 3 months at 60 million a month.

Now, five people a day doesn't sound like much for an enumerator. A hundred a month, working 20 days a month, doesn't sound like a whole lot, either. A hundred-and-eighty million people sounds like—that is more than half the people we are going to count. But yet we know that about two-thirds of the people are going to respond anyway. Maybe, we will say, about a third will be non-responders, so those are the folks we have to go out and count, which would be about 100 million people.

Why do we need 600,000 people a month over 3 months to count roughly 100 million people?

Mr. GROVES. Yes. The figures from 2000 are about 40 million households, and they are, on average, like, say, 2.3 people per household, so that is very close to your 100 million people.

This is tough work, first of all. It is work that is mainly nights and weekends work because you have to call on houses when people are at home. The houses you are calling on are houses that, for one reason or another, chose not to return a questionnaire. And then they are also calling on a lot of vacant houses. The vacancy rate this decade is different than it was in 2000.

When we call on a vacant house, we don't know it is vacant. All we know is we sent a questionnaire to this address and nothing came back. So we have to make really quite sure that when we call on a house, it is not just that people are—and no one answers the door—they are at work or somewhere else, but truly, no one lives in that house. That takes multiple visits.

It is also true on the occupied houses that it takes multiple visits. We actually allow as many as six different visits to a housing unit.

I can tell you that from all the things we know about measuring the American public, the houses that are most difficult to contact and get cooperation from are those that are susceptible to the differential undercount we have seen historically in the country. So you could, indeed, do Non-Response Follow-Up a lot more cheaply, but what will happen is you won't measure those houses that are so difficult to contact.

And so even though it is fantastic to imagine that it takes this much effort and that you can't just rip out five a day—

Senator CARPER. It is five people. It is not five houses, but five people.

Mr. GROVES. That is right. It is, indeed, the fact—most of these people, by the way, are working about 17 to 19 hours a week, so it is not a full-time job because there aren't that many hours that are really peak hours to call on houses.

Senator CARPER. I am going to ask Mr. Zinser and Mr. Goldenkoff, any comments on my questioning and the response we heard from Dr. Groves?

Mr. ZINSER. Well, Senator, I think one of the points that—or one of the things you were putting your finger on was how efficient we can make the operation and how efficiently we can use the 600,000 employees that we hire, and I think that is the key point and I think that is why, to go back to what we have talked about here,

why this operation control system is so important, because to get maximum efficiency out of that workforce, we need that kind of management information.

Senator CARPER. OK. Mr. Goldenkoff.

Mr. GOLDENKOFF. Following up on non-responding housing units is an extremely tough job. During the 2000 Census, we went around with enumerators all over the country. We could see for ourselves how difficult it is. Right off the bat, you are dealing with non-responders, so those are people who already rejected the Census Bureau once. They haven't returned their mail questionnaire. And so it sometimes requires multiple visits.

And on top of that, when you add some of the difficulties of going into certain neighborhoods, because of gated communities, other aspects, it makes it difficult to get into a neighborhood. Sometimes the Census Bureau has to have folks to help them get into an area, to help facilitate access to an area. The country is a big place. In more rural areas, you spend a lot of time in your car driving from one house to another. It is not just going door-to-door, but the next housing unit you go to could be miles away.

And so for all those reasons, the amount of time goes up and the efficiency tends to go down. But I will say this. Everybody we have observed was extremely diligent and extremely conscientious about their task.

Senator CARPER. Well, that is encouraging to hear.

I don't know, Senator Burris, if you have the kind of experience in Illinois that we do in Delaware. Delaware is a small State. We tend to be, at least in the northern part of the State, more densely populated. The southern part is a half-mile, a mile between the houses or farms.

But we do a lot of door-to-door get out the vote efforts in our State around election time, or just campaigning prior to elections to identify who is at home. You have a voter registration list. It doesn't always marry up to who is in the home. People come and go. Homes are foreclosed on. Folks grow up. Kids grow up and leave. They no longer live with their parents. There are all kinds of changes.

And one of our challenges has always been to maintain the voter files so that on election day, who lives in a particular house and if they are registered and the idea is to try to get out the folks who are more likely to vote for you or your side.

So we have a little bit of experience with—this is not enumerating, but in a way enumerating, but for not just to count people but actually find out who does live there, who is registered, and who is more likely to vote. And we know it is not easy. But I would say just the idea of doing five a day doesn't sound like a heavy lift. I am encouraged by what Mr. Goldenkoff has said about actually seeing what is involved in this work. But the focus on cost control, which has been raised as an issue here, obviously, it is something that Dr. Groves is mindful of and we just need to continue to be mindful of that.

Senator BURRIS. Mr. Chairman, in the urban communities or the suburban communities, door-to-door sometimes works. But in the Chicago community or the major markets, people don't open their

doors, even when you try to do door-to-door canvassing for political situations.

I remember I had a little issue, and I live in sort of a middle-class neighborhood in Chicago. Some people had turned the street sign the wrong way and they made it a one way for one block, and we had three one-ways going west. And so I had to then try to go around and turn it back around, and I walked four or five blocks trying to get my neighbors with my recognition, and they all knew me, and to even get them to come to the door, to even open the door—and, of course, some were home and they open the door and saw it is me, then they would respond.

But I found that very difficult in the metropolitan areas for those persons to open up their doors to anybody. They could be at home and the doorbells would ring or they would knock on them and they will not open the doors for anybody. Some of that is security purposes. Some of it is just, I don't want to be bothered. But in the old days, we used to do that. Precinct captains in Chicago would knock on your door. You could knock on doors, pass out literature, and people would open the door. That was in my early days in politics. But I have seen during my days that to have changed substantially.

Let me raise a couple other points, if I may.

Senator CARPER. Before you do, I remember being invited to Illinois to campaign door-to-door with a candidate for office and—

Senator BURRIS. Was this in Chicago?

Senator CARPER. We were going door-to-door and finding a hard time to get people to actually come to the door and open it. A couple of times, you knew somebody was home and on occasion people would say, "Who is it?" and I was finding it very difficult to get people to open their door. I would say, like, my name. Nothing happened. And then I would say, Roland Burris, and it just opened doors. It was just pretty amazing how it worked. [Laughter.]

Senator BURRIS. Yes. That is how it—

Senator CARPER. Imagine their surprise when they opened the door. [Laughter.]

Senator BURRIS. Mr. Chairman, I just had another couple of points here because I heard about the tough door-to-door, and we also now have a lot of foreclosed homes. And you won't be able to locate some of these people because you don't know where they have gone. Hopefully, you can find them. They have moved into rental units or somewhere. I mean, are they living with a parent or a friend or something? So that has to also be taken into consideration.

Second, I just know that we in Illinois in our General Assembly have introduced legislation that states that the census would readjust the count for incarcerated persons back to their residence, not in the areas where the facility is. And we have several prisons in Illinois that were built in downstate, and 70 to 80 percent of those residents in those prisons are from Chicago. Those residents will count those prisoners as being a part of their community for census purposes and they will then try to get the revenue based on those calculations. I hope that we will look at that legislation—we are talking about in Illinois—and say that those persons are to be counted where they are going to go back to the community and put

a drain on that community rather than being incarcerated and more than likely are not going to settle, for instance, in my home town of Centralia. My home town of Centralia has about 14,000 people in it. Well, in the prison, I forget what the prison population is now, but if they go and count those 800 or 900 prisoners, then that is going to make us have 15,000 people in Centralia and 90 percent of those are from Chicago. So Centralia will benefit. Chicago will not get the benefit of those people coming back.

So, Mr. Groves, can you do this adjustment without legislation and they can make some type of adjustment in the count?

Mr. GROVES. This concern that you raised about where to count prisoners, we have heard from others. And we also realize that one of—a wonderful quality control process, we have to have outside people review counts, could use similar data. So for the first time, we will make available publicly, early in the process, in time to handle for redistricting purposes at the State level, counts of what we call group quarters. This would include prisons, but also dormitories and assisted living facilities, things like that, down to the block level.

It is not exactly what you were saying. It isn't attempting to identify what the home place of a prisoner is. But for the first time, States will have available to them during the redistricting process the ability to identify prisoner counts down to block levels and use that however they wish—

Senator BURRIS. That data is very readily available through State sources, of where that last residence was for that person. I don't see why that cannot be made an adjustment. My hometown has 14,000 people and there are 900 in the prison. Of those 900, 800 of them are from Chicago. Then it is not a 14,900 population that is in Centralia. It is a 14,000 population with probably another 50 of them coming from Decatur or Rock Island or Rockford or even from out of State.

So I hope that there is some—even in this instance, because this is a complaint that I have heard about, the urban markets and how our smaller communities are taking advantage of these situations and the urban communities will need the money when these people return back to, for various allocations, and they are being short-changed.

So I am hoping that we can look at the adjustment, and I don't think this will take very much of—even if the census is taken, it shouldn't be very costly. You just adjust the numbers. Once the address is determined within that census tract area, you have 50 people in Centralia from that tract area, then you add that to the Chicago population, or the Rock Island population, or the Kankakee population, or the Joliet population. OK? And I am speaking for primarily the prisoners.

Mr. GROVES. Yes.

Senator BURRIS. Of course, assisted living, the people are in the nursing homes and they are pretty close to home in those assisted living facilities.

Mr. GROVES. It might be good to describe how we do counts within prisons, because it is a special operation. We have something called an Individual Census Report. It is the preferred method of

measuring within censuses because each person incarcerated would fill out their own form.

In some prisoners, for security reasons, both security of our folks and others, the prison management says, we will take data off of our administrative records, the prisoner records themselves, and we do that when we are required to by the prison officials.

Our findings are—and I don't know the Illinois record system, but I do know nationally, our findings are that across the States, the records miss large portions of the attributes we are trying to measure on the individual census form and so we greatly prefer to have people fill them out.

So one of the problems that we face nationally with the issue that you raise is that States vary in the record systems of prisons, and what might be easy for one State to put in place to identify what the home of the prisoner is is very difficult for another State. That is our problem at the national level.

We do one thing pretty well at the Census Bureau, I think, and that is after each census, we reevaluate what we call residence rules. Where do we count different people? One of the topics of great interest going forward for the 2020 Census is to use records systems more efficiently because that would reduce the burden on the American public and the cost of the data collection.

So I believe that we must evaluate this placement, where do we place prisoners, along with how do administrative records consider different households. What does the address on the records system really mean going forward? And so I think we will.

But unfortunately, we are not measuring right now—for your purposes, Senator, we couldn't do the adjustment that you are asking for because we are not measuring the home of an individual prisoner the way we are going about—

Senator BURRIS. Yes, but when that prisoner is counted, Mr. Groves, it is added to that community.

Mr. GROVES. We follow with prisons the same rule that we follow for the vast majority of others, and that is we count you in your usual residence. Now, what do we mean by that? This is actually in the Census Act of 1790 that gave us this rule, and that means where people usually eat and sleep—

Senator BURRIS. Sure, and for the prisoner, you are eating and sleeping in prison.

Mr. GROVES. That is why we count them where—

Senator BURRIS. But that is no benefit—the community is benefiting by that in various ways, and one way is totally unfair to the community. We have 40,000 prisoners in Illinois. Sixty percent of them are from the Chicago community. You are talking about 24,000 individuals that are undercounted in Chicago and overcounted in those downstate communities. That is a number, an impact on that urban area, and we have already got urban problems as it is.

Mr. GROVES. And what I am saying, with this new tabulation for redistricting for the first time this decade, every State can decide how they are going to treat their prisoner population, whether they are going to keep them in the rural areas where they—

Senator BURRIS. So that is a state-to-state decision?

Mr. GROVES. According to how we do redistricting, it is—

Senator BURRIS. No, but then can that data be turned over to you and it be transferred to the particular urban area where these people are really housed? Will you make that count adjustment?

Mr. GROVES. If the State had those data certified in a way that the redistricting process found acceptable to that State, then they could do it themselves. We are not involved in redistricting, as it turns out. We provide the information that allows people at the State level to—

Senator BURRIS. Now, I am not talking about redistricting. I am talking about the count of that head. I am sure these numbers might be used in redistricting, but they are also used for distribution of HUD funds and other various dollars and that goes into the count of what Centralia has. In order for Centralia to get the grant, it is based on what you turn in for the population of Centralia, as I understand it.

Now, if I am wrong in that area, please correct me. But I think that you all ought to take a very hard look at how even nationwide, with over some two million individuals incarcerated, how they are being counted. And I think this is an issue that the census ought to take up in consideration and not just leave it to the States because you are getting a false report on the community from which this person is from because Centralia in no way is being—there is no use of the city streets. There is no use of the—because the State is paying for the water that Centralia provides it. So they are benefiting, and now they benefit unjustly because of the prison population.

And I think that is something that you ought to look at specifically, not dealing with whether it is apportionment, not dealing with whether or not it is dealing with the redistricting. This is an area that we ought to look at for an accurate census count. Where does that prisoner actually have a home and where is that person going back to, and it will be a drain on that community as opposed to leaving Centralia and coming back to Chicago. I mean, that ought to be looked at, Director. I would suggest you do that.

Mr. GROVES. Well, I can promise you, going forward, we will. But I also must, in all honesty, note that from our data themselves, that won't be possible for the 2010 Census to—

Senator BURRIS. GAO, have you all done any analysis—I mean, any comment in that regard?

Mr. GOLDENKOFF. We have done some limited analysis, and we don't have a position on where prisoners should be counted. It is Congress' prerogative to work that out in consultation with the Census Bureau and the States.

What I do want to point out, though, that there are some operational issues and feasibility issues that need to be kept in mind. One is that administrative records, as Dr. Groves has already mentioned, there is a lot of variation from State to State in the quality or completeness of administrative records. So that has to be considered.

Another issue that needs to be taken into account is that there is, at least at present, no definition of a person's home on record. I mean, it is one thing to say, well, we should put them back where they came from. That is where they should be included in the census count. The issue there is, if someone has been in prison for a

number of years, well, how do we know? Is that person going to go back to that location? Does that location, if they say, oh, their last previous residence before being incarcerated was 123 Main Street, does 123 Main Street even exist anymore? Was it a rental property that now somebody else is living in that same unit? So it would create—somebody would have to go out and verify that address still exists.

Senator BURRIS. Well, certainly there is going to be some work in keeping records on it, but that person comes out of that jurisdiction, he is not going back to that jurisdiction, because the census is only done every 10 years. So there is going to be a big turnover in the prison population in 10 years, and some of those people are going to be released during that 10-year period.

Mr. GOLDENKOFF. Well, some will be, some won't be. Some are in Federal prison and won't even be going back to that State where they are housed. They are going back to some other State.

Senator BURRIS. Well, I was thinking of this going to the 40,000 that are in Illinois State prisons, as your example.

Mr. GOLDENKOFF. OK.

Senator BURRIS. You all could make a study by using Illinois because there are quite a few small communities where we have built in the last 20 years, they built 20 new prisons in Illinois.

Mr. GOLDENKOFF. Right.

Senator BURRIS. That is a prison a year. And they have been populated. Sixty to 70 percent of the urban areas, and then most of those people are five or—and for the lifers, that is another issue you have to deal with. Some of them might be getting life in those prisons, and then that would be difficult. But most of those prisoners are time certain and 80 to 90 percent of them are going to be released. We just had 1,100 of them released because of budget cuts, and where did they all head back to? They all headed back to Chicago. And it is a major drain on the urban community when that happens and the local community is taking advantage of that and that person is not even there anymore.

Mr. GOLDENKOFF. Right.

Senator CARPER. I am going to ask you to go ahead and respond.

Mr. GOLDENKOFF. It is something that requires further study. As I said, GAO doesn't have a position on it, but what we do have a position on is just what needs to be considered would be the operational and feasibility issues and it is something that will require further study, because as Dr. Groves said, it is really too late in this census cycle to get down to that level of detail.

Senator BURRIS. I think that adjustments could be made, even in this cycle.

Senator CARPER. OK. Thank you, sir.

I have a couple of short questions, and then if Senator Burris has anything else that he would like to add, he is welcome to, and then we are going to call it a day.

One of the things I will be asking at the very end is anything that any of you want to add yourselves that comes to mind as a result of this conversation. Be thinking about that, but you will have that opportunity.

Dr. Groves, we talked a little bit about this already, but could you give us some idea of how well recruitment and hiring are

going, specifically with respect to bilingual communities? We all know not everybody in this country speaks English. Some speak it not very well. But there are 100 languages that I suppose are spoken in this country, easily. But I think you focus on maybe a dozen or so languages in terms of the ability to enumerate and to count folks.

But how are we doing in terms of hiring folks that are able to go and be effective in bilingual communities? Is the Census Bureau having difficulty attracting enough eligible and qualified bilingual enumerators to work in these communities, and if so, are there any languages for which recruitment is lacking? If you are having certain problems trying to fill the slots that are needed for folks that can speak, maybe, less commonly spoken languages, what is the Census Bureau doing to address those difficulties?

Mr. GROVES. That is a great set of questions. I think the first thing to note is that we attempt to hire people from the neighborhoods in which they will be given assignments. So we want people who know the neighborhoods they will work in. This places a geographical constraint on the recruitment process.

Nationally, we are in fine shape on counts. We are progressing better than we feared. When you go down to local areas, there are problems. It does appear to be the case for some groups, bilingual folks are the target that we want in the neighborhood. We are having some problems in rural areas greater than in urban areas through the recruitment process. I think that has been true in prior decades, as well.

We are not, I don't think, in trouble on this. When I talk to the regional directors, they are concerned about bilingual recruiting, but remain optimistic that we will hit our goals.

So the bilingual skills and the rural recruiting are the toughest areas for us right now, but we are actually—this is not what keeps me awake at night.

Senator CARPER. OK. Any steps that you all have taken at the Census Bureau to address either the bilingual or rural recruitment—

Mr. GROVES. We are advertising in in-language newspapers, some of the weekly newspapers that Senator Burris talked about, and we are advertising on in-language radio in areas. So there are a lot of census ads when we are after bilingual folks that use the media of that language as a way to do it.

Senator CARPER. I have seen some press—this is a change in the focus here a little bit, to “hard to count.” But we have seen some press reports that some Hispanic advocacy groups have launched a grassroots campaign calling for a boycott of the census unless immigration laws are changed. In my view, it is not, in the big picture, not an enlightened position to take, but nonetheless. But what strategies does the Bureau have in place to combat fears on the part of some immigrant communities that participating in the census will be harmful to them?

Mr. GROVES. We spend a lot of our time talking about this and working on this issue. It is an issue that arises in every census where the decade that preceded it had waves of immigration, people coming to this country from other countries with different cul-

tures and different relationships to their central government are special educational targets for us.

I think there are several things that we have learned over the decades that are appropriate in meeting this challenge. One is although I can go throughout the country giving speeches about the safety that is involved in participating in the census, the fact that you can't be harmed, while that is necessary, it is not sufficient and reaching out to these partner organizations is really key.

We are so gratified by the organization of partner groups in a lot of in-language subculture groups, especially new immigrant groups. I was in Minneapolis just a few days ago where they have a large Somali population. You wouldn't imagine it. You wouldn't automatically associate that with Minneapolis. This was a long set of discussions. They have the concerns about whether those who might be undocumented need to fear that enforcement agencies would get this data, and we have a wonderful thing to say in this country about that, that we have very strong laws that protect that information from getting in the hands of any enforcement agency at the local, State, and national level.

Repeating that was good, but when the Somali leaders of Minneapolis said that, it had different meaning than when I said it, and so the fact that we are using in-language ethnic media and using the leadership of those communities helps.

We have hired partner specialists. The stimulus money allowed us to quintuple the number of partners specialists we have. We took them from the communities that were hard to count. They have their own network and ties, and that has been a wise decision in retrospect, I think, for us.

So it is a challenge that never goes away. It is a question that arises all the time. Will I be harmed by participating in the census? We have a wonderful answer to give in the country, but all of us need to give that answer in a unified way.

Senator CARPER. Thank you. Staying on this point again for hard to count, in the past, I am told that the Census Bureau has worked with the Immigration and Naturalization Service to refrain from conducting raids during response follow-up. The thinking, I presume, is that if one arm of our government is actively arresting people believed to be here illegally, they and their friends and families might be less interested in helping another.

What is the status of the Bureau' outreach to immigration officials on these issues, if you will?

Mr. GROVES. I believe the Secretary spoke to this, and I also did. We can't, as one Federal agency, ask another Federal agency to stand down on their mission, nor will that happen. Secretary Napolitano, in response to a query from one of the Catholic bishops, noted that the intent of her agency at this time was to not focus on individuals but to focus on other ways to fulfill their mission and that statement addressed some of the issues of concerns of these groups.

Senator CARPER. OK. Mr. Zinser or Mr. Goldenkoff, do you have anything you want to add on hard to count? You don't have to, but if you have anything that you want to add. Good.

The last issue I want to raise, cost overruns. Dr. Groves, last week, the Commerce Department IG issued a report noting that

the Census Bureau paid millions of dollars to temporary employees who never performed any field work and others who overbilled for travel. Let me just ask, how would you like to respond to the IG's findings? And as you begin to gear up for the upcoming field operations involving significantly more people, as we know, what types of internal controls do you plan to put in place or have you put in place to avoid these types of cost overruns in the future?

Mr. GROVES. Actually, the IG report focused on an operation that was done in the summer of 2009 and the results of their investigation on that. We testified with regard to that overrun in September, October—I have lost track of time. We learned from that overrun various things. One is that we are dealing in 2009–2010 with a different labor market. We over-recruited, clearly, anticipating the labor market of 2000 and the attrition that was built into that kind of labor market. So we learned that lesson and we have adjusted our hiring and recruiting going forward.

Second, I learned as a new director that the cost estimation process that led to the staffing decisions could be improved through updating components of the cost model, and that is what I testified to with regard to Non-Response Follow-Up. Although it has been reported that we have a \$2.3 billion cost estimate, we actually have a thousand cost estimates on Non-Response Follow-Up because there is no one cost estimate. We haven't yet seen what is going to happen that will produce the actual costs. As we see those events fall into line, we are going to narrow our range of cost estimates, and we will be completely transparent on this. I will tell you this as soon as we know it. So cost estimation is another thing that we are doing.

I also want to point out that the address canvassing was an operation that was unique in the experience of the Census Bureau. Those handhelds had to work. There was great concern. There are probably testimonies in front of this Subcommittee that the handhelds weren't going to work at all. So our field folks were really quite concerned that they had enough staff to do the work. That is a natural concern of those involved in production processes that will never go away.

I think our job is to make sure we are as cost efficient as possible, and I care deeply about this. It is notable that the two big field operations we have had since then have been on time and on budget or under budget.

Senator CARPER. That is encouraging.

Mr. Zinser, Mr. Goldenkoff, anything you would like to add on cost overruns?

Mr. ZINSER. Thank you, Senator. I think in our report, we did try to put it in the right context, that these kinds of inefficiencies occur, and the message was with an operation coming up that is four to five times greater than what you just went through, attention to these areas is very important to cost controls.

Senator CARPER. OK. Thank you.

Senator Burriss, are you all in, as we say in the game, all in?

I promised Dr. Groves, Mr. Zinser, and Mr. Goldenkoff, if you wanted to take a minute and just add a closing comment, this might be a good time to do that. If you don't want to, then I will

wrap it up. Go ahead. Mr. Goldenkoff, anything you wanted to add or take away?

Mr. GOLDENKOFF. No. I think that we are all in general agreement here on what the issues are, so in terms of anything new or dramatic that no one has ever realized before.

What I would like to stress, though, is that the census, as large as it is, as complex as it is, it is an inherently fragile operation. It doesn't take much to derail it. So that is why, moving forward, there is really not a whole lot that can be done at this point, a new operation that no one ever thought of, a new action that no one had ever thought of before. So much is already being done.

And so that is why what the Bureau needs to focus on going forward now that the data collection has started is real time metrics of these different operations so that they could see very early on, almost like an intel operation, intel on a ground operation, which essentially is what the census is, making that analogy to the military, what is working, what is not, and taking early and direct action to keep the operations on track.

Senator CARPER. All right. Thank you. Mr. Zinser.

Mr. ZINSER. Thank you, Senator. I think I would just say a couple of things. One is that things are going to go wrong. There are going to be problems. There have been problems every Decennial, and the trick is the management being able to respond to those problems. Especially when you have 600,000 employees, you are going to have problems. I think it is necessary for the Census Bureau and the Department of Commerce, our office, GAO, the Congress, to all kind of try to see those problems and get on top of them.

And the second point, I would just go back to Senator Burriss's concern about the prison populations. I think it is difficult to make any changes to the way the Census Bureau does things right now, but I am wondering if the focus could be on the formula that is used to distribute some of these Federal funds, if there couldn't be some algorithm or some factor that can be used that takes into consideration how the populations of various cities are skewed based on other data concerning prison populations and attack the formula rather than try to change the way the Census Bureau is doing things. That would be my two cents on that issue.

Senator CARPER. OK. Thank you. Dr. Groves.

Mr. GROVES. Well, I want to make a plea to all of us to do everything we can over the next few days to tell friends and neighbors that this thing called the census is coming, that it is a chance for all of us to participate in a building block of the democracy, something that the founding fathers envisioned and told us to do every 10 years and we have done obediently since then.

And that for those who are worried about the Federal deficit and Federal spending, this is the one thing, as you noted, Senator, that we can all do to save money. We really can. All you have to do is fill out that Census form and return it. If you are a private person and you don't want people knocking on your door, you can avoid this simply by taking 10 minutes to fill out this form. All of the benefits of the census derive from that simple act, that 10 minutes that we are asking people to take, and now is the time, I think, for all the leaders of the country in a unified voice to say, come on.

Let us do this. Let us do it together. Let us count ourselves and reapportion the House and get all the benefits from an accurate count that we can through our own participation.

Senator CARPER. All right. Thank you.

Well, I want to conclude again by thanking you for joining us today. I want to conclude by thanking each of you for the work that the agencies or the entities that you represent have put into our efforts to date on this Decennial Census.

This is certainly important work for our country and one that has been important work literally since our founding as a Nation. It is in some ways a lot more difficult than it used to be. But in some ways, it is easier because we have some better tools to enable us to attack these challenges.

I want to just underline what we see our role as here in the Senate and in this Subcommittee, in particular. We have an oversight role to make sure that the Executive Branch is doing the work that they ought to be doing. We also have an obligation to try to find ways that we can be helpful, and to the extent that you need help, we have tried to be there to be supportive. If it is appropriations, if it is funding, if it is other resources that need to be brought to bear, we are trying to make sure that those are.

I want to thank the IG and I want to thank our friends at GAO for being critical when it is appropriate, but I think, without exception, being constructively critical. There is a difference between those two approaches, so thank you for always being constructive.

And for other things that Senator Burris and I and others on this Subcommittee and our full Committee that need to be doing in the days ahead, we certainly want to do that. We certainly have the opportunity through our own public comments to encourage people to stand up to be counted and to be proud of this opportunity, this constitutional obligation and opportunity.

The hearing record will be open for 2 weeks. My colleagues who are not here will have the opportunity to submit their questions in writing. We would ask that you respond promptly.

I want to thank both our majority and our minority staff for their work in preparing for this hearing and for everyone who has participated in it. Senator Burris.

Senator BURRIS. I just think what Dr. Groves just said, that we should get that on tape and make a commercial out of it. That was a hell of a commercial that you just made for the people to fill out the census.

Senator CARPER. That is great.

All right. With that having been said, this hearing is adjourned. Thank you so much.

[Whereupon, at 4:19 p.m., the Subcommittee was adjourned.]

APPENDIX

FOR IMMEDIATE RELEASE



TOM CARPER
UNITED STATES SENATOR · DELAWARE



FOR RELEASE: Feb. 23, 2010
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**SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT
INFORMATION, FEDERAL SERVICES, AND INTERNATIONAL SECURITY**

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

**HEARING: "Countdown to Census Day: Progress Report on the Census Bureau's Preparedness
for the Enumeration"**

Opening Statement of Senator Thomas R. Carper, Chairman

Today is the continuation of our oversight efforts related to the upcoming 2010 Census. As many of you may know, the road to the 2010 Census has been anything but easy, and this Subcommittee has held several hearings on many of the operational and organizational challenges that have threatened the success of the 2010 Census. While we are far from done, I think we can all take pride in the excellent work of Dr. Groves, his predecessor, Dr. Murdock, and the career professionals at the Census Bureau who have worked very hard over the past few months to get the census back on track.

This year's census will be by far the most expensive in the nation's history, even taking inflation into account. So far, the cost of the 2010 census is estimated at \$14.7 billion, reflecting an increase of \$3.2 billion just over the last two years. Although there are only 37 days remaining until Census Day, the 2010 Census has, at long last, begun in certain parts of the country. The population tally officially began in late January in remote parts of Alaska, and the Bureau is now revving up for full-scale operations.

Overall, things seem to be going according to plan. Recruiting is on track; census questionnaires have been printed and are scheduled to be mailed out in mid-March; local census offices are open and operational; and the advertising campaign is moving smoothly into its active phase. However, given the sheer magnitude of such an undertaking as the decennial census, problems are to be expected. Investigations performed by GAO and the Commerce Department's Inspector General have raised concerns that the Bureau is behind on testing and the full development of some of its key information technology systems. In December, the Bureau conducted two operational tests of the computer networks supporting decennial operations, which revealed critical defects and IT performance problems.

More recently, a quarterly report issued last week by the Commerce Inspector General noted that the Bureau wasted millions of dollars on workers who were hired and trained last year for temporary positions by the Census Bureau but never worked for the agency and others who overbilled for travel expenses.

In addition to the operational issues that I previously mentioned, undercounting remains a serious challenge for many communities throughout this country. In 2000, 6.4 million people were missed, many of whom were minorities and children. Reaching out to those who are historically hard to count is even more important when you consider that, for every 1 percent of the population that does respond to the census, we're going to have to spend \$85 million, I'm told, to go door to door to get everyone counted. It is vitally important, then, that we do the necessary hard work now so that we get an accurate, cost-effective count in 2010 that will serve us well in the next decade.

With that said, I look forward to the expert testimony our distinguished panel of witnesses will provide today. It is my hope that today's proceedings will provide us with a clear assessment of the complications facing the Census Bureau, and how Congress can best partner with the Bureau as it works towards achieving its goal of an accurate and cost-effective Census in 2010.

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STATEMENT OF SENATOR JOHN MCCAIN, RANKING MEMBER
SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT
INFORMATION, FEDERAL SERVICES AND INTERNATIONAL SECURITY
COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

“Countdown to Census Day: Progress Report on the Census Bureau’s
Preparedness for Enumeration”

February 23, 2010

Senator Carper, thank you for holding this hearing today and for your continued oversight of the Census Bureau’s preparations for the 2010 census. I also want to welcome our panel of witnesses this afternoon.

This is the Committee’s second census oversight hearing since Dr. Groves’ confirmation and it may be the last one before the April 1st Census Day. We will hear about many of the same risks to the Decennial Census that have been previously identified. What I want to discuss today is cost – specifically the cost of the Census Bureau’s Super Bowl advertisements and the accuracy of cost-estimates for non-response follow up.

Dr. Groves, it is no secret the American people are hurting in this economy right now, and they are keenly attuned to how the government is spending their money. So, when the Census Bureau drops \$2.5 million to compete with ads for Doritos and Coca Cola during the Super Bowl, people become extremely concerned. I know that I am.

I understand that there will be more of these advertisements during the Olympics and March Madness. It is very important that we have a clear explanation today of how and why the decisions were made to buy these expensive ads.

Also, Dr. Groves, at our last hearing you testified that you were personally concerned about cost-estimation control. I share your strong concerns regarding unreliable cost-estimates. Last year, the Bureau went 25 percent over budget in assembling its address list. According to a recent Department of Commerce Inspector General Report, this included paying more than 15,000 people to do less than one day’s work or none at all. Clearly, this is unacceptable.

Following the address canvassing cost overruns, the Bureau said it was completely redoing the cost modeling for non-response follow up since it is expected to run in the billions of dollars. The revised projection now indicates non-response follow up could cost less than originally believed. While I am encouraged by this result, I would like you to discuss why the new estimates are more accurate, and the likelihood we will meet the reduced number.

Today, I am looking for candor on these cost issues, what other remaining problems exist, what we are doing to address them, and the contingencies in place if the system starts to break down. The mission of the 2010 Decennial Census – to count more than 300 million people in over 130 million households – is a herculean task. However, the American people still expect the Census Bureau to deliver the most accurate and trustworthy census in history, while not wasting money.



**PREPARED STATEMENT OF
ROBERT M. GROVES
DIRECTOR
US CENSUS BUREAU**

2010 Census: A Status Update of Key Decennial Operations

**Before the Subcommittee on Federal Financial Management,
Government Information, Federal Services and International Security
Committee on Homeland Security and Governmental Affairs
United States Senate**

23 February 2010

Chairman Carper, Ranking Member McCain, members of the Subcommittee, I appreciate this opportunity to once again testify before you and provide my assessment of the most current status of preparations for the 2010 Census.

First, the most important announcement I have to make to you today is that the 2010 Census is underway. Our work started on Monday, January 25, where we began an enumeration in Noorvik, an Alaska Native village in the Northwest Arctic Borough, 30 miles north of the Arctic Circle. It took crossing four time zones, flying in a 10-seat plane, riding a dog sled and a snow mobile to reach them, but it was worth it even in balmy -5 degree weather. That event, although costing nearly \$85,000, generated an audience of over 80 million people. To purchase that media coverage would have cost at least \$10-\$15 million.

Second, our advertisements are on the air. You may have seen our kickoff event in New York City on the Today Show, and similar events around the country, during the first

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week of January; we are well on our way to executing the largest non-military mobilization in the United States to count every resident in America.

Third, in my last testimony, I noted a list of future activities and risks that needed to be addressed over the next two month period (October/November 2009). I can report that with less than 40 days away from April 1, we have addressed several of these and we are ready to go. All 494 Local Census Offices are open, with equipment in place, and staffed to serve the public. Recruiting for field operations is well ahead of our goal, even in hard-to-count areas, at 117 percent as of January 24. Just over 2 million potential hires have been recruited. We can boast of over 180,000 partnerships formed around the country with organizations and communities ready to help us raise awareness and increase participation rates. There are 9,600 Complete Count Committees, with 6,800 of them being government- based, also ready and poised to work with us to raise awareness. We are on track or ahead of schedule with all of our forms printing: 210 million enumerator forms are printed; 44.5 million group quarters enumeration forms are printed; 97 percent of our 169.5 million Mailout/Mailback, Update/Leave, and Replacement Mailing questionnaires are printed; 70 percent of our 13.5 million bilingual questionnaires are printed; and, 79 percent of the 132 million advance letters are printed. Lastly, we started the Group Quarters Advance Visit on February 1, the precursor to Group Quarters Enumeration, where we work with Group Quarter administrators and devise the best method for counting their residents.

However, there are also challenges that remain, and I will describe those in more detail later in my testimony. Most importantly, though, our biggest risk is the uncertainty presented by the American public's response to the census. I asked then and will ask again now, that every political, corporate, community and religious leader get the message out that the cost and quality of the 2010 Census is in our hands. We really need your help in encouraging and motivating everyone in your States to participate, and in particular, to mail back a completed form and cooperate with the enumerators.

Status Update

In October when I first testified before the subcommittee, I gave my initial assessment of key components of the 2010 Census. Since that time, I have continued to evaluate our preparations, operations and testing and feel that we are prepared to conduct the census. That is not to say no challenges exist; they do, but we are in a position to manage those challenges/risks better than before and believe we will deliver a quality product to the President and Congress by the statutory deadlines.

Before I begin with my latest operational assessment, and the related technical aspects, I want to touch on two important topics which have received quite a bit of attention in the last few months: our fingerprinting policies and procedures and the 2010 Census media campaign. I will start with the topic on which we ended last, and that is our fingerprinting procedures. Toward the end of that hearing, we briefly touched on the screening process – name (or background) check and fingerprinting - to determine suitability for hire as an enumerator. The concerns expressed by the Government Accountability Office generated a stir that rightly caused us to look at our process to determine how it could be improved. Since that time, the Bureau has put in place additional procedures that we believe will reassure Congress and the public that we are taking every measure to protect the American public. The Census Bureau is committed to protecting the public safety and the integrity of the 2010 Census. Toward these ends, the Bureau has taken steps to tighten its methods for the criminal history screening of future job applicants for the 2010 Census compared to both the 2000 Census and 2010 address canvassing operation.

Before discussing the specific steps taken to protect public safety and the integrity of the census, it is important to note that under Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq.), an absolute bar to employment based on a conviction or arrest record is unlawful where the bar results in a disparate impact on groups protected by that Act. See *Green v. Missouri Pac. R.R. Co.*, 523 F.2d 1290 (8th Cir. 1975). Although a criminal record cannot be the basis for a categorical disqualification, the Equal Employment Opportunity Commission (EEOC) has previously determined that specific individuals may be disqualified where there is a nexus between their past offenses and the potential harm to the public, should the applicant be employed.

To carry out this legal requirement, the Census Bureau is instituting a rigorous screening process, designed to protect public safety and the integrity of 2010 Census data. Two steps of the process remain unchanged from the 2000 Census:

- During the application process, each applicant is required to accurately disclose information about any conviction, imprisonment, probation, or parole in the last 10 years. Failure to disclose this information will disqualify an individual from being hired.
- A Federal Bureau of Investigation (FBI) background check (or "name check"), involving a check of an applicant's name, date of birth, social security number and gender, is conducted for each applicant. In 2000, the background screening stopped here.

For the 2010 Census, in addition to meeting the criteria outlined above, all employees will also be subjected to the following additional screening:

- The Census Bureau will conduct a separate fingerprint check against the FBI's database as an added step on the accuracy of the initial name check. Among those who pass the name check, the Census Bureau will hire approximately one million individuals who will undergo fingerprint tests. During this process, two sets of fingerprints are collected by two different Census Bureau employees. The Bureau is working with the FBI to make improvements to this process, as described below.
- The Census Bureau has sharpened the criteria for disqualifying applicants with prior criminal histories. The Bureau will now automatically disqualify any applicant whose screening indicates prior convictions or a pending charge for certain categories of crimes, such as murder, sex offenses, robbery, voter fraud, or other crimes that suggest a threat to safety or the integrity of census data. In addition, those who have been convicted or who have charges pending involving crimes of dishonesty, burglary, theft, or vandalism are disqualified from employment, except when the person conclusively demonstrates that he or she does not present a current threat.

For the 2010 Census, the Census Bureau will also utilize the E-Verify process to confirm employment eligibility based on the Social Security number for each person hired.

Applicants who pass this new and improved background check process will be temporarily employed by the Census Bureau beginning in the spring of 2010.

It should be noted that in address canvassing, about 16 percent of the applicants were disqualified based on the initial name check alone, and less than 0.5 percent more were disqualified based on the fingerprinting. Therefore, if an applicant passes the name check, there is a more than 99 percent chance that they will also pass the fingerprint check. Thus, the first background check is a very effective tool, while the fingerprinting adds some additional screening value to verify the results of the first check. Each of these steps is taken to ensure that the Census Bureau does not send people into the field whom it determines may pose a danger to the public.

The Census Bureau faces a unique challenge in carrying out individual screening consistent with applicable law. The Bureau expects approximately three million applicants for 2010 non-response follow-up operations; each of these applicants will

undergo the initial name check; for the initial round of non-response follow-up hiring, the individuals who pass the application process and are offered jobs will undergo fingerprint testing; this testing will be accomplished on a single day at 34,000 locations around the country by 68,000 Census supervisory personnel who have been specifically trained in collecting fingerprints.

The Bureau is using lessons learned during address canvassing operations and has been working closely with the FBI to take effective actions to drastically reduce the 22 percent unreadable fingerprint rate and to improve the background check process. For example, we have improved the fingerprint training, implementing a new 4-hour fingerprint training enhancement for staff responsible for collection of fingerprints in the field. Additionally, lotion has been added to the fingerprint kits in an effort to make more fingerprints readable. The first collection of fingerprints utilizing the advanced training occurred for hires attending the January 26, 2010 training for the Group Quarters Advance Visit Crew Leaders and the Update/Leave Field Operation Supervisors.

More importantly, the Census Bureau will now use live scan electronic fingerprinting devices in every practical case to collect two more sets of fingerprints from employees who still have unreadable prints. At the end of the process, this pool of employees will have passed a standard FBI background check and will have undergone four different fingerprinting efforts conducted by different employees and employing different technologies. We have already distributed live scan machines for fingerprinting to the Regional Census Centers (RCCs), for deployment to the 494 Local Census Offices (LCOs).

Let me reiterate that the safety of the American public and of our staff is of paramount concern to me; I fully support the unprecedented improvements in the screening of applicants to ensure that safety.

Now, let me turn to the integrated communications campaign.

With respect to the media campaign, the goals of the 2010 Census paid advertising, promotion and public relations are threefold:

1. Increase the share of American households that mail back their census form
2. Reduce the undercount, especially the differential undercount which disproportionately impacts hard to count communities
3. Increase cooperation with enumerators during the door-to-door phase, also known as Non-Response Follow-Up (NRFU).

In 2007, the Bureau contracted with a professional advertising firm that retained 12 subcontractors to research, test, design, and produce a multi-faceted paid media effort to reach everyone in America. With additional funding provided in 2009 through the American Recovery and Reinvestment Act (ARRA), the total media buy budget was increased to \$140 million (including \$7 million in reserves). The media campaign is in 28 languages and across 8 major audiences. Based upon experience, a decade of research, and requirements in Congressional appropriations, the 2010 campaign is designed to especially motivate "hard to count" populations.

Compared to 2000, the budget for ethnic audiences is up 39 percent (\$72M vs. \$52M); and the allocation between diverse mass audience compared to ethnic audiences is skewed heavily toward the latter to help address awareness issues and low response rates.

The Census Bureau has done extensive research aimed at understanding the societal factors which help contribute to low response rates. Among the key indicators are: rates of public assistance, unemployment rates, homeownership vs. renting, linguistic isolation, and others. Altogether we identified 12 variables that help predict low response and mapped these data at the census tract level. This research has helped guide where we are making media buys, especially at the local level. The 2010 media buy strategy puts more resources into these local, targeted buys as compared to the 2000 campaign.

Together the Census Bureau and our subcontractors collaborated on a media buy strategy and allocation of dollars across television, radio, print, out-of-home (OOH - which includes billboards, transit ads, in-store ads, and others), as well as digital media outlets for each audience campaign.

Before entering into negotiations with media outlets, the 2010 Census Team developed an allocation for all media based upon extensive research into media consumption habits of American consumers. We based our allocations on that data:

Total spend by each medium

- Television - \$62.7M
- Radio - \$18.1M
- Newspaper - \$17.2M
- Magazines - \$3.9M

- Out of Home (OOH) - \$12.0M
- Digital - \$10.1M

As our contractors entered into negotiations for media buys for national and local outlets, they followed industry practices which seek "added value" from the media outlets above and beyond the price of the placements sought by an advertiser. Examples of added value for the 2010 Census campaign include additional broadcast spots provided for free; celebrity endorsements or mentions of Census in programming or through public service announcements (PSAs); news or editorial content; or even special 2010 Census programming. In all some 2,100 requests for proposals (RFPs) were issued for media buys, with over 61,000 media outlets responding, and each outlet engaged was asked to provide some added value. However it was never a requirement of a final buy.

As of late January, the Census team has negotiated almost \$30 million in added value from media outlets. This represents a leveraging of the taxpayer spending on media buys of about 22.5% of the total \$133 million in buys negotiated or being completed. We expect the final added value may come close to 25% when finalized after Non-response Follow-up.

Mr. Chairman, in a perfect world, where every resident was completely aware of the constitutional underpinnings of the Census, there might be no need to spend any taxpayer money on advertising. We do not live in such a world. Last Census proved with little doubt the value of a paid media campaign as the Census Bureau reversed a multi-decade decline in response rates. We spend advertising money in an attempt to save salary costs of nonresponse follow-up activities.

Internal Challenges

Now I would like to move into the more technical subjects. In the testimony provided in October 2009, it was noted the Census Bureau faced several challenges in the ramp up to the 2010 Census, both internal and external. Following is my most current assessment of these challenges, which included testing key systems; the master address file or MAF; cost estimation procedures; and completion of Group Quarter Validation.

Status of Key Information Technology (IT) Systems

There are several components to our IT systems that have undergone recent developments: the Paper Based Operation Control System (**PBOCS**), the Universe

Control and Management System (**UC&M**), the Decennial Response Integration System (**DRIS**), and the Matching Review and Coding System (**MaRCS**). I will go through each of these in turn and explain their function.

We have been conducting load tests designed to test the key components of the software that we will rely upon to manage field operations during the 2010 Census. On December 3, 2009, we ran the first version of the load test. That load test involved 8,000 personnel in 400 offices around the country. The test was a synchronized effort where each person was given scripted instructions to run specific applications at specific points in time so that we could carefully monitor the network usage. Additional stress was added to the test by conducting the test in conjunction with other routine network activity such as the use of office suite applications and the Internet.

During the December 3rd test we found glitches at various points in the system. One such glitch prevented our payroll system from being tested. Solutions were developed to address each identified glitch in preparation for the subsequent load test on December 15, 2009. After conducting the December 15th test, we are confident that the infrastructure is more than capable of handling the peak network traffic we expect in the spring 2010.

Paper-based Operations Control System (PBOCS)

Due to the movement from handheld computer use for the Non-response Follow-up (NRFU) stage of the census to a paper-based design, administrative software for this phase had to be developed. The result of this development is the so-called PBOCS. This is a high risk activity, and therefore we monitor it very closely.

The PBOCS has a development approach that delivers the features of the application in *three, five-week development iterations*. This approach accomplishes the following:

- Enables delivery of functionality when it is needed by the stakeholders, rather than as a complete system which would require a longer development window, and
- Maximizes prototyping, stakeholder input/validation, and rapid problem identification and correction.

The PBOCS was certified on January 14, 2010, and its developmental iterations have proceeded as planned.

First Iteration of PBOCS

We completed the critical testing for Release 1 of the PBOCS, and deployed the system to the Local Census Offices (LCOs) on schedule on January 19, 2010. Release 1 of the PBOCS is providing the functionality needed to support the Remote Alaska Enumeration Operation, the Group Quarters Advance Visit, Update Leave, and the Enumeration of Transitory Locations. Since its release, it is clear that the software is providing the functionality needed to support the early activities.

Second Iteration of PBOCS

We have completed developmental activities for Release 2 of the PBOCS. User testing of the following operations has started and is supported by Release 2: Rural Update Enumerate, Update Enumerate, Group Quarters Enumeration, and Non-Response Follow-Up. Deployment of Release 2 occurred on February 22, 2010 for each of these operations with the exception of Non-Response Follow-Up. The software will be ready for use for Non-Response Follow-Up on March 22, 2010.

Third Iteration of PBOCS

The Developmental activities for Release 3 of the PBOCS are underway. Release 3 will support field management of the Vacant/Delete operation beginning June 4, 2010, and the Field Verification operation beginning August 6, 2010.

This subsystem remains a high risk development, as I anticipated at our last hearing, primarily due to the compressed time that has been available to develop these systems and the hard deadlines for operations that we face. To aggressively mitigate and manage the risk, the PBOCS Steering Committee, representing the key stakeholder Census Bureau divisions, actively meets to monitor the project management aspects of the PBOCS's development to include:

- Managing scope and risk as they relate to development, testing, and operational implementation
- Managing time allocated for remedying defects, gaps, and testing within a severely compressed schedule

- Preparing workarounds for remaining defects and gaps (none of which have been instituted for any critical functionality).
- Prioritizing defects that may need to be addressed in production.

Universe Control and Management System (UC&M)

The UC&M system is a dynamic multi-service database designed to define, control, and track the enumeration and data capture processing activities of the 2010 Census. It was developed by Bureau staff following our best practices for database management, development and testing.

The primary functions of the UC&M begin with the initial creation of the database, which includes all known living quarters within the Census. The UC&M system keeps track and manages the cases in all living quarters (both housing units and group quarters) that should be included in the census. The UC&M system also serves as an interactive data base exchanging information with the MAF/TIGER mapping system, the Cost and Progress System and DRIS. The UC&M also exchanged information with the Field Data Collection Automation (FDCA) during the Address Canvassing operations in the spring of 2009.

Although UC&M was tested during the 2007 dress rehearsal, a three-phased approach was used to develop the primary functionality of UC&M during the actual 2010 Census operation cycle:

- *Phase 1* - The first phase, completed in October 2009, covered initial creation of the database, which includes all known living quarters within the Census universe. During phase 1, the UC&M system created and delivered the initial questionnaire label files for addressing questionnaires, advance letters, and reminder cards that will be sent to households in the Census.
- *Phase 2* - During phase 2, which occurs from October 2009 through October 2010, the UC&M system will provide support for data collection and data capture operations by defining cases for the variety of field operations, such as Update Leave, Non-Response Follow-Up, Coverage Follow-up, and the return and processing of mailing packages from households.

- *Phase 3* - During phase 3, which occurs from October 2009 through February 2011, UC&M will provide support for downstream post data capture processing operations within the Response Processing System.

Decennial Response Integration System (DRIS)

The purpose of the DRIS contract, which was awarded in 2005 to the Lockheed Martin Corporation, is to ensure accurate and protected collection and storage of census responses.

We have been conducting a series of Operations Test and Dry Run activities for each of the individual data capture centers located in Baltimore, Phoenix, and our own National Processing Center in Jeffersonville, IN, and for the telephone centers across the country.

Our current All-Sites Test for the three data capture centers and telephone centers, was completed on February 5, 2010. On February 19, 2010, we conducted a successful operational readiness review for for the entire DRIS network.

Matching and Review Coding System (MaRCS)

The MaRCS is scheduled to deploy in February 2010. The MaRCS software will assist with the adjudication of quality control results for both the Update/Enumerate and the Non-Response Follow-Up operations.

The system matches the initial Update/Enumerate and Non-Response Follow-Up operations interview results with the results of sample re-interviews. If there are no discrepancies, the system will flag the re-interview as having passed. If there are discrepancies, it highlights them so we can investigate and determine whether the interviewer either falsified data or committed an enumeration error. In our testing earlier this decade, this approach made the re-interview process much more efficient, improving the overall quality control operations.

Preliminary Assessment of Address Canvassing

As you know, we conducted Address Canvassing in the summer when about 150,000 listers went out on every road and street in the country and listed addresses. They came armed with a list of addresses that we built up over the decade with cooperation from the US Postal Service (USPS) and other sources, especially local governments. We went out with 145 million addresses on this

list. The operation added and deleted addresses and identified some addresses as duplicates. At the end of this operation, we ended up with an address list consisting of approximately 134 million addresses.

Utilizing an independent estimate of the number of housing units that comes from our population estimates program, we have determined that our address list is about two percentage points higher. That compares to about five percentage points high in the Census 2000 address list at a similar point in time. The Census 2000 address list had a variety of duplicates, therefore, coming closer to that independent benchmark is a good thing in our belief.

Also, we believe it is appropriate that our address list be a little higher than the estimated number of addresses in the country, since the Address Canvassing operation was intended to include addresses for housing units that may not exist at the time of Address Canvassing, but are in the process of being built and may be valid living quarters by the time of the census.

Less than one percent of these addresses that were intended to be mailed out have insufficient information to mail out. We're going to handle these addresses with special follow-up operations during Non-response Follow-up. That occurs in every census.

We delivered feedback materials to the local governments that participated in the LUCA program. They now have the opportunity to appeal what we determined in the Address Canvassing operation. At this point, the Appeals Office established by the Office of Management and Budget, as required by the Census Address List Appeals Act, has received appeals from approximately 2,300 governments out of the 7,465 governments that were eligible to appeal addresses. Approximately 100 governments still have a little more time to appeal. The Appeals Office has until the end of March to make a final determination as to whether the appealed addresses should be included in the enumeration or not. We will attempt to count people at all addresses that were successfully appealed.

We are also seeking help from local governments in identifying new construction that's being built right now. We have shipped materials out to the local governments and they have started sending in new addresses. As of January 12, 2010, we have updates from over 1,000 governments. In addition, we have also processed three new updates from the USPS since we created the address list that went into the Address Canvassing operation. The most recent one was

processed in early Fall 2009. Any new addresses from these files were also sent to the print vendors to deliver questionnaires for the enumeration.

We will get one more update from the USPS. Any new addresses from this update will not be provided in time for the mail-out, but we will enumerate residents at these late addresses no later than summer 2010, when we are in the field.

Preliminary Results of Group Quarters Validation (GQV)

The GQV operation began on schedule, September 28, 2009, and was completed under budget and on schedule, October 23, 2009. The GQV operation provides updated addresses and spatial information for use in the Group Quarters Advance Visit, Group Quarters Enumeration, Service-Based Enumeration, Military Group Quarters Enumeration, Enumeration at Transient Locations, and subsequent enumeration universes. The primary purposes of this operation are:

- To verify if a specific address is a Group Quarter, a housing unit, or non-residential, and
- If it is a group quarter, determine the type of group quarter to help us plan the actual enumeration.

Of the 2,045,110 Other Living Quarters classified during GQV, 12 percent were Group Quarters (GQs), 2 percent were transitory locations, and the remaining 86 percent were housing units, non-residential addresses, and deleted units. This was fairly consistent with our expectations.

A review of the cost of the GQV operation is being conducted as part of a review of our overall cost estimates. We are reviewing the actual and estimated productivity rates, the distribution of estimated GQV workloads in comparison to observed GQV workloads, as well as other assumptions in the budget estimate such as mileage and training cost. We conduct this review of overall cost estimates to understand why and how the operation was completed under budget.

Census Coverage Measurement (CCM)

Although coverage measurement operations generally measure the differential undercount of decennial censuses, the primary purpose of CCM is to identify and categorize likely sources of coverage error in the 2010 Census. This information enables

our research and testing during the coming decade to focus on reducing such errors in the 2020 Census.

In September 2009, we announced our plan to reduce non-sampling error in the CCM program. To facilitate this, we decided to reduce the sample size for operations after the CCM Independent Listing, and refocus our efforts toward approaches to reduce non-sampling error. We expect that this redesign of the CCM program will essentially be cost neutral. These approaches are likely to include:

- **Higher field work re-interview rates** - By increasing our re-interview rates for our field operations, we can improve quality.
- **Higher clerical matching review rates and analyst spot checks** - By increasing analysts' review rates of technicians' work for our clerical matching operations, and reviewing the work of the less experienced analysts, we can ensure higher quality data.
- **Adding training modules to interviewer training** - Several modules will be added to interviewer training, to include more localized training scenarios, training on situations due to current economic conditions (squatters, temporary movers, etc.), and training on probing for other residences.
- **Smaller employee-to-supervisor ratios** - We will reduce the number of field staff assigned to each supervisor. This should ensure greater quality control over fieldwork by allowing more monitoring of work at each level.
- **Paired interviewers for Initial Housing Unit Follow-up operation** - Given the difficulty of performing initial housing unit follow-up interviews, paired interviewers could work together in locating units and reconciling the CCM and Census addresses lists using map pairs.
- **Nationwide Personal visits for possible duplicates in the Person Follow-up operation** - When we identify a possible long-distance duplicate in the person matching, we need to collect data to determine where that person should be counted. Current plans call for a centralized paper telephone operation. However, a national personal visit operation would increase our chances of successfully counting such person in the right place, thereby improving data quality.

- **Extending person re-interview for one week** - Due to scheduling constraints, the original plan for re-interviewing after the person interview was to stop sampling one week before production finished to allow time to complete the re-interview cases. With a smaller workload flowing to the later operations, we can extend the time for re-interview to allow sampling to continue throughout the duration of person interview.
- **Telephone Study of Recall Bias** -- We would interview four panels of random digit dialing (RDD) respondents during May, June, and September 2010, and February 2011. These time periods represent the current timing for Non-response Follow-up, Coverage Follow-up, CCM Person Interview (PI), and the CCM Person Follow-up (PFU). We would roster the contacted units and ask them questions similar to the CCM Person Interview and Person Follow-up series of questions. After the data are collected, we can compare each panel's answers to the questions about movement and residence. If there were changes in the proportions of moves within that month across the panels, we would conclude that the data degraded. We would be able to measure the magnitude of such degradation over time.

Non-Response Follow Up Cost Estimation

We performed an analysis to determine whether the current budget for Non-response Follow-up (NRFU) was adequate to successfully complete operations. The budget is based on cost estimates using a number of components that were developed early in the decade or were revisited when the decision was made to go back to paper operations. The components include staff productivity, the number of cases requiring follow up, and cost drivers such as salary and mileage. The baseline budget for NRFU was \$2.74 billion.

As the operation approached, our knowledge of these components improved based on additional experience and data. These included experiences such as Address Canvassing and Group Quarters Validation as well as revisiting Census 2000 observations and Census Tract experiences. We also worked with a panel of experts in both Census headquarters and field operations to determine the impact of this information on cost drivers. This process led us to identify components that needed to be updated and those that could remain as part of the original estimate. The components that emerged as areas with the greatest concern due to high uncertainty and high impact on cost were workload and productivity. Working with subject

matter experts, we developed likely alternative scenarios for these components, and developed over 1000 likely cost estimates based on all scenario combinations.

The analysis indicates that NRFU operations can likely be completed with the original budget despite recent changes in the economy and other external factors that almost certainly will increase NRFU workload and lower productivity. The ability to fit within budget in light of new information would not have been possible without changes to the NRFU operations, most significantly, the management decision to maintain the 2009 hourly salary levels, rather than increase them in FY 2010 (which was our original plan). Though cost will vary greatly due to the uncertainties, those will diminish once the operations unfold.

We at the Bureau are revisiting the likely cost of related operations in a similar manner. This includes the NRFU re-interview operation and the Vacancy/Delete Check operation. Currently emerging information about the Vacancy/Delete Check operation suggests that the workload may be much higher than originally expected, driven primarily by:

1. Significantly higher vacancy rates than originally anticipated, primarily due to current economic conditions.
2. Significantly higher overall number of cases to resolve based on early results from the Local Update Census Addresses program currently in progress.

The Bureau will continue to monitor changing external conditions and will update each estimate as more information becomes available.

Future Activities and Risks

Over the next two months, hundreds of important tasks must be completed across all components of the decennial census program. For example, we will need to complete:

- Group Quarters advance visits;
- Second release of PBOCS;
- Universe Control and Management System (UC&M) phase 2 ;
- DRIS network operational readiness review;

- Incorporation of the appeals from the LUCA program once determinations are done in March;
- Delivery of forms;
- Capture of returned forms.

As I have stated before, there are a number of external events that could lead to delays or operational problems, such as a major hurricane, a widespread outbreak of H1N1 flu, or a major, last minute design change imposed upon the program.

Other events could be a low response rate or an organized effort encouraging non-response or partial response to the census. We are counting on Members of Congress in that respect to reassure the public that this census is safe, it's easy and it's important.

Conclusion

The last time I testified, I indicated the critical risks centered on the software development on the Paper-based Operations Control System and the unknown quality of the Master Address File. I am confident that we are on track with our risk mitigation strategies and activities.

However, as I stated at the beginning of my testimony, our biggest risk is the uncertainty presented by the American public's response to our campaign to encourage participation. We need your help. I look forward to working with you in the coming months and after to let you know how we are doing and how we have done.

I thank the subcommittee for this opportunity and would be happy to answer your questions.

Testimony of

**THE HONORABLE TODD J. ZINSER
INSPECTOR GENERAL**

U.S. DEPARTMENT OF COMMERCE

before the

**Subcommittee on Federal Financial Management, Government
Information, Federal Services, and International Security,
Committee on Homeland Security and Governmental Affairs,
United States Senate**

Tuesday, February 23, 2010

***The 2010 Census: Update of
Schedule, Cost, Risk Management,
and Communications Activities***

Mr. Chairman, Ranking Member McCain, and Members of the Subcommittee:

Thank you for inviting us to testify today on the Census Bureau's recent activities in preparation for this year's decennial count. In just over 4 weeks, millions of census forms will be mailed to households across the country, asking that they be filled out and returned on Census Day, April 1—just 37 days from now.

On February 16 we released our third *Quarterly Report to Congress*¹ on the status of the 2010 Decennial Census, covering October through December 2009. The *Quarterly Report* discusses our most recent findings in the areas of schedule, cost, and risk management. My testimony will highlight these areas, plus an overview of the Census Bureau's Integrated Communications Campaign, through which the bureau is attempting to increase the mail response rate. Higher mail response rates will decrease the need for costly follow-up of nonrespondents. According to the Census Bureau, every percentage point increase in the mailback rate saves about \$85 million dollars of follow-up costs.

With a life-cycle cost estimate now projected to total \$14.7 billion, the 2010 Census is a massive undertaking made up of many moving parts. The bureau must integrate 44

¹ *2010 Census: Quarterly Report to Congress*, Report OIG (Office of Inspector General)-19791-3, February 2010. OIG reports are available on our Web site: www.oig.doc.gov.



separate operations (with a total of some 9,400 program- and project-level activities). The start of the largest operation, nonresponse follow-up (NRFU), is less than 90 days away. Estimated to cost well over \$2 billion, NRFU is the most costly operation of the decennial, requiring census takers to visit every household that does not return a census form and record answers to the form's questions.

Temporary bureau management staff must run 494 local offices and manage over 600,000 temporary workers, while recruiting substantially more. The success of NRFU hinges on how effectively Census controls the enormous NRFU workload and workforce and, as discussed later in this testimony, it must do so using a Paper-Based Operations Control System (PBOCS) with less functionality than planned and currently experiencing performance problems. PBOCS is essential for efficiently making assignments to enumerators, tracking enumeration forms, and reporting on the status of the operation.

While my testimony identifies serious issues currently faced by the Census Bureau, we are mindful of the unparalleled challenge of the decennial and the extraordinary efforts being made by the bureau's dedicated staff to achieve a successful outcome.

In brief, although much of the bureau's plan is on track, NRFU efficiency and accuracy are at some risk—because of PBOCS—and final decennial costs remain uncertain. As I will discuss, important issues remain—issues that the bureau agrees must be addressed, but it has not yet adequately done so. The bureau will need to act quickly to address these issues.

Our *Quarterly Report* discusses the following:

- The current status of PBOCS, whose reduced capabilities and performance will be key factors in Census field operations;
- The need to closely monitor nonresponse follow-up costs, given the overruns and inefficiencies found in the completed address canvassing operation;
- The need to contain the cost of field operations, which requires strong budget estimation capability;
- A reduced cost estimate for nonresponse follow-up, somewhat offset by an increase in the estimate for the vacant/delete check² operation;
- Remaining risk management activities; and
- The uncertainty of the final decennial cost, whose expenses will largely be dictated by the level of mail response, worker productivity, and the effectiveness of PBOCS.

² After nonresponse follow-up is completed, the vacant/delete check operation verifies the status of each housing unit classified by an enumerator as vacant or deleted.

THE CENSUS SCHEDULE DEPENDS ON THE CAPABILITIES AND PERFORMANCE OF PBOCS, WHICH IS UNDERGOING COMPRESSED DEVELOPMENT AND IS EXPERIENCING SERIOUS TECHNICAL PROBLEMS

PBOCS is essential to managing data collection and quality control for ten discrete enumeration operations, including the large, door-to-door nonresponse follow-up (NRFU). This system is needed, for example, to assign several enumerators to difficult-to-complete assignment areas, to confirm that questionnaires that were checked-out to the field have been checked-in back to the office, and ensure that workload completion rates are on track.

As shown in Table 1, PBOCS is being deployed in phases, prior to the start of each field operation it is to support. So far, it has been deployed for three of ten operations; another deployment for three more operations was scheduled for yesterday; and deployment for NRFU, the largest and most complex operation, is scheduled for 27 days from today. Yet system development and testing have fallen substantially behind schedule, resulting in less functionality being deployed and an increased likelihood of local Census Office staff encountering technical problems during operations. Further straining the project is that development staff already working to capacity must now contend with resolving any problems that surface during those operations for which PBOCS has already been deployed. And in recent weeks, Census has encountered major hardware and software issues affecting system performance that have prompted Census officials to call in executives and senior technical troubleshooters from the companies that provide PBOCS hardware and software components.

Table 1. PBOCS Deployment and Field Operations Schedule as of February 16, 2010

Deployment	Operation	Operation Start	Operation End
January 19	<i>Remote Alaska Enumeration</i>	<i>January 25</i>	<i>April 30</i>
	<i>Group Quarters Advance Visit</i>	<i>February 1</i>	<i>March 19</i>
	<i>Update/Leave</i>	<i>March 1</i>	<i>March 26</i>
February 22	<i>Remote Update/Enumerate</i>	<i>March 22</i>	<i>May 29</i>
	<i>Update/Enumerate</i>	<i>March 22</i>	<i>May 29</i>
	<i>Enumeration of Transitory Locations</i>	<i>March 19</i>	<i>April 12</i>
March 1	Group Quarters Enumeration	April 1	May 21
March 22	Nonresponse Follow-up (NRFU)	May 1	July 10
June 4	Vacant Delete Check	July 24	August 25
July 13	Field Verification	August 6	September 3

Source: U.S. Census Bureau 2010 data

PBOCS development started late in the decennial cycle, partially due to a change in plans from using handheld computers to the use of paper for collecting respondent data. An independent assessment of the system requested by Census found that developing PBOCS would take two to three times longer than the time available due to its size, and adding pressure to the bureau.

Information on the problems surrounding PBOCS is not new; we reported on these challenges last October and have recently briefed the Census Bureau Director on our efforts to monitor PBOCS. Our observations are consistent with those of the independent assessment team convened by the Director, as well as reporting by internal bureau staff. It is clear that the Director and bureau are engaged on this issue, and are taking swift corrective action.

In addition, our *Quarterly Report* contains recommendations on actions we feel are necessary to address these problems. Start dates for Census field operations are fixed. If PBOCS is not ready or if additional actions are not taken, field operations could be adversely affected, resulting in increased cost and reduced accuracy of the population count. In one example, due to performance issues, PBOCS limits concurrent users to 2,500 network-wide—or currently about five concurrent users per local Census office. Yet the operational need is estimated to be over three *times* that: as many as 8,000 network-wide (about 16 per local office).

As we testified before this Subcommittee last October, with population counts for apportionment due to the President by December 31, 2010, the decennial census is the epitome of a schedule-driven program—with all of its attendant risks and consequences. Issues have included rushed and incomplete requirements specifications; cut corners in program design, development, and testing; massive cost growth; and increased operational and quality risks.

As our new *Quarterly Report to Congress* details, the testing of PBOCS is being compressed to meet the schedule. However, the inevitable tradeoff is that errors may not be found until the system is used in Census operations and new errors may be introduced. Further, the testing is being conducted by headquarters staff, while the field staff, who will be the system's primary users, have not had the opportunity to test the system under realistic conditions before it is put into operation. As of February 11, PBOCS development was 15 days behind schedule, testing was 14 days behind, and there were 39 critical defects. This reflects some improvement in the development and test schedules, but an increase in critical defects, which were up from 26 in mid-December.

Given schedule delays and fixed deadlines, PBOCS users are being forced to accept more limited system functionality than was expected. For example, one limitation under consideration is that managers at local Census offices may not be able to use PBOCS to help bring in additional enumerators to work an assignment area during nonresponse follow-up; instead, paper records may be needed to track these split assignments. This limitation would be problematic when managing thousands of enumerators working on thousands of assignment areas in close to 500 local offices nationwide. Another example

of the reduction in PBOCS capability is that 50 of the planned 435 management reports are being eliminated. With system capabilities still uncertain, training materials have also been delayed. Further, now that PBOCS has been deployed and is in use for certain operations, it becomes more complicated to maintain consistency in the development, testing, and operational environments.

Recent Operational Load Tests Indicated Adequate Network Capacity but Revealed PBOCS and Other IT Performance Problems

Operational load tests last December of decennial Census networks suggested that capacity is adequate, yet revealed serious performance and functionality problems with other components of the IT infrastructure. In particular, significant problems were found with the PBOCS application servers as well as with the Decennial Applicant, Personnel, and Payroll System (DAPPS). This system, needed to support applicant tracking and processing, recruiting reports, and personnel and payroll processing for the massive temporary workforce, had four times more problems than PBOCS. While the Census Chief Information Officer has redirected the bureau's senior engineers and brought in vendor expertise in an attempt to resolve these problems, PBOCS and DAPPS operational performance issues have remained. Staff in local Census offices are experiencing slow response times and outages. According to the technical team, both PBOCS and DAPPS are underpowered; the team has recommended substantially increasing the number of computer servers for each application.

Overall, then, PBOCS and other essential IT elements are proceeding under very difficult conditions. Specifically:

- Time is short, deployment for nonresponse follow-up is 4 weeks away, and staff are working at capacity, yet PBOCS development continues to be behind schedule;
- Critical software errors are increasing, and system performance is not meeting operational needs; and
- With operations already underway, staff must resolve technical problems encountered in the field, while continuing with system development.

Accordingly, Census officials must address the following questions to minimize the impact of the difficulties being experienced with PBOCS:

- What PBOCS capabilities can Census deliver with high confidence?
- What PBOCS capabilities will have to be scaled back, and what will be the impact?
- What is the plan for developing a consistent set of workarounds so that all local Census offices handle capabilities eliminated from PBOCS in the same way?
- How will the bureau ensure that it can provide adequate technical support to the field to maintain operations when problems inevitably arise?

Because time is at a premium, Census must quickly realign PBOCS development and testing efforts, placing greater emphasis on minimizing the impact of the system's limitations during operation. We include the following recommendations to Census in our quarterly report:

- Foremost, senior executives with the authority to set priorities—such as reallocating resources to where they are most needed, resolving conflicting priorities, and making major changes to the decennial schedule or plan—must closely monitor PBOCS activities, and ensure that steps are taken expeditiously to reduce operational risk.
- To accomplish this, Census will have to streamline development and testing by further reducing planned PBOCS capabilities to the essentials required for the most important enumeration operations.
- The bureau must likewise focus on developing procedural workarounds—contingency plans—for capabilities that cannot be implemented.
- Census must enhance or augment its technical support staff and procedures to expeditiously resolve problems in the field.

We will continue monitoring PBOCS development and its use, along with contingencies put into place to compensate for any shortfalls.

CENSUS MUST CLOSELY MONITOR NONRESPONSE FOLLOW-UP COSTS GIVEN OVERRUNS AND INEFFICIENCIES FOUND IN THE COMPLETED ADDRESS CANVASSING OPERATION

Wide variances between budgeted and actual costs do not generate confidence in the Census Bureau's budgeting and cost containment process for large-scale field operations. Our analysis of address canvassing budget overruns revealed wide disparities in spending among local Census offices. Census Bureau headquarters formulated a total budget of \$356 million for address canvassing in 2009. This amount was allocated among the 151 early local Census offices—based on the type of area, such as urban or rural, covered by each office. Following the operation, Census reported that address canvassing overspent its budget by \$88 million (25 percent). The two major cost drivers of the operation were wages and reimbursement for miles driven by temporary employees (listers) to assignment areas. For production, one-third of the offices exceeded their wage budgets and one-half exceeded their mileage budgets. For the quality control operation, 82 percent of the offices exceeded both their wage and mileage budgets.

Our review of address canvassing wage and travel data revealed several inefficiencies that Census managers should be aware of in managing 2010 field operations. These included excessive miles driven by temporary employees and training costs. Using bureau data, we analyzed the number of miles reported driven per hour compared with the total number of hours worked by address canvassing employees. We found that 604 employees spent the majority of their time driving instead of conducting field work, and

of those, 23 employees spent 100 percent or more of their time driving. This analysis suggests that some employees may have over-reported the number of miles driven. While the number of employees with questionable reimbursements is very small compared with the overall universe of 140,000 employees involved in this operation, the potential exists for this problem to be compounded because upcoming fieldwork operations will involve significantly more temporary employees than did address canvassing. Census Bureau managers should monitor mileage reimbursements carefully during upcoming enumeration operations, and verify the validity of those reimbursement claims that appear excessive before they are paid.

Our analysis of Census data found that the bureau spent a great deal of money on training for the amount of work it received. For example, over 10,000 employees earned over \$300 apiece for attending training, but did not perform work for the Census Bureau. An additional 5,000 employees received the same money and worked only a single day—or less. It may be that some employees, after being trained, decided that they did not want to do this kind of work; others may have been deemed unfit. Nevertheless, the costs were substantial—not only what was paid directly to employees, but the other training costs as well.

Census expenses and projections are a moving target, as might be expected of an operation whose many parts are already progressing on several fronts. Such inefficiencies as we found in the areas of wage, travel, and training costs are the kind for which Census should develop effective internal controls and ensure that managers scrupulously follow these controls in future operations.

COST CONTAINMENT IS ESSENTIAL FOR FIELD OPERATIONS, BUT REQUIRES STRONG BUDGET ESTIMATION CAPABILITY

The ability to produce valid budget estimates is essential for cost containment. The 25-percent cost overrun for address canvassing indicates that either the budget for this operation was unrealistically low or that cost containment for the operation was poorly managed. In contrast, Census spent only about 59 percent of its Group Quarters Validation³ budget, somewhat more than \$41 million out of a field budget of over \$70 million. Inaccuracies of this magnitude in estimated budgets, combined with wide variances among early local Census offices in address canvassing costs, indicate significant weaknesses in the bureau's budget estimation capabilities.

The important lesson for the Census Bureau now is that with the nonresponse follow-up operation set to begin soon—with three times the number of employees and offices than were involved with address canvassing—the bureau's revised budget estimate needs to be as accurate as possible so that the operation's final cost does not exceed the amount budgeted, including contingency. With \$7.4 billion in funding from FY 2009, FY 2010, and the American Recovery and Reinvestment Act to be expended for the decennial in

³ The Group Quarters Validation operation is aimed at verifying information from each one of the potential group quarters nationwide.

FY 2010, poor estimating will not be an acceptable justification for any later request for supplemental funding.

Under the Census Bureau Director's leadership, Census is, in fact, reexamining its NRFU budget. It recently provided a new estimate totaling \$2.33 billion. While this is \$410 million less than the bureau's earlier estimate, it does not factor in the productivity reductions that may result from a PBOCS with significantly reduced capabilities and performance.

In addition, any reductions that may be achieved in NRFU are likely to be partially offset by an estimated increase of \$137 million for the vacant/delete check operation. The vacant/delete check workload, originally estimated at 8 million cases, has now been revised to 14.5 million cases. This results in an estimated cost increase from \$345 million to \$482 million.

The bureau identified two components as areas of the greatest concern due to the high uncertainty and high impact on cost: workload (a function of the level of mail response) and staff productivity. To these we would add the unknown impact on operations of a PBOCS with reduced functionality and performance.

THE CENSUS BUREAU IS MAKING PROGRESS WITH ITS RISK REDUCTION ACTIVITIES, BUT CONTINGENCY PLANS REMAIN UNFINISHED

Census's risk management plan establishes processes and procedures for monitoring decennial risks, and identifies staff responsible for implementing them. Each program-level risk—i.e., one that may affect overall program cost, schedule, and technical and compliance objectives—must have a plan that defines mitigation strategies and specific time frames, along with staff to implement them. The risk management plan also requires contingency plans for addressing certain risks triggered by a missed date or specific event, and these plans are to be completed well in advance of the expected trigger. The bureau's risk management program represents a significant improvement over the 2000 decennial, which lacked a formal risk management process.

While the bureau is making progress with its risk reduction activities, the bulk of its contingency plans remain unfinished, and contingencies for PBOCS have yet to be clearly defined and documented.

Census's Risk Review Board (RRB) continues to oversee risk management activities and update its "risk register." As of December 31, 2009, the register contained 25 program-level risks, each rated high (likely), medium (somewhat likely), or low (unlikely). The

distribution of these risks has not changed for the period October through December 2009; it is the same as for the preceding quarter: 8 high-, 14 medium-, and 3 low-level risks.⁴

In addition, the RRB has been completing contingency plans to guide the bureau in addressing problems that might arise should mitigation plans and activities aimed at program risks fail. Progress on contingency planning has been made during the last quarter, but time is running short; nine of the 13 plans are not yet final. Significant work, then, remains to be completed. This is especially critical in light of the difficulties with PBOCS, so that alternative plans will be ready to be put in motion if needed.

We reviewed four contingency plans that have been completed to date, and they appear adequate. The four plans are:

- IT Security Breach
- Loss of Confidential Data
- Continued Operations of Critical Infrastructure During Disasters
- H1N1 Influenza Affecting Regional Census Centers and Local Census Office Activities

A contingency plan will be triggered if its mitigation activities are no longer effective, prompting the risk to materialize. When a trigger—such as a date or an event—occurs, appropriate Census staff will assess impacts to the decennial schedule and resources, take necessary actions to resolve problems, and monitor their effect on operations. For example, if an H1N1 influenza outbreak were to impact a local census office, Census managers could hold employee replacement training, limit visitors to the office, and monitor the staff illness rate.

PERSONNEL COSTS ARE THE PRIMARY COST DRIVERS AND WILL BE AFFECTED BY THREE KEY UNKNOWNNS

The final decennial cost remains uncertain; three key factors could have significant cost impact. The bureau identified the mail response rate as having the potential to have the greatest impact, with enumerator productivity also a major cost driver. An additional issue, the capabilities and performance of PBOCS for NRFU—and the bureau's ability to implement effective workarounds—will also determine ultimate efficiency, schedule, and thus final cost.

⁴ One risk was closed (*Address Canvassing and Group Quarters Validation operational control system solutions*) and two were added (*H1N1 influenza affecting regional Census centers and local Census Office activities, and H1N1 influenza and similar contagious illnesses affecting nonregional Census centers and nonlocal Census Office activities*).

Census has undertaken an extensive communications campaign with a major objective of increasing the mail response rate. The extent to which the public will respond to the initial Census questionnaire is a critical cost driver and a major unknown factor. If mail response is lower, the NRFU workload and associated expense will be correspondingly higher.

Integrated Communications Campaign Intended to Increase Census Response and Accuracy

The more Census questionnaires that are returned by households, the less costly the Census Bureau's nonresponse follow-up operation will be—the largest and most expensive of the bureau's operations. Census awarded the Integrated Communications Campaign contract to a company called DraftFCB, Inc., to increase public awareness of the decennial's importance. The specific goals of the campaign are to increase the mail response rate, improve accuracy and reduce the undercounting of traditionally hard-to-count populations, and improve cooperation with enumerators.

The communications campaign is consistent with congressional direction in the statements accompanying the FY 2009 and FY 2010 departmental appropriations acts. The statement accompanying the FY 2009 act includes the following language: "Paid media is critical to promoting increased participation in the 2010 Decennial, particularly in minority and other hard-to-count populations."

Further, this statement directs Census to submit a comprehensive communication plan in its FY 2010 budget request to address paper NRFU, but the FY 2010 request to Congress contains no such plan. Our review of the request showed that it included performance measures for paid advertising, as follows:

Measure: Achieve predetermined "reach and frequency" results for three phases of paid advertising by September 30, 2010.

- 1) For the Awareness Phase, reach 95% of the population at least 5 additional times through paid advertising.*
- 2) For the Motivation Phase, reach 95% of the population at least 11 additional times.*
- 3) For the Support NRFU [nonresponse follow-up] phase, reach the lowest responding population at least 2 additional times.*

The Census Bureau credits the communications outreach of the 2000 census with increasing the response rate. Census believes that the results in 2000 would have been significantly worse without the paid advertising program. It attributes paid advertising and public relations with reversing the downward trend in mail response rates compared to previous decennials. In 1970, the response rate was 78 percent; by 1990, it had dropped to 65 percent. According to Census, had the trend continued, the response rate in

2000 would have been about 61 percent. However, at 67 percent, it was slightly higher than the 1990 response rate.

The Census Bureau will spend a total of \$338 million on the communications campaign, up from the \$204 million that was spent in 2000. The total includes an additional \$115 million provided by the American Recovery and Reinvestment Act of 2009. The bureau used the additional funds to procure a road tour, additional paid media, and promotional material for 28 languages (14 more than originally planned). Table 1 shows the plan for allocating the communications campaign budget. Census has already obligated \$329 million of the \$338 million total.

**Table 2. Summary of \$338-million DraftFCB
Integrated Communications Campaign Contract Budget
(millions of dollars)**

General Contract Costs	
Labor	\$ 62.4
Production	36.7
Partnership Support	27.2
Public Relations/Events/Road Tour	26.6
<i>Census in Schools</i>	13.3
Promotional Materials for Other Census Divisions	10.9
Management Reserve (all tasks) and Future Obligations	9.5
Rapid Response & Media Management Reserve	7.4
Research	5.5
Web site	3.5
Travel	2.0
	Total \$205.0
Paid Media	
Mass Communication Base Plan	\$ 60.8
Hispanic	25.5
Black (African American, Black African, & Afro-Caribbean)	23.0
Asian	13.5
American Indian/Alaska Native	3.8
Puerto Rico	2.4
Emerging Audiences (speakers of Arabic and Eastern European languages)	2.0
Native Hawaiian & Other Pacific Islanders	1.1
New Legacy Languages (European languages including French, German, Greek, and Italian)	0.9
	Total \$133.0
Grand Total	\$338.0

Source: OIG analysis of U.S. Census Bureau data

DraftFCB is assisted by partner advertising agencies with expertise in specific racial and ethnic markets. It uses 12 subcontractors to assist with the advertising, the *Census in Schools* program, public relations/events, partnership support, promotional materials, and recruitment. We focus here on paid media because it is the component of the campaign receiving the highest amount of funding.

Census used a systematic process in designing the paid media and the broader communications campaign, and worked with its contractors to determine the paid media funding allocations to the targeted audiences. It built its paid media budget plan with 46 percent of its funding going to the mass communication base plan, which is designed to reach the estimated 84 percent of the population that consumes English-language media, including any English-speaking race or ethnic group. It targeted the remaining 54 percent of its budget to hard-to-count audiences, including Hispanic, Black, Asian, American Indian/Alaska Native, Puerto Rican, Emerging (Arabic-, Russian-, and Polish-speaking segments), and Native Hawaiian and Other Pacific Islanders. Census relied on DraftFCB and its subcontractors to identify the specific media outlets to carry its message about the 2010 decennial to the base plan and targeted hard-to-count audiences.

The communication campaign has three phases. The *Awareness Phase*, which formally began in January, and lasts until the middle of March, seeks to notify the public of the upcoming Census and provide education about its purpose and benefits. Next, the *Motivation Phase* begins, running until the end of April. Here, Census seeks to encourage the public to immediately respond to the questionnaire. By that time, all of the forms should have been mailed. The *Cooperation Phase* is last, running from the end of April to the end of June, and promotes cooperation with enumerators during the nonresponse follow-up process.

During each phase the effectiveness of the communications campaign will be monitored in terms of public awareness, shifts in attitudes and beliefs toward the decennial, and reported participation. Bureau officials told us that this will be done by such means as a nightly tracking poll, an Internet tracking survey, and monitoring real-time questionnaire mail response rates. To address potential areas of concern, bureau officials budgeted a \$7.4- million reserve (\$6 million of it in Recovery Act funds) to respond—through paid media and other communications activities—to conditions such as a natural disaster, which might confuse respondents about the continuation of the Census or to encourage participation in areas in which response is lagging. It has also budgeted \$5.5 million as a general management reserve, which can be used where and when needed to address problems with accomplishing task orders. Additional printing needed for *Census in Schools* is an example of the use of reserves.

Census oversees DraftFCB's execution of each task, and ensures that the contractor deliverables are accepted by the Census 2010 Publicity Office prior to making payment. In addition, bureau officials are relying on DraftFCB to ensure that the thousands of media agreements are settled. Accordingly, the bureau needs to provide sufficient management and oversight to ensure successful contract execution.

OIG OVERSIGHT PLAN FOR DECENNIAL OPERATIONS

We will continue to monitor the bureau's progress—on PBOCS and on other key decennial activities. In addition, over the next several months, about 100 members of our staff will be participating in what is for us an unprecedented effort in scope and resource commitment to go on the road and observe Census workers in action. Such oversight, while Census activities are ongoing, will allow us to immediately observe successes and any problems that might arise, and notify the bureau without delay.

The appendix to this statement provides a discussion of our approach to overseeing this year's operations.

Mr. Chairman, this completes my prepared remarks, and I would be happy to respond to questions from you or any other Members of the Subcommittee.

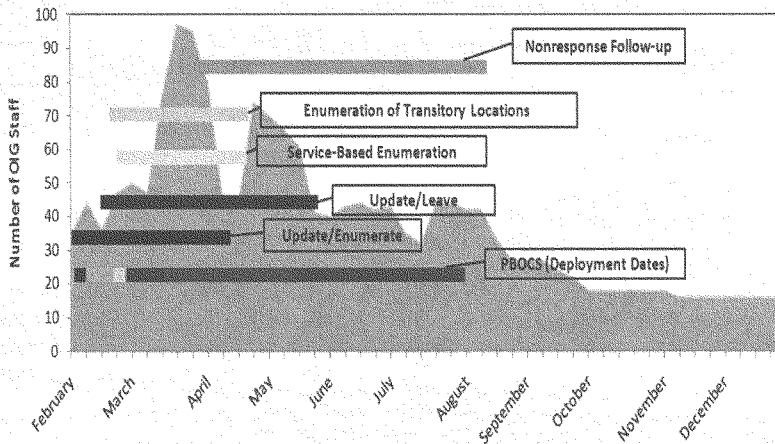
APPENDIX

**OFFICE OF INSPECTOR GENERAL
2010 DECENNIAL CENSUS OVERSIGHT PLAN**

The Census Bureau has identified 44 decennial operations for 2010. These operations span several years and entail providing support, establishing where to count, collecting and integrating respondent information, providing results, measuring coverage, and performing analysis and research for the 2020 Census. In FY 2010 we anticipate covering aspects of 20 of these operations, including deploying substantial numbers of staff to observe eight Census field operations. This work will also inform our oversight of the 2020 census.

OIG resources devoted to the 2010 Decennial Census over the coming year will involve almost 100 members of our staff at a given point in time. Details of our planned staffing deployment over the course of the calendar year are provided in Figure 1, below. The variability of resource deployment is related to the number and extent of the field operations conducted by Census. During this period, OIG plans to expend approximately 35 full-time-equivalent employees (FTEs) at an estimated cost of about \$5.8 million for the review of the decennial census. OIG will oversee Census Bureau field and headquarters management of operations, field enumeration activities, information technology (IT) systems and the security of personally identifiable information, and internal controls over payroll.

Figure 1. OIG Census 2010 Oversight Staffing Plan



APPENDIX

Field Activities

Our oversight of field activities will include deploying staff to selected local Census offices nationwide to observe whether activities are being conducted in accordance with Census procedures (for example, whether the Census questionnaire is being administered properly; whether map and address list updating is being completed correctly, where applicable; etc.) and local Census office practices. We will notify the Census Bureau promptly of any problems needing immediate attention. We will summarize our observations and findings in a final report, to be completed in FY 2011. This capping report will provide our summary assessment of the overall efficacy and efficiency of the 2010 Census enumeration. This and subsequent reports will provide lessons learned to aid in planning for the 2020 Census.

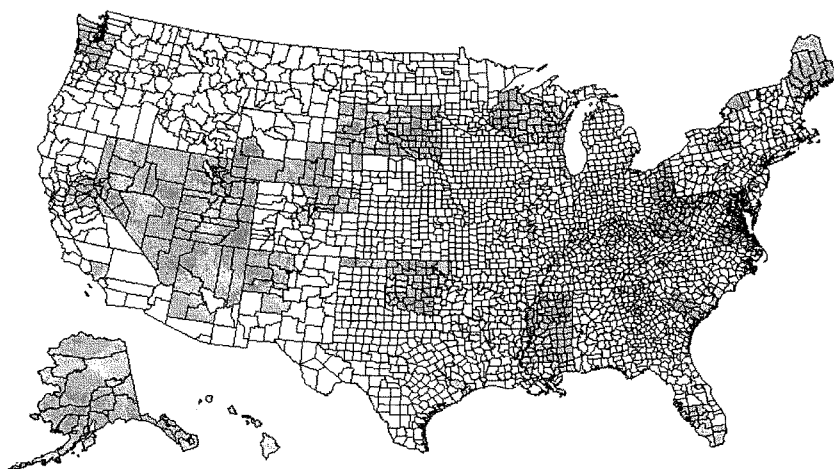
In FY 2009 we observed *Address Canvassing* and *Group Quarters Validation*. During FY 2010 field operations we intend to have a presence in every enumeration activity. In our planning for this major deployment of OIG personnel, we analyzed multiple data sources to ascertain the areas in which the Census Bureau may face its greatest demographic and operational hurdles. The following are six decennial operations that we will be observing:

- *Update/Leave*: In areas in which many homes do not receive mail at a city-style address, enumerators canvass assignment areas to deliver a Census questionnaire to each housing unit. At the same time, they update the address list and maps. This method is also used in selected collection blocks within *mailout/mailback* areas, where mail delivery may be a problem, such as apartment buildings where mail is left in common areas.
- *Update/Enumerate*: Enumerators canvass assignment areas to update residential addresses, including adding living quarters that were not included on original address listing pages, update Census Bureau maps, and complete a questionnaire for each housing unit. This occurs in communities with special enumeration needs and in which many housing units may not have house-number-and-street-name mailing addresses, similar to *update/leave*.
- *Enumeration of Transitory Locations*: Enumerators visit transitory locations, such as campgrounds and hotels, to enumerate their residents.
- *Service-based Enumeration*: This focused, 3-day enumeration provides an opportunity for people living on the street or in shelters to be included in the Census.
- *Nonresponse Follow-up (including Vacant/Delete)*: Enumerators visit addresses for which the Census Bureau had no questionnaire or telephone response. Enumerators collect information about the household residents as of April 1, 2010.
- *Coverage Follow-up*: This telephone operation attempts to resolve erroneous enumerations and omissions.

APPENDIX

Our field observations will focus on a judgmental sample of 34 of 151 early local Census offices that supported address canvassing operations. These are split into smaller local Census offices for enumeration activities; our sample equals 113 of 494 local Census offices. The areas highlighted on the following map (Figure 2) indicate the boundaries of local Census offices within our sample. OIG staff will observe Census operations in selected areas within those locations.

Figure 2. Local Census Office Boundaries within Sample to be Observed by OIG Staff



To ensure nationwide coverage, we initially selected at least one Early Local Census Office per Census region. Our selections were based on the bureau's demographic measures of enumeration difficulty, operational factors such as blocks with large populations, and significant socioeconomic changes such as high foreclosure rates or high growth rates. Next, we identified a smaller sample conveniently located near OIG offices. The remaining selections were included to ensure adequate representation of population density and specific hard-to-count populations. For example, we intentionally included the rural Mississippi Delta and the hurricane-affected Galveston, Texas, areas. We balanced the sample by including several areas that were not considered hard to count. A listing of the Early Local Census Offices in our sample follows:

APPENDIX

<i>Anchorage, AK</i>	<i>St. Louis City, MO</i>
<i>Flagstaff, AZ</i>	<i>Jackson, MS</i>
<i>Phoenix Central, AZ</i>	<i>Meridian, MS</i>
<i>Los Angeles Downtown, CA</i>	<i>Las Vegas, NV</i>
<i>Stockton, CA</i>	<i>Bronx Southeast, NY</i>
<i>Lakewood, CO</i>	<i>Queens Northwest, NY</i>
<i>DC East, DC</i>	<i>Syracuse, NY</i>
<i>Miami East, FL</i>	<i>Canton, OH</i>
<i>Sarasota, FL</i>	<i>Oklahoma City, OK</i>
<i>Atlanta South, GA</i>	<i>Charleston, SC</i>
<i>Honolulu, HI</i>	<i>Rapid City, SD</i>
<i>Chicago Far North, IL</i>	<i>Houston Central, TX</i>
<i>Chicago Near South, IL</i>	<i>Salt Lake City, UT</i>
<i>Frederick, MD</i>	<i>Richmond, VA</i>
<i>Seat Pleasant, MD</i>	<i>Tacoma, WA</i>
<i>Portland, ME</i>	<i>Eau Claire, WI</i>
<i>Detroit West, MI</i>	<i>Charleston, WV</i>

Other Reviews

In addition to deploying staff to observe enumeration activities, we will be conducting reviews in the following areas:

- *Evaluating and Monitoring Decennial Systems:* We plan to evaluate key IT decennial systems for development and operational risks that may affect critical decennial operations and the accuracy of the population count. We will assess the paper-based operations control system and management workarounds required to address its anticipated shortcomings, starting with the *Group Quarters Advanced Visit* operation, as well as the Decennial Applicant, Personnel and Payroll System. Other systems that may be reviewed include the response processing system, the universe control and management system, and the Decennial Response Integration System (DRIS).
- *Safeguarding Decennial Respondent Confidential Data:* We will assess controls to protect the confidentiality, integrity, and availability of electronic decennial respondent information.
- *Census's Ability to Detect/Respond to Cyber Attacks:* We will evaluate the extent and effectiveness of Census's monitoring of its decennial information systems for malicious activity.
- *2010 Enumeration Payroll and Progress Review:* In our ongoing audit of address canvassing payroll for the decennial Census, we are verifying the accuracy and integrity of payroll processing, including a review of supervisory approval, overtime

compliance, and time-and-expense reports. The overall purpose of this review will be to monitor the cost and progress of the 2010 Census field operations and verify the accuracy and integrity of the payroll—with emphasis placed on identifying irregular operations, assessing management staffing and deployment decisions, and identifying fraud.

- *Early 2020 Planning:* Planning for the 2020 Census has already started, and we intend to track progress throughout the decade. Weaknesses in the bureau's cost estimating techniques and its failure in planning and managing the acquisition of handheld computers for field data collection were major contributors to the eventual cost overruns and high level of operational risk. A related factor was the misalignment of budgets, schedules, requirements, testing, and acquisitions leading up to the 2010 Census. We will monitor early 2020 planning to identify more cost-effective methods for obtaining a high-quality address file and conducting enumeration, and promote more effective and transparent decennial planning and budgeting.

United States Government Accountability Office

GAO

Testimony before the Subcommittee on
Federal Financial Management, Government
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2010 CENSUS

Key Enumeration Activities Are Moving Forward, but Information Technology Systems Remain a Concern

Statement of Robert Goldenkoff, Director
Strategic Issues



GAO-10-430T

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Highlights of GAO-10-430T, a testimony before the Subcommittee on Federal Financial Management, Government Information, Federal Services and International Security, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

In March 2008, GAO designated the 2010 Census a high-risk area in part because of information technology (IT) shortcomings and uncertainty over the ultimate cost of the census, now estimated at around \$15 billion. The U.S. Census Bureau (Bureau) has since made improvements to various IT systems and taken other steps to mitigate the risks of a successful census. However, last year, GAO noted that a number of challenges and uncertainties remained, and much work remained to be completed under very tight time frames.

As requested, this testimony provides an update on the Bureau's readiness for an effective headcount, covering (1) the status of key IT systems; (2) steps the Bureau has taken to revise its cost estimates; and (3) the extent to which critical enumeration activities, particularly those aimed at hard-to-count populations, are on track. The testimony is based on previously issued and ongoing GAO work.

What GAO Recommends

GAO is not making new recommendations in this testimony, but past reports recommended that the Bureau strengthen its testing of key IT systems, better document and update its cost estimates, and ensure the accuracy of the address list used to mail out questionnaires. The Bureau generally agreed with these recommendations and is in varying stages of implementing them.

View GAO-10-430T or key components. For more information, contact Robert Goldenkoff at (202) 512-2757 or goldenkoff@gao.gov.

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What GAO Found

Overall, the Bureau's readiness for a successful headcount is mixed. On the one hand, ongoing performance issues are affecting key IT systems, especially a workflow management system essential for the Bureau's field operations and a payroll processing system that will be used to pay more than 1 million temporary workers. Indeed, an important performance test the Bureau held in December 2009 revealed significant performance issues with each system. Bureau officials stated that many of these issues were resolved in further testing; however, others remain unresolved, and new defects were identified. The Bureau is going to great lengths to address these issues. However, little time remains before the systems need to become fully operational.

In addition, the Bureau revised its cost estimate from \$2.7 billion to \$2.3 billion for nonresponse follow-up, the largest and most costly field operation where census workers follow up in person with nonresponding households. However, the Bureau's analyses of cost are not complete. According to the Bureau, it continues to reexamine the cost of two other nonresponse follow-up related operations.

On the other hand, the rollout of key enumeration activities is generally on track, and the Bureau has taken action to address some previously identified problems. For example, the Bureau has taken several steps to reduce the number of unreadable fingerprint cards of temporary workers, a problem that plagued an earlier field operation. Among other actions, the Bureau plans to digitally capture a third and fourth set of fingerprints if the first two sets cannot be read for background security checks. The Bureau has also developed new procedures for counting those living in group quarters, such as dormitories and prisons. For example, the Bureau is using a single address list containing both group quarters and housing units, rather than separate lists as in the 2000 Census, to reduce the chance of double counting. The Bureau's 2010 Census communications campaign is also more robust than the one used in the 2000 Census. Key differences from the 2000 campaign include increased partnership staffing, targeted paid advertising based on market and attitudinal research, and a contingency fund to address unexpected events. To increase participation rates, the Bureau plans to mail a second, replacement questionnaire to census tracts that had low or moderate response rates in the 2000 Census. To help ensure a complete count of areas along the Gulf Coast, the Bureau plans to hand deliver an estimated 1.2 million census forms in areas devastated by hurricanes Katrina, Rita, and Ike. This effort will help ensure that households—even those that were not on the Bureau's address list but appear inhabitable—will be included in the census.

Moving forward, it will be important for the Bureau to quickly identify the problems affecting key IT systems and test solutions. Further, given the complexity of the census and the likelihood that other glitches might arise, it will be important for the Bureau to stay on schedule, monitor operations, and have plans and personnel in place to quickly address operational issues.

United States Government Accountability Office

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the Census Bureau's (Bureau) readiness to conduct the 2010 Census. With just over 5 weeks remaining until Census Day, April 1, 2010, the decade-long process of researching, planning, testing, and evaluating procedures for the nation's largest peacetime mobilization has come to a close, and the complex and costly business of data collection is now underway.

The population count began on January 25, north of the Arctic Circle, in the Inupiat Eskimo village of Noorvik, Alaska, when the Director of the Census Bureau took the lead in counting the first 700 or so residents of the more than 300 million people who reside in our country. The Bureau is scheduled to mail census forms to most of the nation's households in mid-March, and simultaneously launch additional operations aimed at counting people in migrant worker housing, boats, tent cities, homeless shelters, nursing homes, dormitories, prisons, and other diverse dwellings, all in an effort to ensure a complete and accurate enumeration. In short, a successful census will require the near perfect alignment of thousands of interdependent activities; partnerships with local, state, and tribal governments and various community and other organizations; and automated systems, as well as over a million temporary employees, all laboring under extremely tight time frames.

At this critical juncture, it is important to examine the Bureau's preparedness for the headcount, taking stock of the Bureau's progress over the course of the decade, and the challenges that still need to be addressed to ensure a successful enumeration. As you know, the road to Census Day has been a rocky one, fraught with operational setbacks and cost overruns. The hurdles the Bureau has experienced to date—including weaknesses in the Bureau's information technology (IT) acquisition and contract management function and uncertainty over the ultimate cost of the census—now estimated at around \$15 billion—led us to designate the 2010 Census a high-risk area in March 2008.¹ In the last year, however, we testified that the Bureau had made commendable progress in rolling out key components of the census, making improvements to various IT systems and certain risk management efforts, among other activities. At the same time, we cautioned that a number of operations and support

¹GAO, *Information Technology: Significant Problems of Critical Automation Program Contribute to Risks Facing 2010 Census*, GAO-08-550T (Washington, D.C. Mar. 5, 2008).

systems still needed to be designed, planned, and tested; little time remained to address a range of outstanding IT issues; and, perhaps most importantly, the Bureau faced significant challenges finalizing an automated system used to manage field data collection known as the Paper-Based Operations Control System (PBOCS).²

As requested, my remarks today will focus on the Bureau's readiness for the 2010 Census and the challenges and opportunities that lie ahead. In particular, I will update the Subcommittee on the progress the Bureau is making in addressing issues that prompted us to designate the 2010 Census a high-risk area: (1) the reliability of key IT systems, and (2) the quality of its cost estimates, as well as (3) a broad range of activities critical to an effective headcount, some of which were problematic in either earlier 2010 operations or in the 2000 Census. The activities include procedures for fingerprinting temporary employees; the Bureau's efforts to count people residing in nursing homes, dormitories, and other group living arrangements known as "group quarters"; the rollout of key marketing efforts aimed at improving the participation of hard-to-count populations and how Recovery Act³ funds are being used as part of that effort; the Bureau's plans for a mailing a second, follow-up questionnaire and the removal of late mail returns; and the Bureau's plans to secure a complete count in the hurricane-affected areas along the Gulf Coast.

My testimony today is based on our ongoing and completed reviews of key census-taking operations.⁴ In our review, we analyzed key documents including plans, procedures, and guidance for the selected activities, and interviewed cognizant Bureau officials at headquarters and local census offices. In addition, to examine the Bureau's group quarters activities, we observed the group quarters validation operation at Atlanta, Georgia; Fresno, Los Angeles, and San Bernardino, California; Philadelphia, Pennsylvania; and Washington, D.C. We selected these locations because of their geographic diversity, variety of group quarters, and hard-to-count populations. We also made onsite observations of certain census

²See for example, GAO, *2010 Census: Fundamental Building Blocks of a Successful Enumeration Face Challenges*, GAO-09-430T (Washington, D.C.: Mar. 5, 2009), and GAO, *2010 Census: Census Bureau Continues to Make Progress in Mitigating Risks to a Successful Enumeration, but Still Faces Various Challenges*, GAO-10-132T (Washington, D.C.: Oct. 7, 2009).

³American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5 (Feb. 17, 2009).

⁴See related GAO products at the end of this statement.

promotional events in Boston, Massachusetts; Washington D.C.; and Atlanta.

On February 2, 2010, we provided the Bureau with a statement of facts for our audit work, and on February 5, 2010, the Bureau provided written comments. The Bureau made some suggestions where additional context or clarification was needed and, where appropriate, we made those changes. We conducted our work in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audits 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.

In summary, key IT functions—namely the Bureau's personnel and payroll system and PBOCS—continue to face performance problems and have not yet demonstrated the ability to function reliably under full operational loads. With key deadlines looming, it will be important for the Bureau to identify the defects affecting the IT systems, test solutions, and quickly implement changes. Likewise, the Bureau's analyses of cost are not complete. While the Bureau has finalized its reexamination of nonresponse follow-up (NRFU) cost, now estimated at \$2.3 billion, it continues to update the costs for other NRFU-related operations. In other areas, the Bureau continues to make progress. For example, the Bureau has improved its fingerprinting procedures for temporary workers, and its plans to count people in group quarters and to market the census—especially to hard-to-count populations—are generally on track and more robust compared to similar efforts during the 2000 Census.

The performance of the IT systems notwithstanding, a successful outcome is far from guaranteed. To be sure, the 2010 Census is unprecedented in its scope and complexity, and experience from past enumerations suggests that various glitches are all but inevitable once the headcount is fully underway. Given this difficult operating environment, as the Bureau well knows, it will be critical to (1) stay on schedule; (2) closely monitor operations with appropriate cost, performance, and scheduling metrics; and (3) have appropriate plans and personnel in place to quickly address operational issues.

Importantly, I also want to stress, as we have in the past, that the Census Bureau cannot conduct a successful enumeration on its own. Indeed, the decennial census is a shared national undertaking, and it is now up to the general public to fulfill its civic responsibility to mail back the census

questionnaires in a timely fashion.⁵ According to the Bureau, each percentage point increase in the mail response rate saves taxpayers around \$85 million and yields more accurate data compared to information collected by enumerators from nonrespondents. The bottom line, Mr. Chairman, is that in a few weeks, a key determinant of the success of the 2010 Census will be, both literally and figuratively, in the hands of the American people.

Background

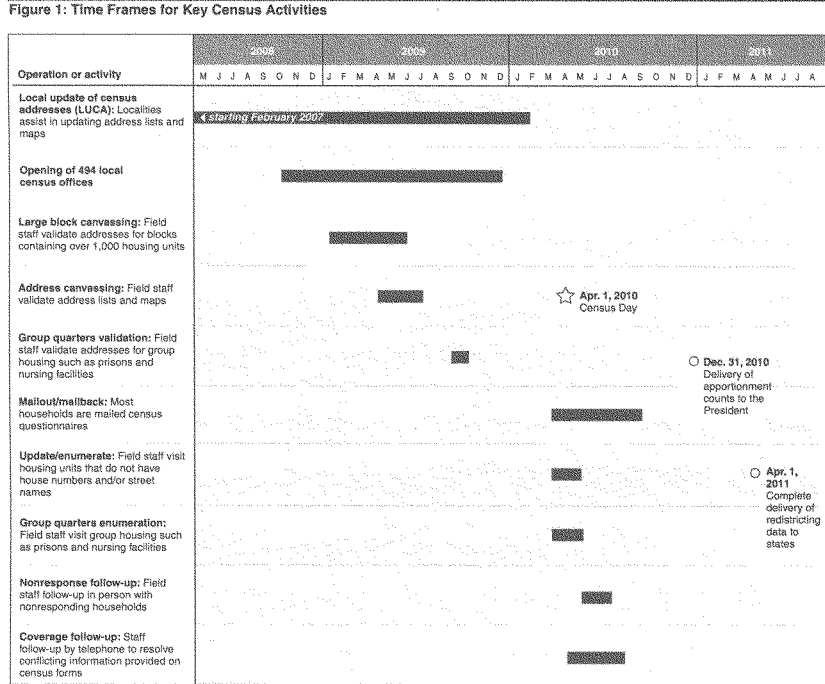
As you know, Mr. Chairman, the decennial census is a constitutionally mandated enterprise critical to our nation. Census data are used to apportion seats and redraw congressional districts, and to help allocate hundreds of billions of dollars in federal aid to state and local governments each year.

In developing the 2010 Census, a long-standing challenge for the Bureau has been the reliability of its IT systems. For example, in March 2009, we reported that the Bureau needed to develop a master list of interfaces between systems; set priorities for the testing of interfaces based on criticality; and develop testing plans and schedules.⁶ In the months that followed, while the Bureau strengthened its management and oversight of its IT systems, additional work was needed under very tight time frames.

More generally, now that the census has moved to the operational phase, it will be important for the Bureau to stay on schedule. The enumeration has several immutable deadlines, and an elaborate chain of interrelated pre- and post-Census Day activities are predicated upon those dates. Specifically, the Department of Commerce—the Bureau's parent agency—is legally required to (1) conduct the census on April 1 of the decennial year, (2) report the state population counts to the President for purposes of congressional apportionment by December 31 of the decennial year, and (3) send population tabulations to the states for purposes of redistricting no later than 1 year after the April 1 census date. To meet these reporting requirements, census activities need to take place at specific times and in the proper sequence. A time line of key census operations is shown in figure 1.

⁵GAO-10-132T.

⁶GAO, *Information Technology: Census Bureau Testing of 2010 Decennial Systems Can Be Strengthened*, GAO-09-262 (Washington, D.C.: Mar. 5, 2009).



Source: GAO summary of U.S. Census Bureau information.

Because of these tight deadlines, as the enumeration progresses, the tolerance for any operational delays or changes becomes increasingly small. Consequently, as the enumeration progresses, it will be important for the Bureau to closely monitor key performance metrics to ensure that the various operations are on track and quickly address any glitches.

Indeed, the interrelated nature of census activities raises the risk that a shortcoming in one operation could trigger other activities to spiral downward. For example, a lower than expected mail response rate would drive up the follow-up workload, which in turn would increase staffing needs and costs. Of course the reverse is also true, where a success in one operation could have a number of positive downstream impacts.

Key IT Systems Are Experiencing Significant Performance Issues

Although the Bureau has made progress in testing and deploying IT systems for the 2010 Census, significant performance issues have been identified with both the workflow management system—PBOCS—as well as with the Decennial Applicant Personnel and Payroll System (DAPPS), the automated system the Bureau is using to handle the payroll of the more than 1 million temporary employees that are to work on the census.

In March 2009, we reported that the Bureau had a number of problems related to testing of key IT systems, including weaknesses in test plans and schedules, and a lack of executive-level oversight and guidance.⁷ In that report, we recommended that the Bureau complete key system testing activities and improve testing oversight and guidance. The Bureau agreed with our recommendations. Since that time, we have been monitoring and tracking the Bureau's progress and, last October, we testified that the Bureau had taken steps to improve its management and testing of key IT system for the 2010 Census, such as naming a Decennial Census Testing Officer whose primary responsibilities include monitoring testing for decennial census activities.⁸ The Bureau had also completed limited end-to-end testing⁹ of PBOCS. The Bureau developed this workflow management system—which is designed to manage the work assignments and related maps for hundreds of thousands of enumerators—late in the decade when it moved from handheld computers, which it found unreliable, to a paper-based approach for some field operations. These operations include NRFU, when enumerators collect data through personal interviews from the tens of millions of households that fail to mail back a census questionnaire.

⁷GAO-09-262.

⁸GAO-10-132T.

⁹End-to-end testing helps verify that a defined set of interrelated systems can function as intended in an operational environment.

However, critical performance issues still need to be addressed and additional testing remains to be completed. For example, in December 2009, the Bureau completed two iterations of a key performance test, known as the Decennial Application Load Test. For the test, more than 8,000 field staff at about 400 local census offices performed a combination of manual and automated tests to assess the performance of key IT systems, including DAPPS and the first release of PBOCS. In the first test, DAPPS failed, and other key systems, including PBOCS, performed slowly. There were system communication errors as well.

Bureau officials stated that many of these issues were resolved during the second iteration of testing; however, others remain to be resolved and new issues were identified. For example, DAPPS performed slowly during the second iteration of testing. This issue must be resolved and retested. To the Bureau's credit, the performance test helped to identify significant issues before systems are needed for key field operations.

DAPPS program officials stated that the current version of the program has been deployed since October 2008 and has been processing payroll for a smaller number of temporary census employees (about 140,000). However, three major issues, involving system hardware, software, and the operating system, were identified as the likely causes of DAPPS system failure during the first load test. At least one of these issues was known to exist before the load test, but has not yet been resolved. The officials stated that they are taking several steps to resolve these issues, including upgrading and reconfiguring the system, and deploying additional hardware to support the system. An additional load test is also planned for DAPPS. The officials stated that they plan to have all issues resolved by the end of February, and acknowledge that it is critical that DAPPS be fully functional under a heavy load by mid-March, when the Bureau will begin hiring a large number of temporary employees (about 600,000) for NRFU who will need to be paid using the system.

In addition to issues mentioned with DAPPS, the December load test was not intended to be a comprehensive test of PBOCS, which has multiple releases at varying stages of development and testing. The first release of this system was deployed for early census field operations in January 2010, but it has known defects, such as limited functionality, slow performance, and problems generating certain progress and performance reports. In addition, the development and testing of two other releases is needed before the system is ready for other key field operations, such as the enumeration of residents in group quarters, scheduled to begin in March 2010.

In recognition of the serious implications that a failed PBOCS would have for conducting of the 2010 Census, the Bureau has taken additional steps to mitigate the outstanding risks. For example, in June 2009, the Bureau chartered an independent assessment team, chaired by the Bureau's Chief Information Officer, to monitor and report on, among other things, the system's development and testing progress. These efforts are encouraging. However, the aggressive development and testing schedule presents various challenges. For example, two of the three releases of PBOCS were not included in the recent performance test because development of these releases had not yet been completed. This increases the risk that performance issues, such as those described above, may reoccur in future releases of the system and the Bureau's ability to resolve and retest these issues before the system is needed for key field operations will be limited.

In addition to DAPPS and PBOCS, the Bureau will rely on six other key automated systems to conduct the census. Progress has been made with respect to system testing. However, much system testing remains to be completed in the next few months, as shown in the following table.

Table 1: Status of key system testing activities (as of January 2010)

Census system	Description	Status of testing activities
Headquarters Processing – Universe Control and Management	Organizes address files into enumeration “universes,” which serve as the basis for enumeration operations and response data collection.	System development is divided into three phases. According to the Bureau, the first of three phases was deployed for initial operations in July 2009, which was completed in January 2010. Limited functionality of the second release was deployed in December 2009 and deployment of the remaining functionality is planned to be completed by September 2010.
Headquarters Processing – Response Processing System	Receives response data and edits the data to help eliminate duplicate responses by, for example, identifying people who have been enumerated more than once.	System development is divided into six components. Testing of the first of six components, intended to receive response data, began in August 2009. The program plans to complete testing of the five remaining components by December 2010. The first component of this system is needed for operations in February 2010.
Master Address File/Topologically Integrated Geographic Encoding and Referencing system	Provides geographic information and support to aid the Bureau in establishing where to count the U.S. population for the 2010 Census.	The system has been functioning in a limited capacity since September 2007; however, additional testing is needed for 2010 Operations. As of January 2010, all nine test plans for 2010 Operations have been finalized. Testing activities for one test plan have been completed; seven are under way; and one has not yet started. Geographic information needed to support key operations, such as NRFU, is planned to be delivered by April 2010.
Field Data Collection Automation (FDCA)	Provides automation support for field data collection operations. It includes the development of handheld computers for the address canvassing operation and the systems, equipment, and infrastructure that field staff will use to collect data.	Development and testing for FDCA has been completed. The FDCA applications related to address canvassing were deployed and the operation completed. Map printing software has been deployed to field offices. The FDCA contractor is supporting map printing activities.
Decennial Response Integration System	Collects and integrates census responses from all sources, including forms and telephone interviews.	Six increments of system development and testing have been completed; however, additional regression testing is needed. The program is also conducting additional interface testing and operational testing before the system is needed for operations in February 2010.
Data Access and Dissemination System II (DADS II)	Replaces legacy systems for tabulating and publicly disseminating data.	The system consists of two subsystems, each with three iterations of development and testing. For one subsystem, the program is testing the second of the three iterations. For the other subsystem, the program is currently testing the third iteration. DADS II is needed for operations beginning in December 2010.

Source: GAO analysis of U.S. Census Bureau data.

Given the importance of IT systems to the decennial census, it is critical that the Bureau ensure that DAPPS, PBOCS, and other key systems are thoroughly tested. The limited amount of time to resolve what are, in certain cases, significant performance issues creates a substantial challenge for the Bureau.

The Bureau Has Revised Its Cost Estimate for Nonresponse Follow-up, but Needs to Complete Additional Updates as Planned

In 2008, we reported that the Bureau had not carried out the necessary analyses to demonstrate that the then life-cycle cost estimate of about \$11.5 billion for the 2010 Census was credible, and we recommended that the Bureau better document and update the estimate, to which it generally agreed.¹⁰ Since then, two early census field operations have experienced major differences between their estimated and actual costs. For address canvassing, where census workers verify address lists and maps, actual costs exceeded the Bureau's initial estimate of \$356 million by \$89 million, or 25 percent. In contrast, for group quarters validation, where census workers verify addresses of group housing, actual costs were below the Bureau's estimate of \$71 million by about \$29 million, or 41 percent.¹¹

Because of cost overruns during address canvassing, as well as concerns over the increased number of vacant units due to foreclosures, the Bureau has implemented our recommendation and reexamined the assumptions and other data used to support the cost estimate for NRFU, the most costly and labor-intensive of all census field operations. Earlier this month, the Bureau provided us with the results from that reexamination. Although we have not fully assessed the Bureau's analysis, our preliminary review shows that the Bureau now estimates that NRFU will cost about \$2.3 billion, a decrease of around \$400 million (15 percent) from its

¹⁰See GAO, *2010 Census: Census Bureau Should Take Action to Improve the Credibility and Accuracy of Its Cost Estimate for the Decennial Census*, GAO-08-554 (Washington, D.C.: June 16, 2008). In GAO-08-554, we reported that the Bureau had not performed sensitivity analysis (examining each cost estimate assumption or factor independently, while holding all others constant), or uncertainty analysis (capturing the cumulative effect of risks, which provides a level of confidence for the estimate), and had not obtained an independent cost estimate. As noted in GAO's *Cost Estimating and Assessment Guide* (GAO-09-3SP), these steps provide a basis for determining whether a cost estimate is credible and are key best practices for cost estimation. See GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, GAO-09-3SP (Washington, D.C.: March 2009).

¹¹In a preliminary assessment, the Bureau attributed cost overruns in address canvassing to increased initial workload, underestimated quality control workload, and training additional staff. The Bureau has not yet provided a cost assessment for group quarters validation.

previous estimate of about \$2.7 billion. In updating the estimate, the Bureau considered a number of cost drivers. For example, the Bureau reviewed 1) field work assumptions—such as miles driven per case, pay rates, hours worked per week, and attrition—which the Bureau updated based on actual Census 2000 data, national and field tests, and address canvassing results; 2) factors affecting response rate and hence NRFU workload—such as the national trend in survey response, use of a bilingual questionnaire and replacement mailing for 2010, and the vacancy rate; and 3) enumerator productivity rates, based on regional managers' concerns over enumerating vacant units and non-English-speaking households. Further, in its analysis, the Bureau cited holding pay rates for NRFU temporary staff at 2009 levels, rather than the proposed 2010 pay rate, as one of the reasons for the reduction in NRFU costs.

According to the Bureau, two cost drivers—workload, based on the mail response rate, and productivity—are uncertain and could have a significant effect on the ultimate cost of NRFU. For example, the Bureau states that if the response rate decreases by 2 percentage points due to extreme circumstances, such as an immigration backlash, costs could increase by \$170 million. Likewise, if PBOCS continues to experience performance problems causing 2 weeks of lost productivity, the Bureau says it would need to hire and train more staff to complete NRFU in order to deliver the apportionment counts to the President by December 31, 2010, which, according to the Bureau, could increase costs by about \$138 million.

As we previously recommended, revising cost estimates with updated data is an important best practice for cost estimation. However, the Bureau's analyses of cost are not complete. While the Bureau has finalized its reexamination of NRFU cost, it continues to update the costs for other NRFU-related operations. These operations include the NRFU Reinterview, a quality assurance procedure designed to ensure that field procedures were followed and to identify census workers who intentionally or unintentionally produced data errors. It also includes the Vacancy/Delete Check operation, which is a follow-up to NRFU and is designed to verify the status of addresses classified as vacant, or addresses determined to be nonexistent (deletes) during NRFU, as well as cases added since the NRFU workload was initially identified. According to the Bureau, emerging information about the Vacancy/Delete Check operation suggest that the workload may be much higher than originally expected and could increase costs from \$345 million to \$482 million—almost \$137 million, or 40 percent. The Bureau said it will update the cost estimates of both these operations once additional information becomes available.

A reliable cost estimate is critical to the success of any program because it provides the basis for informed investment decision making, realistic budget formulation, meaningful progress measurement, proactive course correction when warranted, and accountability for results.

The Implementation of Key Enumeration Activities Continues to Make Progress

In contrast to the IT systems, the rollout of other activities is going more smoothly. Indeed, the Bureau has taken steps to address certain previously identified problems, and its plans to improve the count of hard-to-enumerate groups are generally more robust compared to similar activities during the 2000 Census. Those activities include procedures for fingerprinting temporary employees; the Bureau's efforts to count people residing in nursing homes, dormitories, and other group living arrangements known as "group quarters"; the rollout of key marketing efforts aimed at improving the participation of hard-to-count populations; the Bureau's plans for a mailing a second, follow-up questionnaire and the removal of late mail returns; and the Bureau's plans to secure a complete count in the hurricane-affected areas along the Gulf Coast.

Bureau Has Taken Steps to Reduce the Number of Unclassifiable Fingerprints of Temporary Workers

The Bureau plans to fingerprint its temporary workforce for the first time in the 2010 Census to better conduct background security checks on its workforce of hundreds of thousands of temporary census workers.¹² However, the Bureau found that during address canvassing, an operation that the Bureau conducted in the summer of 2009 to verify every address in the country, 22 percent of the workers (approximately 35,700 people) hired for the operation had unclassifiable prints. The Federal Bureau of Investigation (FBI) determined that the issue was generally the result of errors that occurred when the prints were first taken at the local census offices.

To fingerprint workers during address canvassing, Bureau employees captured two sets of fingerprints on ink fingerprint cards from each temporary worker by the end of the workers' first day of training. The cards were then sent to the Bureau's National Processing Center in Jeffersonville, Indiana, to be scanned and electronically submitted to the FBI. If the first set of prints were unclassifiable, then the National Processing Center sent the FBI the second set of prints. If the results

¹²For the 2000 Census, temporary employees were subject only to a background check on their names.

showed a criminal record that made an employee unsuitable for employment, the Bureau either terminated the person immediately or placed the individual in a nonworking status until the matter was resolved.

To help ensure the success of fingerprinting operations for NRFU—which will peak at approximately 484,000 fingerprint submissions over a 3-day period from April 28-30, 2010—the Bureau will follow similar procedures, but has taken additional steps to improve fingerprint image quality. They include refining training manuals used to instruct local census office staff on how to take fingerprints, scheduling fingerprint training closer to when the prints are captured, and increasing the length of training. Further, the Bureau plans on using an oil-free lotion during fingerprinting that is believed to raise the ridges on fingertips to improve the legibility of the prints.

The Bureau has also revised its procedures for re-fingerprinting employees when both fingerprint cards cannot be read. During address canvassing, if both sets of fingerprints were unclassifiable, workers were allowed to continue working if their name background check was acceptable, and would be re-fingerprinted only if they were rehired for future operations. Under the revised policy, the Bureau plans to digitally capture a third and fourth set of fingerprints if the FBI cannot classify the first two sets. The Bureau plans to purchase approximately 1,017 digital fingerprint scanners. Each local census office will receive a minimum of one machine, with the remaining scanners to be distributed at the discretion of the Regional Director. The Bureau estimates that this additional step could reduce the percentage of workers with unclassifiable prints from 22 percent down to approximately 10 to 12 percent, or an estimated 60,000 to 72,000 temporary workers for NRFU. We did not receive a response from the Bureau whether it will allow those workers with unclassifiable prints to continue to work on NRFU operations.

**Operational Changes Made
for 2010 Position the
Bureau to More Accurately
Classify and Identify
Group Quarters**

During the decennial census, the Bureau conducts separate operations to count people residing in group quarters facilities. The Bureau defines group quarters as “places where people live or stay in a group living arrangement that are owned or managed by an entity or organization providing housing and/or services for the residents,” such as boarding schools, correctional facilities, health care facilities, military quarters, and college and university housing. According to Bureau estimates, more than 8.1 million people, or approximately 3 percent of the population, live in group quarter facilities.

During the 2000 Census, the Bureau did not always accurately enumerate group quarters because, among other reasons, group quarters were sometimes hard to distinguish from conventional housing units (see fig. 2), or the address of an administrative building was in a separate geographic location than where the people actually lived, as was sometimes the case with prison complexes. For example, in prior work,¹³ we found that the population count of Cameron, Missouri, was off by nearly 1,500 people because the population of the state's Crossroads Correctional Center was inadvertently omitted from the town's headcount. Similarly, North Carolina's population count was reduced by 2,828 people, largely because the Bureau had to delete duplicate data on almost 2,700 students in 26 dormitories (see fig. 3) at the University of North Carolina at Chapel Hill (UNC).¹⁴ Precision is critical because, in some cases, small differences in population totals could potentially impact apportionment and/or redistricting decisions.

¹³GAO, *Data Quality: Improvements to Count Correction Efforts Could Produce More Accurate Census Data*, GAO-05-463 (Washington, D.C.: June 20, 2005).

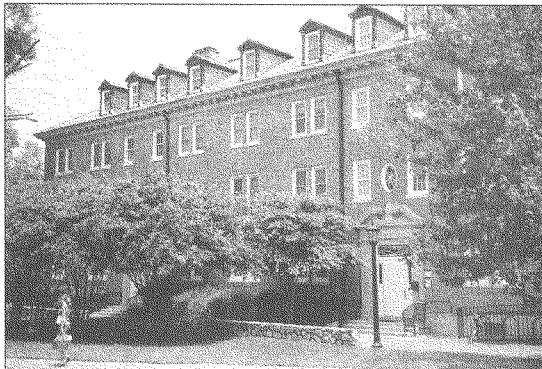
¹⁴The students were counted twice because, during the 2000 Census, the Bureau inadvertently included the UNC dormitories on both the group quarters and conventional housing unit address lists (they should have only been on the group quarters list). As a result, two questionnaires were delivered to the dormitories—one distributed by the university, and one sent to them through the mail.

Figure 2: Group Homes Could Resemble Conventional Housing



Source: GAO.

Figure 3: Students in 26 UNC Dormitories Were Counted Twice in the Census



Source: GAO.

The Bureau developed and tested new procedures to address the difficulties it had in identifying and counting this population during the 2000 Census. For example, the Bureau moved from manual to GPS-generated mapspots, which should reduce the chance of human error and group quarters populations being counted in the wrong jurisdiction; moved from a telephone interview to a field verification approach, which should increase accuracy; and moved to a single address list, which should reduce the chance of double counting. In addition, following the 2004 Census Test, we recommended that the Bureau revisit group quarter procedures to ensure that this population was properly located and counted.¹⁵ The Bureau implemented our recommendation and revised its group quarters procedures to clearly instruct census workers to properly correct and delete addresses. Further, to better ensure a more accurate group quarters count, the Bureau employed a three-prong effort consisting of those operations shown in table 2.

¹⁵GAO, *2010 Census: Basic Design Has Potential, but Remaining Challenges Need Prompt Resolution*, GAO-05-9 (Washington, D.C.: Jan. 12, 2005).

Table 2: Group Quarters Validation is the First Operation in a Three-Prong Effort to Accurately Enumerate Group Quarters

Operation name	Dates	Purpose
Group Quarters Validation	9/28/09 to 10/23/09	<ul style="list-style-type: none"> • Determine the status of the address as either a group quarter, housing unit, transitory location, nonresidential, nonexistent, duplicate, or vacant. • Determine the type of facility (i.e., correctional facility, health care facility, military quarters, dormitory, etc.) and confirm group quarter's geographic location. • Verify group quarters name, address, contact name and phone number.
Group Quarters Advance Visit	2/1/10 to 3/19/10	Confirm locations of group quarters and identify contact officials to facilitate actual enumeration.
Group Quarters Enumeration	3/30/10 to 5/14/10	Visit each group quarter to obtain a complete list of the names of the people living or staying at the group quarter and enumerate all people living or staying there.

Source: GAO analysis of U.S. Census Bureau information.

For the 2010 group quarters operations, the Bureau drew from a number of sources to build its list of group quarters addresses including data from the 2000 Census, address submissions provided by state and local governments, Internet-based research, and group quarters located during door-to-door address canvassing. During the first of the three group quarters operations (group quarters validation), approximately 25,000 temporary workers identified over 240,000 group quarters facilities from a workload of over 2 million potential group quarters in both the United States and Puerto Rico. The remaining approximately 1.76 million addresses were identified during group quarters validation as conventional housing units, transitory locations, nonresidential, nonexistent, or duplicates. All addresses that were verified as housing units or transitory locations were added to the appropriate address extracts for subsequent enumeration operations. In addition, over 7,000 addresses from the group quarters validation workload could not be properly processed in the Bureau's database because they were returned with insufficient information. However, a contingency plan was implemented to ensure these locations were included in the census.

The changes made to group quarters operations appear promising, and the Bureau plans to evaluate coverage of the group quarters population. However, the Bureau will not evaluate each of the three group quarters operation's effectiveness, cost, or value added. Such evaluations could be useful in improving the operations, identifying possibly duplicative operations, and identifying potential cost savings for 2020. For example, given the large number of non-group quarters included in the workload for group quarters validation (about 88 percent), the Bureau may want to

consider ways to begin the operation with a more concise initial workload. Additionally, in both group quarters validation and group quarters advance visit operations, census workers personally visit group quarters, verify the facility contact information, provide confidentiality information, and collect occupancy numbers. Because these activities appear to be duplicative, the Bureau may want to reexamine the need to conduct both operations.

The Bureau's Communications Campaign Is Aimed at Hard-to-count Groups

A complete and accurate census is becoming an increasingly daunting task, in part because the nation's population is growing larger, more diverse, and more reluctant to participate. To overcome these challenges, the Bureau has developed the Integrated Communications Campaign aimed at, among other things, improving the mail response rate and reducing the differential undercount.¹⁶ An undercount occurs when the census misses a person who should have been included; an overcount occurs when an individual is counted in error. What makes these errors particularly problematic is their differential impact on various subgroups. Minorities, renters, and children, for example, are more likely to be undercounted by the census while more affluent groups, such as people with vacation homes, are more likely to be enumerated more than once. As shown in table 3, the 2010 communications campaign consists of four components: the partnership program, paid advertising, public relations, and an educational program called Census in Schools.

¹⁶Differential undercount describes subpopulations that are undercounted at a different rate than the total population.

Table 3: 2010 Census Communications Campaign Components

Component	Description
Partnership program	Engages key government and community organizations and gains their commitment to support the census, focusing resources on hard-to-count communities. Among other contributions, partners help recruit census workers, help locate space for Questionnaire Assistance Centers and for testing census job applicants, sponsor community events to promote census participation, and motivate individuals to complete their census forms.
Paid advertising	Uses numerous paid media sources, such as TV, radio, the Internet, and magazines to encourage census participation, particularly by hard-to-count populations, such as minorities, renters, and linguistically isolated populations.
Public relations	Engages audiences via media activities to create credible, memorable messages.
Census in Schools	Provides schools with lesson plans and teaching materials to support existing curricula so that students can get the message home to parents and guardians that answering the census is important and confidential.

Source: U.S. Census Bureau.

The 2010 communications campaign's initial budget of \$410 million was increased by \$220 million in additional funds appropriated by the American Recovery and Reinvestment Act of 2009¹⁷ (Recovery Act).¹⁸ As a result, the Bureau was able to greatly expand its communications campaign activities. For example, the Bureau hired about 3,000 partnership staff, over 2,000 more than originally planned, and increased its paid advertising purchases targeted to specific ethnic or language audiences by more than \$33 million (85 percent) over its initial plan of about \$39 million. The increased funding should enhance the Bureau's capacity to reach out to hard-to-count communities. In all, the Bureau plans to spend about \$72 million on paid advertising targeted to specific ethnic or language audiences, which is about \$11 million more than the almost \$61 million the Bureau plans to spend targeting the general population.

However, even with the additional Recovery Act funds, the Bureau plans to spend less for some components of the 2010 paid media buys than it did for 2000, when compared in constant 2010 dollars. For example, although

¹⁷Pub. L. No. 111-5, div. A, tit. II, 123 Stat. 115, 127; H.R. Conf. Rep. No. 116-16 at 417 (2009).

¹⁸In the conference report accompanying the Act, the conferees stated that "of the amounts provided, up to \$250,000,000 shall be for partnership and outreach efforts to minority communities and hard-to-reach populations." According to the Bureau, it plans to use \$220 million for expanding the communications campaign and \$30 million for expanding its coverage follow-up operation, where census workers follow up to resolve conflicting information provided on census forms.

the total budget for the 2010 paid advertising is \$253 million, which is about \$12 million (5 percent) more than 2000, the Bureau plans to spend about \$133 million of it on the total advertising buy (excluding production, labor, and other management costs), which is about \$27 million (17 percent) less compared to the about \$160 million spent in 2000. Table 4 shows the Bureau's 2010 budget for paid media buys by target audience compared to what was spent in 2000.

Table 4: Paid Advertising Buys by Target Audience, 2000 vs. 2010

Component	2000 Census (2000 actual expenditures in 2010 constant dollars)	2010 Census (budgeted)
Total buy	\$160,406,244	\$133,003,094
Mass audience	84,441,528	60,811,800
Ethnic/Language audience	75,964,716	72,191,294
Hispanic	27,535,788	25,496,100
Black (including African and Caribbean)	24,816,618	22,978,350
Asian	14,603,328	13,521,600
Native Hawaiian and Pacific Islanders	214,326	1,100,000
American Indian/Alaska Native	4,088,232	3,785,400
Emerging audiences*	2,198,664	2,035,800
Puerto Rico	1,892,484	2,400,000
Island areas	615,276	0
New legacy languages*	Not applicable	874,044

Source: GAO analysis of U.S. Census Bureau information.

Notes: *Emerging audiences includes Polish, Russian, and Arabic Speaking.

*New legacy languages includes Portuguese, German, Italian, Greek, French, and Yiddish.

Decreased spending on paid advertising may seem like a step in the wrong direction for promoting census participation. However, by better targeting paid advertising buys the Bureau expects to reach those who have historically been the hardest to count. For example, the Bureau based its decisions on how to allocate spending across different ethnic and language audiences based on a variety of factors, such as historical response data for an area, prevalence of hard-to-count households in a market, population size, and availability of in-market media. The Bureau also received input from staff in census regional offices, as well as from an independent 2010 Census advisory group called the Race and Ethnic Advisory Committee. Further, the Bureau targeted the paid advertising messages based on market and attitudinal research. For example, the

Bureau's attitudinal research identified five mindsets people have about the census, ranging from what Bureau research identified as "leading edge"—those who are highly likely to respond—to the "cynical fifth" who are less likely to participate because they doubt that the census provides tangible benefits. The Bureau used this information to develop messages to motivate each cohort to participate in the census. To target the cynical fifth, for example, the Bureau developed advertising that focus on the message that the census is important to their community.

In addition, as shown in table 5, the Bureau has made other noteworthy changes to 2010 paid advertising and partnership program activities, which are aimed at expanding outreach to hard-to-count groups and better monitoring campaign effectiveness.

Table 5: Key Differences Between 2000 and 2010 Paid Advertising and Partnership Program Activities

Paid advertising and partnership program activities	2000 Census	2010 Census
Campaign development and targeting	Targeted advertisements by segmenting the population into three groups of census participation likelihood, based on measures of civic participation in an area, such as school board involvement.	Advertisements targeted based in part on actual Census 2000 participation rates and attitudinal research.
Implementation	Hired about 600 partnership staff. Partnership staff spoke 35 languages. No rapid response/media contingency fund for unexpected events.	Hired about 3,000 partnership staff. Partnership staff speak 124 languages. Established a \$7.4 million rapid response/media contingency fund to address unexpected events such as lower response rates in certain areas.
Monitoring	No real-time metrics to measure effectiveness of paid media and limited real-time tracking of partnership activities. Partnership tracking system cumbersome and not user-friendly.	Established metrics to measure effectiveness of paid media and partnership program, such as real-time tracking of attitudes through national polling and value added contributions of partner organizations. Revamped partnership tracking system by, among other things, allowing for up to date monitoring of partner activity.

Source: GAO analysis of U.S. Census Bureau information.

In summary, our analysis suggests that the paid advertising and partnership activities, along with the other components of the Bureau's communications campaign, are generally more robust than the Bureau's promotional efforts during the 2000 Census in that the entire effort is more comprehensive, and activities appear to be more data-driven and targeted. Moving forward, the key challenge facing the campaign is that it must not

only raise awareness of the census, it must also influence behavior, a far more difficult task.

**Second Census
Questionnaire Has
Potential to Increase
Response Rate, but Will Be
Available in English Only**

The Bureau's strategy to mail a second, or replacement, census questionnaire will be implemented for the first time in 2010 and is an important step towards improving response and decreasing costs. According to Bureau studies, mailing a replacement questionnaire increases overall response from households that do not respond to the initial questionnaire, which could generate significant cost savings by eliminating the need for census workers to obtain those responses via personal visits.

The Bureau plans to mail approximately 30 million replacement questionnaires to all households in census tracts that had the lowest response rates in Census 2000 (known as blanket replacement). Also, the Bureau plans to mail approximately 12 million replacement questionnaires to nonresponding households in other census tracts that had low-to-moderate response rates in 2000 (known as targeted replacement). In order to enhance the effectiveness of the replacement mailing, the Bureau will include a cover letter to distinguish the initial and replacement questionnaires and thus avoid receiving duplicate responses. However, replacement questionnaires will be provided in English-only, regardless of whether the household will receive a bilingual English/Spanish questionnaire in the initial mailing.¹⁹ According to a Bureau official, mailing a bilingual replacement questionnaire was logistically impractical for 2010, given the limitations of the printing process and the five-day time frame for the targeted replacement mailing. Thus, in looking forward to the 2020 Census, it will be important for the Bureau to evaluate potential changes to the mailing strategy that would include, at a minimum, sending bilingual replacement questionnaires to those households that initially received a bilingual questionnaire.

The Bureau plans to mail replacement questionnaires between April 1 and April 10 and develop an initial list of nonresponding households on April 7 (see table 6 for key dates in this process). Because the Bureau will likely receive replacement questionnaires after April 7, it must be able to effectively remove these late mail returns from the list of nonresponding

¹⁹The Bureau has identified about 13 million households that will receive a bilingual questionnaire for the 2010 Census.

households, or NRFU workload. Removing late mail returns is important because it prevents enumerators from visiting households that already returned their census forms, thus reducing NRFU workload and cost, as well as respondent burden. As shown in table 6, the Bureau plans to remove late mail returns from the NRFU workload four times using one automated and three manual processes. The Bureau has some experience with the manual process because some local census offices did some testing of late mail removals during the 2000 Census. In addition, they have developed quality assurance procedures for the manual removal process. Moving forward, it will be important for the Bureau to ensure that local census offices follow these procedures so that households are not unnecessarily visited by an enumerator or inadvertently removed from the follow-up workload and missed in the census count.

Table 6: Replacement Mailing and Late Mail Returns Removal Are on a Tight Schedule

Activity	Date
Initial Census Questionnaires mailed	March 15-17, 2010
Census Day	April 1
Blanket replacement mailing questionnaires mailed	April 1-3, 2010
Targeted replacement mail questionnaires mailed	April 6-10, 2010
NRFU workload created	April 7, 2010
Automated removal of late mail returns	April 21, 2010
First manual removal of late mail returns (even numbered assignment areas)	April 24-25, 2010
Second manual removal of late mail returns (odd numbered assignment areas)	May 1-2, 2010
Third manual removal of late mail returns	June 2010*

Source: GAO analysis of U.S. Census Bureau data.

*The third clerical removal occurs when 95 percent of the work in a local census office is completed and the remaining assignments are brought in to redistribute.

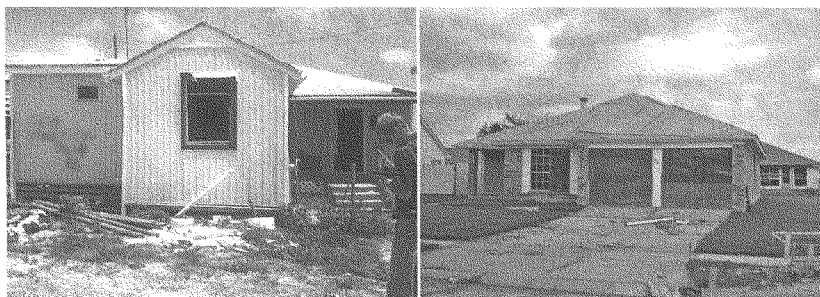
The Bureau Has Tailored Operations to Enumerate Hurricane-Affected Areas

The scale of the destruction in areas affected by hurricanes Katrina, Rita, and Ike has made getting a complete and accurate population count in parts of Mississippi, Louisiana, and Texas especially challenging (see fig. 4). Hurricane Katrina alone destroyed or made uninhabitable an estimated 300,000 homes. As we have previously testified,²⁰ the Bureau, partly in

²⁰GAO, *2010 Census: Efforts to Build an Accurate Address List Are Making Progress, but Face Software and Other Challenges*, GAO-10-140T (Washington, D.C.: Oct. 21, 2009).

response to recommendations made in our June 2007 report,²¹ developed supplemental training materials for natural disaster areas to help census address listers, when developing the census address list, identify addresses where people are, or may be, living when census questionnaires are distributed. For example, the materials noted the various situations that address listers might encounter, such as people living in trailers, homes marked for demolition, converted buses and recreational vehicles, and nonresidential space such as storage areas above restaurants. The training material also described the clues that could alert address listers to the presence of nontraditional places where people are living and provided a script they should follow when interviewing residents on the possible presence of hidden housing units.

Figure 4: Locating and Counting People Displaced by Storms Presents a Challenge Because Occupied Housing Units Could Be Hard to Identify



Source: GAO.

To ensure a quality count in the hurricane-affected areas, the Bureau will hand-deliver an estimated 1.2 million census questionnaires in these areas through the Update Leave operation, where census workers update addresses and provide a mail-back census questionnaire to each living quarter in their assigned areas. The Bureau estimates that it will be delivering questionnaires starting March 1, 2010, to housing units that

²¹GAO, *2010 Census: Census Bureau Has Improved the Local Updates of Census Addresses Program, but Challenges Remain*, GAO-07-796 (Washington, D.C.: June 14, 2007).

appear inhabitable in much of southeast Louisiana, south Mississippi, and Texas, even if they do not appear on the Bureau's address list. Occupants will be asked to complete and return the questionnaire by mail. Census workers will also identify modifications for the Bureau's address list, including additions, deletions, corrections, and spotting duplicate information. By hand delivering questionnaires, the Bureau hopes to ensure that housing units that may have been missed will receive and return questionnaires, ultimately improving the accuracy of the count. Finally, the Bureau stated that it must count people where they are living on Census Day and emphasized that if a housing unit gets rebuilt and people move back before Census Day, then that is where those people will be counted. However, if they are living someplace else, then they should be counted where they are living on Census Day.

Concluding Observations

Mr. Chairman, with less than two months to go until Census Day, the Bureau's readiness for the headcount is mixed. On the one hand, with data collection already underway, the ability of key IT systems to function under full operational loads has not yet been demonstrated. The issues facing these systems need to be resolved, and additional testing must take place, with little time remaining. Likewise, questions remain regarding the ultimate cost of the 2010 Census, as the Bureau continues to analyze the cost of NRFU-related operations.

On the other hand, certain operations, such as the communications campaign and efforts to enumerate group quarters, generally appear to be on track and more robust compared to similar efforts for the 2000 Census, better positioning the Bureau for a complete and accurate headcount. In the coming weeks and months ahead, we will continue to monitor the Bureau's progress in addressing these issues, as well as the implementation of the census as a whole, on behalf of the Subcommittee.

Mr. Chairman and members of this Subcommittee, this concludes my statement. I would be happy to respond to any questions that you might have at this time.

Contacts and Acknowledgments

If you have any questions on matters discussed in this statement, please contact Robert N. Goldenkoff at (202) 512-2757 or by e-mail at goldenkoffr@gao.gov. Other key contributors to this testimony include Peter Beck, Steven Berke, Clayton Brisson, Virginia Chanley, Benjamin Crawford, Dewi Djunaidy, Vijay D'Souza, Jennifer Echard, Elizabeth Fan, Ronald Fecso, Robert Gebhart, Ellen Grady, Richard Hung, Kirsten Lauber, Jason Lee, Andrea Levine, Signora May, Catherine Myrick, Lisa Pearson, David Powner, Jonathan Ticehurst, Cheri Truett, Timothy Wexler, and Katherine Wulff.

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**Census Bureau Responses to Post-Hearing Questions for the Record
Submitted to Dr. Robert M. Groves from Senator John McCain**

**“Countdown to Census Day: Progress Report on the Census Bureau’s
Preparedness for Enumeration”**

February 23, 2010

1. Super Bowl, March Madness, etc. Advertising

Like many Americans I am concerned that the Bureau spent millions of dollars to advertise during the Super Bowl. Before people see the census ads set to run during March Madness and NASCAR, I want them to understand clearly why these purchases were made and if it will result in more value for their money.

- **How much did it cost to run ads during the Super Bowl and Winter Olympics and how much is being spent to advertise during the NCAA Tournament and NASCAR?**

Answer

Together the Census Bureau and our subcontractors collaborated on a media buy strategy and allocation of dollars across television, radio, print, out-of-home (which includes billboards, transit ads, in-store ads, and others), as well as digital media outlets for each audience campaign. Armed with data, and challenged to meet the goal of motivating historically low-responding communities to mail back their forms, the Census media buyers engaged in negotiations with media outlets within the budget framework. Negotiations with the major television networks were comprehensive across the whole spectrum of their programming, and the networks themselves presented our buyers with their own proposals to maximize the reach to our targeted audiences.

The media buyers were required to find the best efficiencies in these negotiations, including the added value component in those calculations. Finally, other networks avoid highly rated programming opposite these major events, which reduces the efficiency and value of purchases made against these major events.

The Super Bowl package cost \$2.5 million and included the following:

- One :30 spot during the game
- One :30 spot and two :15 spots in the pre-game show
- Two live mentions delivered by James Brown in the pre-game show

The total package with NBC is \$10 million. This package included the Winter Olympics and included 132 census ads being run during the Winter Olympics.

The total package for NASCAR is \$1.3 million. This package includes 3 races (Atlanta, Bristol, and Martinsville), a census 2010 branded vehicle, uniforms, on track signage, and a personal service announcement by NASCAR driver Greg Biffle.

We believe the message delivered by James Brown, who was the host of the Super Bowl Sunday, carried great weight with viewers. Furthermore, Nielsen estimates that 113 million people watched our Super Bowl ad, making it the ninth most-watched commercial of all time. Advertising during the Super Bowl was highly economical, with a cost of approximately 2.1 cents per viewer.

The total package for the NCAA is \$5 million. This package includes the following:

- 22 ads shown during the regular season and during the tournament games including the championship game*
- CBS sports talent will provide 9 on air census messages over the first 4 days of the tournament.*

Is there any research showing that the television advertising by the Census Bureau results in greater response rates? If so, what is the research? Who conducted this research? What does the research show?

Answer

Census 2000 was the first time we conducted paid advertising. While the Census Bureau conducted an evaluation of the Census 2000 paid advertising campaign, it was not conclusive, because there was no benchmark to measure against; however, we can correlate the campaign to a reversal of a three decade decline in response rates. The Census Bureau will conduct an evaluation at the end of the 2010 Census to determine if our advertising was effective and has included a benchmark phase, as well as tied research phases to the paid advertising campaign.

- **Did the Bureau purchase advertisements during similar events for the 2000 census?**

Answer

Yes, during Census 2000 we purchased a Super Bowl ad and NCAA ads.

2. Cost Estimates for Non-Response Follow Up

In December, the Bureau completed its review of the budget for non-response follow up and concluded it was reasonable for non-response follow up to cost \$2.33 billion. This is approximately \$400 million less than the original budget for this activity.

- **What caused the estimated cost to fall approximately \$400 million?**

Answer

The FY 2010 enacted budget for NRFU is based on cost estimates using a number of components that were developed early in the decade or were revisited when the decision was made to go back to paper operations. The components include staff productivity, the number of cases requiring follow up, and cost drivers such as salary and mileage. The baseline budgeted for NRFU was \$2.74 billion.

However, as the census approached, our knowledge of these components improved based on additional experience and data. These included experiences such as Address Canvassing and Group Quarters Validation as well as revisiting Census 2000 observations and experiences. We also worked with a panel of experts in both headquarters and field operations to determine the impact of this information on cost drivers. This process led us to identify components that needed to be updated and those that could remain as part of the original estimate. The components that emerged as areas for the greatest concern due to high uncertainty and impact on cost were workload and productivity. Working with subject matter experts, we developed several likely alternative cost scenarios for these components. We did not conclude that NRFU would cost \$400 million less. Rather, we determined a revised cost estimate of \$2.33 billion was reasonable and fell towards the center of the range of the possible cost estimates.

This analysis indicates that NRFU operations can very likely be completed within the original budget despite recent changes in the economy and other external factors that we believe will increase NRFU workload and lower productivity. The ability to fit within budget in light of new information would not have been possible without changes to the NRFU operations, including the management decision to maintain the 2009 hourly salary levels, rather than increase them in FY 2010 according to the original plan, which was based on assessment of current employment and economic conditions.

- **The Bureau indicated it is continuously monitoring external conditions that may affect the budget for non-response follow up and will update its estimates as more information becomes available. Will the Bureau report any major revisions to the cost estimates to Congress in a timely manner?**

Answer

The Census Bureau will continuously monitor all 2010 Census operations. While the economy and other external factors will almost certainly change the workload and productivity for Non-Response Followup (NRFU), we believe we have sufficient funding to conduct the NRFU activities. However, if the current estimate for NRFU is insufficient and major revisions are necessary, we will notify Congress in a timely manner.

- **The Bureau has estimated that for each percentage point increase in the national mail-back response rate, the Census Bureau saves taxpayers about \$80 to \$90 million in costs associated with non-response follow up. How did the Bureau arrive at this estimate, and how accurate is it considered to be?**

Answer

The non-response follow up operations consist of salaries and travel reimbursement costs that will mostly vary directly with the workload. We divide the budgeted cost of the operations by the total budgeted percentage of households that will not return the census by mail, make some minor adjustments, and arrive at \$85 million savings per additional percentage point increase in mail-back. Although this figure also relies on other budget assumptions, such as enumerator productivity, we believe this range is an accurate description of the savings.

- **A recent life-cycle cost estimate for the 2010 census was \$14.7 billion, with non-response follow up being the most expensive census operation. Given the revisions to the estimated cost of non-response follow up, is \$14.7 billion still the current estimate or has that been revised as well? How confident are you in this cost estimate?**

Answer

As presented in the FY 2011 President's Budget, the life cycle estimate for the 2010 Decennial Census Program is now \$14.5 billion. This revision reflects the difference between the FY 2010 President's Budget and the appropriation, which was \$150 million lower. It also includes lower-than-anticipated needs for new budget authority in FY 2011.

The life cycle estimate was not adjusted downward for our review of the Non-Response Follow-up (NRFU) budget estimate since the costs can vary greatly due to the uncertainties, particularly the NRFU workload, based on mail response rates, and productivity. Despite recent changes in the economy and other external factors that almost certainly will increase the workload and lower productivity, such as the recent increases in vacant housing units and associated moves of occupants to alternative housing, the analysis indicates that the NRFU operation can likely be completed within the original budget. We believe we have sufficient funding to conduct the 2010 Census.

3. Partnership Programs

In your opening statement you noted that the Bureau now has over 200,000 partnerships with organizations and communities across the country. At the Subcommittee's last hearing, you reported that the Bureau used \$120 million in funds from the Stimulus bill to expand the local partnership program through the hiring of more than 2,000 additional partnership staff.

- **What indications do you have at this point that the partnership program is working as intended?**

Answer

There are a number of indicators that the partnership program is working as intended. The increased number of staff that were hired through the Recovery Act funds have allowed for broader outreach and the ability to reach more partners. This is reflected in the fact that we have far exceeded the number of partnerships that were projected, 120,000 versus the 218,562 that have now formed. (The 120,000 is based on the 2000 figures)

Another indicator is the increase in requests from partners and others in the community for presentations about the census, exhibits or displays at activities and events, and materials to distribute to constituents and members.

In the Census in Schools program there are thousands of schools nationwide that are using the teaching kits and working with Partnership staff in planning and implementing Census in Schools activities and special events. The Sesame Street characters, The Count and Rosita, have been extremely popular with these events and partnership has been inundated with requests for their appearance. Partnership staff have also been busy with presentations for school assemblies and many have done blitzes in schools in hard-to-count (HTC) areas consisting of "mini" census presentations in each classroom.

Partnerships Faith-based initiative has also been well received with leaders of Faith-based organizations providing space (for testing and training, Questionnaire Assistance Centers, Be Counted Sites), providing information about census jobs, referring applicants for census jobs, displaying census messages and participating in town hall meetings, summits and other activities focusing on the census.

The Complete Count Committee (CCC) program has been successful with many local, regional and state and tribal governments forming CCCs across the country. There are also several specialized or targeted statewide CCCs formed by community organizations with an emphasis on reaching specific populations such as African American males, Hispanics and Upward Bound students. Other unique committees have also been formed such as a Homeless CCC developed by representatives working with the homeless community.

These are just a few of the many instances in which Partnership staff throughout the nation have actively engaged partners and organizations from broad cross sections of their communities in support and promotion of the 2010 Census.

- **Have you had to terminate any partnerships since our last hearing? If so, what caused these terminations to happen?**

Answer

No partnerships have been terminated by the Census Bureau since the October 7, 2009 hearing before the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security.

**Questions and Responses for the Record
From Todd Zinser, Inspector General,
U.S. Department of Commerce**

1. Super Bowl, March Madness, etc. Advertising

Like many Americans I am concerned that the Bureau spent millions of dollars to advertise during the Super Bowl. Before people see the census ads set to run during March Madness and NASCAR, I want them to understand clearly why these purchases were made and if it will result in more value for their money.

- **Do you think the Bureau's purchase of million-dollar advertisements during events such as the Super Bowl and March Madness erodes the public's confidence in the census because of perceived money mismanagement?**

OIG Response:

The communications campaign is consistent with congressional direction in the statements accompanying the FY 2009 and FY 2010 departmental appropriations acts. The statement accompanying the FY 2009 act includes the following language: "Paid media is critical to promoting increased participation in the 2010 Decennial, particularly in minority and other hard-to-count populations."

Census used a systematic process in designing the paid media and the broader communications campaign, and worked with its contractors to determine the paid media funding allocations to the targeted audiences. It built its paid media budget plan with 46 percent of its funding going to the mass communication base plan, which is designed to reach the estimated 84 percent of the population that consumes English-language media, including any English-speaking race or ethnic group. It targeted the remaining 54 percent of its budget to hard-to-count audiences

Unlike the 2000 Census, the 2010 communications campaign has a tracking and evaluation component, as well as a rapid response management reserve to be used for enhancing publicity in areas lagging in response. Responses to questions pertaining to the Census on a Gallup tracking survey showed a steady increase in public awareness of the 2010 Census after the launch of the ad campaign that continued after the airing of the Super Bowl ad. The paid media campaign is designed to increase the mail response rate, improve accuracy and reduce the undercounting of traditionally hard-to-count populations, and improve cooperation with enumerators. Perhaps the best measure of the effectiveness of the campaign will be whether we can see an increase in response rate. As Census has reported, raising the mail response rate 1 percentage point reduces the total cost of the census by about \$85 million.

2. Cost Estimates for Non-Response Follow Up

In December, the Bureau completed its review of the budget for non-response follow up and concluded it was reasonable for non-response follow up to cost \$2.33 billion. This is approximately \$400 million less than the original budget for this activity.

- **Do you agree with the Bureau's determination?**

OIG Response:

Census's estimate, \$2.33 billion, is the mid-point of estimates that range from a low of \$1.94 billion to a high of \$2.83 billion. Census's NRFU validation study reviewed several components, such as productivity and the mail response rate (which were unknown beforehand), and their impact on 20 cost drivers, such as miles per case, replacement training, and rework. Slight changes in productivity and mail response rate may result in either cost overruns or underruns. This validation study included over 1,000 likely cost estimates based on different scenarios involving the 20 cost drivers. Census can use the study's results to monitor how changes to different costs may impact the NRFU cost estimate as the operation progresses and, assess whether and how much contingency funding will be needed.

Census's ability to manage nonresponse follow-up effectively and control its cost, also hinges on a critical IT system: the paper-based operations control system (PBOCS). Described by the bureau as the "nerve center" of its field offices, PBOCS is used to define enumerator assignments and to provide current information on enumerator productivity. Census is on a very tight schedule to complete the PBOCS capabilities needed for NRFU and to resolve existing problems. Once NRFU begins, the system has no margin for error. Yet PBOCS development and testing remain behind schedule and frequent outages and slow performance are impacting early field operations. If not fixed for NRFU, these problems place the schedule and cost at serious risk.

Census also needs to focus on containing NRFU costs through better management of the operation. In address canvassing, we found inefficiencies in wages, travel, and training. Given the significantly larger scale of NRFU, it is important that Census have effective internal controls in place and ensure that managers scrupulously follow them during this operation.

- **A recent life-cycle cost estimate for the 2010 census was \$14.7 billion, with non-response follow up being the most expensive census operation. Given the revisions to the estimated cost of non-response follow up, is \$14.7 billion still the current estimate or has that been revised as well? How confident are you in this cost estimate?**

OIG Response:

The lifecycle estimate of \$14.7 billion remains the current estimate for the decennial census. The validation study that projected the final NRFU cost at \$2.33 billion simply showed that this figure was the midpoint of the more than 1,000 likely estimates based on different combinations involving 20 costs drivers. Census states that the components with the most impact on the cost drivers are enumerator productivity rates and the questionnaire response rate. If both rates turn out high, the costs should be contained, making it likely that the cost of NRFU will come close to the \$2.33 billion revised estimate. However, these estimates do not account for potential productivity impacts from a poorly-performing PBOCS. Although we have not audited Census's life-cycle cost model, according to a 2008 GAO audit, the life cycle cost estimate is not reliable because it lacks adequate documentation and is not comprehensive, accurate, or credible. The bureau was unable to provide detailed documentation on data sources, significant assumptions, or changes in assumptions for the cost estimate.

- **GAO has observed that the current approach to national enumeration may no longer be financially sustainable and the cost of the census has, on average, doubled each decade since 1970 in constant 2010 dollars. If that rate of cost escalation continues into 2020, the nation could be looking at a \$30 billion census. What steps do you advise the Bureau to take at the outset of 2020 census planning to ensure cost control throughout the next census cycle?**

OIG Response:

The Census Bureau must find ways to rein in costs while maintaining or enhancing accuracy. It is crucial for the bureau to lay the groundwork for the 2020 census in calendar year 2010. Even though its workforce is already stretched thin by 2010 operations, Census is beginning to develop its plans for 2020. The bureau must work with the Department to apply lessons learned from the 2010 process and develop an innovative, flexible, cost-effective, and transparent approach to the 2020 census that embodies strong project management and risk assessment activities as the cornerstone of their decision-making process.

The bureau should leverage the research and development efforts conducted by other national statistical agencies, private industry, its own advisory committees, and independent researchers to develop new approaches to the creation of national population statistics. Serious consideration should be given to the use of such alternatives as administrative records, the Internet, and targeted address canvassing for various aspects of the decennial.

For example, administrative records—data collected for the administration of programs and provision of services by federal, state, and local governments and commercial entities—is another potential source of data for assessing and guiding improvements to the quality of census data, including the quality of the address list. Using the Internet as a self-response option was rejected for 2010 and should be given serious consideration for 2020. The Census Bureau also rejected targeted address canvassing, which would have involved enhancing the address list throughout the decade and conducting a more limited end-of-decade address canvassing effort focused on locations where the address list needs the most improvement. This is a potentially more cost effective approach for maintaining and updating the address list.

To accomplish a successful redesign, the bureau must be more flexible and responsive to Commerce and external feedback and collaboration, as well as transparent and performance driven. The significant changes that must take place will need years of innovative thinking and actions, as well as Departmental support.

3. Partnership Programs

Dr. Groves noted in his opening statement that the Bureau now has over 200,000 partnerships with organizations and communities across the country. At the Subcommittee's last hearing, Dr. Groves reported that the Bureau used \$120 million in funds from the Stimulus bill to expand the local partnership program through the hiring of more than 2,000 additional partnership staff.

- **What is the Commerce Department IG's assessments of the 2010 census partnership program to date?**

OIG Response:

The Census Bureau enhanced the decennial partnership program with Recovery Act funds by increasing the number of partnership positions from a base of 680 positions to over 2700. The majority of these new positions were partnership assistants – hourly employees who supported and reported to the professional partnership specialist staff. We reported in our December 2009 Quarterly Report to Congress that we were concerned about the ability of the partnership specialists to effectively supervise these new employees. We have been monitoring the partnership program and Census's accountability of these employees' performance. The effect of additional partnership specialists and the performance of the partnership program is part of our ongoing analysis of the 2010 enumeration activities that are presently underway, and we have not completed our analysis. We will inform the committee of the results of our work.



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Washington, DC 20548

Questions and Responses for the Record
Robert Goldenkoff, Director, Strategic Issues,
U.S. Government Accountability Office

April 9, 2010

The Honorable John McCain
Ranking Member
Subcommittee on Federal Financial Management, Government Information,
Federal Services, and International Security
Committee on Homeland Security and Governmental Affairs,
United States Senate

On March 10, 2010, you requested that we respond to questions for the official record regarding the Subcommittee's February 23, 2010 hearing, "Countdown to Census Day: Progress Report on the Census Bureau's Preparedness for Enumeration." The following is our response to your questions. Because our response is based primarily on our previous work, we did not obtain comments from the Department of Commerce.

Responses to Questions for the Official Record Submitted by Ranking Member John McCain

1. Do you think the Bureau's purchase of million-dollar advertisements during events such as the Super Bowl and March Madness erodes the public's confidence in the census because of perceived money mismanagement?

Although the Census Bureau (Bureau) spent approximately \$2.5 million on advertising during the Super Bowl, the Bureau estimates that it will save between \$25-30 million if the advertisement motivates one percent of the audience to complete a census form. According to the Bureau, both the Super Bowl and March Madness will reach at least 10 percent of most population groups that the Bureau has identified in its marketing research as hard to count, such as young people and those who rent their homes. That said, it will be important for the Bureau to assess the impact of its advertising on motivating behavior, particularly among hard-to-count populations, in order to determine how to best allocate advertising dollars for the 2020 Census.

2a. In December, the Bureau completed its review of the budget for non-response follow up and concluded it was reasonable for nonresponse follow-up to cost \$2.33 billion. This is approximately \$400 million less than the original budget for this activity. Do you agree with the Bureau's determination?

We could not determine whether \$2.33 billion is a reasonable cost estimate for nonresponse follow-up (NRFU), in part, because according to the Bureau, two cost drivers—workload, based on the mail response rate, and productivity—are uncertain and could have a significant effect on the ultimate cost of NRFU. Further, in February

before this Subcommittee, we testified that the Bureau's analyses of cost were not complete for two NRFU-related operations.¹ These operations include NRFU Reinterview, a quality assurance procedure designed to ensure that field procedures were followed and to identify census workers who intentionally or unintentionally produced data errors. The second operation is the Vacancy/Delete check operation, which is a follow-up to NRFU and is designed to verify the status of addresses classified as vacant or addresses determined to be nonexistent (deletes) during NRFU, as well as cases added since the NRFU workload was initially identified. According to the Bureau, emerging information about the Vacancy/Delete Check operation suggests that the workload may be higher than originally expected and could increase costs from \$345 million to \$482 million, an increase of \$137 million (40 percent). We will continue to monitor the cost of the census and update our analysis as more information becomes available from the Bureau.

2b. A recent life-cycle cost estimate for the 2010 census was \$14.7 billion, with nonresponse follow up being the most expensive census operation. Given the revisions to the estimated cost of non-response follow up, is \$14.7 billion still the current estimate or has that been revised as well? How confident are you in this cost estimate?

The life-cycle cost estimate is fluid in part because of changing assumptions. According to the Bureau's fiscal year 2011 budget request, the total life-cycle cost for the 2010 Decennial Census Program is now \$14.5 billion (nominal dollars). According to the Bureau the revised life-cycle cost figure of \$14.5 billion is due in part to "programmatic enhancements or changes as a result of new requirements."

While the Bureau has taken steps to reexamine the cost estimate for NRFU, we could not independently verify the 2010 Census life cycle cost estimate for two reasons. First, as previously stated two cost drivers—workload, based on the mail response rate, and productivity—are uncertain and could have a significant effect on the ultimate cost of NRFU. Second, in our February testimony before this Subcommittee, we noted that two earlier census field operations experienced major differences between their estimated and actual cost. For address canvassing, where census workers verify address lists and maps, actual costs exceeded the Bureau's initial estimate of \$356 million by \$89 million, or 25 percent. In contrast, for group quarters validation, where census workers verify addresses of group housing, actual costs were below the Bureau's estimate of \$71 million by about \$29 million, or 41 percent.²

Further, according to a Bureau official, the \$2.33 billion revised cost estimate for NRFU is being used to manage staffing allocations and other NRFU-related activities, but the budget for NRFU will remain at \$2.74 billion. Based on the Bureau's recent analysis of NRFU costs, the \$2.33 billion figure is a reasonable amount from over 1,000 likely cost estimates ranging between \$1.94 billion to \$2.83 billion, which are based on a combination of workload and productivity scenarios. According to a

¹GAO, *2010 Census: Key Enumeration Activities Are Moving Forward, but Information Technology Systems Remain a Concern*, GAO-10-430T (Washington, D.C.: Feb. 23, 2010).

²In a preliminary assessment, the Bureau attributed cost overruns in address canvassing to increased initial workload, underestimated quality control workload, and training additional staff. The Bureau has not yet provided a cost assessment for group quarters validation.

Bureau official, the purpose of the analysis was to determine whether the current budget for NRFU was adequate and not to go back and revise the costs associated with the budget for NRFU.

2c. GAO noted the Bureau finished ahead of schedule on address canvassing, but this came at a cost of \$356 million which was approximately \$88 million over budget. Could the Bureau have avoided this cost overrun without adversely affecting the outcome of the operation?

Following best practices from GAO's *Cost Estimating and Assessment Guide*, such as defining necessary resources and tasks, could have helped the Bureau recognize the need to update address canvassing workload and other operational assumptions, resulting in a more reliable cost estimate.³ About \$75 million (85 percent) of the cost overrun was due to changes in workload. Specifically, the Bureau did not anticipate an increased workload of 11 million addresses which came from other address file update activities, resulting in \$41 million in additional costs. Further, the Bureau did not account for the extra cost of recanvassing addresses that failed quality control procedures, which increased the quality control workload by 26 million addresses, or \$34 million.

In addition, the Bureau could have potentially avoided \$7 million in training costs by clarifying its staffing process. We found that the staffing authorization and guidance provided to some local census managers were unclear and did not specify that a hiring cushion had already been included for each office to account for potential turnover. Also, basing the number of people invited to training on factors likely to affect worker hiring and retention, such as local unemployment rate, could help the Bureau better manage costs.

2d. GAO has observed that the current approach to the national enumeration may no longer be financially sustainable and the cost of the census has, on average, doubled each decade since 1970 in constant 2010 dollars. If that rate of cost escalation continues into 2020, the nation could be looking at a \$30 billion census. What steps do you advise the Bureau to take at the outset of 2020 census planning to ensure cost control throughout the next census cycle?

Thorough and comprehensive planning and development efforts are crucial to the ultimate efficiency and success of any large, long-term project, particularly one with the scope, magnitude, and deadlines of the decennial census. In general, critical considerations include early planning; a comprehensive and prioritized set of goals, objectives, and projects; milestones and performance measures; and documentation to support research, testing, and evaluation.

Moreover, given past performance issues with the handheld computers used for address canvassing and ongoing concerns with the Bureau's information technology systems, early planning for 2020 technology will be critical and could yield significant gains in efficiency, effectiveness, and cost reduction in the later

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

implementation phase. As we have previously reported, the Bureau needs to finalize requirements in time to ensure that systems are adequately tested.⁴ According to industry best practices, defining requirements for a system is important because they provide a baseline for development and testing activities and are used to establish test plans, which define schedule activities, roles and responsibilities, resources, and system testing priorities. The absence of finalized requirements increases the risk that there may not be sufficient time and resources to adequately test the systems, which are critical to ensuring an accurate count.

In addition, it will be important for the Bureau to develop a more transparent life cycle cost estimate. Given that cost estimates are sensitive to key assumptions, the Bureau could determine the range and likelihood of how true cost drivers could differ from those assumed and how those differences would affect estimates of total cost, which would better enable Congress to consider funding levels in an uncertain environment. Further, early in the decennial census life cycle when funding is at relatively low levels, annual budget requests and reports provided to Congress do not reflect the full magnitude of long-term spending on the census. Therefore, it will be important for the Bureau to clearly define what future costs might be, why they are justified, and what alternatives might exist.

3. Dr. Groves noted in his opening statement that the Bureau now has over 200,000 partnerships with organizations and communities across the country. At the Subcommittee's last hearing, Dr. Groves reported that the Bureau used \$120 million in funds from the Stimulus bill to expand the local partnership program through the hiring of more than 2,000 additional partnership staff. What is GAO's assessment of the 2010 census partnership program to date?

In our February testimony before the Subcommittee,⁵ we noted that 2010 partnership activities were generally more robust than the Bureau's efforts during the 2000 Census. As shown in the table below, the Bureau has made a number of noteworthy changes to 2010 partnership program activities, which are aimed at expanding outreach to hard-to-count groups and better monitoring campaign effectiveness.

⁴GAO, *Information Technology: Census Bureau Testing of 2010 Decennial Systems Can Be Strengthened*, GAO-09-262 (Washington, D.C.: Mar. 5, 2009).

⁵GAO-10-430T

Table: Key Differences Between 2000 and 2010 Partnership Program Activities

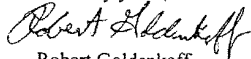
Partnership program activities	2000 Census	2010 Census
Implementation	Hired about 600 partnership staff.	Hired about 3,000 partnership staff.
	Partnership staff spoke 35 languages.	Partnership staff speak 124 languages.
	No rapid response/media contingency fund for unexpected events.	Established a \$7.4 million rapid response/media contingency fund to address unexpected events such as lower response rates in certain areas.
Monitoring	Only limited real-time tracking of partnership activities.	Established metrics to measure effectiveness of the partnership program, such as value added contributions of partner organizations.
	Partnership tracking system cumbersome and not user-friendly.	Revamped partnership tracking system by, among other things, allowing for up to date monitoring of partner activity and new web-based interface.

Source: GAO analysis of U.S. Census Bureau information.

For the 2010 Census, the Bureau has expanded its outreach to partner organizations which include state and local governments, community groups, and businesses. The Bureau increased partnerships from approximately 140,000 during the 2000 Census, to more than 220,000 as of March 2010. Pledged support from partnership organizations is significant. For example, as of March 2010, partnership organizations had made potential value-added commitments of about \$720 million. These potential value-added commitments include, among other things, space for training new employees, displaying and distributing printed materials, and encouraging constituents to participate in the census.

Thank you for the opportunity to participate in your February 23, 2010, hearing on the 2010 Census. Please contact me at (202) 512-2757, if you, other Subcommittee members, or your staffs have additional questions or if we can provide additional help on these issues.

Sincerely yours,



Robert Goldenkoff
 Director, Strategic Issues

