AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

S. Hrg. 110–1039

CENSUS IN PERIL: GETTING THE 2010 DECENNIAL BACK ON TRACK—PARTS I AND II

HEARINGS

BEFORE THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

MARCH 5 AND APRIL 15, 2008

Available via http://www.gpoaccess.gov/congress/index.html

Printed for the use of the
Committee on Homeland Security and Governmental Affairs

U.S. GOVERNMENT PRINTING OFFICE

41–456 PDF WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

JOSEPH I. LIEBERMAN, Connecticut, *Chairman*

CARL LEVIN, Michigan
DANIEL K. AKAKA, Hawaii
THOMAS R. CARPER, Delaware
MARK L. PRYOR, Arkansas
MARY L. LANDRIEU, Louisiana
BARACK OBAMA, Illinois
CLAIRE MCCASKILL, Missouri
JON TESTER, Montana

SUSAN M. COLLINS, Maine
TED STEVENS, Alaska
GEORGE V. VOINOVICH, Ohio
NORM COLEMAN, Minnesota
TOM COBURN, Oklahoma
PETE V. DOMENICI, New Mexico
JOHN WARNER, Virginia
JOHN E. SUNUNU, New Hampshire

MICHAEL L. ALEXANDER, *Staff Director*
KRISTINE V. LAM, *Professional Staff Member*
JOHN P. KILVINGTON, *Staff Director, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security*
BRANDON L. MILHORN, *Minority Staff Director and Chief Counsel*
JENNIFER L. TARR, *Minority Counsel*
CHRISTOPHER J. BARKLEY, *Minority Professional Staff Member, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security*
TRINA DRIESSNACK TYRER, *Chief Clerk*
PATRICIA R. HOGAN, *Publications Clerk and GPO Detailee*
LAURA W. KILBRIDE, *Hearing Clerk*

CONTENTS

Opening statements: Page
Senator Carper 1, 41
Senator Coburn 5, 44
Senator McCaskill 37
Prepared statements:
Senator Lieberman 69
Senator Collins 70, 71

WITNESSES

WEDNESDAY, MARCH 5, 2008

Hon. Carlos M. Gutierrez, Secretary, U.S. Department of Commerce 9
Hon. Steven H. Murdock, Director, U.S. Census Bureau, U.S. Department of Commerce 14
David A. Powner, Director, Information Technology Management Issues, U.S. Government Accountability Office 26
Mathew J. Scirè, Director, Strategic Issues, U.S. Government Accountability Office 28

TUESDAY, APRIL 15, 2008

Hon. Carlos M. Gutierrez, Secretary, U.S. Department of Commerce 47
Hon. Steven H. Murdock, Director, U.S. Census Bureau, U.S. Department of Commerce 57
Mathew J. Scirè, Director, Strategic Issues, U.S. Government Accountability Office 59
David A. Powner, Director, Information Technology Management Issues, U.S. Government Accountability Office 60

ALPHABETICAL LIST OF WITNESSES

Gutierrez, Hon. Carlos M.:
Testimony 9, 47
Prepared statement 72, 107
Murdock, Hon. Steven H.:
Testimony 14, 57
Prepared statement 80, 113
Powner, David A.:
Testimony 26, 60
Prepared statement 83, 117
Scirè, Mathew J.:
Testimony 28, 59
Prepared statement 83, 117

APPENDIX

Questions and responses for March 5, 2008, Record from:
Mr. Gutierrez 132
Mr. Murdock 144
Mr. Powner 155
Mr. Scirè 155
Questions and responses for April 15, 2008, Record from:
Mr. Gutierrez 162
Mr. Murdock 169
PowerPoint presentation titled "Decennial Census Progress Review and Program Replan," submitted by Mr. Gutierrez 173

CENSUS IN PERIL: GETTING THE 2010 DECENNIAL BACK ON TRACK—PART I

WEDNESDAY, MARCH 5, 2008

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 9:36 a.m., in Room SD–342, Dirksen Senate Office Building, Hon. Thomas R. Carper, presiding.

Present: Senators Carper, McCaskill, and Coburn.

OPENING STATEMENT OF CHAIRMAN CARPER

Senator CARPER. The Committee will come to order.

All right. Let me begin by welcoming our witnesses, Secretary Gutierrez, Director Murdock, and our two other witnesses, who will be joining us on the second panel from the U.S. Government Accountability Office (GAO), for being here on such short notice.

Your cooperation with our oversight efforts and your commitment to working with us to get the 2010 Decennial Census back on track are deeply appreciated.

My thanks as well to Senators Lieberman and Collins for allowing us to hold this hearing at the full Committee level.

As my colleagues are aware, the Constitution requires the Federal Government to conduct a census every 10 years. The data collected as a result of these efforts is used to support and ensure the equitable and effective operation of a number of programs here at the Federal level and in the States as well—programs that involve literally tens of billions of taxpayer dollars.

The data obtained through the census is also used, as we know, to determine the make up of the Federal Government itself, at least a portion of the Federal Government in the Legislative Branch.

The information that the Census Bureau collects about people and their communities once every 10 years is utilized to decide how the 435 seats in the U.S. House of Representatives are apportioned.

Senator Coburn and I called this hearing today because information we have learned from the Commerce Department, from the Census Bureau, and in the press indicates that the 2010 Decennial Census could be at risk of failure unless prompt and dramatic corrective action is taken.

Right now, the Census Bureau is supposed to be in the midst of a period it calls the "dress rehearsal." And during the dress rehearsal, all the procedures and technology that will be used in 2010

are to be tested so that adjustments can be made before the counting actually begins.

Instead of being out in the field this month, though, doing a final run through, it appears that Census staff is stuck in headquarters trying to salvage a project that for years had been billed as the cornerstone of the Bureau's 2010 efforts.

The project, called the "Field Data Collection Automation," involves hand-held computers that canvassers and census-takers will use to go into the communities and collect information from individuals who do not initially respond to the census forms that are mailed to them.

The handhelds are supposed to lead to a more accurate census than the largely paper-based efforts conducted in 2000 and in previous decennials.

The handhelds also were supposed to be the key to the Census Bureau's projected cost savings this time around since using handheld computers instead of paper would hopefully mean fewer staff and less office space to be acquired.

However, the Department of Commerce and the Census Bureau officials decided very recently, after preparations for the 2010 decennial began, that the hand-held project may not be viable.

As we will hear from Secretary Gutierrez and Director Murdock today, Census staff is working now to come up with a series of options for how to conduct major portions of the 2010 count.

Among those options, I assume, could be a complete abandonment of the hand-held project and a return to a paper census. It is my understanding that all the options on the table at this point will come with a significant price tag.

I am profoundly disappointed in this outcome. My disappointment comes not so much from the fact that the Census Bureau has tried and, in all likelihood, failed to use technology to improve the Decennial Census. It comes, in part, because we may wind up paying more for a poorer quality census in 2010 because the Census Bureau did not heed the warnings coming from GAO and others that its hand-held project was troubled and in jeopardy.

The Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security that Senator Coburn and I lead has held a number of hearings over the years on preparation for 2010. We take our obligation seriously.

At all of those hearings—and also at some hearings held by our counterparts in the House—we heard warnings that the hand-held project was not where it should be. GAO witnesses testified that, years into the contract with the hand-held maker, the Harris Corporation, the Census Bureau had not finalized what it wanted done and when they wanted it completed.

GAO's findings were supported recently by the MITRE Corporation, an outside group hired by the Census Bureau to examine the contract with Harris. MITRE briefed top Census officials on two occasions—once in June and once this past November—that the hand-held project may not achieve the goals the Census Bureau initially had for it. MITRE even suggested that the entire project may need to be scrapped.

Our goal in holding this hearing, and airing these problems is not to point fingers and not to raise or sound alarm bells.

We want to find out what needs to be done to ensure that all of us live up to our constitutional obligation to conduct a 2010 decennial that is accurate and timely.

And, while it may become necessary at some point to pay what we need to pay to get the census done and done right, I want to make sure that we are doing all we can to try to control those costs, and my hope is that the Department and the Bureau will as well.

One of my favorite old movies was "Cool Hand Luke," where Paul Newman was a convict on the lam and finally was tracked down. And you probably remember the line there at the end of the movie where the warden of the prison said what we have is a failure to communicate.

I think what we have here is a failure to communicate, but that is only part of the failure. I think there was a failure on the part of the Census Bureau to figure out what your needs are going to be in terms of this project and to be able to clearly state those needs at an early point in time.

What we have here is a failure to manage this project. What we have here is a failure to listen to GAO and to others who raised the warning flags about the project and the direction that it was going. What we have here is a failure to communicate to us and to our colleagues in the House of Representatives the real status of this project and to let us know early on.

The census in this country is nothing new. We have been doing them every 10 years for over 200 years, and censuses in the world are nothing new either. They have been doing them since Jesus was a baby and even long before that.

In a day and age when other countries are using the Internet, harnessing technology to do at least a portion of their census, and when my family and I and millions of others submit our tax returns to the Internal Revenue Service (IRS) electronically, rather than talking here today about how we are harnessing the Internet to be able to electronically conduct part of the census, now we are looking at the one significant step forward on technology, the computer handhelds, and find that they may not even be working as well.

I read the testimony submitted to the Committee before this hearing. I will be honest with you. I read the testimony last night from GAO, and I am just in disbelief as I tracked the last several years where we have come from and where we are today.

We cannot tolerate any more failures. You cannot, obviously, as the Secretary of Commerce, Mr. Guiterrez. We cannot either.

And from this point forward, what we have to figure out is how to be successful. A lot of people in this country, a lot of tax dollars, are at stake in this. Getting it right and getting it done right soon is what we need to do now.

Senator Coburn has been on top of this from day one as the former Chairman of the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security, and he is probably going to revisit with us some of the back and forth that he had with your predecessor, Dr. Murdock, and that is very telling in itself.

[The prepared opening statement of Senator Carper follows:]

OPENING STATEMENT OF SENATOR CARPER

The committee will come to order.

My thanks to our witnesses—Secretary Gutierrez, Director Murdock, and our two witnesses from GAO—for being here on such short notice. Your cooperation with our oversight efforts and your commitment to working with us to get the 2010 decennial census back on track are greatly appreciated.

My thanks as well to Senator Lieberman and Senator Collins for allowing us to hold this hearing at the full committee.

As my colleagues are aware, the Constitution requires the Federal Government to go out every ten years and conduct a census. The data collected as a result of these efforts is used to support and ensure the effective operation of a number of programs here at the Federal level and in the states as well.

The data is also used to determine the make up of the Federal Government itself. The information the Census Bureau collects about people and their communities once a decade is used to decide how the 435 seats in the House of Representatives are divided up.

Senator Coburn and I called this hearing because information we've learned from the Commerce Department, the Census Bureau, and in the press indicates that the 2010 decennial census could be at risk of failure.

Right now, the Census Bureau is supposed to be in the middle of a period it calls the "dress rehearsal." During the dress rehearsal, all of the procedures and technology that will be used in 2010 are supposed to be tested so that adjustments can be made before the counting actually begins. Instead of being out in the field doing a final run through, however, it appears that Census staff is stuck in headquarters trying to salvage a project that for years had been billed as the cornerstone of the Bureau's 2010 efforts.

The project—called "Field Data Collection Automation"—involves handheld computers that canvassers and census-takers will use to go into communities and collect information. It was supposed to lead to a better quality census than the largely paper-based efforts conducted in 2000 and in previous decennials. It was also supposed to be the key to the Census Bureau's projected cost savings this time around since using handheld computers instead of paper would likely mean fewer staff and less office space.

However, Commerce and Census officials decided very recently—about a decade after preparations for the 2010 decennial began—that the handheld project may not be viable. As we will hear from Secretary Gutierrez and Director Murdock today, Census staff is working now to come up with a series of options for how to conduct major portions of the 2010 count. Among those options, I assume, will be a complete abandonment of the handheld project and the return to a paper census. It is my understanding that all of the options on the table at this point will come with a hefty price tag.

I am, of course, very disappointed in this outcome. My disappointment comes not so much from the fact that the Census Bureau has tried and, in all likelihood, failed to use technology to improve the decennial census. It comes because we could wind up paying more for a poorer quality census in 2010 because the Census Bureau did not heed the warnings coming from GAO and others that their handheld project was troubled.

The Subcommittee that Senator Coburn and I lead has held a number of hearings over the years on preparations for 2010. At all of those hearings—and also at some hearings held by our counterparts in the House—we heard warnings that the handheld project was not where it should be. GAO witnesses testified that, years into the contract with the handheld maker, the Harris Corporation, the Census Bureau had not finalized what they wanted done and when they wanted it completed.

GAO's findings were supported recently by the MITRE Corporation, an outside group hired by the Census Bureau to examine the contract with Harris. MITRE briefed top Census officials on two occasions—once in June and once in November—that the handheld project may not achieve the goals the Census Bureau initially had for it. MITRE even suggested that the entire project might need to be scrapped.

My goal in holding this hearing and airing these problems is not to point fingers and raise alarm bells. I want to find out what needs to be done to ensure that we live up to our constitutional obligation to conduct a quality 2010 decennial. And, while it may become necessary at some point to pay what we need to pay to get the census right, I want to make sure that we're doing all we can to control costs.

So I applaud you, Mr. Secretary, for involving yourself personally in the process currently underway and for seeking the advice and counsel of outside experts as you prepare to make a decision on how to move forward.

My thanks to you again for coming here on such short notice and for being as open with us as you have been since you realized that you had this problem on your hands.

Senator CARPER. Dr. Coburn, welcome.

OPENING STATEMENT OF SENATOR COBURN

Senator COBURN. Thank you. And I appreciate you coming before us. I would like to ask unanimous consent that my statement be made a part of the record.

Senator CARPER. Without objection.

[The prepared statement of Senator Coburn follows:]

PREPARED STATEMENT OF SENATOR COBURN

Good morning, I would like to start by first thanking Chairman Lieberman and Chairman Carper for holding this hearing today. I would also like to thank Secretary Gutierrez and Director Murdock for being here as well.

We are here today because the Census Bureau finds itself in the midst of a crisis. So serious is the crisis that if it is not dealt with immediately, it could threaten the integrity of the 2010 count. At issue is a $600 million contract designed to create handheld computers for automating the way that census data is collected. Unfortunately, the contract has been managed so poorly that it might fail to produce fully functioning handheld computers, which could set off a chain reaction of events from which the Bureau might never recover. I hope that we can avoid such a worst-case scenario, but the question is: How? I hope that today's hearing will shed some light on that subject.

Most Americans are no doubt unaware of how much time and effort goes into planning for a census since it happens only every 10 years. But, because a census is such a large undertaking, the decisions that are made in the years beforehand are those that have the biggest impact on how much it will cost and, most importantly, how well it will be done. The Census Bureau has now reached a point in which decisions that should have been made months ago—if not years ago—must be made over the next few weeks. There decisions will determine whether the census in 2010 can be rescued from the brink.

The problem that the Bureau faces is not mystery: Many of the functions that it planned to automate using the handheld computers may now have to be done on paper. How we got here is also not a mystery: Thousands of changes were made to the contract over the last two years, making it nearly impossible to know what the final product would be and when it needed to be completed—even if it could be completed.

It should be noted that the problems with this contract seemed apparent to everyone except the Census Bureau. For years, the Government Accountability Office has warned that constantly adding new requirements to the contract could have disastrous effects. This Committee, as well as our counterparts in the House, held hearings to discuss the growing problems associated with the handheld contract. Internal reports from the MITRE Corporation and the contractor itself, dating back to June 2007, warned that serious problems were on the horizon. Inexcusably, the warnings were largely ignored.

We now find ourselves facing a situation in which we might have to revert to conducting the census entirely by paper—no differently than it was done in the 19th Century. It is ironic that this hearing is happening in the middle of tax season, considering that electronic filings are hitting all time high. Just this week, the IRS is reporting that of the 47 million returns that were filed as of the third week in February, 38 million were done electronically. If we can file tax data electronically—which is far more sensitive than census data—we should be able to collect census data electronically. Unfortunately, the likelihood of this seems low.

What is most important now, though, is what we do from this point forward to fulfill the constitutional mandate to count the population. The opinions are either to use the handhelds, revert to paper, or do something in between. As the Census Bureau, and ultimately the Secretary of Commerce, makes a final decision, I would like to outline four concerns I have.

First, I'm afraid that the timetable for decisions is unreasonably slow. Information we have received from the Secretary's office would push off final decisions until late this month or early April. Considering the problems have been well known by high-level Census Bureau executives since at least early January, taking three months to make decisions is too long.

Second, I'm concerned that technology could be abandoned too quickly in favor of reverting back to a paper census. Because paper seems like the comfortable choice for those at the Census who have always relied on it in the past, I know it may be tempting to think that the technology is the villain here. Technology is not the villain—only the poor management of technology. We need to look at what the technology can offer us. Huge investments of time and money have already been made into producing handheld computers, which might still be used. Decisions about whether to use paper or handheld computers need to be based on sound analysis and not simply be based on what is more comfortable.

Third, I'm extremely concerned that taxpayers might be unfairly stuck with an enormous bill to pay for the Census Bureau's mismanagement. While no one has given Congress any reliable figures on what the possible impact would be, I've been assured that the dollar amount could be significant. For years, the Census Bureau has estimated that the 2010 count will cost between $11.3 billion and $11.8 billion—I hope that the Secretary of Commerce will work to ensure that the cost does not increase beyond that, even with these trying circumstances. However, let me be perfectly clear—if costs go over that amount, taxpayers should not have to subsidize this mismanagement more than they already have. If more money is needed, I fully expect that the Department and the Bureau will work internally and with the Office of Management and Budget (OMB) to find offsets out of programs that already exist. This subcommittee has identified billions of dollars in wasteful programs over the years, and I will not support any request that forces taxpayers to bail out the Census Bureau with an off-budget, emergency supplemental.

Finally, and most importantly, I am concerned that the 2010 census may suffer significantly in the area of quality. The Constitution itself demands an accurate count as an essential element of our representative democracy. Allowing the quality of the count to diminish even slightly is unacceptable because of the impact it can have on those who deserve full representation. Every effort should be made to provide the American people full confidence in the apportionment process, which can only be accomplished by an accurate census count in 2010.

I again want to thank our witnesses for being here today and look forward to their testimony.

Senator COBURN. And I will try not to spend a lot of time on it.

I do not think this is a communication problem. I think this is an arrogance and management problem, and I am not saying that to the Secretary, nor to the present Director.

But I am going to read you in a moment the testimony that we had with the former Director of the Census about this very issue, and I think it is very telling in light of what the GAO was saying at the time.

Here are Mr. Kincannon's words:

> Senator Coburn: What happens if these do not work? What is your plan B?
>
> Mr. Kincannon: They will work. They have worked. You might as well ask me what happens if the Postal Service refuses to deliver the census forms.
>
> Senator Coburn: I am not asking it facetiously. I am asking what happens if there is a computer glitch and these hand-held devices do not work. What is plan B?
>
> Mr. Kincannon: The computer devices have been tested and proven to work.

That is the testimony. At that time, they had not been proven to work, but that was his testimony.

> Senator Coburn: All I want you to do is answer my question. What if they do not work.
>
> Mr. Kincannon: We have a big problem then.
>
> Senator Coburn: So are you going to have to hire more people to do the non-response follow up?
>
> Mr. Kincannon: I do not believe that condition will obtain, so I do not——
>
> Senator Coburn: So there is no planning." So, as we have talked about planning for what-ifs and——
>
> Mr. Kincannon: We could hire more people. Yes, we could hire more people, sir.

Senator Coburn: Is it not true that GAO has said that this handheld device is a huge risk in their testimony?

Mr. Kincannon: I do not know the precise formulation of words, but they say there is a risk associated with using handhelds.

Senator Coburn: So your testimony to me is that there is no alternative plan if that does not work?

Mr. Kincannon: We have no reason to believe that there is any systematic risk in all the handhelds. That system will work.

Senator Coburn: Your testimony today is if that does not work—if GAO's concerns happen to be borne out—there is no alternative plan if it does not work?

This was June 2006, 21 months ago. There was no alternative plan, if they did not work. I will not continue the rest of it.

Mr. Secretary, I had a meeting with you in September 2006 raising some concerns on just Web-based and computer issues, trying to get you to look at some of the things. We did not alert you to the significance of what we thought this was, and so we cannot hold you accountable to what we knew at that time. I am not going to try to do that at this time.

But here is what the IRS said this week: It has received 47 million returns as of February 22, 2008. Thirty-eight million were filed electronically, up 5 percent from 2000. Twenty-six million e-files. Self-prepared electronic returns went up to 12.3 million; 12.3 million people without the help of accountants for their tax return or anybody else filed their tax returns, which are much more complicated and require much more serious data collection protection. Thirty-nine million returns were qualified for a refund, with the vast majority of those having direct deposit through the computer. Thirty-three million of them.

We have been saying since 2005 to the Census, when they turned down looking at an information technology (IT) response for the Census that they ought to be doing that. And probably had they gone in that direction, we probably would not have some of the pressure points we have today.

The other point I would make is we know that there are experts out there to help you, and you have a committee that you are putting together, but a guy like Dave Brady from Stanford University is not on that committee.

He is the guru who has written all the statistical analysis of how you do things, but he has not been invited to be on the committee—he is the guy from Stanford who knows the basis under which all this statistical data is used. He wrote it. And yet, he had not been contacted. He had not been asked to be a part of the solution for your problems.

And I would just hope that you broaden the scope of the people who are going to advise you in this short period of time. There are real experts in this country who have written the programs that the Census Bureau has used in the past to accomplish this, and let them help dig us out of this.

I hold the Secretary in great regard. I appreciate him coming, and our new Director of the Census, he has the capability. But we have a real problem, and the problem is two-fold.

One is the risk that we will not have an accurate enough census with which to do apportionment, which there is absolutely no excuse for, even being in a risk situation, given what GAO said; and

two, we did not have testimony, I do not believe, of what the additional costs are going to be, and that may be because you do not know.

But I stated before this Committee over a year and a half ago that we are looking at probably $3 billion in increased costs based on what we saw as incompetence at that time coming out of the Census Bureau.

So I hope I am wrong on that. I know Senator Carper and I both are worried about the increased cost for the value that we are going to get.

I look forward to your testimony, and this cannot be that hard to figure out, especially because we know that the enumerators entering data into a handheld, if it is not working, we know we can always go to Web-based phones.

You only got six questions. You already got the connection. So you do not even need the Harris Corp.

You can get Web-based phones and enter six questions and transmit it. So, the question is there are a lot of alternatives out there that have not been looked at yet that certainly are not going to cost $600 million for us to be able to accomplish the census.

I look forward to your testimony. Our goal right now is to help us work this problem out and continue in oversight.

What is truly disappointing, Mr. Chairman, is that the Census Bureau did not listen to the Government Accountability Office and Inspector General. I mean, it was kind of like you guys do not know what you are talking about. You could not have good insight; so therefore, we are going to ignore you.

And the consequence of ignoring the warning signs is that we find ourselves where we are today. And, to me, I think that is arrogance and mismanagement.

The fact is they were not there to be critical. They were there to assess what they saw, and a good manager takes all options and looks at them and considers them and goes and checks the validity of them. And I do not think that happened in the Census Bureau.

And my hope is that the good professionals—and there are tons in the Census Bureau—look at this and say this is a great learning experience. Let us use everything we can use in the future to help us do our job better. Thank you, Mr. Chairman.

Senator CARPER. Thank you, Dr. Coburn, and in a moment, Secretary Gutierrez, I am going to ask you and Dr. Murdock to stand and take an oath before you testify—but not yet.

I just want to take a moment to provide a brief introduction.

Carlos Gutierrez is the thirty-fifth Secretary of Commerce. Before joining this President's Cabinet in 2005, he served, as I understand, as both chairman and CEO of the Kellogg Company, having risen through the ranks of that company since starting out there I believe in 1975?

Secretary GUTIERREZ. That is right.

Senator CARPER. Nineteen seventy-five.

Dr. Steven Murdock is the Director of the U.S. Census Bureau. He was confirmed to that position by the Senate this past December after serving for more than 25 years, a quarter of a century, as head of the Texas State Data Center and the Texas Population Estimates and Projections Program.

The first-ever state demographer in Texas, Dr. Murdock played a leadership role in the State's decennial census activities in 1980, 1990, and 2000.

Questions have been raised about the veracity of some of the testimony provided in the House of Representatives on this issue last year, and we just want to take the steps suggested by Dr. Coburn, and I think it is a good idea.

And with that, I am going to ask you to stand.

If you would please rise and raise your right hand and repeat after me. Do you swear the testimony you will give before this Committee will be the truth, the whole truth, and nothing but the truth, so help you, God?

Secretary GUTIERREZ. I do.

Mr. MURDOCK. I do.

Senator CARPER. Thanks very much. Please be seated. And normally we set 5 minutes as the target time for testimony. We are just going to ignore that today, and encourage you to take the time that you need within reason, and your full statement will be made a part of the record.

Secretary Gutierrez.

TESTIMONY OF HON. CARLOS M. GUTIERREZ,[1] SECRETARY, U.S. DEPARTMENT OF COMMERCE

Secretary GUTIERREZ. Thank you, Chairman Carper and Senator Coburn. Thank you both for your interest in the census, and I know that you have taken a leadership role in this, and you have shown interest throughout the years, not just in recent times.

And I appreciate the opportunity to discuss preparations for the 2010 census, specifically our efforts to implement the Field Data Collection Automation, known as FDCA.

Preparing and executing the Decennial Census is one of the highest priorities and most important responsibilities of the Commerce Department.

I am working closely with Census Director Steve Murdock to ensure that the Census Bureau and all of its dedicated hard working employees have the support necessary to carry out this constitutionally required task.

I especially want to thank the Committee Members for your interest, for your concern and for your support on every aspect of the Decennial Census.

The complexity of the 2010 census is compounded by our efforts to reengineer the historically paper-based Decennial Census by automating as much of it as possible to improve data collection and operations.

The planning for the 2010 census began after the completion of the 2000 census and includes several key components:

First is replacement of the Decennial Census long-form with the American Community Survey, which provides more timely information on demographic, housing, social, and economic data; a short-form only Decennial Census, which counts the population and gathers basic demographic characteristics; improved mapping, including use of global positioning technology for Master Address File/Topo-

[1] The prepared statement of Secretary Gutierrez appears in the Appendix on page 72.

logically Integrated Geographic Encoding and Referencing (MAF/TIGER); technology data capture from paper, telephone and field sources; replacement of legacy systems for tabulating and disseminating results; and the Field Data Collection Automation.

While most of these components are on schedule and meeting current cost estimates, FDCA is experiencing significant schedule, performance, and cost issues that I will focus on today.

We have discovered serious problems with the FDCA program, and I am personally involved in bringing key issues to the surface and developing a way forward.

In short, the situation is unacceptable. As I know it is unacceptable to you, I want you to know that it is unacceptable to me.

The American people expect and deserve a timely and accurate Decennial Census and the Department, and I will not rest until they have it and they have it on time.

For background, FDCA has three major parts: One, automated data collection using hand-held devices both to verify addresses, called Address Canvassing or AdCan, and to collect data during the non-response follow-up (NRFU) of those households that do not return their census form by mail; the Operational Control System (OCS), that tracks and manages Decennial Census workflow for all the field operations, including those operations conducted on paper; and then finally the Census Operations Infrastructure, which provides office automation and support for regional and local Census Offices.

The bid request for the FDCA contract was released in late 2005, and the Harris Corporation won the contract in April 2006.

The first major test of FDCA systems occurred in the spring of 2007 when the hand-held devices were used for an Address Canvassing dress rehearsal.

Concerns about the FDCA program grew over time and Census and Commerce officials became increasingly aware of the significance of the problems through GAO and Office of Inspector General reviews, the 2007 dress rehearsal, and internal assessments.

In his testimony on December 11, 2007, then-Director Kincannon mentioned that Census was addressing concerns that had been raised about the gap between the capacity to get the work done and the amount of time remaining.

One of the main reasons for this gap was significant miscommunication concerning technical requirements between the Census Bureau and Harris.

The lack of clarity in defining technical requirements was a serious problem especially with regard to testing and functionality of the hand-held devices in a full Census environment.

For example, discrepancies arose over data upload times, screen change speed and data storage capabilities.

In response, Census Deputy Director Jay Waite in mid-November initiated an integrated project team, essentially a SWAT team, to define the problems associated with the FDCA program and develop solutions that would ensure a successful 2010 census.

The integrated project team focused on clarifying the remaining technical requirements where questions were still outstanding, identifying opportunities to reduce the scope of the contract if nec-

essary, and examining the potential for the Census Bureau to absorb some of the activities originally planned for the contractor.

The integrated project team undertook an in-depth review of all the technical specifications and provided Harris with an updated set of requirements in mid-January 2008.

Harris conducted its evaluation of these requirements and provided a rough order of magnitude cost estimate in late January.

The estimate highlighted potentially substantial increases in the contract cost, and raised new questions about staying on schedule.

Clearly, the problem was more significant than had been conveyed in the December 11, 2007, hearing. What we had perceived as serious, but manageable, problems that were being addressed, we now view as critical and urgent.

There is no question that both the Census Bureau and Harris could have done things differently and better over the past couple of years.

I should add at this point that in late 2006 leadership changes did take place, and I would like to thank this Committee and the Senate for confirming Dr. Murdock, as the new Director of the Census Bureau, with whom I am working very closely to further clarify the problems and to develop a set of options for getting the Decennial Census back on track.

Senator CARPER. Secretary Gutierrez, let me interrupt for just a moment. In your testimony, you say that leadership changes occurred in late 2006. Was it late 2007? Is that a misprint?

Secretary GUTIERREZ. I am sorry. Which?

Senator CARPER. Because Director Murdock was confirmed late last year.

Secretary GUTIERREZ. Well, that is correct.

Senator CARPER. But are you alluding to other changes?

Secretary GUTIERREZ. The agreement to undertake the leadership changes was decided in late 2006. It actually did not take place until 2007.

Senator CARPER. Thank you.

Secretary GUTIERREZ. So, OK. In January 2008 after being confirmed, Director Murdock began a top-to-bottom review of all the components of the Decennial Census, including FDCA.

Given the growing problems with FDCA and other possible impacts of building a more automated 2010 census, we want to be sure there are no other major issues or surprises.

As part of that review, for example, we are carefully examining the Census cost estimating assumptions related to such matters as hours worked per enumerator and implications for supervisory and other costs. If necessary, adjustments will be made accordingly.

As part of this broader review, Director Murdock launched the 2010 Census FDCA Risk Reduction Task Force on February 6, 2008, after receiving Harris' response to the integrated project team requirements.

The task force is headed by a former Acting Director of the Census Bureau, members from various parts of the Census Bureau and the Department of Commerce, and outside consultants from MITRE.

The task force was charged with identifying and analyzing options for ensuring the success of FDCA.

These options include reexamining the current contract to determine what changes could be made if there was a decision to shift some of the work back to the Census Bureau. The task force will soon present its findings to Director Murdock.

We are essentially 2 or 3 weeks away from the findings and from the recommendations.

The first phase of the task force's work focused on evaluating risks and options to manage these risks. Harris was not directly involved in this part of the analysis, which is one of the reasons why cost estimates are not yet available.

Preliminary estimates do suggest the potential for cost overruns for the remaining life-cycle of the Decennial Census, we believe most occurring in 2010.

While I have seen some of the same estimates that you have—I have not heard the number that you just mentioned, Senator Coburn, but I have heard a lot of different numbers—we are in the process of assessing these costs so that we can bring you what we believe is the right number.

At this time, I am able to share the basic conceptual elements of the options being considered. All of these options call for using the hand-held computers for Address Canvassing, and we are continuing to work to ensure this requirement is met.

For the other major components of the FDCA, each of the options considers a combination of responsibilities between Harris and Census in terms of capabilities, expertise, staffing, timing and costs.

Option one is what we call the baseline. The first option is continuing with the current baseline largely as envisioned in the original FDCA project plan and contract.

Harris would complete the hand-held computers for Address Canvassing and non-response follow-up. Harris would also complete the development of the operations control system and the field operations infrastructure.

Harris has already developed major parts of the operations control system and has the IT infrastructure and staff to support further testing and development.

However, given various issues related to handhelds, we would simultaneously evaluate the feasibility of a paper-based back-up plan for non-response follow-up should the next FDCA dress rehearsal not succeed.

In the second option, we would shift everything but Address Canvassing back to the Census Bureau, including non-response follow-up, the operations control system and the field operations infrastructure.

The non-response follow-up would be paper based and handhelds would not be used for NRFU. Census has extensive experience in conducting paper-based non-response follow-ups.

The third option would shift non-response follow-up and field operations infrastructure to Census, but Harris would continue to develop the operations control system.

As noted, Harris has already developed major parts of the operations control system. Again, this option would mean a paper based non-response follow-up.

Option four would shift only non-response follow-up back to Census and Harris would keep responsibility for the operations control system and field operations infrastructure.

This option depends on Harris being able to successfully complete both. Again, the non-response follow-up would be paper-based.

So we are now at a critical juncture, and we must move fast to evaluate these options and make decisions for moving forward.

I am appointing an expert panel to quickly evaluate independently each of the options and report back to me before the end of the month.

The expert panel will be composed of five to seven members, including former Census Bureau Directors Ken Prewitt and Vince Barabba, former House Speaker Dennis Hastert, and other knowledgeable experts in Census-type operations and large IT system development programs. And, Senator Coburn, we will definitely call Dave Brady at Stanford and get his experience onto this group.

I know you will have many questions, some of which I will not be able to answer today, and I do not have a specific cost number today. There is so many numbers floating around that we are reluctant to throw another one around. The next time I give you a number, I want it to be the number. And you will have that number, Senators, as soon as I have that number.

After the task force and expert panel complete their work and report back to me at the end of the month, we will brief you on our findings at that time.

We know how seriously you take this and that the American people expect and deserve a correct and thorough census, so let me stress that I take this very seriously; and I take the constitutional responsibility to conduct an accurate Decennial Census extremely, extremely seriously.

Over the past month, I have been briefed by the Director and Deputy Director of the Census Bureau, senior management at the Department of Commerce, our Inspector General, representatives of the task force, Harris Corporation, the MITRE Corporation, and GAO.

And I can assure you that I will be extremely active in this project until my last day that I am in office. And if I need to be involved after that, I will be as well. I have one interest and one interest only and that is to have a good census in 2010 and perhaps even the best census in 2010.

So I am fully committed, along with Director Murdock, to work in partnership with the Congress. And I appreciate, in advance, your support in allowing us to focus on solving these problems, addressing the issues, and looking forward.

Senator Carper, if I may, just on your question. The former Director, Mr. Kincannon, left when Dr. Murdock was confirmed and then the other management change was Deputy Director Waite, in January 2007. So those were the decisions that were made in 2006, and one of them just took longer to implement while we recruited and got Director Murdock confirmed. Thank you.

Senator CARPER. Thank you. Thank you for your testimony. Dr. Murdock, you are recognized. Your entire testimony will be made part of the record. You are welcome to summarize as you see fit.

TESTIMONY OF HON. STEVEN H. MURDOCK,[1] DIRECTOR, U.S. CENSUS BUREAU, U.S. DEPARTMENT OF COMMERCE

Mr. MURDOCK. Thank you, Mr. Chairman and Senator Coburn. I appreciate the opportunity to come here before you and to talk about our preparations for the 2010 census, particularly the Field Data Collection Automation Program, what we call FDCA.

Reviewing and evaluating all Census preparations has been the focus of my Directorship since I was sworn in on January 4, 2008, and, of course, FDCA is at the heart of the reengineered short form of the 2010 census.

When the Census Bureau reengineered the 2010 census at the beginning of the decade, the plan was really threefold: Leverage Global Positioning System (GPS) technology to bring GPS alignment of our street center lines and geographic features to improve our geographical database, or what we call MAF/TIGER; replace the Decennial Census long form with the American Community Survey to provide more timely, accurate household and demographic data; and automate census data collection operations for the short-form 2010 census.

This was a bold vision, and the Census Bureau has taken great strides toward making it a reality.

MAF/TIGER is on schedule for completion next month. This means that census maps and addresses are more accurate than ever before, and operations that depend on them, from censuses and surveys to commercial applications like MapQuest, are better than ever.

The American Community Survey (ACS) is now fully implemented, and we are mailing forms to 250,000 households per month. And the ACS response rate is at 97 percent, and produces yearly estimates for municipalities of 65,000 and more people, and by 2008, will be producing multi-year estimates for municipalities of 20,000 or more.

As a result, government officials and data users have more accurate and timely data to inform policy and planning decisions. These are important accomplishments that dramatically improve the Census' ability to achieve its mission.

However, as you have just heard from Secretary Gutierrez, most components of the Census are proceeding according to plan; but the Field Data Collection Automation program is facing significant schedule, performance and cost issues.

There are really two sets of problems. The first concerns the functionality of the hand-held computers.

Assessments of the Address Canvassing operation for the dress rehearsal revealed that there were difficulties in obtaining efficient transmission to and from the hand-held computers, resulting in enumerator downtime.

In addition, the hand-held computers did not function well if the number of addresses in the enumerator assignment areas were too large.

The second set of problems concerns the requirements for the Operations Control System (OCS). The sheer volume of requirements, as well as the complexity of the operations that FDCA supports,

[1] The prepared statement of Mr. Murdock appears in the Appendix on page 80.

contribute to problems that are particularly significant in the development of the OCS.

Contract deliverables in the fall indicated that problems remained despite steps taken to clarify and strengthen the process we use to define contract requirements.

As we grapple with these problems, I am committed to working with the Secretary and the Task Force and Expert Panel he described to finalize a plan to get the 2010 census back on track.

The Task Force will provide rough cost estimates and risk assessments for each option they are outlining. We will then analyze their report and provide a recommendation to the Secretary and his panel of experts.

Mr. Chairman, Senator Coburn, I cannot overemphasize the seriousness of these issues. My colleagues and I recognize that we must move quickly to implement solutions. While we still have an enormous challenge ahead, I am confident that we are close to defining and implementing a strategy that will ensure a successful 2010 census.

Under the current structure and with the continued support of Congress, we will fulfill our mission. Thank you for the opportunity to testify, and I am happy to answer your questions.

Senator COBURN [presiding]. Thank you, Director Murdock. I will go on and start with the questioning while we are waiting on Senator Carper to come back.

One of my pet peeves since I have been in Congress is cost-plus contracting, and when we asked Director Kincannon about this, he was unaware that it was a cost-plus contract.

You can go back and check that in the testimony if you want.

We are where we are. There has to be some lessons learned from where we are. When we say the requirements were not spelled out enough, Director Murdock, to Harris, does that imply we did not do a good enough job of creating expectations? We did not delineate what was expected or did Harris Corporation fail to supply what was asked for and just did not meet the needs of the Census Bureau? Which is it?

Mr. MURDOCK. I would say that the major difficulty was in their getting an understanding of our business, of what we do, of how it needs to be done. We often thought that we were communicating effectively, in our own terminology, in our own processes, but at the same time, we were not providing the kind of detail that the contractor needed to implement the process.

As I have indicated to you before, I think we did not properly scope this. We did not look at the detail that was needed in the way that we needed to in order to communicate it effectively to the contractor.

Senator COBURN. Were there indications from the contractor that they were having trouble understanding what your need was? Was there communication from Harris that said, hey, we are having trouble? We do not think you all know what you want here. You need to give us a little more direction. Was there that communication from the Harris Corporation?

Mr. MURDOCK. Well, obviously, I was not there at the time.

Senator COBURN. Well, what does your staff tell you?

Mr. MURDOCK. Certainly, we were interacting with them continuously, and we perceived that we were making progress, that we were working through the issues. And only lately, starting in November when Deputy Director Waite began to look in great detail at this, did we see that we had not specified the requirements in a way and in a level of detail that was needed by our contractor.

Senator COBURN. Why is it that the GAO knew that a year ahead of the Census Bureau? That is the thing I do not understand. The GAO knows this problem is occurring. They are putting it out there. They are telling you that it is occurring, and they are saying there is a problem a year ahead of this or soon after the contract was let that this was high risk.

Mr. MURDOCK. These are the very kinds of issues that I have been raising and looking at as I have come into this position. They are the kind of things we know we have got to solve. We cannot continue to have these kinds of practices. We cannot continue to fail to communicate. We are working very strenuously now, including a very intense effort going on this week with the contractor to determine just how we can most effectively ensure that these problems are behind us; that we are going forward; and that we are communicating effectively.

And one of my charges I think is to ensure that that communication continues, that we get good communication, and that we are effectively communicating with the contractor and vice versa.

Senator COBURN. Is it disconcerting to you that, if the American people were to look at this and say, well, what is the cost per household of doing the Decennial Census plus the American Community Survey, we have gone from about $70 per household to $130 in 10 years and that, even figuring in inflation, we have gone from $90 to $130 per household? Is there any concern that there is a legitimate explanation to the American people why we would have a 40 percent increase in the cost of answering six questions? I mean, it is a pretty good question that we are going to have, with deference to the Secretary; we are going to spend $14 billion plus on this. I just will promise you.

I was here in 2000. I saw us come with the emergency money to bail us out in 2000. There was $2.6 billion that you all came for as an emergency money request for the Census in 2000.

So, we are just talking, $2.2 billion versus the Secretary's latest estimate of $11.8 billion I think is the last thing that you gave us before this came up. So, does the American people have a right to say, well, what is going on here? We are spending more money than we have, and now we are going to do a census, something we have been doing every 10 years since we were formed as a Nation, and why should the cost of it be growing 40 percent?

Mr. MURDOCK. Well, certainly, as the Secretary has indicated, it is premature to indicate any cost estimates at this time. We have the task force working and still coming to its decisions and its recommendation to me.

Senator COBURN. I am not asking you to do that.

Mr. MURDOCK. Yes.

Senator COBURN. The fact is if you have to take back a paper survey for a NRFU to follow up—the people, the hours, and the time—that is a big cost. We all know that. You did it the last time.

If you have to take that back up, that is a large cost that is on top of the $11.8 billion. And so the question really is not focusing on the problems, just on the total cost, even at $11.8 billion, are they getting value out of the Bureau of the Census for what they are getting?

Now I know a lot of that has to do with the American Community Survey and the great data we get out of that, but this kind of growth every 10 years, if you extrapolate it, the next one is going to cost $28 billion.

Mr. MURDOCK. Well, obviously costs are a concern to us. They are a concern to me. I appreciate as a taxpayer these kinds of issues, and we certainly want to keep the costs as low as we possibly can.

There are a lot of benefits from the census, Senator, as you have just indicated. Not only is it used for reapportionment, but it is used in a variety of programs to help administer them more effectively.

But the increase in cost is a concern of mine. It is a concern of the Bureau.

Senator COBURN. OK. One last question and this is to both of you.

And I do not know that this is the case, but I am assuming it is the case.

Why has the Internet not been considered as an option for helping the enumerators enter the data if the handhelds will not work? For instance, there are only six questions. Right?

Mr. MURDOCK. Yes.

Senator COBURN. We know that we have the technical capability to authenticate the enumerators remotely. We know that is out there, since that is what the handhelds were based on. So why would we not give them Web-enabled cell phones and allow them to enter the information over a Web-based application? I mean, that is not rocket science.

I mean, are we considering that?

Secretary GUTIERREZ. Senator, if I could just—and I will answer the Internet question. I share your overall concern on cost-plus contracts, and I have read much of what you have been saying about cost-plus contracts.

When we get back the options, if we have a different scope, I think it may be an opportunity to review what kind of a contract are we going to have. We have already awarded Harris two bonuses as part of their fee award. The first year, they were rated a 93; and the second year, 91.

So I think that says something about what we asked them for. What they thought they had been asked for and how we perceived their work.

So that is something that we bring back to you; I would like to lay out what changes, if any, this makes to the contract.

Senator COBURN. So you would say that there really had not been great problems with Harris as far as what you expected of them, based on the ratings of the contract?

Secretary GUTIERREZ. Well, the ratings would suggest that we were pleased with the work they delivered at that time.

Senator COBURN. That should really concern us, should it not?

Secretary GUTIERREZ. Well, it is all part of what we are trying to figure out. And it is all part of this management quandary that you mentioned.

My understanding with the Internet is as yours, and I know you have been on this for a while, we did do a test. The response was low. However, as you pointed out, we did not advertise. So we did not advertise the fact that people could go online. So we had a 7 percent response—very low. We know countries like New Zealand and——

Senator COBURN. Canada.

Secretary GUTIERREZ [continuing]. Canada have done this. They have done it well. Obviously, they are different countries, but I do not believe we have time.

Senator COBURN. Well, I am not talking about starting anew. I am talking about the fact that you already have the technical capability to authenticate the enumerators. So, you could really walk away from the hand-held devices you have now and use a Web-based phone and do the same thing.

Secretary GUTIERREZ. Yes.

Senator COBURN. I mean, that technical capability is out there for you, and my question is are you even looking at it? Are you considering it?

Secretary GUTIERREZ. When we come back, I would like to look at the Web-based phone, because you mentioned that this morning, very specifically, and get back to you with an assessment of that option.

Senator COBURN. OK.

Mr. MURDOCK. One of the difficulties, of course, is that our Operating Control System, which is key to what we have been planning for a Web-based operation that keeps track of who has responded, and who has not. It is a very complex system that has to interact and provide reports on how enumerators perform other functions. The initial assessment is that this would be a difficult operation on a cell phone. But I agree with the Secretary.

Obviously, we can get back to you and look at this in more detail.

Senator COBURN. OK. Thank you. Mr. Chairman.

Senator CARPER. [Presiding.] Secretary Gutierrez, I am going to ask you to put on your old Kellogg hat that you wore for all those years as the chairman and CEO. And obviously during that period of time, the folks who work for you developed and worked on any number of IT projects that had significant ramifications for the company.

Put that hat on. Take the situation in which we find ourselves today. Explain to us what you would have done as CEO of Kellogg to have made sure this did not happen. And if it did on your watch, what you would have done as CEO of Kellogg to fix it.

Secretary GUTIERREZ. That is a good question. Actually, Mr. Chairman, this reminds me of a similar project. On one hand you have a very longstanding, proud organization like the Census Bureau, which has traditionally done the work on its own, and then we inserted an outside player, as I think through this because this is a management problem. It is an organizational problem. In the end, we may say it is a technical problem, but technical problems are rarely technical problems.

So we brought in an outside third party to take over what the Census had been used to doing for a long time, and that requires two sets of challenges.

One is a cultural change, which sounds easy. It sounds fluffy, but I have seen so many acquisitions fail and integrations fail because the cultures do not fit and then to be able to manage through that culture. You need some pretty experienced project management skills that bring together two organizations that do not come together naturally; that pay attention to an incredible amount of detail and ensure that people are talking to each other when they normally would not be talking to each other.

For example, in one of the schedules, we noticed that the delivery date that Harris had for a certain product was different than when we needed it. That just says somebody did not bring them together and somebody did not pay attention to that level of detail, but it does require—and I mentioned this the other day—an autocrat with technical literacy, someone who is going to say this is where we are going, we have decided, and everybody get on board; this is how decisions will get made. We need to have a process in place where Harris and the Census Bureau are talking every day; people looking at schedules; people looking at flowcharts; people following up on the tremendous amount of details.

I just do not think people did this on purpose. I do not think people did this maliciously. I just do not think that they had ever been involved in an integration of this magnitude. And the skills were not there to recognize that.

So what I would do in a case of my experience in something like this is start at the top and ensure that the leadership is there and that the skills are there—the project management skills to do something as complex as this. I mean, this is not a simple thing to pull off. And regardless of where those skills are, whether they are inside or outside, the important thing is to bring the skills into the company. In the case of Harris, if the skills are in Harris, then Harris should come in, and the leadership should be there to inform the Census Bureau that Harris is going to provide a leadership role. That would be very difficult for that culture, but if that is what it takes, that is what it takes.

And I cannot tell you if that is where we are. And I cannot tell you that Harris has that kind of discipline, but it is an integration challenge, a cultural challenge, and a skills challenge across the board, and this is why acquisitions fail. This is why 70 percent of all acquisitions fail. And I think what we are looking at is essentially an acquisition project.

Senator CARPER. You mentioned this is really a management problem, and I agree. Senator Coburn leaned over to me and mentioned the word incompetence in kind of characterizing the way this whole thing has unfolded.

But as I read the GAO testimony, it sounds to me like the Census Bureau was not really sure what they were asking for. And the requirements changed as time went by. There was a requirement creep, as requirements were modified from time to time.

And Harris was being asked to do more and more. I do not know how well those communications were going. And you had the GAO out here saying something is wrong here. I presume the IG as well.

And somehow that never seemed to get to you. I presume it was getting to Dr. Murdock's predecessor, and I presume once he got on board, he certainly got an earful of what was wrong. But somehow these warnings never got to you.

Secretary GUTIERREZ. Yes. Again, I do not believe that people were hiding information. I truly believe that they thought that—in a meeting room things have a way of working themselves out. And it is new technology. We are going to work it out, and people convince each other. We like to work, and in the Commerce Department what we have said is, look, what we want to achieve as a culture is that bad news travels quickly. I like to hear bad news quickly, and once we get it, do something about it.

There is no such thing as a CEO who never has mistakes happen in his company. The difference is which one addresses it quickly, and which one procrastinates. And the only thing I can do is assure you that once I knew that this was a problem, this became a top priority, and we are going to put it on the table, let the whole world know, because the important thing is that we solve it, not who looks good and who looks bad. And that is where we are today.

But I do think that part of this communication problem was just not really knowing what Harris was supposed to know and what we were supposed to know, if they were saying do not worry about it. It is going to work. There is a lot of aspiration unfortunately involved in many of these projects, and sometimes you need a technical realist to say forget it. We are going to change or it is not working or—but that did not happen; that there is a human component here that——

Senator CARPER. Senator Coburn says that is what is wrong with a cost-plus contract. Well, you are not the only Department that has problems with IT projects. We had them in Delaware when I was governor of our State and then businesses and governments have them all too often.

One of the things I find troubling here today is you mentioned the grade, if you will, that was assigned to the work that Harris was doing—a 91 in one instance, and a 93 in other instances.

Senator Coburn and I get evaluated all the time on the work that we do. There are polls and so forth that are taken of our constituents, and we are evaluated by any number of interest groups, too, and sometimes I kid folks when they are giving us our evaluations of the work that we are doing. I ask them if they are grading on a curve, if we are being assessed on a curve. And all I can think is with a 91 and a 93, either you all are grading on a curve or the folks at Harris are doing a better job than maybe I was inclined to give them credit. Which is it?

Secretary GUTIERREZ. Well, I would say two things. One is that because it was so early on in the contract that the requirements were minimal and they were able to achieve them or that we thought they were doing a better job than they actually were doing because we were not really sure what they were supposed to be doing.

And I would like to find out those two, because in the course of this involvement, this is something that has come up, this award fee. We paid them over $3 million in the first year; over $7 million in the second year. And I just need to understand why. Let us see

the paperwork. Let us see the evaluation. Let us see the analysis. Let us see why we got to those numbers.

But I can assure you that as we move forward, I will know why we are rating them what we are rating from here on.

Senator CARPER. All right.

Mr. MURDOCK. And I am also looking into that——

Senator CARPER. Thank you.

Mr. MURDOCK [continuing]. To see why we created the awards fees that we did.

Senator CARPER. All right. Dr. Coburn, why don't you jump in for some more questions, and then I have a couple more.

Senator COBURN. I just have a couple. In early February, did you all have Harris Corporation stop all work on this contract? There has never been a work stoppage on this contract?

Mr. MURDOCK. There has not been a work stoppage——

Senator COBURN. OK.

Mr. MURDOCK [continuing]. On the contract.

Senator COBURN. One of the options that you have listed is bringing some of the IT stuff back in, that you are not going to be able to handle potentially under the options you laid out, Mr. Secretary. Do you all presently have the expertise in house to handle these IT functions?

Mr. MURDOCK. We have expertise, but we clearly would need to augment it. We have, for example, the people who designed the OCS system for the 2000 census are still there. But they would have to be augmented extensively——

Senator COBURN. OK.

Mr. MURDOCK [continuing]. Because their number are not sufficient to be able to form this without some additional hiring in the Bureau and some additional contractors.

Senator COBURN. OK. So what you are talking about is using people in house plus contracting out with additional contractors to be able to bring it back in house?

Mr. MURDOCK. I think that is the most likely case—simply getting the number—as in the 2000 census, in order to meet this need. That was the combination that we used then, and we had a substantially larger number of in-house IT people at that time than we do now.

Senator COBURN. If I was Oracle and wanted to bid this contract, my bid would be pretty high right now because you are over a barrel, right?

Mr. MURDOCK. I understand.

Senator COBURN. So it is going to have a major impact on costs; right? I mean, we are not going to get any really efficient skinny deal because they know it has to happen in 2010, and you ask them to bid on it, nobody is going to be cutting this thing close. They are going to be cutting it high and fast, because you have to have it; correct?

Mr. MURDOCK. Well, we have to have it. That is for sure.

Senator COBURN. OK.

Secretary GUTIERREZ. Well, I think that any company that bids and works with the Census and the Federal Government will know that people like you will be around next time, and I am sure they are going to want future contracts, so——

Senator COBURN. But, if they got something to offer and you need it, it is a market, and they are going to advantage themselves, and I would, too, because you all have created the opportunity for them to do that.

Mr. Secretary, we do not know what the increase in cost is. One thing I would like for you to think about is one good message to the American people is if this increased cost is coming, and some of it is mismanagement, the offsetting of the cost should not be the Census Bureau coming back to the Congress. It should be offset within the Department of Commerce through reprogramming.

Why should the American people pay for this by borrowing additional money against the deficit rather than have the Department of Commerce become much more efficient in other things to pay for it themselves? In your Kellogg hat, that is what would happen. And the question is why do the American taxpayers deserve to have that happen on the Census?

Secretary GUTIERREZ. Well, there is no question they deserve the best management that the country has on something like this, and we are going to look at all alternatives, Senator. We have to figure out first the timing, 2008, 2009, and 2010. We think that the increases will fall in 2010. We will have to look at that. But we will look at all options.

Senator COBURN. Yes.

Secretary GUTIERREZ. We will look at that.

Senator COBURN. Yes. With most of the increases falling in 2010, that really relates back to the paper-based NRFU, right?

Secretary GUTIERREZ. If that is where we end up. And I want to leave you a diagram, both of you, just so you get a sense of what we are looking at.

Senator COBURN. OK. Was there ever any time that you believe Harris Corporation was under the impression in recent months that they should halt most work on this contract, to either of your knowledge?

Mr. MURDOCK. There was a period of time when they interpreted a limitation of funds letter, or at least indicated they may have interpreted it, as a stop work order. But it was not—our contract lawyers say it was not such a letter. And it simply indicated what we had to spend and indicated what we would like to have them emphasize for the present period activities related to Address Canvassing.

Senator COBURN. OK. Thank you.

Senator CARPER. Well, gentleman, I am encouraged at least to the point that you both seem to be saying you are going to take personal responsibility for getting this done and done right.

It is possible that neither of you will be here for the next full 2 or 3 years in order to be able to do that. Usually, when people sign up to be Cabinet Secretaries, they do so for the balance of a President's term. I just checked with my staff, Dr. Murdock, to see that your tenure as Census Director is one that is for a set period of time, and apparently you serve at the pleasure of, I guess, the Secretary and the President.

My guess is if you do a good job, if you are able to get this project out of the ditch and back on track, then we are going to be wanting and needing you to stay around.

And, Secretary Gutierrez, as you think about your legacy and you are prepared to move on I suspect next year—maybe not—but I am sure you do not want to leave as part of your legacy a census that turns out to be a failure. Let me say failure is not an option. It is not an option for you; it is not an option for us. And it is not an option for our country.

But let me just ask what steps you all are planning to take to ensure that the career staff at the Commerce Department, and the career staff at the Census Bureau are going to be ready to carry on with whatever decisions that you make in the coming weeks given the options that you are looking at. What are you doing to ensure that the problems that you are currently facing are not a drag on morale on those who work in this case for you, Dr. Murdock?

Secretary GUTIERREZ. If I could just——

Mr. MURDOCK. Yes, go ahead.

Secretary GUTIERREZ. We met with the top 40 people at the Census Bureau just recently. And my sense is these are very highly skilled people who understand their work. And they understand what they do. Perhaps they had never been involved in managing an outside contractor, but from the standpoint of the technical aspects of the census, I walked away saying these people want to get it done. They have a certain amount of pride in their job, they do not want this to fail, and they are as frustrated as anyone else.

But your comment is a good one and from here on, aside from getting the options in the technical part, the notion of people working together, understanding their roles, being able to follow one direction, I think, from here on is a big part of this. It is just as big as designing the software. And Director Murdock knows that. Deputy Director Waite knows that. This is all about management and leadership.

Mr. MURDOCK. Yes. There is one clear thing that the staff of the Census Bureau has said to me repeatedly and that is when we get a decision, we are going to make this work. We are going to make the census work. This is an incredibly dedicated group of professionals, and they are ready to follow the Secretary's lead in terms of determining and getting a very good census. There is no doubt about the motivation. Certainly, there has been some concern about where we have been in terms of things, but they are ready to go forward and with the Secretary's leadership, we are going to get a good census.

Senator CARPER. I think it is fair at this point to assume that most of the options, and you went through, I think, about four of them that you are currently considering for addressing the problem with the hand-held contract, are going to come with a price tag.

Both Senator Coburn and I have been skeptical probably from the beginning about the Census Bureau's estimates for the 2010 census. I think we have got every reason to be skeptical.

We saw the lifecycle costs of the decennial go up from about, I think, $11.2 billion to $11.5 billion just before our last Subcommittee oversight hearing. And then very recently our staff was told in a budget briefing that $11.5 billion was still an accurate number only to hear that Senator Coburn and I were told later that day that the real cost by the end of the process would be some

$11.8 billion; this does not inspire our confidence. I am sure you can see why.

Well, how can we be sure that the numbers associated with the different options that you are putting on the table here today in the coming weeks are going to be any more accurate?

Secretary GUTIERREZ. Well, I would just say that we understand that we do not have a lot of different shots at this. We have one shot to get this right, and time is not on our side. And one of the things that the people at Census are asking us is give us a decision because we need to start moving.

So, as you said, we do not have an option to get this wrong again. So we are going to be putting the best brains and the best people and the best minds and experience on that number and on those options, and when we come to you, that will be as much my number as anyone else's. And I will stand behind it.

Senator CARPER. This is probably not a fix. It is a mission you've got to accomplish, and there are ways to do it, and it is going to cost some money. But I would ask you to, as you figure out how to go about it and which of these options to pick, just think about how much money we are going to borrow today from China, South Korea, Japan or other countries, in order to fund our budget deficit. So I just want you to keep that in mind as we try to squeeze those dimes.

The last thing I want to say is it is not enough for us to hold oversight hearings.

It is not enough for us just to put a spotlight on what is not going well. We have an obligation also to ask how can we help, and I hope that we are helping a little bit just through this dialogue today and some that we had earlier in the year. But what else can we do to help, to be constructive?

Secretary GUTIERREZ. Well, I would just like to say just the tone of this hearing has been very helpful, and I know that you both have been frustrated. I have read a lot of your testimony, Senator Coburn, and I know what you said 4 years ago and 2 years ago. But the fact that you are approaching this from the standpoint of what can we do to get the right 2010 census, if we can continue to do that, and I told the folks at the Census we are going to look back only to inform the future, but not to find out who was at fault. Let us get this thing right. And if we can continue to work that way, I can assure you that you will have the information you need. And I want you to be involved, and you are like my board of directors and you will have the information.

My request to you would be just help us get this done, as you are doing now.

Senator CARPER. All right.

Secretary GUTIERREZ. I appreciate that.

Senator CARPER. Dr. Coburn.

Senator COBURN. We will have a couple of questions that we are going to submit for the record.

Mr. Secretary and Director Murdock, we are getting ready to have the testimony of those who are going to follow you. I think it is very important you stay here and listen to them. I mean, the big mistakes that have been made within the Census Bureau was ignoring the big warnings. And we have GAO to testify here, even

though you may have read their report, I think it is really important that you have your critical people here to hear what they have to say. In fact, you do not have to believe all of it, but at least you need to hear it in the context in which it is given because there has certainly been a lack of response to what they had to say in the past. That is all I have, and I thank you. And we will work with you.

Senator CARPER. And in closing before you leave the table, let me just say Dr. Coburn and I have not talked about this, but my guess is we are going to invite you to come back and talk with us some more. Tell us again when you are expecting to make a decision on the options that you outlined for us.

Secretary GUTIERREZ. I would say later this month.

Mr. MURDOCK. That is the schedule. Yes, sir.

Secretary GUTIERREZ. So the task force does their work. We will run it by the expert panel, and I would make a decision on that.

Senator CARPER. Yes. We will talk about this. We will probably want you to come back some time next month and give us an update, and we are going to ask how are you doing and we we're going to again ask what can we do to help to make sure we get this done right.

The last thing I would say is not so much to either of you directly, but really to the people that work for you, Dr. Murdock. The responsibility that you and the folks who serve with you hold to our country is large and growing as we approach 2010. For those people that take their responsibility seriously and who are determined to do a good job and to get this right and get us back on track I would just say good. We are here to support those efforts. And for those who do not approach it with that spirit, we want to say get out of the way, and let those who are going to help us make this successful to do the work that needs to be done.

Mr. MURDOCK. Senator, we just appreciate your concern, and we appreciate your support. It is important to all of us in the Census, and have no doubt about our dedication and about our assurance that we are going to meet the mission that is required.

Senator CARPER. All right. Thank you both very much.

We are pleased to welcome our second panel here today.

You fellows look familiar. I think we may have seen you before. And my guess is before we are done in 2010, we will see you a lot more.

Let me just say from the outset, we are grateful for the work that you have done. Dr. Murdock, I am pleased that you are able to stay and listen. What you hear will be instructive to you and to the folks that you lead at the Census Bureau.

Let me just briefly introduce our witnesses. I understand, Mr. Powner, I understand you may speak initially, and then as sort of tag team hand it off to Mr. Scirè, is that correct?

Mr. POWNER. Correct.

Senator CARPER. All right. David Powner, Director of GAO's IT Management Team, where you focus on systems development and IT investment management.

Before joining GAO, I understand that you held several executive level positions in the telecommunications industry that involved overseeing IT projects.

And Mathew Scirè is the Director on the GAO's Strategic Issues Team. And your work is focused on the Census Bureau and on regulatory issues. We are told that you have more than 25 years of experience in evaluating the effectiveness of Federal programs, which should put you in good standing for the work that lies ahead.

Both of your testimonies will be entered in the record, and you are welcome to summarize as you see fit.

And, Mr. Powner, we will recognize you first. Thank you for joining us and for your work.

STATEMENT OF DAVID A. POWNER,[1] DIRECTOR, INFORMATION TECHNOLOGY MANAGEMENT ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. POWNER. Chairman Carper, Dr. Coburn, we appreciate the opportunity to testify on the problems associated with the Census' Field Data Collection Project.

With me today is Matt Scirè, Director with GAO's Strategic Issues Team. Not only has he been looking at the performance issues with the hand-held devices, but overall he looks at the management of the 2010 Decennial Census.

Our work has highlighted the key IT management gaps that unfortunately have not been addressed and now place the success of the 2010 Decennial at risk.

In 2004, we started looking at the Bureau's institutional IT management capacity and concluded from this review that it was not prepared to manage the $3 billion it was planning to spend on IT.

In March 2006, we testified after our detailed look at the integration system and the Field Data Collection System that neither project had the full set of capabilities needed to effectively manage these acquisitions.

At that hearing, we stated that incomplete management activities, including those with requirements management, risk management, and contract monitoring, increased the risk that the Decennial acquisitions will encounter problems in meeting cost and schedule deadlines.

At that time, we specifically recommended that the Field Data Collection System program office approve and validate baseline requirements. We highlighted that not doing so placed the Bureau at risk of cost overruns, schedule delays, and performance shortfalls.

This past October we reported to your Subcommittee that due to growing requirements, FDCA was experiencing cost increases and schedule delays.

In addition, poor cost estimates were also a cause of the increases in delays. We also reported that due to the delays in these projects, the dress rehearsal would not include key systems functionality which raised the importance of systems testing post dress rehearsal.

Given that relevant test plans were not completed, we recommended to the Bureau that such plans, including end-to-end test

[1] The joint prepared statement of Mr. Powner and Mr. Scirè appears in the Appendix on page 83.

plans to test the full complement of systems, be completed and executed.

In October, we also reported that the Bureau had identified and was managing certain risks associated with its key acquisitions, several risk management weaknesses needed to be immediately addressed.

Acknowledged risks include changing baselines, increasing requirements, and aggressive test schedules. Despite this, we found three areas that could be strengthened: Identifying risks, establishing mitigation plans, and reporting these risks to executives.

For example, the mobile computing device performance issues associated with slow and inconsistent data transmissions had not been identified and tracked by the project office despite the problems arising during the dress rehearsal.

Because these devices are a keystone to the reengineered census, it is essential that the Bureau perform the appropriate oversight of how the device performance compares to what is expected and ensure that all performance limitations are effectively addressed.

We made a number of recommendations to the Bureau to improve its risk management activities and to its credit, it has been working on an action plan to strengthen these areas.

I would like to expand on the requirements issue. This is particularly troubling because even before our extensive body of work that started in 2004 on this topic, a Commerce IG report on lessons learned from the 2000 Decennial identified the need for more disciplined IT management due to cost increases that were primarily attributable to ever increasing requirements.

Last July, when we testified before your Subcommittee, Mr. Chairman and Dr. Coburn, we expressed great concern about requirements creep and the potential for significant cost increases.

At that time, an independent assessment of the FDCA program found requirements problems similar to those we reported. The assessment found that the contractor was overwhelmed by a substantial increase in requirements.

The study was not disclosed to us until the December time frame, and was not mentioned at your July hearing.

Mr. Chairman and Dr. Coburn, this lack of transparency is unacceptable, as is not acting timely on this key risk.

In late December, the Bureau further defined its requirements for the FDCA program. Nearly 20 months after our March 2006 recommendation to do so and 7 months after the independent assessors told the Bureau to immediately stabilize requirements.

Now the Bureau is faced with the crisis that could cost somewhere from $600 million to $2 billion to fix.

As we just heard from the Secretary, the exact amount is uncertain, as are the specific technology acquisitions affected, the operations affected, the amount of manual paper-based contingencies that will be pursued, and the game plan to move forward.

This uncertainty is currently being addressed by a task force. It is imperative that the task force act quickly with its decisions. If the task force decides to move forward with the FDCA program, the Bureau should swiftly take the following steps:

First, put someone in charge who has a proven track record of rescuing troubled projects;

Second, demand from the prime contractor their A-team and top attention; and

Third, manage the program risk daily and aggressively.

Addressing the FDCA problem is one issue, but other issues also need to remain on the Bureau's radar screen, including the delivery on the other contracts.

There was a comment made from the Secretary that the other contracts were on schedule. We would not agree with that comment.

In addition, conducting disciplined testing post dress rehearsal needs to occur, especially since late deliveries and deferred functionality makes the dress rehearsal less important now.

Because of these issues and others, today we are adding the 2010 Decennial to GAO's list of high-risk programs, and I will turn it over to Mr. Scirè to expand on this further. But before I do so, I would like to thank you, Mr. Chairman and Dr. Coburn, for your leadership and oversight of the Decennial Census.

Senator CARPER. Mr. Scirè, thank you for joining us.

STATEMENT OF MATHEW J. SCIRÈ,[1] DIRECTOR, STRATEGIC ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. SCIRÈ. Thank you, Mr. Chairman, Senator Coburn. Thank you for the opportunity to be here today to discuss the 2010 Decennial Census.

In our written statement, we highlight a number of longstanding and urgent issues facing the Census Bureau. My colleague just described the need for urgent action in managing IT acquisitions that are central to the reengineered Decennial Census.

Today, there remains much uncertainty, as the dress rehearsal continues to unfold. The magnitude of how well the hand-held computers performed in their first field dress rehearsal operation Address Canvassing is not clear. The ultimate cost of the Decennial Census is uncertain.

Already it is estimated to be the most expensive, even after adjusting for inflation.

Also the Bureau has dropped certain dress rehearsal operations, in part, to devote greater attention to testing information technology. The dress rehearsal is the Bureau's last opportunity to identify potential risks in operations under census-like conditions. Because of these critical issues today, we designate the 2010 Decennial Census as a high risk area.

There is much the Bureau can do to address these issues. My colleague just described what the Bureau could do to address longstanding issues in managing information technology investments and the urgent steps the Bureau must take to address pressing risks.

We have also recommended that the Bureau establish performance measures and benchmarks for the hand-held computers, measures that would enable the Bureau to not only assess the performance of these devices, but also to hold contractors accountable.

[1] The joint prepared statement of Mr. Scirè and Mr. Powner appears in the Appendix on page 83.

We have recommended that the Bureau use tools, such as a comprehensive integrated project plan and sensitivity analysis that would help the Bureau better measure and manage the costs associated with individual operations and to provide the Congress with credible, accurate, and lifecycle cost estimates.

Going forward it will be important for the Bureau to demonstrate that it not only is committed to addressing these longstanding and pressing issues, but that it has concrete plans in place, is making substantial progress, and has effective solutions to the root causes of these problems.

Mr. Chairman, we believe that the challenges highlighted today require careful monitoring and oversight. As in the past, we look forward to supporting the Committee's efforts to promote a timely, complete, accurate, and cost effective census.

Thanks again for the opportunity to be here today. I would be glad to take any questions that you may have.

Senator CARPER. Mr. Scirè, thank you so much.

Let me just ask you. Sort of set aside your prepared testimony. Just talk to us from your hearts. What went wrong here?

Mr. POWNER. Well, from a requirements perspective with FDCA, I mean, clearly what you want to do is define to the contractor early in as much detail as possible what you want the system to provide. That was not done.

Our recommendations in March 2006—that was prior to contract award. The contract was awarded in April, and our point is you want to do this early or soon after contract award so that you do not get into these change requests that typically result in increased costs. We see it on all the high-risk and watch-list projects that we discuss at other hearings.

And what happened was that the list of 418 requirements should have been defined and validated soon after contract award, not 2 years later.

Senator CARPER. So this is the kind of thing that we see not just in this instance, but a lot of times when we end up with these similar problems.

Mr. POWNER. Well, I think requirements creep and not defining requirements up front is a common problem—one of the core reasons why we have overruns and delays.

But to this extent, when you are talking about a doubling or potentially even a tripling in cost—those are the rough numbers that are being thrown out right now. Typically, you do not see it to this extent.

Senator CARPER. All right. Mr. Scirè, you want to add to that?

Mr. SCIRÈ. Yes. I think I would add to what was talked about earlier and that was lack of communication or poor communication, and I would go beyond the communication difficulties between the Bureau and the contractor, but also between the Bureau, the Department, the oversight committees, and the GAO; there is a lack of transparency as to where things stood as they progressed or did not progress as the case may be.

Senator CARPER. We talked with our first panel and I think Secretary Gutierrez said this is a leadership problem, and I appreciate the fact that he has assumed responsibility, and he is, in his words,

embarrassed by the situation that the Department and the Bureau find themselves in. We are embarrassed, too.

If you were able to turn around and just to talk with Dr. Murdock—he is sitting behind you—and say these are the things that you and your folks need to do to get this project back on track, what would you say? Because he is there taking notes.

Mr. POWNER. Several items, and we talked to Secretary Gutierrez about a similar program within his Department. It was a large environmental satellite acquisition, referred to as the National Polar-orbiting Operational Environmental Satellite System (NPOESS).

When NPOESS went from a $6 billion to a $12 billion project, what did we do? We secured a key program executive to oversee it, who had a history of rescuing troubled projects. We need to find someone like that to manage this. So you need someone to manage that on a daily basis, and then Director Murdock and Secretary Gutierrez need to stay on this on a weekly, if not a daily, basis on progress. I mean, we are under the gun in terms of time.

I think the Secretary mentioned about a solid program manager. That is fine. But the executives—what drives solid program management is executives being on their case daily, reporting progress, disclosing risk, and making sure that things get done.

And if there are issues with the contractor, those executives ought to be picking up the phone and having those real tough discussions with the executives at the Harris Corporation.

Senator CARPER. All right. Mr. Scirè, you want to add to that please?

Mr. SCIRÈ. Yes. I think that it is important to ask some tough questions here about what it is that FDCA will ultimately produce so that you are looking at not just what it is going to cost. Three of these options suggest that they will not be using the handhelds for non-response follow up. In all options, they are planning on using the hand-held computers for Address Canvassing.

And we have said for a while now, that it is important to lay out what the costs are, but also what the expected benefits are, what the expected savings are of utilizing that technology.

So I would advise Dr. Murdock that he delve into that, to find out whether or not you now are getting something out of the investment during Address Canvassing that rationalizes the potential reward that you could be getting by the use of this technology.

Senator CARPER. All right.

Mr. SCIRÈ. That is part of it. I think it is also important to take a look at the opportunity costs for loss of being able to do a late-mail return, and so that is another aspect that needs to be looked at in making the decisions as to which of these options you are going to take is what you are getting and what you are going to pay for it.

Senator CARPER. All right. Over the years, GAO has made a number of recommendations on how the Census Bureau could improve the way that they are managing not just this hand-held contract, but really contracting in general. And it appears that a lot of those recommendations were, frankly, ignored.

Do you have any sense that the Bureau might finally be starting to understand why it is important that they make changes? Dr.

Murdock has been on the job for less than 2 months. But have you had the opportunity to meet with him, to brief him, to brief his senior management team since he has come on board, and to just get a sense that they are feeling a sense of urgency and listening and acting on what you have recommended?

Mr. SCIRÈ. We have not yet met with Dr. Murdock and his management team to talk about these issues. I spoke with Dr. Murdock yesterday actually about the possibility of setting something up, and he is interested, and wants to make that happen, where we could go through and talk about all of the different areas that we have had recommendations in and what we think they could today.

Mr. POWNER. Mr. Chairman, we did meet with the Secretary and discussed our recommendations.

Senator CARPER. When was that?

Mr. POWNER [continuing]. Two weeks ago——

Senator CARPER. All right.

Mr. POWNER [continuing]. We met with the Secretary. One comment here is obviously with GAO's recommendations, and we sat down with key executives during the course of our reviews, not just when we issued a report, to go over our recommendations. So we made an effort to convey our concerns personally with individuals within the Bureau.

Senator CARPER. At what level did that take place?

Mr. POWNER. At Mr. Waite's level.

Senator CARPER. OK.

Mr. POWNER. One of the things that is troubling here is that obviously with GAO's work, we have inconsistent application of our recommendations across the Federal Government. But one of the things that was particularly troubling was the MITRE study in June, which reiterated exactly what we said back in March 2006. And it still took 7 months to immediately validate the requirements. Seven months is not immediate, and we need a sense of urgency here to get this on track.

Senator CARPER. Let me yield to Dr. Coburn, and I have another question or two for you once he has asked whatever questions he would like to.

Senator COBURN. Thank you. First of all, thank both of you for your efforts in this regard. And my staff handed me a note that said it might be very interesting for the Secretary to have David Powner on his team looking at how we respond and fix this. If you really want the people who have had the critical eye looking at it, you might want them on the advisory team that is helping to solve the problems. So if anybody from Commerce is still here, you might take that message back.

Mr. POWNER. Dr. Coburn, he asked that we attend those meetings, and we agreed to do that.

Senator COBURN. Great. One thing you said, Mr. Powner, which really concerns me is that in our last hearing in July, they knew the MITRE report was there and did not tell us. Is that correct? Is that your testimony?

Mr. POWNER. Yes, sir.

Senator COBURN. We did not get this in June. We had no receipt of the MITRE report.

Mr. POWNER. There is a MITRE briefing. It is dated June. So our understanding is that the MITRE information, with these comments and recommendation to stabilize requirements immediately—that was the recommendation—was known in the June time frame.

Senator COBURN. We had a hearing in July, and Census said nothing to us about this report in their testimony? Is that right?

Mr. POWNER. Correct. We found out about all the MITRE efforts in the December time frame.

Senator COBURN. But you all did not find out until December?

Mr. POWNER. We had an ongoing review for you because we testified on our preliminary findings at that point in time and issued a report in October. And we were not aware of that MITRE assessment until the December time frame after our report was issued.

Senator COBURN. So there are really two problems. One is the lack of response to it, and two, the lack of disclosure——

Mr. POWNER. Correct.

Senator COBURN [continuing]. That is here. And that is the part that is unacceptable. And I do not know about Senator Carper, but after we are through with this, we are going to find out.

It is like the little kid in the corner who did something and is trying to hide it, and it is obvious that he is hiding it. And it does not change anything. As a matter of fact, it makes things worse. And that kind of behavior is why we are in the situation we are in; rather than fess up and say, hey, we have this problem, the problem is hidden. It does not go away when you hide it.

Mr. POWNER. Right. Well, Dr. Coburn, to add to that, you mentioned the IRS—they use MITRE extensively—and you mentioned some of their successes with using technology. The IRS approach to using MITRE is to disclose exactly what MITRE and other independent assessors, the Software——

Senator COBURN. Right.

Mr. POWNER [continuing]. Engineering Institute of Carnegie Mellon, identify to say that, hey, we are on top of these risks, and we want to let everyone know we are effectively managing them instead of not disclosing them.

Senator COBURN. Is it your gut feeling, based on what you know on the contract with the handhelds, that they can use any aspect of the handhelds in the 2010 census? I am asking for an educated guess. I am not holding you on it. You do not have to be right or wrong.

Mr. SCIRÈ. Well, it seems that what is being proposed here is to use it for Address Canvassing.

Senator COBURN. Only.

Mr. SCIRÈ. Only, essentially, insofar as the handhelds are concerned. There is a separate issue in terms of other items—the Operating Control System and so forth.

I think it is a fair question to ask if that is the case. What will it deliver? Are we now at a point where we are trying to find a use for the technology as opposed to asking the hard question about whether or not the cost for just doing Address Canvassing, say, is outweighed by the benefit.

The greatest selling point for the handhelds up until now, as I have heard, is the ability to pull late-mail returns. And this is the non-response follow-up operation.

What we are talking about there is the ability to quickly identify those individuals who returned their questionnaire, but returned it late, and be able to pull it from the workload of those who go door-to-door to follow up.

Last time, there were 4 million forms that were returned late, where the Bureau knocked on the door and followed up. As you can pull those out, there are potentially great savings there. I have heard that is the greatest argument for the technology.

It seems that, in three of these options, that is off the table. So that is why I add——

Senator CARPER. I am sorry. Say that again. Start that sentence over again.

Mr. SCIRÈ [continuing]. The greatest selling feature that I have heard for the handhelds——

Senator CARPER. Right.

Mr. SCIRÈ [continuing]. Is ability to use the technology to pull these late-mail returns.

Senator CARPER. Yes. I got that.

Mr. SCIRÈ. So if it is not going to deliver on that, and that is where you are expecting a lot of the cost savings, what will it deliver in the Address Canvassing operation?

Senator COBURN. What will it save?

Mr. SCIRÈ. Yes. Now it should improve MAFs, and that should have an implication in terms of non-response follow up.

The Bureau knows quite a bit actually about what happened during the Address Canvassing dress rehearsal. So it should have some information to tell you what benefit you are getting out of this. Is it going to improve the MAF to such a point that it is worth whatever the cost is?

Now there is a trade-off here, too, because there is a risk in taking on an Address Canvassing operation or going back to block canvassing or some other technique that is not tested in a dress rehearsal. It actually was used in 2000.

So I do not want to diminish that, but I think it is still important to ask what are you getting out of this technology if you take out its ability to deliver on this one feature, pulling late-mail returns.

Mr. POWNER. Dr. Coburn, if I could also add, too, I think that is a key question. What will it deliver and ultimately save? But if you look at these 400 requirements, roughly a fifth of these are associated with the handhelds, so there is a fundamental question about getting them to work as expected and desired in addition to that basic fundamental question.

Senator COBURN. All right. I want to follow up on another question, which was disturbing to Senator Carper and me, as well, which is that we paid bonuses on a cost-plus contract where we knew requirement creep was happening, and yet the assessment system that Commerce and Census used to evaluate that contract said that everything was hunky-dory and that we are going to pay a bonus because you are performing.

To me, there seems to be some type of problem in contract assessment if, in fact, we are paying a bonus based on premium performance that ends up with where we are today.

So would you comment for me on the bonus assessment system of how they evaluate contract performance and whether or not it was accurate in this case.

Mr. POWNER. Dr. Coburn, we did not look at the award fees that were paid, the $3 million and $7 million that were mentioned by the Secretary. But a couple comments here. We have seen instances on projects within the Department—and I will mention NPOESS—where they were actually getting close to a hundred percent of their award fee when there were significant overruns and schedule delays.

So typically, it is hard to figure out here whether they were actually delivering on what was expected and they deserved these scores of 91 and 83 or whether the contract oversight was just so poor from a program office perspective that the Bureau did not know.

Senator COBURN. Well, I think that is an important question for you all to look at so we know the answer to that.

Mr. POWNER. OK.

Senator COBURN. That is important. Is there any reason why you think that this Harris contract could not be converted to a fixed-price contract now that we know what the requirements are, why cannot we have a fixed-price contract and know what it is going to cost us?

Mr. POWNER. I think that is clearly a possibility, and I also think we understand why we do not have fixed-price contracts on some things that are extremely complex. What we are trying to do here is not on this far end of complexity.

Senator COBURN. Yes.

Mr. POWNER. It really is not. The technology is there to do it, and this should—now that it is more clearly defined, that should clearly be an option.

Senator COBURN. I will just say one other thing. In all of the oversight hearings, we know GAO has done great work on these fees, on fixed-plus contracts and the $8 billion per year problem what we have in DOD in terms of this same thing, of paying for performance bonuses on non-performing contracts. So it is a big issue within the Federal Government, and it is not surprising that it is here, too. But it is really important, I think, that you go back and look at that.

How in the world did we give a great rating to a contract that obviously was not performing? I do not mean that to be a reflection on Harris Corporation. We were making the assessment. And we were paying the bonus. With that, I will yield back to the Chairman.

Senator CARPER. A couple more and I will turn it back over to Dr. Coburn for any other questions that he might have, and we will wrap it up.

But gentlemen, this is probably more for Mr. Scirè. But do you think we are running the risk right now of having a census in 2010 that might actually be poorer in quality than that which was conducted in 2000 or do you think the risk is that we will not be able

to live up to our constitutional obligation to conduct the decennial on time and at a level of quality that can be used not just for congressional apportionment, but for a whole myriad of other purposes that the decennial serves?

Mr. SCIRÈ. I believe those risks are there. I would say that at this point, there is an awful lot that we do not know. I would say that it is also very important to make decisions about which way the Bureau is going to be going with non-response follow up.

It seems as if three of the options are saying that they are going to go to paper. That dress rehearsal was scheduled to start within the next month.

And if you back up from that, you have to get training material and so forth going. So I guess the fundamental decision here is whether you are choosing between option one and the other three. That decision needs to be taken sooner rather than later, and again what I mentioned before about whether or not it makes sense to keep this and the technology for Address Canvassing needs to be looked at, too.

You asked earlier about what it is that we would advise that the Bureau could do right now. And we have for a number of years made recommendations about how the Bureau could make more credible and accurate the lifecycle cost estimates that they are providing to you.

And we have serious concerns about the accuracy of the estimates that are being provided. I would advise Dr. Murdock to look carefully at the assumptions going into these estimates right now; whether or not those assumptions reflect what has been learned already in the Address Canvassing dress rehearsal. That also has the potential to increase costs—as we heard today for the first time, I think, from the Bureau and from the Department that productivity was an issue.

If that is the case, then you will need more people. You might need more hand-held devices. You will need more resources in order to complete the operation in the same amount of time. And you really do not have a lot of flexibility of adding time.

So is that reflected in this $11.5 billion estimate that was delivered to the Congress this February? I think that is important to know so that you have a full idea of what the potential cost increases are.

Senator CARPER. Thank you. We have been joined by Senator McCaskill. And I have one more question to ask, and then we are going to kick it over to you. And we are just glad you are here, and I know you were trying to get here for the first panel.

Senator MCCASKILL. I think you guys have covered a lot of it.

Senator CARPER. Well, we have tried to, but I am sure we have not covered it all.

Senator MCCASKILL. You always do.

Senator CARPER. Well, we have uncovered some things that are mighty disturbing, but that we knew some of this already.

Let me just ask one last question of our panel. As we have discussed, I think, before, the 2010 census is going to be expensive, but it is hard to be certain just how expensive it is going to be by the end of the day.

And since Dr. Coburn and I have started our oversight in preparation for 2010, the projected lifecycle costs of the Decennial has gone up several times. I mentioned that before.

Are you any more confident than you were before in the cost estimates that we are now getting out of the Census Bureau? And what is your best guess as to what the final cost is likely to be? And I underline best guess.

Mr. SCIRÈ. We are no more confident than we have been in our prior reports, where we said that the process for developing lifecycle cost estimates was not documented and that assumptions are not reflected. So we are looking at that right now as a matter of fact, and we have serious questions about the accuracy and the credibility. And in terms of credibility, we are thinking there is more the Bureau can do to do sensitivity analysis and uncertainty analysis so that they can present to the Congress more than a simple point estimate, but it can also express some level of confidence in that or even a confidence interval and what the price ranges could be.

Right now, the Bureau does not do the analysis to provide you that kind of information. And it is not clear. There is not the transparency for us or anybody else to go and independently assess the estimate and say that all the assumptions are updated in the lifecycle cost model.

Senator CARPER. Before Dr. Coburn has to leave, I am going to ask you one last question. And I asked this of our first panel. But be thinking about it while you answer his question. What advice do you have for us? Not just for those who serve on this Committee, but for the Legislative Branch, in terms of what we can do, what our responsibilities are to make sure we get this right and get it straightened out. Just be thinking about that, and, Dr. Coburn, go ahead and ask your question.

Senator COBURN. Are there other IT systems at Census that you have significant concerns over?

Mr. POWNER. Dr. Coburn, I would not say significant at this point in time, but the comment that was made that everything was within cost and schedule, we would not agree to that. The DRIS Program that we have testified on there is a comment—what has occurred, and this occurred with FDCA, is they delayed or deferred functionality. OK. So you pushed out.

So things that were planned during the dress rehearsal, you push it post dress rehearsal, and that is why we made the point that the post dress rehearsal testing is so important.

But when you defer functionality, you are not on schedule.

Senator COBURN. Right.

Mr. POWNER. And that is what, in fact, is occurring with the Decennial Response Integration System (DRIS) also. So we need to keep an eye on DRIS. That also is a large contract. It is very important for the integration of the paper and phone responses.

Senator COBURN. Is that a cost-plus contract as well?

Mr. POWNER. Yes.

Senator COBURN. Is there any reason that you all know why all these contracts are cost-plus at Census?

Senator MCCASKILL. Unbelievable.

Senator COBURN. Yes. You cannot give an explanation for why they are rather than a fixed-price contract?

Mr. POWNER. No, I can not.

Senator COBURN. OK. All right. Thank you. And thank you both for your testimony.

Mr. SCIRÈ. If I could add to that on the mention of the DRIS contract, this is another key point looking forward is the ability for the Bureau to do a targeted second mailing. And this will depend in part on DRIS, and the Operating Control System.

We had estimated that doing a targeted second mailing has a potential for saving over $400 million. So I think it is important that that be tested as part of the dress rehearsal and that DRIS be in place and capable of testing that second mailing.

Senator COBURN. OK. Thank you.

Senator CARPER. Dr. Coburn, thank you. And thanks very much for your intensive involvement in this for several years now.

Let me just yield at this time to Senator McCaskill. And then I will come back and ask my closing question. Senator McCaskill, delighted that you are here. Thank you.

OPENING STATEMENT OF SENATOR MCCASKILL

Senator MCCASKILL. Thank you very much. I know that this subject matter has been covered. I am disappointed I could not get here for the first panel because you all have done the work of basically fleshing out the details of this particular contractual train wreck, but you obviously are not the ones responsible for it, and my questions would be more appropriately directed to them.

The cost-plus part, the lack of specification in terms of the requirements part, I mean, I keep hearing the same song over and over again. It is like it is an old-fashioned record and the needle is stuck: Cost-plus specifications not laid out, award performance fees when there has not been performance. And this is whether we are talking about reconstruction in Iraq or whether we are talking about the Census Bureau.

Now the issue for me is how do we fix it. And the only way you fix something that is broken is by requiring accountability. Has GAO discussed or do you all have any ideas—and obviously, I will direct these questions to the Census Bureau and to Secretary Gutierrez about accountability—but has anybody been demoted? Has anybody lost their job over the failure to enter into a contract that was going to function appropriately for the taxpayers and not reward a company that was not doing what we needed to do? Are you aware of anybody who has been held accountable for these mistakes?

Mr. POWNER. We are not aware of anyone who has lost their job, Senator.

Senator MCCASKILL. Are you aware of anyone who has been accountable in terms of being demoted or anyone who has been reprimanded or during your audit was there anyone who said that person made this mistake, and we took this action because of it?

Mr. SCIRÈ. I am aware that there is at least one individual who will be taken out of their current position, but that decision I do not believe has been taken.

Senator MCCASKILL. Well, and as so often happens in this, it rolls downhill. One of our challenges in government is making the accountability go to the levels where you change the culture. And is it your opinion the problem as it relates to contracting at the Census Bureau, is it cultural? Is it systematic? Or is it leadership?

Mr. POWNER. I think it is a little bit of everything. Our work starting in 2004 definitely showed they did not have the management processes in place to effectively manage these large acquisitions. It got into requirements management, risk management, and contractor oversight—all things that have come true.

But the other thing that you want to make sure—that is all typically focused at the project level. You want to make sure that the key executives are performing the appropriate governance-related——

Senator MCCASKILL. Right.

Mr. POWNER [continuing]. Accountability at the executive level. And we have addressed that in numerous reports calling for more executive level oversight of key risks, where they take ownership and accountability.

Senator MCCASKILL. Well, I do not know if I will be around in the next one, but I think we need to help GAO in this regard by taking your report seriously, demanding accountability as it relates to the failures of this contracting exercise, and being on top of the next contracting exercise that is going to occur because it would be one thing if this was the first time this had happened. But obviously, this is not the first time it has happened. This is a recurring theme, and I am very concerned about it.

I have some other specific questions, but I do not want to ask them because I think most of them have been asked and answered. But I will check the record and make sure that all these questions have been answered and I will submit them in writing if they have not because I do not want to subject the great folks from GAO to my railing against the Census Bureau and the leadership thereof in terms of their contracting failures.

Thank you very much, Mr. Chairman.

Senator CARPER. Senator McCaskill, my guess is you will still be here when the next one rolls around in 2020. And my hope is that when it happens, you probably will be chairing the Committee, and you will be——

Senator MCCASKILL. I am way down on the food chain, Senator.

Senator CARPER [continuing]. Getting a report that says that we learned from our mistakes in 2006, 2007, 2008, and that we ended up coming out OK in 2010 and the census in 2020 would be one that our people can be proud of and that the rest of the world will use as a model. So that is a goal, and my guess is you are going to be in a position to help make sure that happens.

Thanks so much for being here today.

The closing question again, as I telegraphed before, is your advice to us. I asked you to give advice to the Census Bureau and their leadership. Your advice to us in the Legislative Branch, and what we need to do, and can do, to make sure we get this right.

Mr. POWNER. Well, first of all, Mr. Chairman, I want to thank you for your oversight and also, too, for Senator McCaskill's comments. I mean not only was this raised as part of our work for you

on the Census Bureau, but FDCA and DRIS came up as part of our hearings on high-risk and watch-list projects, where initially they were not included on the OMB's list, and we got them on the list. And now OMB is focused and helping hold some folks accountable. So that is all a move in the right direction.

I think the key going forward is to continue to apply pressure. There are key dates coming up. There was a key date last Friday, where Harris was to come up with a rough order of magnitude. And I know the Secretary and the Director—no one wants to throw out a point estimate, but there are numbers floating around, and we need to get those numbers sooner rather than later, and we also need this decision in 2 or 3 weeks from now.

So I think the more you can apply pressure in the short term, the better.

Senator CARPER. All right. Mr. Scirè.

Mr. SCIRÈ. I agree with all of that. I would also point out that the Bureau is scheduled to complete its draft assessment of the Address Canvassing dress rehearsal the middle of this month. And so I think that is something that you need to hold the Bureau accountable for presenting the results of this because it will talk about more than just the hand-held computers.

I think that it is important for the Committee to keep a focus also on the Operating Control System, and how that is performing, not only in the operation where the handhelds were used, but also in the paper-based operations. It is also a central system that is important to all of the field operations.

So those are a couple areas that in the short run, I think, need attention and so I think there is more that the Bureau could do to describe what they are learning about those.

And the other issue is, I think, to encourage greater transparency on the part of the Bureau. In many ways, GAO is your eyes and ears, and so I think it is important that the Bureau be more transparent and forthcoming and more quickly respond to the information that we are looking at for you.

Senator CARPER. All right. Well, on behalf of all of us, the Senators who have been here today and those who are not, and I think really on behalf of the American people, I thank you very much for your stewardship on this and for being our watchdogs, and we need you to continue to be vigilant. Thank you very much. And with that, this hearing is adjourned.

[Whereupon, at 11:35 a.m., the Committee was adjourned.]

CENSUS IN PERIL: GETTING THE 2010 DECENNIAL BACK ON TRACK—PART II

TUESDAY, APRIL 15, 2008

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 3:19 p.m., in Room SD–342, Dirksen Senate Office Building, Hon. Thomas R. Carper, presiding.

Present: Senators Carper and Coburn.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. The Committee will come to order. Welcome, Secretary Gutierrez, and other witnesses and guests. We are starting a couple minutes late. I explained to Secretary Gutierrez we had a couple of special guests who just happened to drop by. The Air Force announced today its selection of what they describe as the best Air Force base in America. There are over 100 Air Force bases in this country and around the world. And today, for the first time in the 23 years that this award has been given, an airlift command was named as the Air Force's finest, and we are proud to say that the Dover Air Force Base has been named the best of the best, and we are enormously proud. And the wing commander and the commander master chief were here just by coincidence. We were exchanging high fives out in the hallway. We are just so proud of them, the men and women, civilian and military, who work there and have for so many years. They fly C–5s and C–17s and take cargo and personnel all over the world.

The Committee is going to come to order, and I want to thank Senator Lieberman and Senator Collins for working with us again to continue our oversight in this important area.

My thanks as well to our witnesses for talking with us and for taking the time to be here today. You also deserve some thanks for all that you have been putting in over the past several weeks and months to try to get our planning and early preparation for the 2010 Decennial Census back on track.

Last month, we held a hearing about problems that the Census Bureau was having with a project it calls "Field Data Collection Automation." The Field Collection Automation Project is a project that, for a number of years now, has been a major part of the Bureau's efforts to streamline decennial operations and to find cost savings.

The major component of the project is hundreds of thousands of handheld computers that census takers would use to verify addresses and, later on, to collect information door to door from households that do not initially mail in their census forms.

At our last hearing, the Department of Commerce and the Census Bureau officials admitted for the first time that the handhelds did not work as well as they had originally planned and hoped. They also admitted that, contrary to previous Administration testimony to Congress, the handhelds may not be a viable option come 2010.

We have been informed now that, due in part to the very short amount of time between now and the beginning of major decennial operations, the handhelds will be largely set aside in favor of the "pencil and paper" counting method that we have used since the very first census some 200 years ago.

I know that a limited number of the handhelds will be used next year to perform some address verification work in the field. And I know that there are some technological and other improvements to the census process this time that should result in some efficiencies. But I am disappointed that, at a time when so many countries are relying to a greater and greater degree on technology to do their census work, we are stuck with what is probably the most rudimentary enumeration method out there. Maybe not the most, but one of the most for an advanced country like our own.

The method the Census Bureau will be using to count non-responders in 2010 also seems to be the most expensive out there. Just over a month ago, you may recall that the life cycle cost of the entire 2010 census was expected to be about $11.5 billion. Now, due largely to the need to hire more census takers, costs could go as high as $14.5 billion. That is roughly twice the cost, maybe a little more than twice the cost, of the 2000 census.

I still have some questions about how we got to this point. I know some of my colleagues do as well. And Senator Coburn, who was here and who will be back shortly, will certainly have his questions to ask, as will I and others who join us. It is not clear to me, for example, why the top managers at Commerce and Census did not know until very recently about the serious problems with the handheld contract.

Mr. Secretary, you and our new director, Director Murdock, should be commended for moving quickly to find a solution once you were fully informed about the mess, if you will, that is on your hands. But I do not know why your predecessors were not able to take similar action much earlier, even when experts like the Government Accountability Office (GAO) were warning that things were not right. Earlier action could have saved the handhelds and probably saved a whole lot of money as well.

That said, we are probably at a point where we need to limit the fingerpointing and figure out quickly what needs to be done to get us the best, most accurate census that we can obtain.

The Census Bureau has been spending the better part of a decade planning—some might say hoping—to use some of the handheld devices for non-response follow-up in 2010. Now the Bureau must quickly pivot and develop new plans and procedures for handling paper census reforms. Getting the right plans in place, test-

ing them, and making the appropriate adjustments before the 2010 count begins will be vital to getting a good response rate, collecting reliable data, and ensuring that decennial operations run smoothly. Poor planning and testing can only lead to confusion, wasted resources, and a bad final product.

So I look forward to learning today not only about what went wrong with the handheld project, but about what the leadership at Commerce and the Census Bureau plan to do to set things right. It is clear from the testimony we have before us today that reverting to paper does not solve all of the problems with the 2010 census. We need to move quickly if we really are going to put preparations for the 2010 census back on track.

[The prepared statement of Senator Carper follows:]

OPENING STATEMENT OF SENATOR CARPER

I'd like to start by thanking Senator Lieberman and Senator Collins for working with us again to continue our oversight in this area.

My thanks as well to our witnesses for taking for taking the time to be here. You also deserve some thanks for all of the time you've been putting in over the past several weeks and months to try and get the planning and early preparations for the 2010 census back on track.

Last month, we held a hearing about problems that the Census Bureau was having with a project it calls "Field Data Collection Automation." This is a project that, for a number of years now, has been a major part of the Bureau's efforts to streamline decennial operations and find cost savings.

The major component of the project is hundreds of thousands of handheld computers that census-takers would use to verify addresses and, later on, to collect information door to door from households that do not initially mail in their census forms.

At our hearing, Commerce and Census officials admitted for the first time that the handhelds did not work as well as they originally planned. They also admitted that, contrary to previous administration testimony to Congress, the handhelds may not be a viable option come 2010.

We've been informed now that, due in part to the very short amount of time between now and the beginning of major decennial operations, the handhelds will be largely ditched in favor of the "paper and pencil" counting method used since the very first census more than 200 years ago.

I know that a limited number of the handhelds will be used next year to perform some address verification work in the field. And I know that there are some technological and other improvements to the census process this time that should result in some efficiencies. But I'm disappointed that, at a time when so many countries are relying to a greater and greater degree on technology to do their census work, we're stuck with what is probably the most rudimentary enumeration method out there.

The method the Census Bureau will be using to count non-responders in 2010 also seems to be the most expensive out there. Just over a month ago, the life cycle cost of the entire 2010 census was supposed to be about $11.5 billion. Now, due largely to the need to hire more census-takers, costs could go as high as $14.5 billion. That is more than twice the cost of the 2000 census.

I still have some questions about how we got to this point. It's not clear to me, for example, why the top managers at Commerce and the Census did not know until very recently about the very serious problems with the handhelds contract.

Both you, Secretary Gutierrez, and Director Murdock should be commended for moving quickly to find a solution once you were fully informed about the mess you had on your hands. But I don't know why your predecessors weren't able to take similar action much earlier, even when experts like GAO were warning that things were not right. Earlier action could have saved the handhelds and probably a lot of money as well.

That said, we're probably at a point where we need to limit the finger-pointing and figure out quickly what needs to be done to get us the best, most accurate census we can get.

The Census Bureau has been spending the better part of a decade planning—some might say hoping—to use some sort of hand-held device for non-response follow up in 2010. Now, the Bureau must quickly pivot and develop new plans and

procedures for handling paper census reforms. Getting the right plans in place, testing them, and making the appropriate adjustments before the 2010 count begins will be vital to getting a good response rate, collecting reliable data, and ensuring that decennial operations run smoothly. Poor planning and testing can only lead to confusion, wasted resources, and a bad final product.

So I look forward to learning not only about what went wrong with the handheld project, but about what the leadership at Commerce and Census plans to so to set things right. It's clear from the testimony we have before us today that reverting to paper does not solve all of the problems with the 2010 census. We need to move quickly together if we really are going to put preparations for the 2010 back on track.

Senator CARPER. And with that having been said, let me call on my colleague, Dr. Coburn.

OPENING STATEMENT OF SENATOR COBURN

Senator COBURN. Thank you, Senator Carper, and thank you and Chairman Lieberman for having this hearing.

In June 2006, the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Sercurity held a hearing titled "2010 Census, Off-Line and Off-Budget: The High Cost of Low-Tech Counting." That was $3 billion ago and before the handheld computers were scrapped. We know things now were far worse than what we knew at that hearing. It is not going to do us a lot of good to look backwards other than on a couple of things.

At the last hearing, I asked if there was ever a time at which the Census Bureau told the Harris Corporation to stop processing on the handhelds, and we were told no, and then we were told yes. Well, we did send them a letter as far as non-response follow-up (NRFU) was concerned, to keep going on the geographic but the NRFU stopped. It took 8 days to answer the Census Bureau's letter. Two days later, the Harris Corporporation sent the Census Bureau a letter, and it was 8 days after that before the Census Bureau even responded. So, that 10 days does not seem like a lot, but that 10 days could have been the difference in terms of whether or not non-response follow-up could have been used on this heavy investment we are going to have in these computers. So I think that is a breakdown that we ought to think about in terms of responsiveness within the Census Bureau. And I am very appreciative of the Secretary and Director Murdock. You all have been straightforward with us from the start, and this has no reflection.

I have great heartburn over the previous Census Director. I will not hide that. "Incompetency" comes to my mind, and we find ourselves today unprepared because of the incompetent answers that we received that were, in fact, untrue, unstudied, and unknowledgeable.

A couple of other things that I think are important that we should highlight is why Americans should be outraged at this. It is not that we have management problems. It is that we have gone from a contract with Harris Corp. for $600 million to $1.3 billion. That is for a handheld computer that will only do half the work we asked it to do before.

Second, the cost of the handheld computer has increased from $400 a unit to $600 per unit—that is according to your Department, Secretary Gutierrez—for a mapping function that can be done on a $150 BlackBerry.

So we are still going to pay $600, four times what the American taxpayers should be paying for something that could be done on a $150 BlackBerry. Right now, we are going to continue a contract with a corporation that either did not perform or we did not send the right signals for them to perform and pay four times what we should be paying.

And, third, the Census Bureau has contracted for the help desk, services for enumerators that are going to have to be in the field because we are not going to have computer technology to help us, and we have gone from $36 million to $217 million. And the reason that has happened is not because the cost went up. It is because we did not ask appropriately when we contracted the first time and really define what our needs were going to be.

The other thing that is concerning to me is that there is a risk that the quality of this census could be lower in 2010 than what it was in 2000. And the 2000 census was not without dispute as far as Utah was concerned, and there is still some question of whether or not we accurately reflected the enumeration in this country.

I offered an amendment when I was in the House during the 2000 census when the Census Bureau came and said, oops, we need more money. And I asked for it to be paid for. I asked for us to offset spending. And what is going to happen this time is the same thing that is going to happen next time—the American people are going to get charged for the mistakes that have been made. We are not going to trim spending somewhere else, and most likely it is going to get added to a supplemental. And because we have abandoned our responsibility to do a great job, our kids are going to pay for it. That is what it is. It is going to be on a supplemental. It is going to get added to the debt, and they are going to pay it back three times over.

I am proud of GAO, I must tell you. They were raising these flags the whole time, and we were hearing concerns about the NRFU from GAO. And I think there is a great lesson for the Census Bureau, which is pay attention to your outside critics rather than put up a shield and become defensive—and this is not intended for Director Murdock. Rather than put up a shield, listen to what they have to say and make absolutely sure there is not any credence to what they say because our kids and our country pay for it.

With that, I would yield back.

[The prepared statement of Senator Coburn follows:]

PREPARED STATEMENT OF SENATOR COBURN

I would like to thank Chairman Lieberman and Ranking Member Collins for calling this hearing, the second hearing that the Committee has held in recent months, to discuss the 2010 census.

In June 2006, the Federal Financial Management Subcommittee held a hearing titled: "2010 Census, Off-Line and Off-Budget—the High Cost of Low Tech Counting." That was three billion dollars ago and before the handheld computers were scrapped. We now know that things were far worse than this Committee was ever led to believe.

It has become apparent in recent weeks that the Census Bureau and the Department of Commerce should have known about these problems long ago, but failed to act. Worse yet, they ignored the problems. Even as auditors from the Government Accountability Office sat in this room and explained to this Committee in great detail about the problems facing the 2010 census, the Bureau sat next to them at the

table testifying that everything was on track. Somehow the problems were ignored again when the MITRE Corporation—hired by the Bureau for its ability to give frank advice—warned the agency a year ago that problems with the handheld computer contract were threatening the entire 2010 census.

The consequences will, as usual, be laid at the feet of those who had nothing to do creating the problem in the first place—taxpayers. This is exactly what happened in 1999 when Congress decided to increase spending for the 2000 census by $2.8 billion more than it originally planned. Instead of cutting funding someplace else it simply declared that the additional amount was "emergency spending." This provided a convenient way to bust through the spending caps and avoid any budget cuts. At the time, I tried to prevent that increase by offering an amendment on the floor that would force budget cuts instead of new spending—the amendment had bipartisan support but ultimately lost.

This time is shaping up to be no different. Taxpayers will get stuck with the bill for the most expensive census of all time, which will be nearly $15 billion even after inflation is factored in. Some in Congress again want to take the well-worn path of paying for these problems through more "emergency" deficit spending rather than to cut the funds of programs with bloated budgets. Every single Member of Congress who supports paying for these outrageous cost increases and reduced deliverable by charging it to our grandkids should be ashamed of themselves for punishing taxpayers this way.

The following few examples highlight exactly why Americans should be outraged by the price tag of the next census:

- First, the estimated value of the contract awarded to the Harris Corporation has ballooned from $600 million to $1.3 billion, even though the handheld computer will have only half of the functionality originally planned;
- Second, the cost of the handheld computer has increased from about $400 per unit to upwards of $600 per unit, according to the Commerce Department, for a mapping function that could easily be performed on a $150 Blackberry; and
- Third, the Census Bureau has contracted for help desk services for enumerators in the field, but the cost has increased from $36 million to $217 million, seemingly overnight.

On top of the spending problems we face, the Director of the Census has also told us that the quality of the census could be lower than it was in 2000. This has a direct impact on the Bureau's constitutional duty to apportion the House of Representatives. Even after the 2000 census, which was billed as the most accurate census ever, there was significant controversy about whether Utah should have been given an additional seat. I fear what may result from a less accurate census in 2010.

Admittedly, the picture I've just painted is bleak. There is no good way to put a positive spin on this situation and I don't believe that the American people are looking for excuses. I have serious questions about the decision to abandon the handheld computers for non-response follow up. And I hope to receive some more of the detailed justification for that decision at this hearing. Regardless, the decision has been made and we need to ensure that the plan for moving forward is a sound one. I want to thank the witnesses for being with us today and look forward to their testimony.

Senator CARPER. Thank you, Dr. Coburn.

Senator COBURN. Here is the difference, a $400 iPhone can do twice as much as the $600 handheld computer. You can buy iPhones that do all this, plus the NRFU. The American people should know that they are pating 50 percent more. Here is the latest technology in telephones, and it can do everything this can do.

Senator CARPER. All right. Mr. Secretary, thank you for joining us. We look forward to your testimony. And I understand you can be with us for about another 45 minutes and then you need to be excused.

Secretary GUTIERREZ. Thank you.

Senator CARPER. We will be sure to make that happen.

TESTIMONY OF HON. CARLOS M. GUTIERREZ,[1] SECRETARY, U.S. DEPARTMENT OF COMMERCE

Secretary GUTIERREZ. Well, thank you, Chairman Carper and Senator Coburn. Thank you again for your interest in the census, and I have a brief oral statement, and then I will submit my written testimony for the record. And I do appreciate your interest and I appreciate your wanting to look forward and figure this out and have the best census possible. And I appreciate that.

I am here to update you on the progress toward addressing the challenges facing the 2010 census and to seek the Committee's support in ensuring success. The American people expect and deserve a timely and accurate census, and we are working diligently to ensure they get it.

While taking the census sounds simple, it is anything but. As you well know, its scope and complexity have steadily increased, whether it be that we have more households or it is harder to reach households, and there is more fragmentation of media. And it is today the largest peacetime mobilization in the United States. And, of course, the challenges have only increased with time.

To deal with some of these challenges, at the beginning of the decade, the 2010 census was reengineered to build a better, faster, and simpler census. The plan was to leverage technology; eliminate the long-form and conduct a short-form-only decennial census—and that would reduce time from perhaps 45 minutes to 10 minutes an interview; introduce the American Community Survey; take further steps toward conducting a multi-language census; and coordinate and target messaging with integrated communications and partnerships.

While the majority of these elements are on track, problems have developed with the Field Data Collection Automation (FDCA) program. The FDCA program has experienced significant schedule, performance, and cost issues. A lack of effective communication with one of our key contractors has significantly contributed to the challenges.

To address these issues, we sought advice from a wide range of respected sources, including our Inspector General, the GAO, the MITRE Corporation, the 2010 Census Risk Reduction Task Force, and an independent panel of experts.

Based on these inputs and serious consideration, we have decided to move forward with a paper-based non-response follow-up in the 2010 census. And I know how disappointing this is for you, Chairman and Senator Coburn. This allows the Census Bureau and the Harris Corporation to focus on what they do best and represents a significant step in the use of automation. We will continue to use the handhelds for Address Canvassing.

The effect of moving forward with this alternative as well has placed the non-FDCA-related planning challenges that we have faced and will require an increase of anywhere from $2.2 to $3 billion through fiscal year 2013, bringing the total life cycle cost of the 2010 census to between $13.7 billion and $14.5 billion. And as you mentioned, the last number we brought the Committee was $11.5 billion.

[1] The prepared statement of Secretary Gutierrez appears in the Appendix on page 107.

The broadest reason behind the cost growth is the initial lack of sufficient communication between Harris and the Census Bureau. And while the revised plan does shift some duties away from Harris, the amount of work that Harris is responsible for has actually increased. So while it is a reduced level of activities, they have more work within each activity.

To successfully pursue this course, we estimate an increase of approximately $160 million to $230 million is needed for fiscal year 2008. While we continue to assess the cost impact for fiscal year 2009 and beyond, our current rough estimate for additional funding in 2009 is approximately an increase of $600 to $700 million. We expect to have more concrete numbers for 2009 when we submit to Congress an amendment to the President's 2009 budget that will be fully offset. Most of the life cycle cost increase occurs in 2010, and we are evaluating all options to keep the cost increase towards the low end of the range, while ensuring an accurate count.

To address the funding needed for 2008, we have developed a transfer proposal from existing Department resources that will cover the needs for the 2010 census. Our transfer proposal would require legislative authority to remove certain limits on our ability to make intra-departmental transfers. I believe it is responsible in light of the importance of the decennial census and our shared need to avoid additional burdens on the American taxpayer.

Both at the Census Bureau and at the Department of Commerce we have made substantial management changes to address the challenges facing the 2010 census. It will remain a top priority for me and for the Department, and I look forward, as always, to continuing to work with you as we move ahead.

Again, I thank you for your interest, and I will be glad to answer any questions. Thanks.

Senator CARPER. Thank you for that statement.

I want to start off by looking back a bit, and then I want us to pivot and to look forward. Again, let me start by commending you for taking swift action once you were fully briefed on the situation with the handhelds and for taking control of things and doing what you needed to do to try to set things right. And while I am disappointed that we will not be taking more advantage of the technology that is out there—I know Senator Coburn is at least as disappointed as I am about that—to find cost savings and to get a better census result, I believe that the decision you have shared with us is probably the only decision you could make at this point in time.

Having said that, I think it is unlikely that we would find ourselves in the situation if the top leadership at the Commerce Department and the Census Bureau were more fully and practically involved in what anyone can see is a very complicated and very important project.

Again, looking back, why is it that—I will not say that nobody, but the right people were not paying attention to the warnings from GAO and from MITRE. I read some of the comments from work done by MITRE at the behest of the Census Bureau. But why wasn't somebody paying attention to those warnings about the risks that were associated with the project? And I think I know the answer to this question, but are you taking steps to ensure that

you and the other key people in the Department and at the Bureau are more involved in major investments like this? And if so, what are some of those steps? And if not, why not?

Secretary GUTIERREZ. Sure. I suppose, and to put it in simple terms, I think the folks who were on this felt confident in what was being talked about in meeting rooms, and they felt that they were on the right track and that either GAO or others who were informing them of the risks did not have the full story right. But I think it is one of those senses of false confidence that things always have a way of working out without necessarily having the plan, the process, or the mechanism to make it work. And for all of us, it is a great management lesson that these projects are complicated and they tend to get worse before they get better. Problems tend to happen more easily than one expects, especially with something as large as this. To take it lightly is a big mistake.

So I recall that the first meeting I had when it was clearly a problem, the way the meeting started was somebody saying we have a problem, and at least what we have talked about inside of the Commerce Department is that we would like to think that our culture is one that bad news should travel just as quickly or more quickly than good news. And so once we heard about this, we have tried to move forward, confront it, face up to it, but not try to step back and hope that things just all of a sudden got better.

I think Director Murdock would say that he is getting a little bit too much help from the Commerce Department. This has clearly been what we have spent the most time on over the last month or so. And looking forward, a lot of it does depend on the Commerce Department, and we have had daily involvement. At some point we would like to move to weekly involvement. At some point we would like to move to a monthly board involvement. And what is happening inside the Census Bureau, I believe, is very positive—daily meetings, accountability, decisiveness. Harris is going to collocate with Census. It is a concept that the Director calls "embedding."

I have said this to Harris, and I do not think I would be speaking out of school, that where I would fault the Harris Corporation is if they saw that things were not moving forward, if they saw that decisions were not being made, they should have either knocked my door down, knocked the Deputy Director's door down, or knocked the Under Secretary's door down, but somehow it is too big of a project to be diplomatic about it.

But we have processes, we have systems, we have information systems going forward, and I feel good about the people and about the systems and about the processes that we have moving forward to the 2010 census.

Senator CARPER. I will just say one thing on this point, and then we will look forward. The idea that we had GAO out there consistently ringing the alarm, sounding the alarm, and MITRE Corporation, which is—is the MITRE Corporation a nonprofit?

Secretary GUTIERREZ. Yes.

Senator CARPER. MITRE Corporation in there basically saying, "Houston, we have a problem here." And then to have literally within weeks of that the kind of exchange that Dr. Coburn had with the former, I think, acting director, which almost suggested

that he had never seen or heard of the findings reported by MITRE is just very disappointing and almost hard to believe.

Well, let me set that aside, and let's just talk about going forward. Just lay out for us, if you will, Mr. Secretary, the path forward, step by step as we proceed through this month and next month and the balance of this year getting us ready for next year, please.

Secretary GUTIERREZ. I would say that the most critical time period is the next couple of months. In our estimate, we know we have a void of anywhere from $160 to $230 million this year. In 2009, within the President's budget, we plan to look inside of Commerce and look elsewhere and get an amendment for the budget. But this year, we have approached this saying we believe that the responsible thing is because it is not as much as next year and it is an amount that is somewhat manageable, that we should try to get it from inside the Department.

We have a couple of months to do that, but in order to be able to give ourselves some breathing room to July, we have requested the ability to move $33 million within Census. And my understanding is that we only need to inform, but we would like to have at least a sense from the House Committee that this is acceptable, that this is fine. Without that $33 million, which we believe is not a high risk, we are then facing a June deadline. And if we are facing a June deadline, then sometime in May we have got to tell Harris to stop working. And it begins to roll up into a major problem because we incur more delays.

So, for me, that is one of the things that concerns me the most is just——

Senator CARPER. Let me just interrupt for a second. What you are saying to us is that you need the ability to move $33 million within Census from one pot to the other?

Secretary GUTIERREZ. That is right.

Senator CARPER. And it is your understanding that you do not need legislation to do that; it is something that can be done administratively?

Secretary GUTIERREZ. Yes, I just want to let you know because—for me, that is perhaps the single biggest issue in the very short term. We are also in the process of renegotiating the contract with Harris, and that should be done toward the back half of the summer. We want to pay a lot of attention to that. We want to get it right. And that is also a big activity that needs to get done correctly.

We are also looking at what programs within the contract can we make fixed price as opposed to making the whole contract cost-plus. And Harris has been very supportive, and we are trying to parcel out as much as we can and fix it as opposed to leaving it on a cost-plus basis. That is another major activity. And then getting the processes right——

Senator CARPER. Let me just interrupt again. One of the things that became apparent to me in reading the testimony for today is, given the hundreds of changes that the Census Bureau was making in the requests of Harris, it is hard to have a fixed-price contract when you are working in that kind of environment. And my hope is that this time you actually have a pretty good handle on what

you want, what your deliverables are so that you could actually expect from them a fixed-price contract. Go ahead.

Secretary GUTIERREZ. Yes, well, one of the things that we are talking about this morning is that, in the event of some technological, infrastructure, or material need, that could be fixed price. So maybe not all of it can be fixed price. We are trying to get as much of it as we can, and we will obviously get back to the Committee. We know your interest in this. So that is a major part of immediate steps that we have to take.

I think it is safe to say within the Census Bureau, there is a lot of management change, process change, and a lot more intensity. There should be daily meetings and decisions made daily. People should be feeling pressure because decisions cannot be delayed. So, really, the heart and the nerve system are right there in the Census Bureau, and that is where the management changes are being made, not in terms of perhaps moving a lot of people around, but in terms of how people work together, how they communicate, what kind of information they look at, what kind of deadlines are put in place, and what kind of pressure is put on the system. And that needs to be happening as of today, and those are the things that I think about. We have got to redesign the whole non-response follow-up system. Even though it is something we have done in the past, we were not headed in that direction. We were headed in the direction of the handhelds. Granted, it is still lower risk than going to the handhelds, but that requires an awful lot of work to kind of get that wheel restarted again. And Address Canvassing has to go on. That needs to be happening. We have a higher requirement of Census workers than we thought we had sometime back, one, because we are doing paper and, two, because our productivity assumptions were wrong. So that needs to be fired up as well.

So, in terms of the $3 billion, about $2.2 billion—if you take the upper range—are non-Harris. So we have got the Harris contract to deal with. But then we have a lot of other costs that were underestimated within the system. So there is a lot to get right, a lot to get into timetables. We need milestones, we need deadlines. And very importantly, we need a tremendous amount of management focus and intensity, which I believe we have.

Senator CARPER. I am over my time. Let me just ask you to clarify one point, please: $33 million to move within the Census Bureau, and then for this fiscal year, do I understand there is roughly another $150 to $200 million that needs to be moved within the Department of Commerce's budget? Does that require legislation in your view? Or is that something that you believe you can do administratively?

Secretary GUTIERREZ. Yes, that does require legislation.

Senator CARPER. All right. Thanks.

Secretary GUTIERREZ. Thank you.

Senator CARPER. Dr. Coburn.

Senator COBURN. Thank you again for being here. Let me make a couple of points. This is not a question.

It is not against human behavior when somebody has a cost-plus contract for them not to tell you when things are not going well because they have every economic advantage for them not to go well. So that is a lesson on cost-plus contracts.

The second lesson on cost-plus contracts is if you do not know what you want, it is always going to cost a whole lot more than what the estimate is. And Census did know what they wanted, and they changed it all the way down through the deal.

Why do you have to redesign the non-response follow-up? We have done it for 4 or 5 decades in a row, and we have done it on paper for 4 or 5 decades in a row. Why does that have to be redesigned?

Secretary GUTIERREZ. You are right, there is a lot that we have done before in the past. I suppose the part that does require sort of bottoms-up work at this point is how to integrate manual information into an operating system that was designed for handhelds. So that would be a part that is probably different than what we have done in the past. A lot of it, we should be able to dust it off, but we have got to crank it up, which is something that we had not done.

Senator COBURN. That cannot be that expensive. Let me ask another question. We have got $33 million in additional costs over the next 3 months, correct?

Secretary GUTIERREZ. Right.

Senator COBURN. Until July. What makes up the $33 million?

Secretary GUTIERREZ. Well, a big part of that is getting the work on the new requirements for the handhelds, the Address Canvassing, which is happening as we speak.

Senator COBURN. But Address Canvassing was always part of the contract, so why is there a $33 million increased cost in the Address Canvassing?

Secretary GUTIERREZ. You are right. The Address Canvassing work was underestimated. Part of the new requirement, the 419 requirements that you have heard about, many of those came out of the Address Canvassing dress rehearsal. So Address Canvassing was underestimated.

Senator COBURN. So if, in fact, we were right on track and we had NRFU on the handhelds, would you still be wanting $33 million for Address Canvassing? Is that the answer?

Secretary GUTIERREZ. Yes, sir.

Senator COBURN. So it does not have anything to do with the previous incompetency. That is just a function of asking for more stuff on a cost-plus contract.

Secretary GUTIERREZ. Well, this is what came out of the dress rehearsal that was done in mid-2007.

Senator COBURN. Do you buy the fact that Harris says that this thing that works slowly is because the people could not use it faster, it is designed to be slow? I mean, I have seen it work. I have seen them go through the handheld. Do you buy that, or have you asked for it to be speeded up to the operation of what an eighth grader could use it at? I know I cannot use it that fast, but I know my eighth-grade grandchildren can.

Secretary GUTIERREZ. Yes, I had not heard this notion that it cannot be faster. I believe it can be designed to be faster. I do not see why it would not——

Senator COBURN. Well, we were told it was specifically designed to be slow by Harris. That is just something else—that is just another problem.

And we have got a mess. I know you are trying to solve the mess, and I know the people at Census are trying to solve the mess. There is a measure of this Congress that is going to come out of this census, and the measure is going to be whether or not somebody takes responsibility and is culpable for what has happened here. And I will bet you now, I will bet Senator Carper a steak dinner in Delaware, that the vast majority of these funds will be charged to our grandchildren rather than Members of Congress say we are going to have to sacrifice somewhere else in Commerce to pay for this error. And that is the real problem the American people have with Washington. There is no accountability.

And what you are doing and trying to do is admirable. I applaud you for trying to do it. But as sure as I am sitting here, they are not going to let you do it because they got their little fiefdoms and they have got their little special things, and they are not going to want any of them cut even though we have made mistakes.

A final point: We had a hearing in June 2006 where the Director of the Census was asked: What is Plan B? With your background, there has always got to be a Plan B. There always has to be a Plan B. It is Murphy's law. What can go wrong, will. We were told and we were reassured then that there is no reason to have a Plan B, everything is on track.

Was that Director misinforming us or just totally clueless? Which was it? Because it cannot be anything either than he was misleading this Committee or he was totally out of touch with reality. Which is it, Mr. Secretary?

Secretary GUTIERREZ. I think he believed that he could pull it off, that the Census Bureau could pull it off. I think he was truly confident that this would work out. As in many information technology (IT) projects I have seen in the past, somehow there is a belief that the technology will take care of itself, and we know it does not.

Senator COBURN. Mr. Chairman, I would like to submit some written questions. I do not want to keep the Secretary any longer. I would be happy to have those questions back in a couple of weeks. I know you have got plenty to do.

Senator CARPER. Thank you, sir.

Senator COBURN. Thank you.

Senator CARPER. Mr. Secretary, I asked you to do this last time you were before us, and that is, put on your hat from your job when you headed up Kellogg and do that for us again today. As I have read today's testimony, yours and that of the Director and GAO, I was trying to figure out why does it cost twice as much to do this year's census, more than twice as much as it did almost 10 years ago? And among the things that I read, there are more people. In some cases people do not speak the same language. They do not all speak English so that is a challenge. They may live in more dispersed locations. That is a problem as well.

And one of the other comments that I read is sometimes people are less inclined to open their mail. They get a lot of mail. Some of it is solicitations. It took me about half an hour to go through our mail last night when I got home to Delaware just on a regular day. And some people maybe get the request from the Census for information and just throw it away. So that increases the requirement for us to do our non-response follow-up.

I am trying to think—and you have probably tried to think this through, too, and the folks at the Census—how do we increase the likelihood that people who receive something in the mail are actually going to fill it out and mail it back in? As I recall, the expectation is something like 60 to maybe 70 percent of the folks who receive the questionnaire, a short questionnaire, in the mail are going to respond to it. And I am just trying to think, how can we inspire people to do more?

I will just give you a different kind of example. We have been trying to encourage people to recycle more in the city of Wilmington, where I live. One of the things that has been done is we have bar-coded the cans that people put their recyclables in, and when they are loaded into the recycling truck, the truck actually measures and apportions back to my account for my family so many points based on how much we are recycling. And at the end of some period of time, we can use the points that are accumulated for tickets to theaters or for discounts on restaurant dinners. We actually incentivize people, so not only are we doing something that we think is right for our environment, but there is also some financial incentive for us to recycle.

But have you given any thought to incentivizing folks to actually comply? For example, if you send it in, you have a chance to—not to win the lottery, but you have a chance to win something, and it is something that might be of value to you and your family.

Secretary GUTIERREZ. I think that the question you are asking is an important question, and it may be the question in order to get the cost down. We are estimating, I think, 64-percent response. If that becomes 65 percent, we save $75 million. So for every 1 percent, it is a $75 million reduction.

I have met with the advertising agency, because that is my background, to see how they can help us because they should have that goal. Their advertising is only good if that response is higher than what we had expected or what we had 10 years ago. So we have challenged them, and they are going to come back.

We also have a huge number of partnerships locally which are designed to do that—church groups, local community groups who are asked to go out and tell people, please, respond to the census. It is not intruding into your privacy. It is not going to be used against you.

The other thing that we have working for us—and it is hard to put a number on this—is that the questionnaire is a lot shorter. Because we did the American Community Survey (ACS) over the last decade, we have pushed a lot of the questions to a monthly survey, so now people have to spend 10 minutes instead of 45 minutes. And it is hard to imagine in this day and age somebody giving an enumerator 45 minutes. Now they only have to give him 10 minutes. So those things should work.

The incentive, we have talked about it, and I do not know if the Census has—that we have gone into it as much as we have, but I would be glad to go back to that because I think these are all good questions, and if we can get that number up, we could probably figure out something to do, perhaps in the second response—which we are doing this time. We are doing one mailing, and then

we are doing a second mailing. Perhaps there is room there to do something to motivate people more.

Senator CARPER. Well, this is 1 a percentage point increase, $75 million saving?

Secretary GUTIERREZ. Yes.

Senator CARPER. If you can go from 64 percent to 74 percent, that is three-quarters of a billion dollars?

Secretary GUTIERREZ. That is correct.

Senator CARPER. You can probably come up with some pretty clever ways to incent people for that kind of money.

Secretary GUTIERREZ. That is, if whoever comes up with the idea to get 80 percent, I think they should be classified as a genius, because that is the ultimate challenge we have every 10 years.

We are looking at the Internet. Can we get 1 percent from the Internet, additional to what we are doing? If we do that, that would be anything that we can do, that is the big number. And then my understanding is the rest of the job is less difficult than it would have been had we just started out with 64 percent.

Senator CARPER. Senator Coburn says maybe a $5 certificate for Starbucks or McDonald's. But look back a couple years ago when everyone wanted to get an iPod. The idea that you turn in your census on time, you do not need a non-response follow-up, and your name goes into the hat for a new iPod, something that people are excited to get, interested in getting, something that is highly timely.

Secretary GUTIERREZ. It is a great thought.

Senator CARPER. I would urge you to consider that.

In terms of language barriers, how do you cope at a time when a lot of folks are concerned that there is a great deal of Spanish spoken in our country, but it is not just Spanish. I mean, people—a friend of mine, Roy Romer, who used to be Governor of Colorado, ended up as superintendent of the public schools in L.A. for a number of years. He told me that one of his challenges—he said, "This is the toughest job I have ever had, superintendent of the school district. I have got 110, 115 languages that are being spoken in my school district." You probably have there, and in other places around the country, folks who are going door to door talking to people and maybe speaking Laotian or Haitian or whatever, not just Spanish.

Secretary GUTIERREZ. Right.

Senator CARPER. How do we deal with that?

Secretary GUTIERREZ. On the Spanish part, because of the ACS—and this is one of the benefits of ACS—we know where we need to provide a Spanish language questionnaire. So we will be able to do that from the start, targeted at those households. We also have a multi-language manual of how to go about answering the questionnaire.

A big part of how we get to these other hard-to-reach communities—Vietnamese, Croatian—will be through these community partnerships where they should know where people live who do not speak English or who could use some help in speaking English. So that is where the partnerships will come in tremendously handy. But that is another part that makes it more complex.

I would like to think that we may have more languages today than we did 80 years ago or 100 years ago, although we have always had that problem. I mean, 100 years ago it was Europeans who did not speak English yet, and we were doing a census. So maybe we do have more languages today, but I think it is a problem that we have had before. But no question about it, it is one of the variables that makes this so complex.

Senator CARPER. And I do have one more question, and that will be it. I understand from what you are telling us that you are going to stick with Harris, they are going to be involved in the portion of the project that I think involves Address Canvassing, but there is other work that you want for them to do as well. Explain the other piece that you have negotiated or are negotiating with them to do. I do not fully understand what that other piece is.

Secretary GUTIERREZ. I will give you the primary examples. The integration of the paper non-response follow-up into the automated Operating Control System is a big part of what they have to redesign. We have given them more work in the Address Canvassing. We had assumed that we could manage a help desk for $34 million. We now have $197 million into the help desk. So there are things that on the one hand we have increased the requirements. There are others when we have realized we got this wrong. But it is a combination of those, and I would be glad to provide you with a list of how that $700 million is made up.

Senator CARPER. Fair enough. Dr. Coburn, anything else?

Senator COBURN. No. Thank you.

Senator CARPER. All right. Secretary Gutierrez, thanks for being with us today. Thanks for your testimony. Thanks for responding to our questions, and thanks for making this the kind of priority that it needs.

Secretary GUTIERREZ. Thank you, and thank you for your suggestions.

Senator CARPER. You bet.

Secretary GUTIERREZ. Thank you, sir. I appreciate it.

Senator CARPER. All right.

Gentlemen, we welcome you here. We have appreciated your testimony before, and we look forward to your testimony here today.

This panel includes Dr. Steven Murdock, who is Director of Census for almost 4 months now. It probably seems like 4 years.

Mathew Scirè, we welcome you as the Director of Strategic Issues at the GAO.

I was over there the other day when we said good-bye to David Walker, Dr. Coburn. Did you have a chance to stop by there? As it turned out, Comptroller General Walker shares the same birthday, same day, month, year, with Sting.

Senator COBURN. That is notable.

Senator CARPER. It really is, when you think some people consider GAO a sting operation. I thought it was more than just a coincidence. I enjoy music, and as it turns out, General Walker does, too. And I think he is especially fond of the music of Sting. So I looked through Sting's portfolio, and I found a CD called "Brand New Day" and presented that to him in front of all of his folks, because, really, it was his last day at GAO, and he is looking forward to a brand new day. But we appreciate the work that you and

David Powner have done to make Comptroller General Walker look pretty good during the time that he was in charge of GAO. But we welcome you here today, and thanks for your input.

Dr. Murdock, we have your testimony. You are welcome to proceed, and we will make it all a part of the record so summarize as you see fit. Thanks for joining us.

TESTIMONY OF STEVEN H. MURDOCK,[1] DIRECTOR, U.S. CENSUS BUREAU, U.S. DEPARTMENT OF COMMERCE

Mr. MURDOCK. Thank you, Mr. Chairman and Dr. Coburn. Thank you for the opportunity to come before you again to discuss our ongoing efforts to address the problems associated with the Field Data Collection Automation (FDCA) Program.

Secretary Gutierrez has just outlined our plans for going forward with the FDCA program. And since the Secretary last spoke to you, all of the options that we talked about before regarding the FDCA program were thoroughly examined. We have considered feasibility, timing, and, of course, costs, while placing our greatest emphasis on ensuring the most accurate possible census in 2010.

I fully support his decision. Our contractor will continue developing the Address Canvassing operation utilizing the handheld computers and develop the Operations Control System, and the Census Bureau will implement a paper-based non-response follow-up operation and provide the regional census centers infrastructure. We will work with our contractor to ensure that the other components of the FDCA program are successfully completed. This option maximizes our control of 2010 census operations, and our decision to do so again gives us flexibility and minimizes the risks we identified in the FDCA program. At the same time, the plan allows us to leverage Global Positioning System (GPS) technologies by using handheld computers in the Address Canvassing operation. This will improve the accuracy of our address list, which is fundamental to an accurate census.

This is not a decision that any of us have taken lightly. The Risk Reduction Task Force, chaired by former Deputy Director William Barron and made up of key Census Bureau officials from each office involved with decennial census operations, as well as personnel from the Department of Commerce, and MITRE Corporation, carefully assessed every aspect of the FDCA program. Their work was then reviewed by an expert panel established by the Secretary. Nearly all of us involved with this effort reached the same conclusion: Moving to a paper-based NRFU operation significantly reduces risk. There are several reasons for this:

We experienced a series of problems with the handheld computers during the dress rehearsal Address Canvassing operation.

The handheld computers often took far longer than expected to move between screens, and they occasionally froze up resulting in enumerator downtime.

There were difficulties in obtaining efficient transmission to and from the handheld computer. This, too, led to delays for the enumerators.

[1] The prepared statement of Mr. Murdock appears in the Appendix on page 113.

The handheld computers could not handle assignment areas that contained more than 700 addresses, and our contractor does not believe that this flaw can be corrected. The result is that we now have to develop an alternative outside of the FDCA system for situations where we cannot reduce the size of large assignment areas.

We determined that if we had similar problems in the NRFU dress rehearsal, it would be too late to correct them and too late for us to pursue any alternative.

Given our efforts to mitigate elements of risk to decennial operations, the automated NRFU operation provides less flexibility than a paper-based operation because of the lead time required for ordering and equipping additional handheld computers.

We know we can successfully complete a paper NRFU since we have done so in past censuses. And by taking this work back, the Census Bureau can focus the work of the contractor on completing work on Address Canvassing and the operational control system.

We recognize that the option we chose is not without risk and has cost implications. However, we believe it is the best way to ensure a successful census, and we are taking actions that mitigate risk, particularly the ultimate risk of a failed, incomplete, or inaccurate census.

As we move forward, I am taking a number of steps to ensure that we address the organizational weaknesses that caused the problem with the FDCA program. This begins with a new management approach.

Arnold Jackson, a seasoned census manager with extensive experience directing information technology projects, has taken over as Associate Director for the Decennial Census. He is establishing a schedule for daily assessment meetings with the Census Bureau and contractor personnel, weekly status assessment and resolution meetings with the Deputy Director and me, and regular meetings with the Department of Commerce. We will continue to keep Congress informed of our progress and of any problems that arise.

We will move quickly to strengthen management planning and oversight relative to key areas such as risk management, issue identification, product testing, communications, and budgeting and cost management.

We are also instituting an embedding process, which the Secretary referred to, of Census Bureau personnel with the contractor at the worksite and contractor personnel at Census Bureau headquarters. This will help alleviate the communications problems that led to the breakdown in the requirements definition process.

We will institute periodic, unscheduled reviews by MITRE and departmental specialists in IT, project management, and contracting.

Within the next 30 days we will produce a detailed plan for the FDCA re-plan that includes deadlines for key milestones. In 45 days we will develop an integrated project schedule for the program. And in 60 days we will produce a testing program for the automated Address Canvassing operation. All of this will strengthen implementation of the Decennial Census as we move forward.

I want to stress again that since becoming Director in January, addressing the problems associated with the FDCA program has been my highest priority. My colleagues and I share the concerns

of the Congress about the increased costs we are now facing. Nonetheless, we must find a way to move forward. With the steps I have outlined today, I am confident we can put the 2010 census back on track.

Thank you for the opportunity to be with you today. I am happy to answer any questions you may have.

Senator CARPER. Thank you, Dr. Murdock.

Before I introduce our two witnesses from GAO, let me just say that I am going to be asking you to respond to the schedule that Dr. Murdock has laid out, which seemed to make sense. Is it logical? What questions would you suggest that we ask about it or would you have about that timeline? Thank you.

Mr. Scirè.

STATEMENT OF MATHEW J. SCIRÈ,[1] DIRECTOR, STRATEGIC ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. SCIRÈ. Mr. Chairman and Dr. Coburn, thank you very much for the opportunity to be here today to discuss the 2010 Decennial Census. With me today is David Powner, Director of GAO's Information Technology Team, who has been reviewing the Census Bureau's major information technology investments.

Last month, we testified before this Committee on the growing uncertainties surrounding plans for the 2010 census. At that time, we designed the Decennial Census as a high-risk area. We cited longstanding weaknesses in technology management, operational planning, and cost estimation. We also cited uncertainty over dress rehearsal plans and the ultimate cost of the decennial.

Earlier this month, the Commerce Department and Census Bureau announced major changes to how it plans to conduct the 2010 census. This redesign will have significant implications for decennial operations and costs. The redesign also highlights again the critical need for aggressive management of technology investments.

First, the redesign will require that the Bureau quickly develop and test a paper-based non-response follow-up operation. This will require different operations, printing, and training programs. Also, because this change comes late in the decade, the Bureau will need to provide assurance that this huge operation and its linkages with other operations and systems will be tested in the absence of a full dress rehearsal.

Second, the redesign calls for using the handheld computers for the Address Canvassing operation except for large assignment areas. This will require additional planning for operations, training, and equipment. Also, there remains some uncertainty as to how the Bureau will work around potential inabilities to update incorrect address lists once Address Canvassing has been completed. In this event, the Bureau may elect to deliver census forms by hand rather than via mail. It is critical that the Bureau ensure that the technology for conducting Address Canvassing is a success and that it tests the design for large assignment areas and the linkages among Address Canvassing and other operations.

[1] The joint prepared statement of Mr. Powner and Mr. Scirè appears in the Appendix on page 117.

Third, the redesign will result in additional costs. It is important to note that had it chosen to go forward with its original design, the Bureau estimated that the cost of the decennial would be up to $2.3 billion more than it previously estimated. In comparison, the cost of the redesigned decennial is expected to be up to $3 billion more than the previous census estimate. Regardless, it is not clear that these cost estimates fully recognize changes in the expected productivity of field workers, and the ultimate cost of the decennial is uncertain.

We recommended that the Bureau use tools such as a comprehensive, integrated project plan and sensitivity analysis that would help the Bureau better measure and manage the costs associated with individual operations. To provide the Congress with credible, accurate life cycle cost estimates, it will be important for the Bureau to demonstrate that its cost estimates reflect the most current understanding of important underlying assumptions, including productivity.

Finally, the redesign makes more urgent the need for the Bureau to address significant and longstanding weaknesses in managing information technology. Going forward, it will be important for the Bureau to aggressively manage its key information technology investments, and I will turn it over to Mr. Powner to expand on this. But before I do, let me thank you again for the opportunity to speak today, and as in the past, we look forward to supporting this Committee's efforts to promote a timely, complete, accurate, and cost-effective census.

Senator CARPER. Thank you, sir. Mr. Powner

DAVID A. POWNER,[1] DIRECTOR, INFORMATION TECHNOLOGY MANAGEMENT ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. POWNER. Chairman Carper, I would like to stress two key points about moving forward in managing the technology acquisitions associated with the redesign.

First, a clear, integrated schedule with critical milestones of key deliverables and tests needs to be clearly articulated so that oversight can be performed by both the Department and the Congress. This should include key technology deployment and acceptance dates, as well as testing time frame.

Second, a major concern is whether the Bureau has the capability to improve its program management and executive-level governance of the technology. Although we just heard from Dr. Murdock about this new management approach, history tells us that sound program management and executive-level principles is not something that can be just switched on overnight. Because of this, it will be important that the Bureau seek advice from the Department of Commerce in performing governance over the remaining technology acquisitions, utilizing the expertise of MITRE. We heard about this embedding with the contractor, and it probably would make sense to embed MITRE a bit, too. Sometimes a healthy tension there works.

[1] The joint prepared statement of Mr. Powner and Mr. Scirè appears in the Appendix on page 117.

In addition, they ought to still consider hiring an executive with a proven track record of rescuing these projects. One of the things we are doing within the Census Bureau is shuffling some chairs right now. Hopefully, the new management attention and focus, coupled with the governance, will fix things going forward. But that is also something that should be on the table.

Thank you, and I look forward to your questions.

Senator CARPER. Thank you, sir. What was that last point there about hiring an executive with a proven track record in rescuing these kinds of situations?

Mr. POWNER. Well, if you look historically at some of these IT projects, large acquisitions that have not gone as expected, we do have certain projects that we can point to where we brought in expertise from other departments or other parts of the Department where folks have a history of rescuing some projects. One of them that I would point to within the Department of Commerce, there was a large environmental satellite acquisition where they sought the expertise of some Department of Defense (DOD) officials to come in and help them get their program management and governance processes on track. So that is one model to look at.

Senator CARPER. Dr. Murdock, would you just respond to that point, please?

Mr. MURDOCK. Certainly, we are looking at a number of options in terms of improving and increasing management intensity. We are open to a number of suggestions. We have been looking at this particular area, recognizing the limitations we have. We have some very good people in the IT area, but we have very small numbers, particularly compared to what we had, for example, in 2000. So we are open to looking at a variety of options to strengthen that area because we recognize our limitations there, and we recognize that we simply have to do this right.

Senator CARPER. Dr. Murdock, would you just go back and not in its entirety, but truncate, if you will, the timeline that you were sharing with us in the latter part of your testimony? And then I am going to ask our two witnesses from GAO to comment on the reasonableness of that and any recommendations they have pertaining to it.

Mr. MURDOCK. OK. What I had said is that within the next 30 days we will produce a detailed operating plan for the FDCA replan effort with setting up key milestones that will allow us and others to assess how well we are doing, whether we are on schedule, etc.

In 45 days, we will develop an integrated project schedule for this particular part of our program for FDCA, and in 60 days, we will produce a testing program for the automated Address Canvassing operations. That is the part that we had tested in terms of a dress rehearsal, the handheld computers where we found some difficulties, and we need to make sure now, with a thorough and end-to-end kind of testing program, that these are up and operating in the way that we need them in order to apply them in less than a year now.

Senator CARPER. Gentlemen, any comments as to what you like about it, don't like, or any questions you might have of the schedule that has been laid out by Dr. Murdock?

Mr. SCIRÈ. A few points, I guess. The FDCA, the Field Data Collection Automation——

Senator CARPER. Thank you.

Mr. SCIRÈ [continuing]. Operating plan, obviously that is something that would be needed immediately, and that coming to terms with what the final requirements are going to be with the contractor is something that is needed immediately. So this talk about 30 days or less would be desirable. I understand that there will be an integrated project schedule and plan. I am assuming that part of that would address issues with the re-planning of the non-response follow-up operation.

So I think I would like to see more specifics as to what might comprise these. We mentioned there are major implications to going to paper for this non-response follow-up operation, and there we would expect to see specifics in their plans and dates and benchmarks for when they will have a printing solution or a plan for a printing solution, when they will have in place plans that would describe how they are going to manage the workload for that particular operation, plans for the integration of that paper-based operation with other automated operations, for example, the one for collecting and integrating responses.

So there are more specifics, I think, that we would like to see in terms of when the Bureau will have in place plans for these key implications that we lay out in our statement.

Senator CARPER. All right. Dr. Murdock, any response to that?

Mr. MURDOCK. The items that we were talking about will provide some of that information, but we can certainly lay out in greater detail for you and for GAO our plans in much more specific terms. We would be glad to do that.

Senator CARPER. Mr. Powner, any reflections you have on what Dr. Murdock has laid out?

Mr. POWNER. Well, clearly we want these sooner than later, but I do believe the 30-, 45-, and 60-day time frames are reasonable, because we want a good plan going forward. I think what is more important is that we want to stick to those time frames and that they get done and then that we hold folks accountable from that point going forward. I mean, we talked about this comprehensive testing program. A high-level testing program should be part of that integrated schedule that is delivered in 45 days. But we need to have those dates set in stone, and then we need to march to make sure we are hitting those very timely.

Senator CARPER. Earlier in the testimony, Dr. Murdock, I don't know if it was you or if it was Secretary Gutierrez, one of you was talking about why this effort to automate more of the census operation in 2010 failed. And one of you said that part of the problem was the failure of communication between the Census Bureau and Harris, the provider of the technology.

Actually, it occurred to me that in part there had been a failure to communicate maybe between GAO and the Bureau because they were raising questions and raising caution flags for many months before we ended up in this predicament, and also a failure to communicate with MITRE and the Bureau itself.

How is that changing now under your watch, not just improving communications with Harris, making clear what you expect them

to do, what your needs are, without changing or adding to that, but also what is going on here to improve communications with GAO? What is going on to improve communications with MITRE? Then I will ask our friends from GAO to comment on that as well.

Mr. MURDOCK. Well, I am taking as one of my top priorities when I came in, before we discovered all of these issues that we are dealing with today, that we would improve our communication with GAO and other oversight groups. And I am trying in a very concerted manner to do this, having established a key person, one of our most effective people in terms of getting answers to people as a contact person for GAO. I have met with them to get their overview on a number of key issues. And what I can say is that, for whatever reason that we did not listen sufficiently well before, I am dedicated that we are going to listen and do our best to meet the kind of criticisms that we should have addressed before.

Senator CARPER. All right. Gentlemen, any comment?

Mr. SCIRÈ. Yes, we did sit down and have the conversation about how we can improve the communication between the two agencies, and I think we have some ideas for how we can do that. I am looking forward to an improved relationship between the Census Bureau and the GAO, and I will wait and see how that plays out.

Mr. POWNER. I agree that communication has improved, but I think the characterization that this was due to poor communication is an understatement. It was poor communication, it was poor program management, and it was poor executive-level oversight. The communication has improved, and were not too worried about that going forward, but we are worried about solidifying the program management and executive-level oversight that needs to occur.

Senator CARPER. It would seem to me that just based on what I have seen over the last couple of months with the arrival of Dr. Murdock in his position and with the attention that Secretary Gutierrez is paying to this dilemma, the executive oversight, at least executive attention to this problem, has certainly ratcheted up a couple of notches. Is that a fair statement?

Mr. POWNER. Yes, I think that is fair, but I think we need to continue that going forward.

Senator CARPER. OK.

Mr. MURDOCK. I think one of the things we recognize is that this is not a few-month process. This is going to be an intensified management day after day after day to keep us moving forward and moving forward on schedule because there is no time to lose. Of all the issues facing us, time is our biggest enemy, and we recognize that to lose any more time is to threaten the very census itself.

Senator CARPER. OK. Dr. Murdock, I will ask you this question, and then, gentlemen, if you would respond as well, I would appreciate it. But, Dr. Murdock, just take a minute or two, if you will, and talk with us about how your plans for 2010 have got to change in light of the decision that has been made to revert to paper for collecting data from those who do not response when they get their census forms in the mail. And give us some idea what you think you need to do as far as hiring more people, training those people, renting additional space, and so forth. Just look ahead for us.

Mr. MURDOCK. Certainly, as we look forward with a paper-based NRFU, we are talking about an operation that has a number of

challenges. One is simply the relatively large number of additional people that we will have to hire. Our estimates are, for example, in terms of enumerators, probably 95,000 or so more enumerators will be needed because of the processes that are involved and the fact that we anticipate that not being able to use automation in the NRFU process, we will suffer some in terms of our ability to catch late returns and second mailings.

In addition, it is going to take more space, and I do not have those figures off the top of my head. It is going to require more management in terms of field management and in our regional centers as you put that many more people into the field. It is certainly going to require that we print more forms, somewhere in the range, because of the number of ways we use it, of over 40 million more forms. So that the big part of this does occur in terms of what is happening with the non-response follow-up.

But also, as part of the plan, we are taking back some of the work relative to the infrastructure for the regional census centers, and this, too, involves more technology. It involves re-merging what were two systems into one so that we have a single system. We were operating two systems that were not communicating very well at the regional center. We are going to have one integrated system for the regional centers, and that will require some additional work, certainly in terms of our information technology people. And as we look at this, one of our challenges that I think our GAO colleagues here pointed out is to get the types of people in IT that can ensure that we are able to pull that off, do it in a very thorough manner, and ensure that it operates smoothly with the rest of our systems.

So there are a number of challenges relative to taking this back. We did not take it back lightly. What we recognized was that given the history we had at the point we had to make this decision, that if we had difficulties in the non-response follow-up dress rehearsal anywhere near the magnitude that we had in Address Canvassing, that there would be insufficient time by the time that process was over for us to take another alternative. So that we really tried to balance off the ultimate risk, that is, the risk of not getting a complete census on time or as accurate as we would like it, with reverting to processes that we know we can do, we have done repeatedly, and that, therefore, we can reduce the overall risk to the overall census.

Senator CARPER. OK. Mr. Scirè and Mr. Powner, any reflection on what you just heard or in response to my question?

Mr. SCIRÈ. Yes, if I could add to that, I think what you just heard is a fairly daunting task to put in place a paper-based operation when one was planning up until a month ago to use automation. And there are a lot of plans that the Bureau needs to lay out specifically as to how it is going to get there. I think that is where you will get confidence that they will be able to execute this transition to a paper-based non-response follow-up. And so the testing becomes even more important.

I would point out that ordinarily this would be rehearsed, and during a rehearsal, you would see all the interconnections between all the various aspects of a non-response paper operation. And without doing that dress rehearsal, you do not get that opportunity

to see all the linkages executed at once. And so it is going to be important for the Bureau to simulate some of those interfaces and linkages to get as close as you can to that sort of a real system test, a dress rehearsal-style test, and so we would expect that any sort of plan for testing of the non-response follow-up operation would include descriptions of those kinds of mini-tests, if you will.

And the other part of this is there is integration between automation and paper. There will be an Operating Control System, which will control the workload for the paper-based operation, and there will also be a system for integrating responses that are coming through this operation. So those interfaces also would need to be tested and simulated in as close to a census-like condition as you can.

Senator CARPER. Mr. Powner, anything else?

Mr. POWNER. Nothing further, Mr. Chairman.

Senator CARPER. Maybe one more question for GAO. It is a great benefit. But it is clear to me that there is a significant amount of work that the Census Bureau needs to do before we can have some confidence that the plans for 2010 are sound.

What do you need to see them do in the coming weeks and months to gain your confidence? And feel free to repeat some of what Dr. Murdock and Secretary Gutierrez have said, but add to that, if you will.

Mr. SCIRÈ. Well, I think the immediate need is the establishment of the final requirements for the Field Data Collection Automation, and I think what we are looking for are plans, milestones, and benchmarks that lay out specifically when some of these things will be occurring, but at a sufficiently specific level that you can see that they are laying out the plans for how to operationalize a paper-based non-response follow-up, that they are setting dates for when they will finalize their decisions on a printing solution, finalize their decisions on how they will be managing the workload from the paper-based operation, what their plans are for the late mail returned, and with the absence of the handheld computer, this complicates the ability of the Bureau to pull late mail returns from the non-response follow-up workload. And I know that the Director is contemplating ways that can be done without the handhelds. But one would expect to see a description of how that will be accomplished.

In the Address Canvassing operation, there still is a need here for some realistic testing of the automation, including testing of the automation under a workload that you might expect during the actual Address Canvassing operation, sort of the stress testing, if you will. Part of the Address Canvassing will not use the handheld computers, and there is some uncertainty there as to what the Bureau's plans are.

So we would expect to see a date that would say by this date we will have in place a plan that describes what the plans are for operationalizing a non-handheld computer Address Canvassing operation. And part of that, you would also want to see some specification of how this handheld operation and one that could be a paper-based operation for Address Canvassing will be integrated.

So those are some of the things that I would expect to see in a plan that describes where they are going from here.

Senator CARPER. Mr. Powner, do you want to add to that?

Mr. POWNER. Just two points. I would like to reinforce the importance of that integrated schedule so that we get that sooner than later and that it is comprehensive. And the other point is that the Census Bureau needs to be prepared to scrub the numbers that are coming in, and I will give you an example.

We already heard that the FDCA contract is going to go up roughly $700 million, from $600 million to $1.3 billion. Those numbers are very rough. There is no preliminary design behind that. If you look at the set of requirements, the 400 requirements, about 250 of those requirements are clarifications.

Now, it has been described that they are all new requirements. They are not all new. Some of them are clarifications, so supposedly the contractor was working on some of those. We just need to really look closely. I understand the MITRE Corporation might be taking a look at this, but I think scrubbing those numbers that come in on what that final contract cost is is very important because there potentially could be some savings there.

Senator CARPER. All right. Thank you.

Dr. Murdock, one last question for you. Talk to us about MITRE Corporation, about your interaction with them and their involvement.

Mr. MURDOCK. Well, MITRE Corporation has been very instrumental to our recognizing some of the difficulties that we were experiencing. I regret that we did not listen to them as well as GAO earlier in the process. We have them employed now in a number of ways helping us, and one of the things in my new management plan is that I am establishing them to be involved with our various processes and report to me weekly on issues that they see that may be occurring that we need to address. I am using them as, if you will, an inside-outside monitoring group to help keep us on track and to inform upper-level management if there are difficulties arising that we are not addressing in a timely manner.

One of the things that we recognized in the process is that we had a difficulty coming to decisions in a timely manner. That is very problematic when you have a project like this where you have to meet deadlines so that everything else can be done. And, in fact, I would say relative to the issues that GAO has laid out today, I can tell you that we are desirous of having those deadlines and having them all planned out, and we are doing that now.

But we recognize that you cannot know where you are in a process until you have those milestones laid out and you are holding yourself responsible for meeting those on an ongoing basis. So MITRE is in a continuous process with us and is helping us in some of our cost accounting processes, and in relationship to a comment that was made, we are still analyzing costs within many different parts of our process. And we are working with the contractor in terms of refining those costs, and that will be done over the next several weeks.

Senator CARPER. Mr. Powner, I do not know if it was you or Mr. Scirè who mentioned embedding and tied that with MITRE. Do you recall which one of you said that?

Mr. POWNER. I suggested that, Mr. Chairman.

Senator CARPER. And tell us why you think that might be a good idea, and then, Dr. Murdock, would you just share your thoughts?

Mr. POWNER. Well, I think it is a good idea, whether it is MITRE or a similar organization. They offer some engineering expertise, program management expertise, that could help in various meetings and settings, having them right there rather than just getting minutes of meetings. And sometimes when you have a nonprofit, a federally funded research and development center (FFRDC) that is coming in more on an independent basis and providing some verification of what is going on, having them there real time could help and could save us some time.

Senator CARPER. Any thoughts on that?

Mr. MURDOCK. Yes, we have thought of their involvement, and that could be very helpful to us in a number of ways. One is simply extending our resources in the area that we are very short of people, in IT. We have discussed this kind of arrangement with them. They are willing to provide some of that type of work, and we are working out details on that and other types of involvement.

The one I just mentioned about in terms of the kind of monitoring process for upper-level management, we have already established that, but we are working at other ways that they can help us stay on track.

Senator CARPER. Thank you.

And, finally, to Mr. Powner and Mr. Scirè, for almost every Subcommittee that I chair or Committee that I chair, I ask for advice. What should we be doing in the Legislative Branch as we try to do a good job with respect to our oversight responsibilities? What advice would you have for us? We have asked you to give advice to Mr. Murdock and the folks that he leads at the Census Bureau. Any advice that you might have for my colleagues and me going forward?

Mr. SCIRÈ. I think that continuing to provide the oversight that you are providing is very helpful and demanding that the Census Bureau produce these plans to establish a benchmark that will help with accountability and oversight in the future is very important.

One thing that I am looking forward to seeing is the Census Bureau producing a final assessment of the Address Canvassing dress rehearsal so that might be available to you for your review and oversight. I know that it raises some issues about the Operating Control System, and so I think that is a subject that the Census Bureau needs to describe more as to what it found during its Address Canvassing dress rehearsal as well as its other dress rehearsal operations.

Senator CARPER. Mr. Powner, anything else?

Mr. POWNER. Just to highlight the importance of the 30-, 45-, and 60-day deliverables. It is important that those are delivered on time, and then once they are delivered, your oversight that indeed all the aspects of what needs to occur—key deployment drops, the technology being accepted, the operations being tested, the test plans being executed effectively, and results reported—all that from an oversight perspective will be very helpful.

Senator CARPER. Good. Thank you.

Dr. Murdock, what else ought we to be doing or could we be doing that would be helpful to you and your team?

Mr. MURDOCK. Certainly, I think two issues that were raised by the Secretary are very important; that is, the timing issue, that we get going with the process because the time is very short; and equally important is any assistance you can provide in helping us to stabilize funding over time so that we can move forward and have the resources necessary to get this job done. Recognizing all of the issues about the cost and what has happened to the cost, the reality is still that in order for us to move forward and for us to have a successful census, we need to have a dependable flow of funds so that we can continue our operations and those of the contractors we may have.

Senator CARPER. All right. Fair enough.

Well, I would just say in response, our thanks to each of you for being here. We do appreciate your testimony, and thank you for responding to our questions.

And Dr. Murdock, to you and the team that you lead, and have led now for less than 4 months, just keep working hard and work smart, and let us know what we need to do to be helpful.

And to our friends at GAO, stay on them, stay on the job, but in a constructive way, and I know that you will. And with a little bit of luck, we will get through this, and at the end we will be able to provide the kind of census that the people of this country need and deserve.

With that having been said, this hearing is adjourned. Thanks very much.

[Whereupon, at 4:48 p.m., the Committee was adjourned.]

APPENDIX

OPENING STATEMENT OF CHAIRMAN LIEBERMAN

MARCH 5, 2008

The purpose of today's hearing is to examine problems that, if not corrected, will threaten the Census Bureau's readiness for the 2010 survey.

I want to thank Senator Carper and Sen. Coburn, the Chairman and Ranking Member of HSGAC's Subcommittee on Federal Financial Management, who have been closely monitoring this issue, for their steadfastness in pursuing the Committee's oversight agenda. And I thank Commerce Secretary Guitierrez and Census Director Murdock for taking time from their very busy schedules to be here.

The Bureau's decennial population counts are not only the Census Bureau's most important function, they are constitutionally required. The nation has been relying on them ever since 1790 when U.S. Marshals rode around on horseback to count our young nation's population of 3.9 million that year.

Every 10 years since, we have conducted the survey in order to divide states up into Congressional districts, to distribute billions of dollars in Federal aid, and to make basic decisions at every level of government.

For most of the survey's history, counters have used old fashioned methods to tabulate their numbers. As recently as 2000, Bureau employees were using paper and pencil. But a decision was made shortly after the completion of the 2000 census to move to an electronic system to ensure greater accuracy and to streamline the process.

Now, two years before the 2010 Census, we learn that the development of handheld computers is in serious trouble and that they may not be functional by the time they are needed. The Census Bureau has recently indicated that development of the handheld computers had experienced several delays and cost overruns and that the handhelds may not meet the Bureau's operational needs and quality controls. With just two years to go, this is extremely distressing news.

So, how did it come to this? In March 2006, the Census Bureau awarded Harris Corporation a $600 million contract to develop and manufacture the handheld computers in time for the 2010 census. As late as December last year, Census Bureau officials reassured Congress that development of the electronic counters was on schedule and contingency plans were unnecessary.

But the Government Accountability Office warned Census officials in an October 5, 2007, report of the consequences of falling behind schedule and questioned the Bureau's ability to manage the project's risks. Then, last November, the Mitre Corporation, which Census hired to advise it on IT programs, told the Bureau that requirements for the handhelds may not be achieved in time for 2010—even if the Bureau received an influx of funding. Mitre recommended the Bureau immediately develop plans to use paper forms for the 2010 census. A January 2, 2008, story in the trade publication Government Executive reported that Census officials "have no plans to revert to paper."

The Bureau will very quickly need to decide if problems with the handheld computers can be fixed before a 2010 census dress rehearsal that starts on May 1, 2008. If the problems can be fixed, Census estimates it will need an additional $1 billion in the FY09 Budget to do so. If the problems cannot be fixed, the Bureau will need even more money to prepare for a paper system both for the 2008 dress rehearsal and the 2010 census.

The situation is clearly troubling, and I am concerned that it could have deteriorated to this degree and without proper warning from the Bureau. I have noted with concern the failure of other government agencies to properly oversee high-priced technology contracts. Too much of the taxpayer's hard earned dollars ride on these contracts not to manage them closely. Furthermore, 10 years into the 21st century, it is inexcusable that the Census Bureau must still rely on paper and pencils to perform its most important function.

I understand that the Bureau is working hard to correct these specific problems. A great deal is at stake, and the nation must be able to rely on the accuracy of the decennial. Thank you.

PREPARED STATEMENT OF SENATOR COLLINS

MARCH 5, 2008

Since 1790, any American with faith in the Constitution could predict that a Census would occur in 2010. This constitutionally mandated function of the Federal Government is nearly as ironclad a certainty as death and taxes.

As we approach the final stages of preparations for the 2010 census, however, we face a large and alarming uncertainty about whether our nation will be able to rely on the results on the 2010 census—whether for apportionment of representation in the U.S. House of Representatives, as required by the Constitution, or for the myriad other Federal programs that rely on accurate Census data in their operations.

Given the importance of the Census, we must also examine the information-technology failures that have placed the 2010 census on such an uneasy foundation. Developing and deploying a customized technology against a fixed deadline demand extra diligence and energy in defining requirements, negotiating contracts, overseeing progress, and devising contingency plans. Here there is little to applaud and much to be concerned about the efforts of the Census Bureau.

This Committee is unfortunately no stranger to tales of Federal projects and contracts that have gone awry, often at a heavy cost in taxpayer funds. Quite often, these failed projects have involved efforts to improve the government's use of information technology. Far too often, the results of these projects seem to follow a similar pattern—inadequately defined initial requirements, an increase in requirements to address both old and new operational challenges, substantial cost increases that squeeze program budgets, inability or unwillingness of management to control "requirements creep" or cost overruns, and, finally, a decision to end an acquisition process with no deliverables or to accept a system that doesn't meet expectations.

The 2010 census is notable among projects that have drawn our attention, not only because of its great scope and expense, but because of its history of unheeded cautions.

I won't belabor the points made in our Committee's recent hearings, news stories, and Government Accountability Office reports. The salient fact is that years before the 2010 census, warnings of potential dangers came from experts sought out by the Census Bureau itself and from the Commerce Department's own Inspector General.

In 2004, the National Research Council's Panel on Future Census Methods cautioned that "unique risks and challenges" attended the plan to develop a new data-collection and transmission technology on the tight schedule for the next Census. Then in 2005, the Commerce Inspector General echoed the panel's concerns and noted a "late start" on imposing effective project-management methods.

It now appears that some combination of wishful thinking, lax management, and tunnel vision have brought us to a point at which the new Field Data Collection Acquisition or FDCA technology for hand-held devices may not be ready for full service in April 2010.

The implications appear in the Census Bureau's budget request for Fiscal Year 2009. The Bureau has already requested more than a billion dollars above the FY 2008 funding level, but has told Committee staff that because revisions to the FDCA contract with Harris Corporation are incomplete, they could not estimate the future costs of the 2010 census. And some estimates claim an additional billion dollars or more might be required to effectively complete this constitutional requirement.

In other words, it appears that we cannot exclude the possibility of going into the 2010 census with a hastily devised and obscenely expensive reversion to paper-based data collection to handle data from people who do not return the mailed forms or who otherwise require a follow-up visit.

If the recent briefing summary prepared by MITRE Corporation—a Census Bureau consultant—is correct in saying that "immediate, significant changes are required to rescue the program" and that "money cannot trump time remaining," then the Census Bureau and the country face a very serious problem.

I look to all the witnesses today to describe with complete candor on what the outlook for the 2010 census really is, what steps you have taken or plan to take to improve that outlook, and what, in your judgment, should have been done differently.

I commend Senator Carper and Senator Coburn for the leadership they have shown in aggressively monitoring the challenges facing the 2010 census and the close attention they have paid to "at risk" information technology procurements government-wide. Those Senators presided over a 2006 hearing that sounded a clear

alarm bell for Federal information-technology projects in general, citing a GAO finding that up to $12 billion of the $64 billion requested for more than 850 IT projects in FY 2007 might be wasted—including the Census Bureau's FDCA project. The current problems with the 2010 census illustrate the pertinence of that warning.

I sincerely hope that today's hearing will produce some solid answers to the concerns that Chairman Lieberman, Senators Carper and Coburn, and I raised in our February 22 letter to the Secretary of Commerce. Time is too short for us to accept anything less.

PREPARED STATEMENT OF SENATOR COLLINS

APRIL 15, 2008

The announcement by the Department of Commerce that plans for the 2010 census are undergoing drastic revision at this late stage and that its costs are expected to increase by as much as $3 billion is alarming. It is also at odds with previous assessments provided to this Committee.

The fact that our best option is returning to a paper-based Census after working for years and obligating more than $200 million on a largely failed hand-held computer option indicates, at best, woefully inadequate procurement practices, and, at worst, gross mismanagement.

The Census is too important—not only for its Constitutionally mandated use in apportioning the House of Representatives, but also for the role its data plays in a myriad of program and policy operations—for lax management practices to imperil its success.

For now, the top priority for Congress must be a careful examination of the resources the Census Bureau needs—including adequate staff and robust project-management protocols—to execute an accurate enumeration two years from now.

But I also believe that Congress must carefully reexamine this and other troubled Federal technology projects to identify the flaws, to ensure accountability, and to make better use of taxpayers' money.

As the GAO has stated, "Again and again, projects have run into serious trouble, despite hard work by dedicated staff. They are developed late, fail to work as planned, and cost millions—even hundreds of millions—more than expected. The results, in missed benefits and misspent money, can be found throughout government."

That observation was delivered more than 15 years ago. It appeared in a December 1992 GAO report to Congress on information-management and technology issues. The GAO's judgment reminds us that these technology problems are neither isolated nor novel, but that does not in any way excuse the failures in the Census project.

Unfortunately, the record indicates that the Census Bureau has not fully implemented GAO recommendations in vital areas like acquisition management, operational planning, cost estimation, and performance measurement.

One troubling indicator of inadequate development practices appeared in Secretary Gutierrez's testimony last week. Nearly two years after the initial contract award and a mere four months away from a full-blown test of the handhelds, and despite repeated third-party observations about the problems of "requirements creep," the Secretary noted that "more than 400 new or clarified technical requirements" were delivered to contractor Harris Corporation on January 16, 2008. That was a remarkable load to pile on the back of a project already teetering at the precipice.

Perhaps the most accurate comment on the recent disturbing news on the 2010 census may be a short sentence by Dr. George T. Ligler, a technology consultant who has participated in the 2010 Decennial Census Expert Panel. In a March 18 letter to Secretary Gutierrez, Dr. Ligler said, "It didn't need to be this way."

Prominent among any list of lessons learned is the imperative to establish concrete requirements early in the development process, to take note of caution flags such as cost overruns and major requirement modifications, and to adopt effective risk-management strategies.

I appreciate the difficulty of the task that Dr. Murdock assumed when he took the helm at the Census Bureau, and look forward to hearing his plans to put the Census back on track and keep it there.

STATEMENT OF
THE HONORABLE CARLOS M. GUTIERREZ
SECRETARY
UNITED STATES DEPARTMENT OF COMMERCE
BEFORE THE
UNITED STATES SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
Wednesday, March 5, 2008

Chairman Lieberman, Ranking Member Collins, Members of the Committee, I appreciate this opportunity to discuss preparations for the 2010 Census, specifically our efforts to implement Field Data Collection Automation, known as FDCA.

Preparing and executing the Decennial Census is one of the highest priorities and most important responsibilities of the Commerce Department. I am working closely with Census Director Steve Murdock to ensure that the Census Bureau and all of its dedicated hard working employees have the support necessary to carry out this constitutionally required task. I especially want to thank the Committee members for your interest, concern and support on every aspect of the Decennial Census.

The complexity of the 2010 Census is compounded by our efforts to reengineer the historically paper-based Decennial Census by automating as much of it as possible to improve data collection and operations. Planning for the 2010 Census began after the completion of the 2000 Census and includes several key components:

1. Replacement of the Decennial Census long-form with the American Community Survey (ACS), which provides more timely information on demographic, housing, social, and economic data;
2. A short-form only Decennial Census, which counts the population and gathers basic demographic characteristics;
3. Improved mapping, including use of global positioning technology (MAF/TIGER);
4. Technology data capture from paper, telephone and field sources (DRIS);
5. Replacement of legacy systems for tabulating and disseminating results (DADSII); and
6. Field Data Collection Automation (FDCA).

While most of these components are on schedule and meeting current cost estimates, FDCA is experiencing significant schedule, performance and cost issues that I will focus on today. We have discovered serious problems with the FDCA program and I am personally involved in bringing key issues to the surface and developing a way forward. In short, the current situation is unacceptable. The American people expect and deserve a timely and accurate Decennial Census and the Department and I won't rest until they have it.

For background, FDCA has three major parts:

1. Automated data collection using handheld devices both to verify addresses, called Address Canvassing or AdCan, and to collect data during the non-

response follow-up, known as NRFU, of those households that do not return their census form by mail;

2. The Operations Control System (OCS) that tracks and manages Decennial Census workflow for all of the field operations, including those operations conducted on paper; and
3. Census Operations Infrastructure, which provides office automation and support for Regional and Local Census Offices.

The bid request for the FDCA contract was released in late 2005, and the Harris Corporation won the contract in April 2006. The first major test of FDCA systems occurred in the spring of 2007 when the handheld devices were used for an address canvassing dress rehearsal.

Concerns about the FDCA program grew over time and Census and Commerce officials became increasingly aware of the significance of the problems through GAO and Office of Inspector General reviews, the 2007 dress rehearsal, and internal assessments. In his testimony on December 11, then-Director Kincannon mentioned that Census was addressing concerns that had been raised about the gap between the capacity to get the work done and the amount of time remaining. One of the main reasons for this gap was significant miscommunication concerning technical requirements between the Census Bureau and Harris. The lack of clarity in defining technical requirements was a serious problem especially with regard to the testing and functionality of the handheld devices in a full Census environment. For example, discrepancies arose over data upload times, screen change speed and data storage capabilities.

In response, Census Deputy Director Jay Waite in mid-November initiated an integrated project team - essentially a SWAT team - to define the problems associated with the FDCA program and develop solutions that would ensure a successful 2010 Census. The integrated project team focused on clarifying the remaining technical requirements where questions were still outstanding, identifying opportunities to reduce the scope of the contract if necessary, and examining the potential for the Census Bureau to absorb some of the activities originally planned for the contractor.

The integrated project team undertook an in-depth review of all the technical specifications and provided Harris with an updated set of requirements in mid-January 2008. Harris conducted its evaluation of these requirements and provided a rough order of magnitude cost estimate in late January. The estimate highlighted potentially substantial increases in the contract cost, and raised new questions about staying on schedule. Clearly the problem was more significant than had been conveyed in the December 11 hearing. What we had perceived as serious, but manageable, problems that were being addressed, we now viewed as critical and urgent matters.

There is no question that both the Census Bureau and Harris could have done things differently and better over the past couple of years. I should add at this point that in late 2006 leadership changes took place. I'd like to thank this Committee and the Senate for confirming Dr. Murdock, as the new Director of the Census Bureau, with whom I am working closely to further clarify the problems and to develop a set of options for getting the Decennial Census back on track.

In January 2008 after being confirmed, Director Murdock began a top-to-bottom review of all the components of the Decennial Census, including FDCA. Given the growing problems with FDCA and other possible impacts of building a more automated 2010 Census, we want to be sure there are no other major issues or surprises. As part of that review, for example, we are carefully examining the Census cost estimating assumptions related to such matters as hours worked per enumerator and implications for supervisory and other costs. If necessary, adjustments will be made accordingly.

As part of this broader review, Director Murdock launched the 2010 Census FDCA Risk Reduction Task Force on February 6 after receiving Harris's response to the integrated project team requirements. The task force is headed by a former Acting Director of the Census Bureau, members from various parts of the Census Bureau and the Department of Commerce, and outside consultants from MITRE. The task force was charged with identifying and analyzing options for ensuring the success of FDCA. These options include reexamining the current contract to determine what changes could be made if there was a decision to shift some of the work back to the Census Bureau. The task force will soon present its findings to Director Murdock.

The first phase of the task force's work focused on evaluating risks and options to manage these risks. Harris was not directly involved in this part of the analysis, which is one of the reasons cost estimates are not yet available. Preliminary estimates do suggest the potential for cost overruns for the remaining life-cycle of the Decennial

Census, most occurring in 2010. While I have seen some of the same estimates that you have, we are still in the process of assessing these costs.

At this time, I am able to share the basic conceptual elements of the options being considered. All of these options call for using the handheld computers for Address Canvassing and we are continuing to work to ensure this requirement is met. For the other major components of FDCA each of the options considers a combination of responsibilities between Harris and Census in terms of capabilities, expertise, staffing, timing and costs.

Option 1 - Baseline

The first option is continuing with the current baseline largely as envisioned in the original FDCA project plan and contract. Harris would complete the handheld computers for Address Canvassing and nonresponse follow-up. Harris would also complete the development of the operations control system and the field operations infrastructure. Harris has already developed major parts of the operations control system and has the IT infrastructure and staff to support further testing and development. However, given various issues related to handhelds, we would simultaneously evaluate the feasibility of a paper-based back-up plan for nonresponse follow-up should the next FDCA dress rehearsal not succeed.

Option 2

In the second option, we would shift everything but Address Canvassing back to the Census Bureau including nonresponse follow-up, the operations control system and the field operations infrastructure. The nonreponse follow-up would be paper based and handhelds would not be used for NRFU. Census has extensive experience in conducting paper-based nonresponse follow-ups.

Option 3

The third option would shift nonresponse follow-up and field operations infrastructure to Census, but Harris would continue to develop the operations control system. As noted, Harris has already developed major parts of the operations control system. Again, this option would mean a paper based nonresponse follow-up.

Option 4

Option four would shift only nonresponse follow-up back to Census and Harris would keep responsibility for the operations control system and field operations infrastructure. This option depends on Harris being able to successfully complete both. Again, the nonresponse follow-up would be paper-based.

We are at a very critical juncture and must move fast to evaluate these options and make decisions for moving forward. I am appointing an expert panel to quickly evaluate independently each of the options and report back to me before the end of the month. The expert panel will be composed of 5-7 members, including former Census

Bureau Directors Ken Prewitt and Vince Barabba, former House Speaker Dennis Hastert, and other knowledgeable experts in Census-type operations and large IT systems development programs.

I know you will have many questions, some of which I won't be able to answer today. After the task force and expert panel complete their work and report back to me at the end of the month, we will brief you on our findings at that time.

The American people expect and deserve a correct and thorough census so let me stress that I take very seriously the Constitutional responsibility to conduct an accurate Decennial Census. Over the past month, I have been briefed by the Director and Deputy Director of the Census Bureau, senior management at the Department of Commerce, our Inspector General, representatives of the task force, Harris Corporation, The MITRE Corporation, and GAO. I will stay very active until my last day in office.

I am fully committed, along with Director Murdock, to working in partnership with the Congress. I appreciate, in advance, your support in allowing us to focus on solving these problems, addressing the issues and looking forward.

PREPARED STATEMENT OF
STEVE H. MURDOCK
DIRECTOR
U.S. CENSUS BUREAU

Census in Peril: Getting the 2010 Decennial Back on Track

Before the Committee on Homeland Security and Governmental Affairs
U.S. Senate

5 March 2008

Mr. Chairman and members of the Committee, thank you for this opportunity to come before you to bring you up to date on preparations for the 2010 Decennial Census, and particularly the Field Data Collection Automation Program, what we call FDCA. FDCA is at the heart of the reengineered short-form 2010 Census. Reviewing and evaluating all Decennial Census preparations has been the focus of my Directorship since I was sworn in on January 4, 2008.

When the Census Bureau reengineered the 2010 Census at the beginning of the decade, the plan was threefold: 1) leverage Global Positioning System (GPS) technology to bring into GPS alignment the street center lines and geographic features in our address and mapping database (what we call MAF/TIGER); 2) replace the Decennial Census long form with the American Community Survey (ACS) to provide more timely and accurate household and demographic data; and 3) automate census data collection operations in the short-form 2010 Census.

This was a bold vision, and the Census Bureau has taken great strides toward making it a reality. MAF/TIGER is on schedule for completion in April of this year. This means that census maps and addresses are more accurate than ever before, and operations that depend on them, from censuses and surveys to commercial applications like MapQuest, are better than ever.

The ACS is now fully implemented, and we are mailing forms to 250,000 households per month. The ACS response rate is 97%, and it produces yearly estimates for municipalities of 65,000 and up. In 2008, ACS will be producing multiyear estimates for municipalities of 20,000 and up. As a result, government officials and data users have more accurate and timely data to inform policy and planning decisions. These are important accomplishments that dramatically improve the Census Bureau's ability to fulfill its mission.

As you have just heard from Secretary Gutierrez, most components of the 2010 Decennial Census are proceeding according to plan; however, the Field Data Collection Automation (FDCA) program is facing significant schedule, performance and cost issues.

The FDCA program is designed to supply the information technology infrastructure, support services, hardware and software to support a network for almost 500 local offices and hand-held computers (HHCs) that will be used around the country. It is helpful to think of FDCA as being made up of three fundamental components:

1. Automated data collection using handheld devices both to verify addresses, called Address Canvassing or AdCan, and to collect data during the nonresponse follow-up, known as NRFU, of those households that do not return the census survey;
2. The Operations Control System (OCS) that tracks and manages Decennial Census workflow; and
3. Census Operations Infrastructure which provides office automation and support for Regional and Local Census Offices.

In late November 2007, as a result of concerns raised regarding the ability to meet deadlines and budgets, the Deputy Director of the Census Bureau initiated a comprehensive assessment to determine the status of the program and to better understand any issues or concerns as the program approaches key 2010 Census milestones. This assessment included a series of wide-ranging meetings with Census Bureau staff directly involved in the FDCA program. The Deputy Director also met with Harris Corporation, the company developing the FDCA system, and Mitre Corporation, an information technology firm under contract with the Census Bureau. Mitre's role is to provide an internal, independent assessment of the information technology systems in the decennial programs and also IT systems in the bureau.

This process identified issues that raised concerns about the complete development of all of the operations initially planned for the FDCA system in time for the 2010 Census.

HHC Functionality -- Assessments of the Address Canvassing operation for the 2008 Dress Rehearsal revealed that there were difficulties in obtaining efficient transmission to and from the hand-held computer, resulting in enumerator downtime. In addition, the HHCs did not function well if the number of addresses in the enumerator assignment area was too large.

OCS Requirements -- The sheer volume of requirements, as well as the complexity of the operations that FDCA supports, contribute to problems that are particularly significant in the development of the OCS. Contract deliverables in the Fall indicated that problems remained despite steps taken to clarify and strengthen the process we use to define contract requirements.

Accordingly, the Deputy Director established an Integrated Project Team (IPT) made up of key, high ranking 2010 Census managers. The IPT was tasked with producing the final set of FDCA program requirements by January 16, 2008.

This process was nearing completion when I arrived in early January. When Harris Corporation provided feedback at the end of January, the full scope of our problem came into focus.

As we grappled with this problem, I established a task force, chaired by former Deputy Director William Barron and made up of some of the Census Bureau's and the Department's best people, as well as representatives from MITRE, to help us develop a strategy for moving forward.

The Task force outlines four options for moving forward. All of these options call for using the handheld computers for Address Canvassing and we are continuing to work to ensure this requirement is met. For the other major components of FDCA each of the options considers a combination of responsibilities between Harris and Census in terms of capabilities, expertise, staffing, timing and costs.

Option 1 - Baseline
The first option is continuing with the current baseline largely as envisioned in the original FDCA project plan and contract. Harris would complete the handheld computers for Address Canvassing and nonresponse follow-up. Harris would also complete the development of the operations control system and the field operations infrastructure. Harris has already developed major parts of the operations control system and has the IT infrastructure and staff to support further testing and development. However, given various issues related to handhelds, we would simultaneously evaluate the feasibility of a paper-based back-up plan for nonresponse follow-up should the next FDCA dress rehearsal not succeed.

Option 2
In the second option, we would shift everything but Address Canvassing back to the Census Bureau including nonresponse follow-up, the operations control system and the field operations infrastructure. The nonreponse follow-up would be paper based and handhelds would not be used for NRFU. Census has extensive experience in conducting paper-based nonresponse follow-ups.

Option 3
The third option would shift nonresponse follow-up and field operations infrastructure to Census, but Harris would continue to develop the operations control system. As noted, Harris has already developed major parts of the operations control system. Again, this option would mean a paper based nonresponse follow-up.

Option 4
Option four would shift only nonresponse follow-up back to Census and Harris would keep responsibility for the operations control system and field operations infrastructure. This option depends on Harris being able to successfully complete both. Again, the nonresponse follow-up would be paper-based.

The task force report will provide rough cost estimates and risk assessments for each of these options. Our next step is to analyze the report and provide a recommendation to the Secretary, who is establishing a panel of experts to provide an independent review for him of the report and the appropriate options.

We will work with this Expert Panel to finalize a plan to get the 2010 Census back on track.

Mr. Chairman, I cannot over-emphasize the seriousness of this problem. My colleagues and I recognize that we must move quickly to address this problem, and implement solutions. While we still have an enormous challenge in front of us, I am confident that we are close to defining and implementing a strategy that will ensure a successful 2010 Census.

Thank you for this opportunity. I am happy to answer any of your questions.

United States Government Accountability Office

GAO

Testimony

Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

For Release on Delivery
Expected at 9:30 a.m. EST
Wednesday, March 5, 2008

INFORMATION TECHNOLOGY

Significant Problems of Critical Automation Program Contribute to Risks Facing 2010 Census

Statement of David A. Powner
Director, Information Technology Management Issues

Mathew J. Scirè
Director, Strategic Issues

GAO-08-550T

March 5, 2008

GAO
Accountability · Integrity · Reliability

Highlights

Highlights of GAO-08-550T, a testimony before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

INFORMATION TECHNOLOGY

Significant Problems of Critical Automation Program Contribute to Risks Facing 2010 Census

Why GAO Did This Study

Of the $11 billion total estimated cost of the 2010 Census, the Census Bureau planned (as of 2007) to spend about $3 billion on automation and information technology in order to improve census coverage, accuracy, and efficiency. Among other things, the Bureau is planning to automate many of its planned field data collection activities as a way to reduce costs and improve data quality and operational efficiency. Known as Field Data Collection Automation (FDCA), this initiative is acquiring handheld mobile computing devices that, along with other technology, are undergoing operational testing during a Census "Dress Rehearsal" that is taking place from February 2006 to June 2009. The $600 million FDCA program is a crucial component of the reengineered processes envisioned for the 2010 Census.

In March 2006, GAO reported on the management capabilities of the FDCA program, and in October 2007, it reported on FDCA's status and plans. As requested, this testimony summarizes key findings from these two reports, as well as subsequent Bureau actions.

What GAO Recommends

In its reports, GAO made several recommendations to improve acquisition management capabilities, including approving baseline requirements for FDCA and strengthening risk management. The Bureau generally agreed with them, but it has not yet fully implemented these and other recommendations.

To view the full product, including the scope and methodology, click on GAO-08-550T. For more information, contact David A. Powner, 202-512-9286, pownerd@gao.gov, or Mathew Scire, 202-512-6806, sciremj@gao.gov.

What GAO Found

In March 2006, GAO reported that the FDCA project office had not implemented the full set of acquisition management capabilities (such as project and acquisition planning and requirements development and management) that were needed to effectively manage the program. For example, although the project office had developed baseline functional requirements for the acquisition, the Bureau had not yet validated and approved them. Valid baseline requirements are crucial for success, because they are the basis for the detailed operational requirements that determine system development. Without well-defined requirements, system acquisitions are at risk of cost increases, schedule delays, or performance shortfalls. Accordingly, GAO recommended that the Bureau validate and approve baseline requirements for FDCA.

In October 2007, GAO reported that changes to requirements had been a contributing factor to both cost increases and schedule delays experienced by the FDCA program. Increases in the number of requirements led to the need for additional work and staffing. In addition, an initial underestimate of the contract costs caused both cost and schedule revisions. In response to the cost and schedule changes, the Bureau decided to delay certain system functionality, which increased the likelihood that the systems testing at the Dress Rehearsal would not be as comprehensive as planned. In addition, despite reports from Census field staff during spring Dress Rehearsal operations that data transmissions from handheld mobile computing devices were slow and inconsistent, the project team did not adequately identify performance issues with these devices as a risk. The magnitude of the performance difficulties was not clear, and the Bureau had not fully specified how it planned to measure the devices' performance, as GAO had recommended. Without effective management of these and other key risks, the FDCA program faced an increased probability that the system would not be delivered on schedule and within budget or perform as expected. Accordingly, GAO recommended that the FDCA project team strengthen its risk management activities, including risk identification and oversight.

The Bureau has recently made efforts to further define the requirements for the FDCA program, and it has estimated that the revised requirements will result in significant cost increases. Rough estimates shared with the Congress and the Administration range from $600 million to $2 billion; however, specific programs and operations affected have not been identified, nor has the Bureau decided on a clear approach to address these issues. In view of the time frames for the 2010 Census, it is essential that the Bureau act rapidly to make decisions and to implement GAO's recommendations.

March 5, 2008

GAO
Accountability·Integrity·Reliability

Highlights

Highlights of GAO-08-550T, a testimony before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

2010 CENSUS

Automation Problems and Uncertain Costs and Plans May Jeopardize the Success of the Decennial and Warrant Immediate Attention

Why GAO Assigns High Risk

GAO audits and evaluations identify federal programs and operations that are high risk due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement. Increasingly, GAO also is identifying high-risk areas to focus on the need for broad-based transformations to address major economy, efficiency, or effectiveness challenges. In January 2007, GAO presented the 110th Congress with the latest status of existing and new high-risk areas warranting attention by both the Congress and the administration. Lasting solutions to high-risk problems could save billions of dollars, dramatically improve service to the public, strengthen confidence and trust in the performance and accountability of the U.S. government, and ensure the ability of government to deliver on its promises. The decennial census is a Constitutionally-mandated activity that produces critical data used to apportion congressional seats and allocate billions of dollars in federal assistance.

What GAO Recommends

In its reports, GAO has recommended that the Bureau improve acquisition management capabilities, operational planning, cost estimation, and performance measurement. The Bureau agreed with most of these recommendations, but has not fully implemented them.

To view the full product, including the scope and methodology, click on GAO-08-550T. For more information, contact Mathew Scire, 202-512-6806, sciremj@gao.gov or David A. Powner, 202-512-9286, pownerd@gao.gov.

Designation as High Risk

Today GAO is designating the 2010 Census as a high-risk area. The Decennial Census is at a critical stage in the 2008 Dress Rehearsal, in which the Bureau has the opportunity to test, for the last time under census-like conditions, its plans for 2010. GAO's work and Census have highlighted a number of long-standing and emerging challenges facing the 2010 Census. Because the census is one of the foundations for many government decisions, threats to a timely and reliable census can affect the public's confidence in government.

GAO has reported long-standing weaknesses in the Bureau's management of information technology. To control costs and improve accuracy, the Bureau is relying as never before on contractor provided technology, including the use of handheld mobile computing devices. In October 2007, GAO concluded that without effective management of key risks, the Field Data Collection Automation (FDCA) program responsible for the devices faced an increased probability that the system would not be delivered on schedule and within budget or perform as expected. GAO recommended that the Bureau strengthen its system testing and risk management activities. Today the Bureau and its contractor are finalizing the FDCA program and have not yet agreed on requirements for FDCA, and system interface testing has been delayed. In the spring of 2007, the Bureau tested the device under census-like conditions for the first time as part of its address canvassing dress rehearsal. Field staff reported technical problems with the handheld devices. The magnitude of these problems is not clear and the Bureau still has not fully specified how it will measure the performance of the handheld devices, as GAO recommended. In addition, the Bureau has not performed recommended analysis or provided sufficient information to provide a level of confidence in its $11.5 billion life-cycle cost estimate of the decennial census. The Bureau has not itemized the estimated costs of each component operation, conducted sensitivity analysis on cost drivers, or provided an explanation of significant changes in the assumptions on which these costs are based. More recently, the Bureau has delayed the dress rehearsal and dropped several operations. Together, these weaknesses and actions raise serious questions about the Bureau's preparations for conducting the 2010 Census.

In 2005 GAO highlighted the 2010 Census as an emerging area for possible high-risk designation. GAO has recommended numerous corrective actions to address the risks associated with the 2010 Census, but many of them have not been implemented. GAO recommended that the Bureau (1) strengthen its systems testing and risk management activities, (2) define specific measurable performance requirements for the handheld mobile computing device, and (3) develop an integrated and comprehensive plan to control its costs and manage operations.

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to participate in today's hearing to discuss our past work on the Field Data Collection Automation (FDCA) program—a key information technology acquisition that includes systems, equipment, and infrastructure for field staff to use in collecting census data for the 2010 Decennial Census. As you know, the decennial census is mandated by the U.S. Constitution and provides data that are vital to the nation. These data are used to apportion the seats of the U.S. House of Representatives; realign the boundaries of the legislative districts of each state; allocate billions of dollars in federal financial assistance; and provide social, demographic, and economic profiles of the nation's people to guide policy decisions at each level of government.

Carrying out the census is the responsibility of the Department of Commerce's Census Bureau, which is now preparing for the 2010 Census. The next decennial census date is April 1, 2010, and the Secretary of Commerce is required to report to the President the tabulation of total population by states by December 31.[1]

The Bureau plans to rely on automation and technology to improve the coverage, accuracy, and efficiency of the 2010 Census. The Bureau estimated that its information technology (IT) acquisitions would account for about $3 billion of the currently estimated total $11.5 billion cost of the entire census. It is also holding what it refers to as a Dress Rehearsal, a period centering around a mock Census Day on May 1, 2008. Planned Dress Rehearsal activities include operational testing of the 2010 Census systems in a census-like environment.

The Census Bureau has recently indicated that the FDCA program is likely to incur significant cost overruns. As requested, our testimony today will summarize our past reports on the FDCA program,[2]

[1]13 U.S.C. §§141(a) and (b).

[2]GAO, *Census Bureau: Important Activities for Improving Management of Key 2010 Decennial Acquisitions Remain to be Done*, GAO-06-444T (Washington, D.C.: Mar. 1, 2006) and *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems*, GAO-08-79 (Washington, D.C.: Oct. 5, 2007).

including our observations on the performance of the FDCA handheld mobile computing devices, which were used during the April 2007 address canvassing activities for the Dress Rehearsal, as well as subsequent Bureau actions. In addition, we will discuss our designation of the 2010 Census as a high-risk program.

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

Results in Brief

We have previously reported on weaknesses in FDCA's IT acquisition management activities.

- In March 2006, we reported that the FDCA project office had not implemented the full set of acquisition management capabilities (such as project and acquisition planning, and requirements development and management) that were needed to effectively manage the program.[3] Specifically, the FDCA project had completed most of its solicitation activities, but activities in other management areas had been initiated but not completed. Further, although the project office had developed baseline functional requirements for the acquisition, the Bureau had not yet validated and approved them. Valid baseline requirements are crucial for success, because they are the basis for the detailed operational requirements that determine system development. Without well-defined requirements, system acquisitions are at risk of cost increases, schedule delays, or performance shortfalls. Finally, the project office had identified risks, but it had not yet implemented a risk management process.

[3]We also reported on the Decennial Response Integration System, which is to provide a system for collecting and integrating census responses from all sources, including forms, telephone interviews, and handheld computing devices in the field.

Until these and other basic management activities were fully implemented, the project faced increased risks that the system would experience cost overruns, schedule delays, and performance shortfalls. We made recommendations to the Director of the Census Bureau to ensure that the project office completed key activities needed to effectively manage its acquisitions, including activities associated with effective requirements management.

- In October 2007, we reported that changes to requirements had been a contributing factor to both schedule delays and cost increases experienced by the FDCA program.[4] The schedule had been revised—resulting in delays in system development and testing of interfaces—and the life-cycle cost estimates for this program had increased to $647 million, with additional cost increases anticipated. According to the contractor, the overrun was due primarily to an increase in the number of system requirements. We also reported that the FDCA project team had not adequately identified risks associated with performance issues experienced by handheld mobile computing devices. In May and June 2007, both we and the Census Bureau had observed the use of the handheld mobile computing device in Census-like conditions, which revealed a number of performance issues with the devices, such as slow and inconsistent data processing. The magnitude of these performance issues was not clear. If the project team did not implement key risk management activities, it would face an increased probability that the system would not be delivered on schedule and within budget or perform as expected. To help ensure that the program operates as intended, we recommended that the project team strengthen risk management activities, including those associated with risk identification, mitigation, and oversight. In written comments on a draft of both reports, the department generally agreed with our recommendations for the FDCA project.

The Bureau has recently made efforts to further define the requirements for the FDCA program, and it has estimated that the revised requirements will result in significant cost increases. Rough

[4]GAO-08-79.

estimates that have been shared with the Congress and the Administration range from $600 million to $2 billion; however, specific programs and operations affected have not been identified, nor has the Bureau decided on a clear approach to address these issues. In view of the timeframes for the 2010 Census, it is essential that the Bureau act rapidly to make decisions and to implement our previous recommendations.

In 2005 we highlighted the 2010 Census as an emerging area for possible high-risk designation. In addition to the recommendations discussed above, we have recommended other corrective actions to address the risks associated with the 2010 Census, but many of these have not yet been fully implemented. Among these are recommendations that the Bureau strengthen its systems testing, define specific measurable performance requirements for the handheld mobile computing device, and develop an integrated and comprehensive plan to control its costs and manage operations.[5] More recently, the Bureau has delayed the Dress Rehearsal and dropped several operations, some of which are designed to reach historically undercounted populations and measure census coverage. Together, these concerns raise serious questions about the Bureau's preparations for conducting the 2010 Census. Because the census is one of the foundations for many government decisions, threats to a timely and reliable census can affect the public's confidence in government. We are, therefore, today designating the 2010 Census as high risk.

Background

Conducting the decennial census is a major undertaking involving many interrelated steps, including

- identifying and correcting addresses for all known living quarters in the United States (known as "address canvassing");

[5]GAO, *2010 Census: Cost and Design Issues Need to be Addressed Soon*, GAO-04-37 (Washington, D.C.: Jan 15, 2004) and *2010 Census: Basic Design Has Potential But Remaining Challenges Need Prompt Resolution*, GAO-05-9 (Washington, D.C. : Jan. 12, 2005).

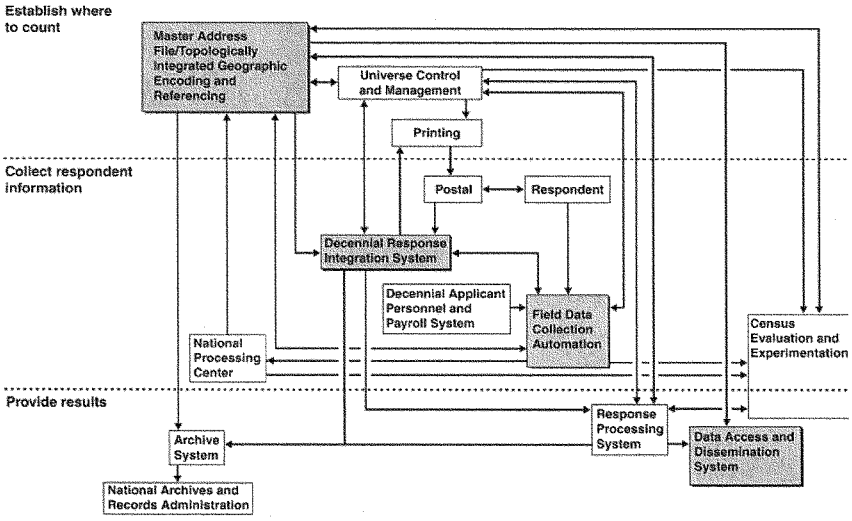
- sending questionnaires to housing units;
- following up with nonrespondents through personal interviews;
- identifying people with nontraditional living arrangements;
- managing a voluminous workforce responsible for follow-up activities;
- collecting census data by means of questionnaires, calls, and personal interviews;
- tabulating and summarizing census data; and
- disseminating census analytical results to the public.

The decennial census program is the responsibility of the bureau's Decennial Census organization, which is made up of several divisions and offices. In particular, the Decennial Management Division is responsible for implementing the decennial census. The Decennial Systems and Contracts Management Office manages selected system contracts supporting the decennial census including FDCA.

FDCA Plays Crucial Role in the Decennial Census

The Bureau estimated that it would spend about $3 billion on automation and IT for the 2010 Census to improve coverage, accuracy, and efficiency. Figure 1 shows the key systems and interfaces supporting the 2010 Census.

Figure 1: Key 2010 Census Systems and Interfaces



Source: U.S. Census Bureau.

Note: Shaded boxes indicate major IT decennial systems.

To collect respondent information (a process depicted in the middle section of fig. 1), the Bureau is pursuing the FDCA program. FDCA is expected to provide automation support for field data collection operations, as well as reduce costs and improve data quality and operational efficiency. As the figure shows, the FDCA technology is central to the reengineered processes that are envisioned for the 2010 Census. The acquisition includes the systems, equipment, and infrastructure that field staff will use to collect census data,

including handheld mobile computing devices.[6] The program is expected to provide office automation for regional and local census offices; the telecommunications infrastructure for headquarters, regional, and local offices; and mobile computing devices for field workers.

The bureau plans to have field-based enumerators use nearly 500,000 mobile computing devices to support decennial census field operations. Enumerators from local census offices will use these mobile computing devices to complete activities including address canvassing (visiting households to update address lists and collect global positioning coordinates to update maps) and conducting nonresponse follow-up (visiting households to obtain information from households that do not provide responses via mail, Internet, or phone).[7]

In preparation for the 2010 Census, the Bureau plans a series of tests of its (new and existing) operations and systems in different environments, as well as to conduct what it refers to as the Dress Rehearsal. During the Dress Rehearsal period, which runs from February 2006 through June 2009, the Bureau plans to conduct development and testing of systems, run a mock Census Day, and prepare for Census 2010, which will include opening offices and hiring staff. These Dress Rehearsal activities are to provide an operational test of the available system functionalities in a census-like environment, as well as other operational and procedural activities.

[6]Handheld mobile computing devices will be used to update the Bureau's address list, to perform follow-up at addresses for which no questionnaire was returned, and to perform activities to measure census coverage.

[7]Further details of mobile computing devices are provided in GAO, *2010 Census: Planning and Testing Activities Are Making Progress*, GAO-06-465T (Washington, D.C.: Mar. 1, 2006).

Previously Reported Weaknesses in Acquisition Management Activities Increase Risks to Census

In previous reports, we have described weaknesses in FDCA's IT acquisition management activities that pose serious risks to the success of the 2010 Census. In March 2006, we testified that the FDCA project office had not implemented the full set of acquisition management capabilities that were needed to effectively manage the program; we noted in particular that although baseline functional requirements had been developed, they had not been validated and approved.[8] Subsequently, in October 2007, we reported that changes to requirements had been a contributing factor to both schedule delays and cost increases experienced by the FDCA program.[9] Further, although the FDCA project team had performed many practices associated with establishing sound and capable risk management processes, critical weaknesses remained. For example, despite reports of performance issues with handheld mobile computing devices, the project team did not adequately identify these as a risk.

The FDCA Program Had Not Initiated Key Management Activities

In March 2006, we reported that the FDCA project office had initiated many key processes to oversee and manage the program, but had not yet implemented the full set of acquisition management capabilities it needed to fully manage the acquisition. Table 1 provides a summary of the status of the FDCA project in each of the process areas we evaluated.

[8]GAO-06-444T.

[9]GAO-08-79.

Table 1: Summary of the Status of FDCA Acquisition Management Capabilities as of March 2006

Capability	Status
Project and acquisition planning	Initiated, but key activities remained to be completed, such as identifying deliverables and milestones, and obtaining stakeholder buy-in on a project plan that included the project's estimated costs, budget, and schedules.
Solicitation	Key activities completed; bureau officials said that they were on schedule to award the contract in March 2006.
Requirements development and management	Initiated, but key activities remained to be completed, such as validating requirements.
Risk management	Initiated, but key activities remained to be performed, such as assigning responsibilities for risks and preparing mitigation plans.
Contract tracking and oversight/project monitoring and control	Initiated, but key performance measures had not yet been established; bureau officials said that they expected to define these metrics after contract award.
Process and product quality assurance	Initiated; the quality assurance process was expected to be implemented after contract award.
Executive oversight/governance	Initiated, but key governance activities remained to be completed.

Source: GAO analysis

The FDCA project office had made some progress in building management capabilities, but more remained to be done in key areas. For example, the project office completed many key solicitation activities and planned to award a contract in March 2006. In the requirements development and management area, the project office and the Decennial Management Division developed some FDCA-specific functional requirements with participation from stakeholders. The office had also drafted a requirements management plan. However, the division had not yet validated and approved a baseline set of operational requirements nor ensured traceability between its operational requirements and the FDCA request for proposals. Until the bureau finalized its operational requirements for the census and ensured that the FDCA request for proposal was consistent with the baseline requirements, the project would be at risk of having changes to the requirements, potentially affecting its ambitious development and implementation schedule.

Additionally, in the contract and project monitoring area, the project office had initiated efforts to oversee the contractor's performance, such as requiring earned value management reporting and hiring

staff with contract tracking and oversight experience. However, the project office had not yet selected detailed performance measures for tracking the contractor or its own internal progress (such as progress against planned milestones, number of risks opened and closed, number and frequency of changes to requirements, and frequency of quality assurance reviews). Without such practices in place, the project team would not be able to ensure that it could identify problems and take appropriate corrective actions in a timely manner.

We said that sound acquisition and management processes were needed to minimize risks and thereby maximize chances for success. Such processes have been identified and endorsed by such leading organizations as the Software Engineering Institute and the Chief Information Officers' Council, as well as in our prior work analyzing best practices in industry and government. Our work has shown that such processes are significant factors in successful systems acquisitions and development programs, and they improve the likelihood of meeting cost and schedule estimates as well as performance.

To ensure that the bureau adequately managed the FDCA project, we recommended that the Director of the Census Bureau direct the project office to take four actions, including validating and approving baseline requirements. The Bureau generally agreed with our recommendations and stated that time constraints and budgets had driven it to proceed with its acquisitions before all the recommended activities had been completed.

The FDCA Program Had Delayed Functionality and Was Experiencing Cost Increases

As of October 2007, we reported that FDCA had experienced schedule delays and cost increases. Specifically, the life cycle cost estimates for this program had increased to $647 million, and additional cost increases were anticipated. In response to schedule delays as well as other factors, including cost, the Bureau made schedule adjustments and planned to delay certain system functionality. As a result of the FDCA schedule changes, the likelihood had increased that the systems testing at the Dress Rehearsal would not be as comprehensive as planned.

In October 2007, we reported that the contractor was in the process of developing and testing FDCA software for the Dress Rehearsal Census Day, and had delivered 1,388 handheld mobile computing devices to be used in address canvassing[10] for the Dress Rehearsal. Also, key FDCA support infrastructure had been installed, including the Security Operation Center. In future contract phases, the project was to continue development, deploy systems and hardware, support census operations, and perform operational and contract closeout activities.

However, the Bureau revised FDCA's original schedule and delayed or eliminated some of its key functionality from the Dress Rehearsal, including the automated software distribution system. According to the Bureau, it revised the schedule because it realized that it had underestimated the costs for the early stages of the contract, and that it could not meet the contractor's estimated level of first-year funding because the fiscal year 2006 budget was already in place. According to the Bureau, this initial underestimate led to schedule changes and overall cost increases.

In particular, the project life-cycle costs had increased. At contract award in March 2006, the total cost of FDCA was estimated not to exceed $596 million. As of September 2006, the cost estimate had increased to $624 million. In May 2007, the life-cycle cost rose by a further $23 million because of increasing system requirements, which resulted in an estimated life-cycle cost of about $647 million. Table 2 shows the life-cycle cost estimates for FDCA as of October 2007.

[10]Address canvassing is a field operation to build a complete and accurate address list. In this operation, census field workers go door to door verifying and correcting addresses for all households and street features contained on decennial maps.

Table 2: FDCA Life-Cycle Cost Estimates as of October 2007

			Cost estimates (in millions)	
Execution period	**Start date**	**End date**	**September 2006**	**May 2007**
Baseline planning period	March 31, 2006	June 30, 2006	$11	$11
Execution Period 1	July 1, 2006	December 31, 2008	200	225
Execution Period 2	January 1, 2009	September 30, 2011	319	318
Execution Period 3	August 1, 2010	End of contract	10	10
Leased equipment	N/A	N/A	12	12
Management reserve	N/A	N/A	7	5
Award fee	N/A	N/A	65	65
Total			**$624**	**$647**

Source: GAO analysis of Census Bureau data

Note: Total may not add due to rounding.

In addition, FDCA had already experienced $6 million in cost overruns, and both our analysis and the contractor's analysis expected FDCA to experience additional cost overruns. Based on our analysis of cost performance reports (from July 2006 to May 2007), we projected that the FDCA project would experience further cost overruns by December 2008.

According to the contractor, the major cause of projected cost overruns was the system requirements definition process. For example, in December 2006, the contractor noted a significant increase in the requirements for the Dress Rehearsal Paper Based Operations in Execution Period 1. According to the cost performance reports, this increase meant that more work had to be conducted and more staffing assigned to meet the Dress Rehearsal schedule.

The Bureau agreed that cost increases occurred in some cases because of the addition of new requirements, most of which related to the security of IT systems, but added that in other cases, increases occurred from the process of the contractor converting high-level functional requirements into more detailed specific requirements. However, the process of developing detailed requirements from high-level functional requirements does not

inevitably lead to cost increases if the functional requirements were initially well-defined.

We reported that the FDCA schedule changes had increased the likelihood that the systems testing at the Dress Rehearsal would not be as comprehensive as planned. The inability to perform comprehensive operational testing of all interrelated systems increases the risk that further cost overruns will occur and that decennial systems will experience performance shortfalls.

The FDCA Project Team Was Making Progress in Risk Management Activities, but Critical Weaknesses Remained

According to the Software Engineering Institute (SEI), the purpose of risk management is to identify potential problems before they occur. When problems are identified, risk-handling activities can be planned and invoked as needed across the life of a project in order to mitigate adverse impacts on objectives. Effective risk management involves early and aggressive risk identification through the collaboration and involvement of relevant stakeholders. Based on SEI's Capability Maturity Model® Integration (CMMI®), risk management activities can be divided into four key areas:

- preparing for risk management,
- identifying and analyzing risks,
- mitigating risks, and
- executive oversight.

The discipline of risk management is important to help ensure that projects are delivered on time, within budget, and with the promised functionality. It is especially important for the 2010 Census, given the established timeframe.

In October 2007, we reported that the FDCA project had made progress in implementing risk management practices, but some weaknesses remained. For example, the project team had developed strategies to identify the scope of the risk management effort. However, the project team had weaknesses in identifying risks,

establishing adequate mitigation plans, and reporting risk status to executive-level officials. These weaknesses in completing key risk management activities can be attributed in part to the absence of Bureau policies for managing major acquisitions, as we described in earlier reports.[11] Without effective risk management practices, the likelihood of project success is decreased.

Weaknesses in identifying risks. As of July 2007, the FDCA project team had not identified or documented any significant risks related to the handheld computers that will be used in the 2010 Census, despite problems arising during the Dress Rehearsal. The computers are designed to automate operations for field staff and eliminate the need to print millions of paper questionnaires and maps used by temporary field staff to conduct address canvassing and nonresponse follow-up. Automating operations may allow the Bureau to reduce the cost of operations; thus, it is critical that the risks surrounding the use of the handheld computers be closely monitored and effectively managed to ensure their success.

However, the Bureau had not identified or documented risks associated with a variety of handheld computers' performance problems that we identified through field work.[12] Specifically, we found that during Dress Rehearsal activities between May 2007 and June 2007, as the Bureau tested a prototype of the handheld computers, field staff experienced multiple problems. For example, the field staff told us that they experienced slow and inconsistent data transmissions from the handheld computers to the central data processing center. The field staff reported that the device was slow to process addresses that were a part of a large assignment area.[13]

[11]GAO, *Information Technology Management: Census Bureau Has Implemented Many Key Practices, but Additional Actions Are Needed*, GAO-05-661 (Washington, D.C.: June 16, 2005) and *Census Bureau: Important Activities for Improving Management of Key 2010 Decennial Acquisitions Remain to be Done*, GAO-06-444T (Washington, D.C.: Mar. 1, 2006).

[12]We testified on the preliminary results from this field work, as well as the results of our October report, in GAO, *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems*, GAO-08-259T (Washington, D.C.: Dec. 11, 2007).

[13]A small geographic area, usually a block or group of blocks, established by the Census Bureau as a basic unit for data collection by a single enumerator, lister, or other field staff.

Bureau staff reported similar problems with the handheld computers in observation reports, help desk calls, and debriefing reports. In addition, a time and motion study conducted by the Census Bureau indicated that field staff reported significant downtime in two test locations—about 23 percent in one location and about 27 percent in another location. The study also described occurrences of failed transmissions and field staff attempts to resolve transmission problems.

Collectively, the observation reports, help desk calls, debriefing reports, and time-and-motion study raised serious questions about the performance of the handheld computers during the address canvassing operation. According to the Bureau, the contractor used these indicators to identify and address underlying problems during the Dress Rehearsal. Still, the magnitude of the handheld computers' performance issues throughout the Dress Rehearsal was not clear. For example, the Bureau received analyses from the contractor on average transmission times. However, the contractor had not provided analyses that show the full range of transmission times, nor how this might have changed throughout the whole operation.

In addition, the Bureau has not fully specified how it will measure performance of the handheld computers, even though the FDCA contract anticipates the Bureau's need for data on the performance of the handheld computers. The FDCA program outlines the type of data the contractor is to provide the Bureau on the performance of the handheld computers. Specifically, sections of the FDCA contract require the handheld computers to have a transmission log showing what was transmitted, the date, time, user, destination, content/data type, and the outcome status. Another section of the Bureau's FDCA contract states that the FDCA contractor shall provide near real time reporting and monitoring of performance metrics and a "control panel/dash board" application to visually report those metrics from any Internet-enabled computer. However, the contractor and the Bureau are not using a dashboard for Dress Rehearsal activities. Rather, during the Dress Rehearsal, the Bureau plans to identify what data and performance it would need for tracking the performance of the handheld computers in 2010 operations.

In order for the Bureau to ensure that the FDCA handheld computers are ready for full scale operations, it will have to be able to measure performance. We recommended in a report on the Bureau's earlier version of the handheld computers that the Bureau define specific, measurable performance requirements for the handheld computer and other census-taking activities that address such important measures as productivity, cost savings, reliability, and durability, and that the Bureau test the device's ability to meet those requirements in 2006.[14] We also recommended in a March 2006 testimony that the Bureau validate and approve FDCA baseline requirements.[15] To get these things done, the Bureau must work within a time frame that has now been compressed. By law, the decennial census date is April 1, 2010, and the results must be submitted to the President in December 2010. Access to real-time performance metrics via a "control panel/dash board" would assist Bureau management in assessing the handheld computer's performance and maximize the amount of time the Bureau and the contractor would have to remedy any problems that are identified during any operations.

Further, the Bureau's tight 2010 decennial operations schedule allows little time for fixing problems with the device, raising the importance of the Bureau's access to these performance indicators. Such data would help fully inform stakeholders of the risks associated with the handheld computer and allow project teams to develop mitigation activities to help avoid, reduce, and control the probability of these risks occurring.

Finally, the FDCA project team did not provide evidence that specific system interface risks were being adequately identified to ensure that risk handling activities would be invoked should the systems fail during the 2010 Census. If risks are not adequately identified and analyzed, management may be prevented from monitoring and tracking risks and taking the appropriate mitigation

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

[15]GAO-06-444T.

actions, increasing the probability that the risks will materialize and magnifying the extent of damage incurred in such an event.

Weaknesses in establishing adequate mitigation plans. The FDCA project team had developed mitigation plans that were often untimely or included incomplete activities and milestones for addressing the risks. For example, the FDCA project team had developed mitigation plans for the most significant risks, but the plans did not always identify milestones for implementing mitigation activities. Moreover, the plans did not identify any commitment of resources, several did not establish a period of performance, and the team did not always update the plans with the latest information on the status of the risk. In addition, the FDCA project team did not provide evidence of developing mitigation plans to handle the other significant risks as described in its risk mitigation strategy. (These risks included a lack of consistency in requirements definition and insufficient FDCA project office staffing levels).

Further, the project team did not always implement the mitigation plans as appropriate. For example, the project team did not identify system interface risks nor prepare adequate mitigation plans to ensure that systems would operate as intended. Because they did not develop complete mitigation plans, the project team could not ensure that for a given risk, techniques and methods would be invoked to avoid, reduce, and control the probability of occurrence.

Weaknesses in reporting risk status to executive-level officials. Reviews of the project teams' risk management activities, status, and results should be held on a periodic and event-driven basis. The reviews should include appropriate levels of management, such as key Bureau executives, who can provide visibility into the potential for project risk exposure and appropriate corrective actions. The FDCA project team did not provide sufficient evidence to document that the status of risks was discussed with executive-level officials or what the discussions covered. Failure to report a project's risks to executive-level officials reduces the visibility of risks to executives who should be playing a role in mitigating them.

To strengthen the FDCA program risk management activities, we recommended that the Director of the Census Bureau ensure that

the project teams, including FDCA, implement actions to address weaknesses in risk management. The Bureau generally agreed with our recommendations, but disagreed with our assessment with regard to risk identification, pointing out that the FDCA project identified risks associated with handheld mobile computing devices and assigned responsibility to the contractors. In addition, the Bureau said that it had identified risks related to system interfaces. However, the project did not identify significant risks for the project office to monitor and track related to problems arising during the address canvassing component of the Dress Rehearsal. Also, although this project identified a general risk related to system interfaces, it did not identify specific risks related to particular interfaces.

In June 2007, an independent assessment of the FDCA program reported on requirements management problems similar to those we reported in March 2006. Specifically, the study reported that the contractor is overwhelmed by a substantial increase in requirements, having thousands of unreconciled (that is, not validated) requirements. According to the study, reconciliation of requirements was impeded by many factors, including the number of requirements and lack of agreement among stakeholders on what to include in requirements. Similar to our recommendation in the March 2006 report, the study recommended that the Bureau immediately stabilize requirements by defining and refining them.

The Bureau has recently made efforts to further define the requirements for the FDCA program, and it has estimated that the revised requirements will result in significant cost increases. Rough estimates that have been shared with the Congress and the Administration range from $600 million to $2 billion; however, specific programs and operations affected have not been identified, nor has the Bureau decided on a clear approach to address these issues.

2010 Census Is at Risk

The Decennial Census is at a critical stage in the 2008 Dress Rehearsal, in which the Bureau has the opportunity to test, for the

last time, its plans for 2010. Our work, over the years, and the Bureau itself have highlighted a number of challenges facing the 2010 Census. These include (as discussed above) weaknesses in the Bureau's IT acquisition management capabilities and risks associated with the performance of the handheld mobile computing device. In addition to these challenges, concerns have been raised in two other areas: the uncertainty over the ultimate cost of the 2010 Census and the elimination of several operations from the 2008 Dress Rehearsal:

- The Bureau has not performed the analysis or provided sufficient information to provide a level of confidence in its $11.5 billion life-cycle cost estimate of the decennial census. The Bureau has not itemized the estimated costs of each component operation, conducted a sensitivity analysis on cost drivers, or provided an explanation of significant changes in the assumptions on which these costs are based.

- The Dress Rehearsal, designed to be a dry run of the census, is the Bureau's last opportunity to ensure that all the various operations and systems are in sync before the 2010 Census. However, the Bureau has delayed the dress rehearsal and dropped several operations, including operations that are designed to reach populations that are typically undercounted, measure census coverage, and enumerate people living in rural areas. Although the Bureau has carried out these operations before, in some cases they now involve new procedures and system interfaces that, as a result of their exclusion, will not be tested under census-like conditions. Further, end-to-end testing of the various IT systems will not be performed under census-like conditions because such testing will not occur during the Dress Rehearsal.

Given its size and complexity, the Census presents significant risks, and implementing our recommendations would help the Bureau effectively manage the myriad interrelated operations needed to ensure an accurate and complete count in 2010. The success of this effort is put in jeopardy by the risks discussed above. Managing these risks is critical to the timely completion of a reliable and cost-effective census.

We have recommended numerous corrective actions to address the risks associated with the 2010 Census, but many of them have not been implemented. Besides those already discussed, in January 2004 we made recommendations that the Bureau control the costs of the census and develop an integrated and comprehensive plan to manage operations.[16] Specifically, to understand and manage the assumptions that drive the cost of the Decennial Census, we asked the Bureau to annually update the cost of the 2010 Census and conduct sensitivity analysis on the $11.5 billion estimate. However, while the Bureau understands the utility of sensitivity analysis, it has not conducted such analysis. To effectively manage operations, we recommended that the Bureau develop a comprehensive, integrated project plan for the 2010 Census. In response, the Bureau developed a 2010 Census Operations and Systems Plan. This document includes inputs and outputs and describes linkages among operations and systems. However, it does not yet include a risk mitigation plan, a detailed 2010 Census timeline, and the cost for each operation.

In 2005, we highlighted the 2010 Census as an emerging area to be monitored for possible high-risk designation, and in 2006, we listed it as a key oversight issue for the 110th Congress.[17] To determine whether the 2010 Census is high risk, we have considered a set of quantitative and qualitative factors.[18] Those factors relevant to the 2010 Census include whether the investment is large, exceeding $1 billion; whether the risk is detrimental to service delivery and citizens' rights; and whether the risk could result in unreliable decision-making data and a reduced confidence in government. Based on our work, the 2010 Census meets those criteria. As noted above, the decennial census is a large investment, and there is a potential risk for an incomplete or inaccurate census, which would be detrimental to the administration of federal financial assistance

[16]GAO, *2010 Census: Cost and Design Issues Need to Be Addressed Soon*, GAO-04-37 (Washington, D.C.: Jan. 15, 2004).

[17]GAO, *Suggested Areas for Oversight for the 110th Congress*, GAO-07-235R (Washington, D.C.: November 2006).

[18]GAO, *Determining Performance and Accountability Challenges and High Risks*, GAO-01-159SP (Washington, D.C.: November 2007).

for government programs and to the enforcement, for example, of citizens' rights under the Voting Rights Act. Furthermore, because the census is a foundation for elected government, threats to a timely and reliable census can affect the public's confidence in government. We are therefore designating the 2010 Census as high risk.

In summary, the FDCA program was expected to support the goal of a reengineered 2010 Decennial Census to reduce costs and improve data quality and operational efficiency. Because the Bureau did not validate and approve the FDCA program requirements, it faces a crisis, including increased costs and schedule delays. In this emergency, the Bureau will have to make quick decisions to ensure that the project can achieve its purpose. Continued attention by this Committee, Commerce, the Bureau, us, and others will be essential to helping ensure a cost-effective and efficient 2010 census.

Mr. Chairman and members of the committee, this concludes our statement. We would be happy to respond to any questions that you or members of the committee may have at this time.

Contacts and Staff Acknowledgments

If you have any questions on matters discussed in this testimony, please contact David A. Powner at (202) 512-9286 or Mathew Scirè at (202) 512-6806 or by e-mail at pownerd@gao.gov or sciremj@gao.gov. Other key contributors to this testimony include Mathew Bader, Thomas Beall, Barbara Collier, Jeffrey DeMarco, Elizabeth Hosler, Richard Hung, Franklin Jackson, Barbara Lancaster, Andrea Levine, Signora May, Lisa Pearson, Cynthia Scott, Niti Tandon, Jonathan Ticehurst, and Timothy Wexler.

Statement of U.S. Secretary of Commerce Carlos M. Gutierrez
Before the United States Senate Committee on
Homeland Security and Governmental Affairs
Tuesday, April 15, 2008

Thank you for the opportunity to come before you today to discuss the Census Bureau and the status of the 2010 Census. The goals of the Department of Commerce are far reaching, from increasing American competitiveness to growing American exports and protecting America's environment. Measuring American life is also a mission-critical objective, which comes into sharper focus every 10 years with the decennial census.

As you know, the Census Bureau is part of the Department's Economics and Statistics Administration. The 2010 Census is one of the highest priorities and most important responsibilities of the Department.

Today, I am here to update you on the progress we have made toward addressing some of the challenges currently facing the 2010 Census and to seek the Committee's support in ensuring that it is successful. The American people expect and deserve a timely and accurate decennial census, and we at the Department are working assiduously to ensure they get it.

The 2010 Census
First, I thought it might be helpful to review briefly how the Census field operations work.

Since last October, the Local Update of Census Addresses, or LUCA, has been underway. This program provides state, local and tribal governments with an opportunity to review their address lists. The Census Bureau will then verify and update its address list in the Address Canvassing operation, which will begin in mid-April 2009.

In mid-March 2010, the Census Bureau will mail a census form to every address on the list, with the expectation that a large number (60 to 70 percent) will respond. A second, follow-up mailing will be sent out on April 10, 2010, to those who have not responded. As you know, it is vital that people respond by mail, as this will help save the government significant costs.

The intense fieldwork starts in the Non-Response Follow-Up, or NRFU, which begins in April 2010 and runs through the end of June, where enumerators go door-to-door to personally interview those who have not responded by mail. The Census Bureau will also conduct special field operations for people living in group quarters and other residences not effectively covered by mail at that time.

From July through November 2010, the Census Coverage Measurement process, an intense effort with specially trained people to conduct a detailed analysis of the count, will take place. This effort will help evaluate if there has been an under- or over-count by providing a detailed measure of the quality of coverage in the Census.

The final count by state will be sent to the President by December 31, 2010, and detailed block-level counts for redistricting at the state level will be delivered by April 1, 2011. The full data tables will be made available beginning in late 2011.

While taking the Census sounds simple and straightforward, it is anything but. Its scope and complexity have steadily increased. It is the largest peacetime mobilization in the United States.

The sheer volume of participants and infrastructure necessary to carry out the Census can be daunting. To staff 12 Regional Census Centers (RCCs) and over 450 local Census offices with the best possible workforce, the Census Bureau conducts over one million applicant interviews and hires 140,000 address canvassers and more than 580,000 enumerators.

This undertaking is increasingly supported by state-of-the-art technology, including GPS address mapping, wireless handheld computers and sophisticated electronic and paper-based data integration systems.

The challenges with the decennial census are increasing. Population growth means there are more people to count and more housing units to visit. Increasing amounts of "junk mail" may also reduce household responses to mailed questionnaires.

Two-income families, increasing transience, and the changing shape and diversity of the American family all combine to make an accurate count increasingly difficult. Enumerators often have to return to homes numerous times in order to find someone at home.

We also know that it is more difficult to reach people with our advertising. In Census 2000 we could rely on television, radio, and print media. The migration away from passive, traditional forms of media means we have to find new ways to get our message across to the people we need to reach.

And, survey responses are down, in part because there is in general less of a willingness to complete a government survey than may have existed in the past. Recent data suggest that a general distrust of government has increased, as have concerns about privacy.

As a result of these factors, the number of enumerators needed has steadily risen and the productivity in NRFU, in terms of households answering per hour, has declined.

Planning for the 2010 Census

To deal with some of these challenges, at the beginning of the decade, the Census Bureau reengineered the 2010 Census to build a better, faster, and simpler Census.

The plan was to:

1) Leverage technology more effectively, including GPS mapping and handheld computers;
2) Eliminate the long-form and conduct a short-form only decennial census;
3) Introduce the American Community Survey to capture annual economic and social data previously collected using the long-form;
4) Take further steps toward conducting a multi-language census; and
5) Coordinate and target messaging with integrated communications and partnerships.

I am pleased to report that the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) Accuracy Improvement Project, the GPS portion of the reengineering, was completed this month (other than island areas). Utilizing GPS will reduce the geographic coding problems and help get more accurate counts in rural areas.

The American Community Survey is fully implemented. It has an overall response rate of 97 percent and is providing far more timely data than the once-a-decade long-form.

With the 2010 Census we are aggressively trying to knock down anything that keeps people from answering the Census. Language is increasingly one of those barriers.

In 2010, for the first time a bilingual form will be sent to neighborhoods with large Spanish speaking populations, as identified in the American Community Survey. And, as before, the form will be available in other major languages such as Chinese, and a "help guide" will be printed in 40 additional languages.

This multi-language approach is helping remove obstacles and encouraging participation in the Census by households in which English is not the primary language.

In addition, we are working closely to ensure that our messages and outreach are coordinated and targeted more effectively with our integrated communications and partnerships.

However, while we are pleased that these components are on track, problems have developed with the Field Data Collection Automation (FDCA) program. FDCA is a key component of the reengineered short-form 2010 Census. Non-FDCA related planning challenges have also surfaced that require immediate attention.

I am here today because the FDCA project has experienced significant schedule, performance, and cost issues. A lack of effective communication with one of our key contractors has significantly contributed to the challenges.

As I have said before, the situation today is unacceptable, and we have been taking steps to address the issues. But first, let's answer the question, how did we get here?

The decision to automate data collection was made at the beginning of the decade, just after the 2000 Census. Initially, the Census Bureau worked to develop an automation effort using in-house resources. The Bureau realized after the 2004 test that this massive technology development effort required additional expertise.

In 2006, a contract for FDCA was signed with Harris Corporation providing for a comprehensive approach to the use of handheld computers and information technology for managing the decennial operations. In 2007, the Address Canvassing dress rehearsal was conducted, at which time development and scoping problems emerged. Reports from the Census Bureau's field staff, consultants from the non-profit MITRE Corporation working for the Bureau, and the Government Accountability Office confirmed these problems. The Department's Inspector General also raised concerns.

In late 2007 and early 2008, more than 400 new or clarified technical requirements were identified by the Census Bureau. Upon the realization of the large scope of requirement changes, Census Director Murdock established the 2010 Census FDCA Risk Reduction Task Force to identify and evaluate options to improve the execution of the FDCA program. These efforts served to clarify the issues and confirm the need for a rapid response.

To address the issues, we sought advice from a wide range of respected sources, including the Office of the Inspector General, the Government Accountability Office, the MITRE Corporation, the 2010 Census FDCA Risk Reduction Task Force, and an independent panel of experts I formed last month, which includes Dennis Hastert, former Speaker of the House; Kenneth Prewitt, a former Census Director and now of Columbia University; Vincent Barabba, also a former Census Director and now with Market Insight Corporation; George Ligler, an independent software developer and consultant; Ron Ponder of Hudson Heights Partners; and John Thompson, the Associate Director for the 2000 Census who is currently at the National Opinion Research Center.

The expert panel evaluated the four options identified by the 2010 Census FDCA Risk Reduction Task Force. A majority of the expert panel members recommended that we proceed with the alternative recommended by the Task Force, which calls for the Census Bureau to utilize a paper-based NRFU methodology, as opposed to using the electronic handheld units for NRFU.

Assessments by the MITRE Corporation, our Inspector General and the leadership of the Census Bureau echoed this recommendation to utilize a paper-based NRFU. Based on these inputs and serious consideration of the benefits and pitfalls of each option we will move forward with the recommendation to use a paper-based NRFU in the 2010 decennial census.

Pursuing this recommendation allows both the Census Bureau and the Harris Corporation to focus on what they can do best. This path still represents a significant step forward for the Census Bureau in the use of automation. Address Canvassing, the operation that occurs the year before the decennial to validate and update the location of every household in the country will be conducted using the Harris GPS-enabled handheld computers, allowing for the most accurate and comprehensive address list in the Census Bureau's history.
The paper-based NRFU we propose will be supported by state-of-the-art hardware and software that will help ensure the most accurate Census. The Census Bureau has extensive experience conducting paper NRFU, and it will build on that experience for the 2010 decennial census.

Our flexibility to respond to unforeseen difficulties will be greater under the paper-based option because our ability to deploy people will be greater and faster than the ability to manufacture additional handhelds on short notice. Additionally, the majority of expert panel members recommended this alternative, believing that it offers greater flexibility to ensure a successful decennial at this point in the planning and development cycle.

Cost Estimates

The effect of moving forward with this alternative, as well as the non-FDCA related planning challenges we have faced will require an increase of $2.2 to $3 billion dollars through Fiscal Year (FY) 2013. This will bring the total lifecycle cost of the 2010 Census to between $13.7 to $14.5 billion.

The broadest reason behind the cost growth of the FDCA contract is the initial lack of sufficient communication between Harris and the Census Bureau. While the revised plan does shift some duties away from Harris, the amount of work that Harris is responsible for has increased. The contract increases are larger than the savings associated with the hand-held computers (HHCs) that will no longer be supplied by Harris for use in non-response follow-up (NRFU). Under the new approach to the decennial census, the contractor will be responsible for the following major activities:

- Building the architecture and providing equipment for paper-based operations that will link all the Local Census Offices (LCOs) together in a nationwide network, and developing custom software that will be the backbone of those operations – allowing LCOs to assign field work, track progress, and report up the chain to headquarters;
- Supporting an automated Address Canvassing operation with HHCs and the custom software on which they operate;
- Equipping LCOs with additional equipment to meet revised demands;
- Providing a help desk for technical support covering not only the HHCs, but the computers and other equipment in all the LCOs.

These costs are driven in large part by increases in the number of people who will be needed to carry out the 2010 Census, which includes enumerators and personnel to service the help desks, data centers, and the control system for the paper-based NRFU. There are also additional costs that result from more recent increases in gas prices, postage, and printing.

We estimate that to successfully pursue this new course, an increase of approximately $160 to $230 million is needed for FY 2008. The exact amount needed is still contingent on final procurement decisions to be made soon. This funding will allow Harris to continue its development of an automated Address Canvassing operation and the operational control system, and the Census Bureau to immediately begin developing a paper-based NRFU system for 2010. While we continue to assess the cost impact for FY 2009 and beyond, our current rough estimates place the need for additional funding in 2009 at approximately $600 to $700 million. We expect to have more concrete numbers for 2009 when we submit to the Congress an amendment to the President's 2009 budget that will be fully offset. Most of the lifecycle cost increase occurs in 2010, and we and the Census Bureau are evaluating all options to keep the cost increase towards the low end of the range, while ensuring an accurate count.

To address the funding need for 2008, we have developed a transfer proposal from existing Departmental resources that will fully cover the resources required for the 2010 Census. Our transfer proposal would require legislative authority to remove certain limits on the Department's ability to make intra-Departmental funds transfers, and we have submitted to the Congress proposed legislative language that would provide this authority.

I realize that a transfer proposal such as this is extraordinary; however, I believe it is the responsible thing to do in light of the importance of the decennial census and our shared need to engage in fiscal restraint and avoid additional burdens on the American taxpayer.

Executing the Replan

Both at the Census Bureau and at the Department of Commerce we have made substantial management changes to address the challenges facing the 2010 Census. We are working to ensure that there is clear accountability and that we have set specific leadership expectations. This includes better integration between Census and Harris personnel; rapid decision-making; real-time problem solving; and improved transparency, oversight, and communication. The 2010 Decennial Census is and will remain a top priority for me and the Department.

I will continue working with Census to assure that we establish a sustainable and achievable path forward to a successful 2010 Census. In addition, I have devoted significant resources from the Department of Commerce to assist our colleagues at the Census Bureau. The 2010 Decennial Census is a responsibility we all share at the Department of Commerce, and we are collectively working to ensure the problems we face are effectively addressed. I welcome any questions you may have and look forward to continuing to work with you as we move ahead.

PREPARED STATEMENT OF
STEVE H. MURDOCK
DIRECTOR
US CENSUS BUREAU

Census in Peril: Getting the 2010 Decennial Back on Track, Part II

Before the Committee on Homeland Security and Governmental Affairs
U.S. Senate

15 April, 2008

Thank you for the opportunity to come before you again to discuss our ongoing efforts to address the problems associated with the Field Data Collection Automation Program.

Secretary Gutierrez has just outlined our plans for going forward with the Field Data Collection Automation (FDCA) program. Since the Secretary last spoke to you, all of the options regarding the FDCA program were thoroughly examined. We have considered feasibility, timing, and, of course, costs, while placing our greatest emphasis on ensuring the most accurate possible census in 2010.

I fully support his decision. Our contractor will continue developing the Address Canvassing operation utilizing the handheld computers and develop the Operations Control System, and the Census Bureau will implement a paper-based Nonresponse Follow-up (NRFU) operation and provide the RCC infrastructure. We will work with our contractor to ensure that the other components of the FDCA program are successfully completed. This option maximizes our control of 2010 Census operations. The Census Bureau knows how to develop and implement a paper-based NRFU, and our decision to do so again gives us flexibility and minimizes the risks we identified in the FDCA program. At the same time, the plan allows us to leverage Global Positioning System technologies by using handheld computers in the Address Canvassing operation. This will improve the accuracy of our address list, which is fundamental to an accurate census.

This is not a decision any of us are taking lightly. The Risk Reduction Task Force, chaired by former Deputy Director William Barron and made up of key Census Bureau officials from each office involved with decennial census operations, personnel from the Department of Commerce, and Mitre Corporation, carefully assessed every aspect of the FDCA program. Their work was then reviewed by the expert panel established by the Secretary. Nearly all of us involved with this effort reached the same conclusion: Moving to a paper-based NRFU operation significantly reduces risk.

There are four reasons for this:

1) We experienced a series of problems with the handheld computers (HHC) during the Dress Rehearsal Address Canvassing Operation.

   -- The HHCs often took far longer than expected to move between screens, and they occasionally froze up resulting in enumerator downtime.

   -- There were difficulties in obtaining efficient transmission to and from the handheld computer. This, too, led to delays for the enumerators.

   -- The HHCs could not handle assignment areas that contained more than 700 addresses, and our contractor does not believe that this flaw can be corrected. The result is that we now have to develop an alternative outside of the FDCA system for situations where we cannot reduce the size of large assignment areas.

2) We determined that if we had similar problems in the NRFU Dress Rehearsal, it could be too late to correct them and too late for us to pursue any alternative.

3) Given our efforts to mitigate elements of risk to decennial operations, the automated NRFU operation provides less flexibility than a paper-based operation because of the lead time required for ordering and equipping additional HHCs.

4) We know we can successfully complete a paper NRFU since we have done so in past censuses. By taking this work back, the Census Bureau can

focus the work of the contractor on completing work on Address Canvassing and the operational control system.

We recognize that the option we chose is not without risk and has cost implications. However, we believe it is the best way to ensure a successful 2010 Census. We are taking actions that mitigate risk, particularly the ultimate risk of an incomplete or inaccurate census.

As we move forward I am taking a number of steps to ensure that we address the organizational weaknesses that caused the problems with the FDCA program. This begins with a new management approach.

Arnold Jackson, a seasoned Census manager with extensive experience directing information technology projects, has taken over as Associate Director for the Decennial Census. He is establishing a schedule for daily assessment meetings with Census Bureau and contractor personnel; weekly status assessment and resolution meetings with the Deputy Director and me; and regular meetings with the Department of Commerce. We will continue to keep Congress informed of our progress, and any problems that arise.

We will move quickly to strengthen management planning and oversight relative to key areas such as:

- Risk Management
- Issue Identification
- Product Testing
- Communications
- Budgeting and Cost Management.

We are also instituting an embedding process of Census Bureau personnel with the contractor at the worksite, and contractor personnel at Census Bureau Headquarters. This will help alleviate the communications problems that led to the breakdown in the requirements-definition process.

We will institute periodic, unscheduled reviews by MITRE and departmental specialists in IT, project management, and contracting.

Within the next 30 days we will produce a detailed operating plan for the FDCA

re-plan that includes deadlines for key milestones. In 45 days we will develop an integrated project schedule for the 2010 Census. And in 60 days we will produce a testing program for the automated Address Canvassing operation.

All of this will strengthen implementation of the Decennial Census as we move forward.

I want to stress again that since becoming Director in January, addressing the problems associated with the FDCA program has been my highest priority. My colleagues and I share the concerns of the Congress about the increased costs we are now facing. Nonetheless, we must find a way to move forward. With the steps I have outlined today, I am confident we can put the 2010 Census back on track.

Thank you for this opportunity to be with you today. I am happy to answer any of your questions.

United States Government Accountability Office

GAO

Testimony
Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

For Release on Delivery
Expected at 3:15 p.m. EDT
Tuesday, April 15, 2008

2010 CENSUS

Census at Critical Juncture for Implementing Risk Reduction Strategies

Statement of Mathew Scirè
Director, Strategic Issues

David A. Powner
Director, Information Technology Management Issues

GAO-08-685T

April 15, 2008

GAO
Accountability-Integrity-Reliability

Highlights

Highlights of GAO-08-685T, a testimony for the Committee on Homeland Security and Governmental Affairs, U.S. Senate

2010 CENSUS

Census at Critical Juncture for Implementing Risk Reduction Strategies

Why GAO Did This Study

In 2007, the U.S. Census Bureau (Bureau) estimated the 2010 Census would cost $11.5 billion, including $3 billion on automation and technology. At a March hearing, the Department of Commerce (Commerce) stated that the Field Data Collection Automation (FDCA) program was likely to incur significant cost overruns and announced a redesign effort. At that time, GAO designated the 2010 Decennial Census as high risk, citing long-standing concerns in managing information technology (IT) investments and uncertain costs and operations. This testimony is based on past work and work nearing completion, including GAO's observation of the address canvassing dress rehearsal. For IT acquisitions, GAO analyzed system documentation, including deliverables, cost estimates, other acquisitions-related documents, and interviewed Bureau officials and contractors. This testimony describes the implications of redesign for (1) dress rehearsal and decennial operations, (2) IT acquisitions management, and (3) Decennial Census costs.

What GAO Recommends

In its reports, GAO has recommended that the Bureau improve acquisition management capabilities, operational planning, cost estimation, and performance measurement. The Bureau agreed with most of these recommendations, but has not fully implemented them.

To view the full product, including the scope and methodology, click on GAO-08-685T. For more information, contact Mathew Scire at (202) 512-6806 or sciremj@gao.gov or David A. Powner at (202) 512-9286 or pownerd@gao.gov.

What GAO Found

The Decennial Census is at a critical stage in the 2008 Dress Rehearsal, in which the Bureau has its last opportunity to test its plans for 2010 under census-like conditions. On April 3, 2008, Commerce announced significant changes to the FDCA program. It also announced that it expected the cost of the decennial to be up to $3 billion greater than previously estimated. The redesign will have fundamental impacts on the dress rehearsal as well as 2010 Census operations. Changes this late in the decade introduce additional risks, making more important the steps the Bureau can take to manage those risks. The content and timing of dress rehearsal operations must be altered to accommodate the Bureau's design. For example, Commerce has selected an option that calls for the Bureau to drop the use of handheld computers (HHCs) during the nonresponse follow-up operation, and the Bureau may now be unable to fully rehearse a paper-based operation. Additionally, reverting to a paper-based nonresponse follow-up operation presents the Bureau with a wide range of additional challenges, such as arranging for the printing of enumerator forms and testing the systems that will read the data from these forms once completed by enumerators.

Given the redesign effort, implementing GAO's recommendations associated with managing the IT acquisitions is as critical as ever. Specifically, the Bureau needs to strengthen its acquisition management capabilities, including finalizing FDCA requirements. Further, it also needs to strengthen its risk management activities, including developing risk mitigation plans for significant risks and improving its executive-level governance of these acquisitions. The Bureau also needs to plan and conduct key tests, including end-to-end testing, to help ensure that decennial systems perform as expected.

According to the Bureau, the redesign and related revision of the FDCA program is expected to result in significant increases to the life cycle cost estimate for the 2010 Census. Even without considering the recent expected cost increases announced by the Bureau to accompany the redesign of the FDCA program, the Bureau's cost projections for the 2010 Census revealed an escalating trend from previous censuses. Previously, GAO recommended that the Bureau develop an integrated and comprehensive plan to manage operations. Specifically, to understand and manage the assumptions that drive the cost of the decennial census, GAO recommended, among other actions, that the Bureau annually update the cost of the 2010 Census and conduct sensitivity analysis on the $11.5 billion estimate. However, while the Bureau understands the utility of sensitivity analysis, it has not conducted such an analysis.

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to participate in today's hearing. As you know, the last time we appeared before you we designated the 2010 Decennial Census as a high-risk area, citing a number of long-standing and emerging challenges facing the census.[1] These include weaknesses in managing information technology (IT), operational planning, and cost estimating, as well as uncertainty over dress rehearsal plans and the ultimate cost of the census.

For 2010, the U.S. Census Bureau (Bureau) planned to make greater use of technology. Among other things, the Bureau planned to automate some of its field data collection activities as a way to reduce costs and improve data quality and operational efficiency. In fact, census workers used new technology, handheld computers (HHCs), during last spring's dress rehearsal operation. The Field Data Collection Automation (FDCA) program is a key IT acquisition that includes systems, equipment, and infrastructure for field staff to use in collecting census data for the 2010 Census. Last year, the Bureau had estimated this and other IT acquisitions would account for about $3 billion of the then-estimated $11.5 billion total cost of the census. Under the FDCA program the Bureau planned to use HHCs during operations such as address canvassing, nonresponse follow-up, and census coverage measurement. Last year, during address canvassing dress rehearsal field activities in California and North Carolina, both we and Bureau officials observed a number of performance problems with the HHCs (such as slow and inconsistent data transmissions).

At a March 2008 hearing before this committee, the Department of Commerce (Commerce) and the Bureau stated that the FDCA program was likely to incur significant cost overruns and said that a redesigning effort to get the Decennial Census back on track was under way. The Secretary of Commerce outlined several alternatives for redesigning this central technology investment, including possibly dropping the HHCs from the nonresponse follow-up operation. On April 3, 2008, the Secretary chose to do just that. Additionally, he decided that the Bureau would reduce deployment of field technology infrastructure by the contractor, and have the contractor provide HHCs for address canvassing and develop the information system for controlling field operations.

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

As requested, our testimony today will call upon our past work, including our observation of the use of HHCs in the address canvassing dress rehearsal, as well as an update of the status of the Bureau's redesign efforts, to provide a description of the redesign for (1) dress rehearsal and Decennial Census operations, (2) IT acquisitions management, and (3) Decennial Census costs. We discussed these issues last week before the Committee on Oversight and Government Reform and the Subcommittee on Information Policy, Census, and National Archives, House of Representatives.[2] That testimony and our remarks today are based primarily on reports that we issued from 2002 through December 2007 on the planning and development of the 2010 Census, as well as the results of work nearing completion. We visited census test sites in Queens, New York; several counties in rural south-central Georgia; Austin, Texas; and the Cheyenne Indian Reservation in South Dakota. During these visits we observed tests of the address canvassing operation, and we observed tests of the nonresponse follow-up operation. In May and June 2007, we observed address canvassing at the 2008 Dress Rehearsal in sites located in North Carolina and California. For IT acquisitions we analyzed system documentation, including project plans, deliverables, cost estimates, earned value management data, other acquisition-related documents, and we interviewed Bureau officials and contractors.

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

Results in Brief

The redesign of the Decennial Census carries with it significant implications for its key operations—address canvassing and nonresponse follow-up. Among these are the need for putting in place a paper-based nonresponse follow-up operation, devising approaches to manage work load from late mail returns, and ensuring that the automation for address canvassing works. This is not an exhaustive list of the numerous challenges the Bureau faces going forward. While these challenges are significant, it must be stressed that the Bureau could have faced

[2] GAO, *2010 Census: Census at Critical Juncture for Implementing Risk Reduction Strategies*. GAO-08-659T (Washington, D.C.: April 9, 2008).

overwhelming challenges had it chosen not to redesign the Decennial Census.

Given the redesign effort, implementing our recommendations associated with managing the IT acquisitions is as critical as ever. Specifically, the Bureau needs to strengthen its acquisition management capabilities, including finalizing FDCA requirements. The Bureau also needs to strengthen its risk management activities, including developing risk mitigation plans for significant risks and improving its executive-level governance of these acquisitions. The Bureau also needs to plan and conduct key tests, including end-to-end testing to help ensure that decennial systems perform as expected.

According to the Bureau, this redesign and subsequent revision of the FDCA program is expected to result in significant increases to the life cycle cost estimate for the 2010 Census. On April 3, 2008, the Secretary testified that the Decennial Census could cost up to $3 billion more than the existing $11.5 billion total life cycle cost estimate. Even without considering the recent expected cost increases announced by the Bureau that will accompany the streamlining of the FDCA program, the Bureau's cost projections for the 2010 Census revealed an escalating trend compared to those from previous censuses. In constant 2010 dollars, the estimated $11.8 billion cost of the 2010 Census, before the FDCA program redesign, represented a more than tenfold increase over the $1 billion spent on the 1970 Census. To manage the 2010 Census and contain costs, we previously recommended that the Bureau develop a comprehensive, integrated project plan for the 2010 Census that should include itemized estimated costs of each component, including a sensitivity analysis and an explanation of significant changes in the assumptions on which these costs were based.[3] In response, the Bureau provided us with the 2010 Census Operations and Systems Plan dated August 2007. This plan represented an important step forward at the time. It included inputs and outputs and described linkages among operations and systems. However, it did not include sensitivity analysis, risk mitigation plans, a detailed 2010 Census timeline, or itemized estimated costs of each component. With the redesign, this plan will need to be updated.

[3] GAO, *2010 Census: Redesigned Approach Holds Promise, but Census Bureau Needs to Annually Develop and Provide a Comprehensive Project Plan to Monitor Costs*, GAO-06-1009T (Washington, D.C.: July 27, 2006).

Redesign Implications for Decennial Census Operations

The Decennial Census is at a critical stage in the 2008 Dress Rehearsal, in which the Bureau has its last opportunity to test its plans for 2010 under census-like conditions. The dress rehearsal features a mock Census Day, now set for May 1, 2008. Last year at this time, the Bureau carried out a major dress rehearsal operation—address canvassing—in which the Bureau updated address lists and collected global positioning coordinates for mapspots. The largest field operation of the dress rehearsal was to have begun this month. In this operation (nonresponse follow-up), field staff were to conduct face-to-face interviews with households that did not mail back their questionnaires.

Prior to the redesigning effort, the Bureau had already changed its plans for the dress rehearsal, in part, to focus greater attention on the testing of technology. In a November 20, 2007, decision memo, the Bureau announced that it would delay Census Day for the dress rehearsal by 1 month, to May 1, 2008. The Bureau also listed a number of operations it no longer planned to rehearse, including group quarters enumeration and census coverage measurement. Also in February 2008, the Bureau announced that it would remove from the scope of the FDCA program contract the development of all systems and software associated with the census coverage measurement operation.

The redesign approach selected by the Secretary will require that the Bureau quickly develop and test a paper-based nonresponse follow-up operation. Any paper-based option has its own set of unique issues, such as setting up operations to support paper field data collection centers and seeking printing solutions for enumerator forms. Among other issues, decisions on a printing solution will need to be made soon. Although the Bureau has carried out paper-based operations before, in some cases they now involve new procedures and system interfaces that as a result of their exclusion from the dress rehearsal, will not be tested under census-like conditions. For nonresponse follow-up in 2010 the Bureau will be using newly developed systems for integrating responses and controlling workload. For example, the Bureau will need to rely on a newly developed system called the Decennial Response Integration System to help identify households that have not returned census forms and for collecting the results of enumerators conducting nonresponse follow-up person interviews. Dropping the use of the HHCs for nonresponse follow-up and reverting to paper for that operation this late in the decade also precludes nonresponse follow-up from being fully tested in the dress rehearsal. Under the delayed dress rehearsal this operation was to begin next month, soon after households in dress rehearsal locations were to return their census forms. A paper operation requires different training, maps, and

other material to be prepared prior to the operation. The Bureau has announced no specific plans for conducting field testing of certain key operations, such as nonresponse follow-up. Without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost.

The redesign's move from the use of HHCs to a paper-based nonresponse follow-up operation may limit the Bureau's ability to reduce follow-up with persons who are late in returning their census questionnaires. One of the primary advantages the Bureau cited for using HHCs was the ability, as late mail returns came in, to remove those addresses from enumerators' assignments—preventing enumerators from doing unnecessary work. According to the Bureau, in 2000 enumerators visited over 4 million households that had returned their census form late. In 2004, the Bureau tested the capability of an earlier prototype of the HHC to adjust workloads by identifying late mail returns. We reported in 2007[4] that based on these tests it appears that if the Bureau had possessed this capability during the 2000 Census, it could have eliminated the need to visit nearly 773,000 late-responding households and saved an estimated $22 million (based on our estimate that a 1 percentage point increase in workload could add at least $34 million in direct salary, benefits, and travel costs to the price tag of nonresponse follow-up[5]). The Director of the Census Bureau stated that he believes that the Bureau can still partially adjust enumerator workload to recognize late mail returns without the use of HHCs. To achieve this objective, the Bureau will need to specify the process it will use and conduct appropriate tests.

The redesign will also affect the 2010 Census address canvassing operation. The Secretary's decision to use the HHCs for the 2010 address canvassing operation means that certain performance issues with the handheld technology must be addressed promptly. Field staff experienced difficulties using the technology during the address canvassing dress rehearsal. For example, workers reported problems with HHCs when working in large assignment areas during address canvassing. The devices could not accommodate more than 720 addresses—3 percent of dress

[4] GAO, *2010 Census: Design Shows Progress, but Managing Technology Acquisitions, Temporary Field Staff, and Gulf Region Enumeration Require Attention*. GAO-07-779T (Washington, D.C.: April 24, 2007).

[5] GAO, *2000 Census: Contingency Planning Needed to Address Risk That Pose a Threat to a Successful Census*, GAO/GGD-00-6 (Washington, D.C.: Dec. 14, 1999).

rehearsal assignment areas were larger than that. The amount of data transmitted and used slowed down the HHCs significantly. Identification of these problems caused the contractor to create a task team to examine the issues, and the team recommended improving the end-to-end performance of the mobile solution by controlling the size of assignment area data delivered to the HHC both for address canvassing and nonresponse follow-up operations. One specific recommendation was limiting the size of assignment areas to 200 total addresses. However, the redesign effort took another approach deciding not to use HHCs in certain large assignment areas. It is not yet clear how this workaround will be carried out. Furthermore, the Bureau will need to define specific and measurable performance requirements for the HHCs as we recommended in January 2005.[6]

Another operational issue is the ability of the contractor to accept changes to its address files after it completes address canvassing updates. This could preclude the Bureau from conducting "restart/redo" operations for an area where the address file is discovered to be incorrect. This function is critical in developing an accurate and complete address list. Without the ability to update the mailing list for "restart/redo" operations, the Bureau would consider not mailing census questionnaires to addresses in that area and instead deliver census forms by hand. This has the potential to significantly increase costs.

Redesign Implications for IT Acquisitions

The Bureau still needs to agree upon and finalize requirements for the FDCA program. In March 2006, we reported that the FDCA project office had not implemented the full set of acquisition management capabilities (such as project and acquisition planning and requirements development and management) that were needed to effectively manage the program.[7] For example, although the project office had developed baseline functional requirements for the acquisition, the Bureau had not yet validated and approved them. Subsequently, in October 2007, we reported that changes to requirements had been a contributing factor to both cost

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

[7] GAO, *Census Bureau: Important Activities for Improving Management of Key 2010 Decennial Acquisitions Remain to be Done*, GAO-06-444T (Washington, D.C.: Mar. 1, 2006).

increases and schedule delays experienced by the FDCA program.[8] In June 2007, an assessment by an independent contractor of the FDCA program reported on requirements management problems—much like those we reported in March 2006. Similar to our recommendation, the independent assessors recommended that the Bureau immediately stabilize requirements by defining and refining them. The Bureau has recently made efforts to further define requirements for the FDCA program, and it has estimated that the revised requirements will result in significant cost increases. On January 16, 2008, the Bureau provided the FDCA contractor with a list of over 400 requirements for the FDCA program to reconcile. Although some of these new requirements will be dropped based on the Secretary's recent decision, many will still need to be addressed to ensure that FDCA will perform as needed.

Commerce and Bureau officials need to address critical weaknesses in risk management practices. In October 2007, we reported that the FDCA project had weaknesses in identifying risks, establishing adequate mitigation plans, and reporting risk status to executive-level officials.[9] For example, the FDCA project team had not developed mitigation plans that were timely or complete nor did it provide regular briefings on risks to senior executives. The FDCA project team's failure to report a project's risks to executive-level officials reduces the visibility of risks to executives who should be playing a role in mitigating them.

As of October 2007, in response to the cost and schedule changes, the Bureau decided to delay certain system functionality for FDCA. As a result, the operational testing that was to occur during the dress rehearsal period around May 1, 2008, would not include tests of the full complement of Decennial Census systems and their functionality. Operational testing helps verify that systems function as intended in an operational environment. In late 2007, according to Bureau officials, testing plans for IT systems were to be finalized in February 2008. Therefore, we recommended that the Bureau plan and conduct critical testing, including end-to-end testing of the Decennial Census systems.[10] As of March 2008, the Bureau still had not developed these test plans. In the recent program

[8] GAO, *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems*, GAO-08-79 (Washington, D.C.: Oct. 5, 2007).

[9] GAO-08-79

[10] GAO-08-79

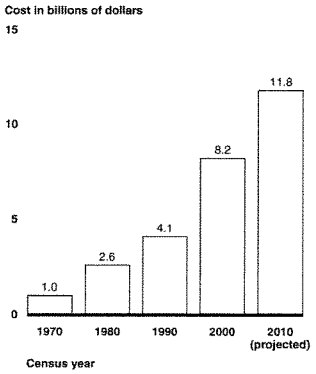
redesign, the Bureau included conducting end-to-end testing. The inability to perform comprehensive operational testing of all interrelated systems increases the risk that further cost overruns will occur, that decennial systems will experience performance shortfalls, or both.

Given the redesigning effort, implementing our recommendations associated with managing the IT acquisitions is as critical as ever. Specifically, the Bureau needs to strengthen its acquisition management capabilities, including finalizing FDCA requirements. Further, it also needs to strengthen its risk management activities, including developing adequate risk mitigation plans for significant risks and improving its executive-level governance of these acquisitions. The Bureau also needs to plan and conduct key tests, including end-to-end testing, to help ensure that decennial systems perform as expected.

Redesign Implications for Decennial Census Life Cycle Costs

Even without considering the recent expected cost increases announced by the Bureau to accommodate the redesign of the FDCA program, the Bureau's cost projections for the 2010 Census revealed an escalating trend from the 1970 Census. As shown in figure 1, the estimated $11.8 billion cost (expressed in constant 2010 dollars) of the 2010 Census, before the FDCA program redesign, represented a more than tenfold increase over the $1 billion spent on the 1970 Census. The 1970 Census was the first Census to rely on mailing census forms to households and asking for a mail return—a major part of the data collection. Although some of the cost increase could be expected because the number of housing units—and hence the Bureau's workload—has gotten larger, the cost growth has far exceeded the increase in the number of housing units. The Bureau estimated that the number of housing units for the 2010 Census would increase by almost 14 percent over Census 2000 levels.

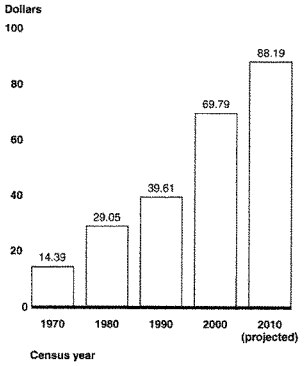
Figure 1: Decennial Census Costs from 1970 through 2010 (Projected) in Constant 2010 Dollars



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

As figure 2 shows, before the FDCA program redesign, the Bureau estimated that the average cost per housing unit for the 2010 Census was expected to increase by approximately 26 percent over 2000 levels, from $69.79 per housing unit to $88.19 per housing unit in constant 2010 dollars. When the projected cost increase that accompanies the FDCA program redesign is considered, the average cost per housing unit will increase by an even greater percentage.

Figure 2: Decennial Census Average Cost per Housing Unit from 1970 through 2010 (Projected) in Constant 2010 Dollars



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

Given the projected increase in spending, it will be imperative that the Bureau effectively manage the 2010 Census, as the risk exists that the actual, final cost of the census could be considerably higher than anticipated. Indeed, this was the case for the 2000 Census, when the Bureau's initial cost projections proved to be too low because of such factors as unforeseen operational problems and changes to the fundamental design. The Bureau estimated that the 2000 Census would cost around $5 billion. However, the final price tag for the 2000 Census was more than $6.5 billion, a 30 percent increase in cost. Large federal deficits and other fiscal challenges underscore the importance of managing the cost of the census, while promoting an accurate, timely census.

We have repeatedly reported that the Bureau would be challenged to control the cost of the 2010 Census. In January 2004, we reported that under the Bureau's approach for reengineering the 2010 Census, the Bureau might find it difficult to reduce operational risk because

reengineering introduces new risks.[11] To manage the 2010 Census and contain costs, we recommended that the Bureau develop a comprehensive, integrated project plan for the 2010 Census that should include the itemized estimated costs of each component, including a sensitivity analysis and an explanation of significant changes in the assumptions on which these costs were based. In response, the Bureau provided us with the 2010 Census Operations and Systems Plan, dated August 2007. This plan represented an important step forward at the time. It included inputs and outputs and described linkages among operations and systems. However, it did not yet include sensitivity analysis, risk mitigation plans, a detailed 2010 Census timeline, or itemized estimated costs of each component. Going forward, it will be important for the Bureau to update its operations plan.

The assumptions in the fiscal year 2009 President's Budget life cycle cost estimate of $11.5 billion may not have included recent productivity data from last year's address canvassing dress rehearsal. According to the Bureau, initially, the cost model assumed productivity for address canvassing to be 25.6 addresses per hour for urban/suburban areas. However, results from the address canvassing dress rehearsal showed productivity of 13.4 addresses per hour for urban/suburban areas. While the life cycle cost estimate increased slightly to $11.5 billion in the fiscal year 2009 President's Budget, these increases were attributed to other factors and not to lower-than-expected canvassing productivity. Best practices call for cost model assumptions to be updated as new information becomes available. We previously reported that the life cycle cost estimate has not been updated to reflect changes in assumptions. In July 2006, we testified that the estimate had not been updated to reflect the results of testing conducted in 2004.[12] As the Bureau updates its estimate of the life cycle cost annually and as part of the redesigning effort, it will be important that it reflect changing assumptions for productivity and hours worked.

[11] GAO, *2010 Census: Cost and Design Issues Need to Be Addressed Soon*, GAO-04-37 (Washington, D.C.: Jan. 15, 2004).

[12] GAO, *2010 Census: Redesigned Approach Holds Promise, but Census Bureau Needs to Annually Develop and Provide a Comprehensive Project Plan to Monitor Costs*, GAO-06-1009T (Washington, D.C.: July 27, 2006).

Concluding Observations

Given its size and complexity, carrying out the Decennial Census presents significant challenges under any circumstances. Late changes in census plans and operations, long-standing weaknesses in IT acquisition and contract management, limited capacity for undertaking these critical management functions, scaling back of dress rehearsal activities, and uncertainty as to the ultimate cost of the 2010 Census puts the success of this effort in jeopardy. Managing these risks is critical to the timely completion of a reliable and cost-effective census. Implementing our recommendations would help the Bureau effectively manage the myriad of interrelated operations needed to ensure an accurate and complete count in 2010 (Bureau officials have agreed with many of our recommendations, but have not fully implemented them).

The dress rehearsal represents a critical stage in preparing for the 2010 Census. This is the time when the Congress and others should have the information they need to know how well the design for 2010 is likely to work, what risks remain, and how those risks will be mitigated. We have highlighted some of the risks today. Going forward, it will be important for the Bureau to specify how it will ensure that planned dress rehearsal operations will be successfully carried out, and how it will provide assurance that the largest operation—nonresponse follow-up—will be tested in the absence of a full dress rehearsal. Likewise, the Bureau will need to establish plans for working around limitations in the technology to be used in address canvassing operations. It is critical that the Bureau ensure that the technology for conducting address canvassing is a success.

The Bureau should implement prior recommendations in moving forward. Contractor-developed IT systems and deliverables need to be closely monitored to ensure that contractors are performing within budget. As we have stressed throughout this testimony and in our prior recommendations, the Bureau needs to practice aggressive project management and governance over both the IT and non-IT components. Further, it is essential that the Bureau implement our recommendations related to information technology. The Bureau must solidify the FDCA program requirements, strengthen risk management activities, and plan and conduct critical testing of the Decennial Census systems.

Mr. Chairman, Census Day is less than 2 years away and address canvassing is 1 year away. The challenges we highlighted today call for effective risk mitigation by the U.S. Census Bureau, and careful monitoring and oversight by the Department of Commerce, the Office of Management and Budget, the Congress, GAO, and other key stakeholders. As in the

past, we look forward to supporting the committee's oversight efforts to promote an accurate and cost-effective census.

Mr. Chairman, this concludes our statement. We would be glad to answer any questions you and the committee members may have.

Contacts and Acknowledgments

If you have any questions on matters discussed in this testimony, please contact Mathew Scirè at (202) 512-6806 or sciremj@gao.gov or David A. Powner at (202) 512-9286 or pownerd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony. Other key contributors to this testimony include Signora May, Assistant Director; Mathew Bader; Thomas Beall; Jeffrey DeMarco; Elizabeth Hosler; Richard Hung; Anne Inserra; Andrea Levine; Lisa Pearson; Sonya Phillips; Cynthia Scott; Niti Tandon; Jonathan Ticehurst; Timothy Wexler; and Katherine Wulff.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Thomas R. Carper

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. The 2000 decennial has been hailed as the best, most accurate census to date. It wasn't perfect, however, so I'm certain that your goal going into the planning process for 2010 was to improve your performance. With the problems we're seeing with this handheld contract now, however, I fear that we'll see little improvement over 2000. All of this last-minute scrambling has me afraid we could even take a step back in census quality. What is the risk at this point that we'll see an erosion in census quality in 2010? Is there any chance at all that the data you collect will not be of sufficient quality to meet our constitutional mandate with respect to Congressional apportionment?

   Answer: Every effort is being made to ensure that the 2010 Census meets or exceeds the accuracy achieved in the 2000 Census. I believe a process has now been established to identify available options and their cost and to quickly determine the best way to proceed to accomplish this goal. If decisions are made quickly and implemented promptly, I am convinced we can succeed. The Nation expects it, Congress demands it and, as I indicated in testimony before your Committee on March 5, 2008, I intend to devote myself to that goal until my last day in office and even beyond if need be.

   Let me also add that, as we confront these problems, it is important not to lose sight of the fact that we have also conducted extensive research, development, and testing of ways to build on the coverage gains we made last decade. These improvements will be implemented regardless of how we conduct the Non-Response Follow-up (NRFU) and will contribute to the overall success of the 2010 Census.

   - The mailout/mailback form contains improved residence rules instructions to reduce under- and over-coverage. These instructions were tested and developed starting with the Census 2000 Experiments program and researched extensively in the 2005 National Census Test. The evaluations of improved instructions show reduced erroneous enumerations and omissions. These changes include:
     - An undercount coverage probe has been added to our questionnaires to identify households where someone may have been omitted. Our current plan is that households indicating that someone may have been omitted are included in the Coverage Follow-up program and reinterviewed. People identified as

omitted from the original roster then would be added during Coverage Follow-up.

- An overcount coverage probe has been added to our questionnaires to identify households where someone may have been counted erroneously. Our current plan is that households indicating that someone may have been counted erroneously are included in the Coverage Follow-up program and reinterviewed. People identified as being erroneously enumerated at that housing unit would be removed from the original roster during Coverage Follow-up.

- Improvements to our language program, including the use of a bilingual (Spanish/English) questionnaire.
- The multi-year effort to bring our electronic map (TIGER) into alignment with GPS coordinates will improve the geographic accuracy of census counts, and thus help ensure that people and housing units are tabulated in the right place.
- We have maintained our Master Address File (MAF) throughout the decade, including regular updates from the U.S. Postal Service. We also will conduct a nationwide Address Canvassing operation next year to update the MAF, which serves as our master control file for conducting the census. The MAF also will be updated through the improved Local Update of Census Addresses (LUCA) program now being conducted with over 11,000 participating governments throughout the country.
- We have improved our methods for developing an inventory of Group Quarters (GQs; e.g., dormitories, prisons), and developed new operations and methods to better integrate the identification and enumeration of GQs.
- We have instituted an annual American Community Survey (ACS) that fills in the gaps with regard to how communities are changing between each ten-year census. The ACS is sent to a small percentage of our population on a rotating basis. The information collected from the ACS helps inform decisions on policies, programs, and services to communities. Implementation of the ACS also eliminates the need to rely upon long-form responses for some of the enumeration in 2010, and it provides data similar to the long-form every year, instead of once every ten years. This is a significant benefit to tribal, state and local governments, and other census data users who rely on data on the wide range of important social and economic characteristics that the ACS produces for all communities in the country.

2. Even as questions were raised about the handheld contract, it does not appear that the Census Bureau had contingency plans in place to go to a paper-based system or some other less risky method for conducting the 2010 census. Why is that the case?

   Answer: Census has not developed a paper-based system to date due to the significant staffing and other substantial costs such an undertaking would entail. Simultaneously planning to conduct two very different types of censuses would

have been an enormous commitment of additional resources. However, as you know, we are now developing a number of alternatives which are being evaluated and vetted.

3. Time and again our subcommittee has found that success with major information technology projects requires active engagement on the part of senior management, especially when a project is facing serious challenges. Why weren't senior managers like yourselves or even your predecessors involved in this handheld project before now? What lessons have you learned from this experience?

   Answer: Then-Deputy Secretary Sampson (and on his departure, then-General Counsel John Sullivan) and his staff met with the Under Secretary for Economic Affairs, her deputy, and the Census Director and Deputy Director throughout 2007 to review decennial progress. Those meetings were bi-weekly until late 2007, when they were increased to weekly meetings and expanded to include a larger group of senior Department officials. Those briefings routinely included a report by the Census Director or Deputy Director on the status of the two major Information Technology (IT) contracts, the Field Data Collection Automation (FDCA) program and the Decennial Response Integration System (DRIS). The Department's Information Technology Review Board (IT Review Board), co-chaired by the Chief Information Officer and the Chief Financial Officer/Assistant Secretary for Administration, also met quarterly throughout 2007 to review the status of the Census's major IT projects, including FDCA.

   Since the problems with FDCA surfaced at the Department level, my senior staff has been meeting at least weekly, and almost daily during the last month, with Census officials on the FDCA contract. The IT Review Board increased its oversight and now meets weekly with Census Bureau staff and interacts with them on a daily basis to address FDCA. I have been meeting several times a week, and speaking frequently, with Department and Census officials to address FDCA issues, and have met with the Inspector General, the Government Accountability Office, Harris Corporation, MITRE Corporation, Members of Congress, and Office of Management and Budget officials as well.

4. I understand that you hope to have an answer with respect to how to proceed with the handheld contract in about a month. Between now and then, a panel of experts at the Commerce Department is supposed to vet the options for moving forward. What do you want to hear from the panel? What factors will you weigh when you make your decision? How do you plan to balance the need for an accurate census with the need to control costs?

   Answer: Regarding the FDCA program, I am committed to getting the FDCA program back on track and containing costs as much as possible, mitigating operational risk, and ensuring that the 2010 Census is successful.

The Census Bureau's Director has established a Task Force that is examining costs, risks, and other characteristics of the options being considered. The Expert Panel will review their assessments and conclusions, and consider all this information in making a recommendation to me.

In assessing our options we are considering risk factors that include: 1) the number of staff with knowledge about decennial census operations, both within the Census Bureau and among the various contractors available to the Census Bureau; 2) the complexity of the tasks, and the capabilities of the contractor and progress to date given the tight timeframe for completing development of the FDCA program; and 3) possible recourse should the operations utilizing contractor solutions fail.

The Department will make every possible effort to find offsets from other Commerce programs, if any additional funding is necessary for the decennial census. We will work with Congress as more, and more accurate, information becomes available regarding costs. The Census Bureau and I respect the taxpayers and believe we have an obligation to be good stewards of the taxpayers' money. I also am obligated to give you our best judgment on what will now be required in order to conduct an accurate census in 2010.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Claire McCaskill

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. The Census Bureau's (Bureau) contract for the design and development of Field Data Collection Automation (FDCA) system was competitively awarded to the Harris Corporation in March 2006 as a cost-plus contract. The estimated total life cycle cost of FDCA was $596 million. Notwithstanding GAO finds the FDCA initiative is at high risk of failing and may cost as much as two to three times the amount of initial estimated life cycle costs, Secretary Gutierrez affirmed that Harris Corporation has been paid two award fees totaling $7 million dollars.

    a. Who authorized the payment of award fees under the FDCA contract (Contract No. YA132306CN0012), and has the Commerce Department initiated an investigation to determine the basis under which the payments were authorized?

    Answer: FDCA award fees are determined by an Award Fee Determination Board consisting of a Chairperson, eight voting members and three non-voting members and an Award Fee Determining Official, in accordance with procedures outlined in Answer 1 b., below.

    b. What policies are in place to ensure that incentive fees are linked to acquisition outcomes such as cost, schedule, and performance results?

    Answer:

    The FDCA contract is not an incentive fee contract. It is an award fee contract. The procedures by which award fees are granted are as follows:

    1. Government Technical Monitors (TMs) prepare/submit monthly Technical Monitors Reports (TMRs) documenting aspects of Contractor performance.
    2. Government Principal Technical Monitor (PTM) prepares/submits monthly report summarizing TMRs.
    3. Together with final monthly TMR in the Award Fee Period (AFP), TMs also prepare/submit a summary report of observations over the entire AFP; the PTM prepares a similar overall summary.
    4. FDCA Project Management Office (PMO) distributes timetable of activities called for by the FDCA Award Fee Determination Plan and schedules necessary meetings/briefings.

5. FDCA PMO distributes TMRs/PTMRs, any Individual Event Reports, and related information to Award Fee Board members.
6. Contractor submits (and briefs to the Award Fee Determination Board) its Self-Evaluation Report for the AFP in question.
7. Award Fee Determination Board members review documentation referenced in previous steps, and other documentation deemed relevant by individual Board members (e.g., field observation reports).
8. Award Fee Determination Board meets to arrive at consensus score.
9. FDCA PMO documents Board's findings and conclusions and briefs Award Fee Determining Official.
10. Award Fee Determining Official makes final fee determination.
11. Government Contracting Officer reviews determination for contract compliance and submits invoice authorization letter to Contractor.
12. FDCA PMO debriefs Contractor on final award fee determination.

Step 4 takes place shortly before the end of a given AFP. Steps 5 through 12 are scheduled so as to conclude no later than 60 calendar days after the end of the Award Fee Period.

c. What progress has the Census Bureau made in implementing GAO's recommendations to improve IT acquisitions—(1) enacting plans for conducting end-to-end testing of all four projects to ensure that all systems have been effectively tested in a realistic operating environment; (2) developing a comprehensive list of risks among acquisitions for system interfaces and mobile computing devices in order to determine risk levels and the need for mitigating actions; (3) developing risk mitigation plans for significant risks facing each project including mitigating actions, milestones, thresholds, and resource levels; and, (4) establishing polices for briefing senior Bureau leadership on the risks facing each project?

Answer:

1. The 2008 Census Dress Rehearsal was intended to serve as an integrated test of all IT systems and interfaces needed to conduct the 2010 Census, however due to funding constraints at the beginning of FY 2008 the Census Bureau delayed and reduced the scope of the Dress Rehearsal. The Census Bureau still plans to test the critical systems and interfaces being developed by FDCA and Decennial Response Integrations System (DRIS) contractors. Consideration is also being given to a later integrated test that would include other systems and interfaces not now part of the Dress Rehearsal.
2. The Census Bureau has established risk registers for all its major IT systems, and identified risks for all interfaces. Those risks (including any new ones identified during the Dress Rehearsal) will be actively managed over the life cycle of these contracts.
3. Risk mitigations plans will be an integral part of comprehensive risk management operations.

4. Since we began to understand the magnitude of the problems associated with the FDCA contract, new procedures have been put into place to provide greater oversight of projects. Deputy Secretary Sullivan now meets weekly on the status of projects with high-level procurement officers, officials of the Census Bureau and the Department of Commerce, including Chief Financial Officer and Assistant Secretary for Administration. In addition, the Project Management Office will continue their quarterly Program Management Review meetings with senior Census Bureau and Department of Commerce officials. These briefings will continue to cover major developments, earned value management results, and steps being taken to manage all active risks.

2. Three of the options being considered by the Commerce Department and Census Bureau to complete nonresponse follow up are paper-based and would not utilize the FDCA handheld devices.

   a. How would a change to a paper census impact the Bureau's ability to conduct end-to-end testing of systems for the 2010 Census?

      Answer: Although the Census Bureau has conducted a paper based NRFU for many censuses, this change in approach for 2010 now needs to be integrated with other systems and operations planned for the census. A number of Dress Rehearsal operations already had been cancelled due to funding constraints at the beginning of FY 2008. When coupled with my decision to discontinue plans for the use of handheld computers for NRFU, the Dress Rehearsal no longer can provide the opportunity for a full end-to-end test of all systems and interfaces. Work is underway now to develop and implement such an integrated test, but the timing and details are not yet finalized.

   b. Have you consulted with the printing contractor to determine their ability to print an estimated 40 million nonresponse follow-up questionnaires? (What was the timeline for printing leading up to the 2000 Census?)

      Answer: The Census Bureau has not consulted with the printing contractor. The size of this printing task will require the awarding of a separate contract for the NRFU questionnaires. The schedule of printing NRFU questionnaires for Census 2000 was as follows:
      Prepared the Request for Proposals (RFP) starting - September 1, 1998
      Contract went out for bid - December 9, 1998
      Contract was awarded - December 29, 1998
      Printer started to print the questionnaires - February 15, 1999

   c. What is the deadline for submitting a paper-based nonresponse follow-up questionnaire to OMB for approval?

      Answer: The time frame required for OMB approval of the NRFU is among

the details to be determined. We will include all the elements associated with the Paperwork Reduction Act process (including *Federal Register* notices requesting public comment) in our planned schedule for the paper-based NRFU and will work closely with OMB to ensure that all requirements are met.

d. What will be the cost of implementing any contingency plans, including any preparation and staging costs so that any contingency could be executed in a timely manner?

Answer: Current cost increase estimates associated with the replan of 2010 Census operations are as follows: For FY08: between $210-280 million; for FY09: between $600-700 million; for fiscal years 2010-2013: between $1.3-2.1 billion. These estimates are based in part on the Rough Order of Magnitude (ROM) lifecycle estimate of the Field Data Collection Automation (FDCA) prepared by the Harris Corp. We are continuing to work with the Harris Corporation to refine this estimate.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Tom Coburn

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. What are you doing differently now than you did six months ago to communicate with the Bureau about the problems related to the FDCA contract?

    a. How often did your team meet with the Census Bureau team prior to this incident to track their progress on managing the FDCA contract?

    b. How often do you meet with them now?

    Answer: Then-Deputy Secretary Sampson (and on his departure, then-General Counsel John Sullivan) and his staff met with the Under Secretary for Economic Affairs, her deputy, and the Census Director and Deputy Director throughout 2007 to review decennial progress. Those meetings were bi-weekly until late 2007, when they were increased to weekly meetings and expanded to include a larger group of senior Department officials. Those briefings routinely included a report by the Census Director or Deputy Director on the status of the two major Information Technology (IT) contracts, the Field Data Collection Automation (FDCA) program and the Decennial Response Integration System (DRIS). The Department's Information Technology Review Board (IT Review Board), co-chaired by the Chief Information Officer and the Chief Financial Officer/Assistant Secretary for Administration, also met quarterly throughout 2007 to review the status of the Census's major IT projects, including FDCA.

    Since the problems with FDCA surfaced at the Department level, my senior staff has been meeting at least weekly, and almost daily during the last month, with Census officials on the FDCA contract. The IT Review Board increased its oversight and now meets weekly with Census Bureau staff and interacts with them on a daily basis to address FDCA. I have been meeting several times a week, and speaking frequently, with Department and Census officials to address FDCA issues, and have met with the Inspector General (IG), the Government Accountability Office (GAO), Harris Corporation, MITRE Corporation, Members of Congress, and Office of Management and Budget (OMB) officials as well.

2. Right now, do you consider the paper-based option to be the main plan or the contingency option?

    Answer: A paper-based Address Canvassing operation is not among the options identified by the Task Force established by Census Director Murdock, and it is not a significant option being considered at this point. Reverting to paper for Non-Response Follow-up (NRFU) is among the options preliminarily identified by the Task Force that will be considered by the Expert Panel, which I have appointed to review all options and make recommendations to me. Until that process has been concluded, no decisions will be made.

3. Do you believe that a paper-based census option would be less risky than a census done using handheld computers?

   Answer: Ensuring an accurate Census will be our goal. Once our expedited review of the options is complete, we will have an assessment as to the relative risks and costs of paper versus handhelds.

   a. What are the major risk factors for the various options you are considering?

      Answer: In assessing our options we are considering risk factors that include: 1) the number of staff with knowledge about decennial census operations, both within the Census Bureau and among the various contractors available to the Census Bureau; 2) the complexity of the tasks, and the capabilities of the contractor and progress to date given the tight time frame for completing development of the FDCA program; and 3) possible recourse should the operations utilizing contractor solutions fail.

4. One of the options you laid out included bringing some of the IT functions back in-house. Does the Commerce Department have the expertise to bring these IT functions in-house?

   Answer: We have conducted all of these functions before, and still have experienced staff to lead these efforts, but would likely need to augment our current staff.

   a. Will the Department be forced to contract those functions back out?

      Answer: It is possible we might determine that in order to best utilize our resources, we should contract for some support staff to assist the experienced Census Bureau staff, who would lead the efforts.

   b. How will that affect cost?

      Answer: The Department and the Bureau are examining the costs and risks involved in the various proposed options.

5. To your knowledge at this point, what are the potential upsides and downsides to each of the options presented to the committee in your testimony?

   Answer: We are examining costs, risks, and other factors of the options being considered, and these are being presented to the Expert Panel. They will review the situation including all of the information gathered in making recommendations to me.

6. The Bureau has failed to provide reliable cost estimates for IT acquisitions in the past. Why should we place any confidence in upcoming estimates?

   Answer: We are working closely in a transparent process with GAO, our IG, MITRE, Harris and OMB to develop the best estimates possible

7. If the mismanagement of this contract results in a higher overall cost for the 2010 Census, are you prepared to suggest cuts from the Department of Commerce to offset that cost?

Answer: The Department will make every possible effort to find offsets from other Commerce programs to fund any necessary increases for the decennial census. We will work with Congress as more, and more accurate, information becomes available regarding costs. The Census Bureau and I respect the taxpayers and believe we have an obligation to be good stewards of the taxpayers' money. I also am obligated to give you our best judgment on what will now be required in order to conduct an accurate census in 2010.

8. When is the Harris Corporation scheduled to get back to the Commerce Department with a rough order of magnitude for the cost of any changes to the contract?

   Answer: On April 10, 2008, Harris will submit an updated ROM for the entire FDCA project.

   a. Do you think that there is a reasonable chance that this timetable could slide even further given what you know now?

   Answer: We are devoting all of our efforts to working with Harris to meet that timetable. Our overarching goal is to complete an accurate and on-time 2010 Census.

9. Will the contractor be able to produce a sufficient number of handheld computers for the actual address canvassing operation in 2009?

   Answer: Yes, we are working to ensure that decisions are made with sufficient lead time to ensure that handheld computers are available for address canvassing operations in 2009.

10. Looking at the matter prospectively, how do you plan on holding your department accountable to achieving the 2010 Census in a way that is both accurate and on-budget?

    Answer: I assure you that the Census Bureau and the Department are devoting all of the resources at our disposal to ensure effective management of the decennial program. We are working to strengthen the Bureau's project management, capital asset planning, software development and IT security. I have asked our Inspector General to report to me directly on Census's progress, and I have personally met with representatives of GAO on this matter.

    I have also established a team of senior Departmental staff to work closely with Census managers and to keep me personally apprised of progress in preparing for Census 2010. The Commerce IT Review Board now meets weekly with Census staff on the FDCA contract and interacts with them on a daily basis.

    We will continue a close dialogue with Congress as we proceed with planning for a comprehensive and accurate decennial census in 2010.

    a. Do you plan on taking any steps to hold accountable those who were in charge of managing the handheld computer contract?

       Answer: It is essential that we have the right people in place at the Bureau to ensure that this contract is properly managed. If changes need to be made, they will be made. And we will, through the established personnel processes, hold employees fully accountable for their actions.

11. What role is the Office of Management and Budget playing to help the Department solve its problems with the handheld computer contract?

    a. Have you asked them to get involved in the day-to-day work of addressing the handheld computer contract?

    Answer: The Office of Management and Budget is working closely with Commerce on solving these problems. While not involved in the day-to-day work on the FDCA contract, OMB staff and officials are closely monitoring our activities and providing valuable assistance at all levels of this undertaking from both the budget and management perspectives.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator George V. Voinovich

"Census in Peril: Getting the 2010 Decennial Census Back on Track"
March 5, 2008

1. It is unfortunate that Committee hearings and meetings regarding the 2010 Census prior to today lacked the level of transparency expected by Congress and GAO now. What assurance can you give the Committee that we have the level of disclosure the public deserves?

   Answer: I assure you that the Census Bureau and the Department are devoting all of the resources at our disposal to ensure effective management of the decennial program. We are working to strengthen the Bureau's project management, capital asset planning, software development and IT security. I have asked our Inspector General to report to me directly on Census's progress, and I have personally met with representatives of GAO on this matter.

   I have also established a team of senior Departmental leaders to work closely with Census managers and to keep me personally apprised of progress in preparing for Census 2010. The Commerce IT Review Board now meets weekly with Census staff on the FDCA contract and interacts with them on a daily basis.

   We will continue a close dialogue with Congress as we proceed with planning for a comprehensive and accurate decennial census in 2010.

Post-Hearing Questions for the Record
Submitted to Steven H. Murdock
From Senator Thomas R. Carper

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. You are supposed to be in the final stages of your 2010 dress rehearsal right now. The dress rehearsal, as I understand it, is supposed to be your final run through where you test all of the procedures and technology you'll be using during the decennial. That has not happened this time around. The whole dress rehearsal process was delayed for some time due to funding issues. Some tests have been dropped. And now, with the problems with the handhelds you're dealing with now, it's unclear how the final stages of the dress rehearsal will even be carried out. How will the various options you're considering now impact the dress rehearsal and your efforts between now and 2010 to address any problems that arise?

   Answer: Census has already completed the Local Update of Census Addresses (LUCA) and Address Canvassing operations for the Dress Rehearsal sites, and both the Group Quarters Validation and Coverage Measurement Independent Listing operations were completed on schedule because they were ready for implementation at that point.

   If we decide to continue our plan for using the handhelds to conduct the Non-Response Follow-up (NRFU) for the 2010 Census, this will be part of the Dress Rehearsal. If we decide not to continue the use of handhelds for 2010 NRFU, we will not be able to conduct a paper-based NRFU in the Dress Rehearsal. There simply is not enough time to prepare for and carry out all the needed activities. However, the Dress Rehearsal will still test a variety of critical census operations, including: mailout/mailback of questionnaires (including tracts identified to receive the bilingual form), the second mailing, and DRIS data-capture systems. The handhelds will be used for Address Canvassing in all of the options we are considering, and, as mentioned above, this operation has already been tested in the Dress Rehearsal.

2. I believe that all of the options you have on the table right now involve using the handhelds for at least a portion of the 2010 census. I'm told, however, that the handhelds did not always perform up to expectations when they were tested during the address canvassing portion of the dress rehearsal. Can you take a minute or so to talk about what problems you did experience with the handhelds in the dress rehearsal and then maybe tell us how we can be sure that they will work later on down the road when we're using them in the real census?

Answer: Each of the options identified by the Task Force contemplates the use of handheld computers in Address Canvassing operations during the 2010 Census. This operation with the handheld computers has already been tested in the Dress Rehearsal. We believe the problems experienced in Address Canvassing are manageable and consistent with what the Dress Rehearsal is designed to identify.

Broadly, those problems had to do with transmission speeds, poor system performance for large assignment areas, the vendor's Help Desk response, and other factors. Efforts are underway to resolve such problems.

3. Do you even know yet whether the handheld computers will be used in the dress rehearsal? Can your contractor, the Harris Corporation, even produce the number of units that will be needed for the testing and, later on, for address canvassing and other functions where we know they'll be needed?

   Answer: We have already used the handhelds in Address Canvassing operations in the Dress Rehearsal. A decision will be made soon regarding the use of handheld computers for NRFU operations during the Dress Rehearsal. That is among the options proposed by the Task Force. Secretary Gutierrez has convened an Expert Panel to consider all options and make a recommendation to the Secretary.

   The contractor has a sufficient inventory of handheld computers on hand to successfully carry out NRFU operations in the Dress Rehearsal, should that option be chosen, and can purchase an adequate supply to accommodate any contingent need.

Post-Hearing Questions for the Record
Submitted to the Honorable Steven H. Murdock
From Senator Susan M. Collins

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. At a December 11, 2007 House subcommittee hearing, Census Director Kincannon was asked if he could tell the committee, with confidence, that there were no inherent risks within the FDCA program that will require the Bureau to transition into contingency plans for a paper-based census. Director Kincannon responded that he did not see any major risk that would require this move. However, a November 29, 2007 MITRE Corporation "talking points" memo for a meeting with Deputy Director Jay Waite indicates that the Census Bureau had already been alerted that "FDCA is in serious trouble," and that "immediate, significant changes are required to rescue the program." Can you discuss the disparity between Director Kincannon's assurances to the House subcommittee and the alarming tone of the MITRE talking points that were discussed prior to the House hearing?

   Answer: I think it is important to put the "MITRE talking points" into perspective. Previous evaluations of the MITRE Corporation in Spring/Summer of 2007 and by GAO later in the year did provide early signals of potential problems, but Census Bureau officials believed at the time that such problems were manageable.

   After Address Canvassing operations concluded in the summer and early fall, further analysis indicated that more substantial problems existed with the handheld computers. The intent of the Dress Rehearsal was to identify such problems, and at that time they appeared to be adequately managed. Of more concern were the problems we identified with the management of the Operations Control System, particularly the paper-based systems that the FDCA program would need to support.

   In November 2007, the Deputy Director of the Census Bureau initiated a comprehensive assessment to determine the status of the program and to better understand these issues. At the conclusion of this process, issues were identified that raised concerns about the complete development of all of the operations initially planned for the FDCA system in time for the 2010 Census. A primary obstacle to understanding the extent of these issues was the need for the Census Bureau to define all 2010 Census requirements for this contract to the level of detail necessary to satisfy the various needs of the Census Bureau's numerous field activities. In order to respond to these problems, the Deputy Director established an Integrated Program Team tasked with producing the final set of FDCA program requirements by January 16, 2008.

   This process was nearing completion when I assumed my Directorship on January 4, 2008. When Harris Corporation responded to the final set of detailed requirements

with a Rough Order of Magnitude (ROM) cost estimate on January 31, 2008, we recognized that the problems with the FDCA program were far more significant than we expected, and that the cost increases could potentially be higher than expected. I also understood then that there were serious questions about our ability to complete the FDCA program successfully unless changes were made. For both reasons I established the 2010 Census Risk Reduction Task Force that has completed its work.

Since I was not at the Census Bureau when MITRE presented its talking points, I cannot speculate on Mr. Kincannon's testimony and refer you to the public statement he has made regarding this matter: "I have reviewed my testimony and the record of the hearing of December 11, 2007. I am satisfied that I testified correctly and frankly, based upon facts known to me at that time."

2. According to GAO, at the contract award in March 2006, the total cost of FDCA was estimated not to exceed $596 million. As of September 2006, GAO estimated that the cost had increased to $624 million. Then in May 2007, GAO estimated life-cycle cost rose again by a further $23 million. What is the current estimate of the life-cycle cost?

   Answer: The current negotiated value of the contract is $624 million. The current budget estimate for the contract - that is, the life cycle estimate assumed in the FY 2009 President's Budget - is $703 million. Subsequent to my testimony before the Committee, the Secretary made a determination that the best way forward is to proceed with Option Two recommended by the 2010 Census Risk Reduction Task Force for 2010 decennial operations. Under this option, Address Canvassing operations will be performed using handheld computers, while the Nonresponse Follow-Up (NRFU) operation will be conducted using paper address registers and maps. The Census Bureau will develop the IT infrastructure for the Regional Census Centers. The Harris Corporation will develop the Operating Control System (OCS) and continue to be responsible for the IT infrastructure of the Local Census Offices. The Rough Order of Magnitude (ROM) life cycle estimate for the contract is $1,306 million. We are continuing to work with the Harris Corporation to refine this estimate.

3. GAO has identified contractual "requirements creep" as a core problem with FDCA program. What measures has the Census Bureau and the Department of Commerce taken to ensure that a final set of valid requirements for operational deployment can be finalized?

   Answer: A set of final requirements under the original scope of the contract was developed and delivered to the Harris project team on January 16, 2008. Harris then submitted an updated estimate for the entire FDCA project. Now that the decision has been made to proceed with a paper-based NRFU, the Census Bureau will develop detailed requirements for that operation. After those requirements are finalized, any subsequent changes will require approval by the Deputy Director of the Census Bureau.

4. The 2008 dress rehearsal is essentially the last opportunity to perform realistic field testing of the handhelds and other IT acquisitions. Unfortunately, the dress rehearsal has been delayed from April until May, and some key aspects will not be included even then. Could you discuss what functions will not be tested at the dress rehearsal and how you plan to assess them in the future?

Answer: Although the Census Bureau has conducted a paper based NRFU for many censuses, this change in approach for 2010 now needs to be integrated with other systems and operations planned for the census. A number of Dress Rehearsal operations already had been cancelled due to funding constraints. When coupled with the decision to drop the use of handheld computers for NRFU, the Dress Rehearsal no longer can provide the opportunity for a full end-to-end test of all systems and interfaces. Work is underway now to develop and implement such an integrated test, but the timing and details are not yet available.
The following are among the operations that had to be dropped from the 2008 Census Dress Rehearsal:

- New Construction
- Update/Leave
- Group Quarters Advance Visit
- Group Quarters Enumeration
- Service Based Enumeration
- Enumeration of Transitory Locations
- Questionnaire Assistance Centers
- Be Counted Program
- Non-ID Processing
- Field Verification
- Census Coverage Measurement Housing Unit field operations (other than Independent Listing)
- Census Coverage Measurement Housing Unit Matching processing
- Assessments of the operations that were dropped

Most other Dress Rehearsal operations have already taken place, or will still take place, including:

- Address Canvassing,
- Mail out of census questionnaires, including a directed mailing of bilingual questionnaires to neighborhoods with higher concentrations of households speaking Spanish at home,
- Mail second questionnaire to households that do not respond to the initial mailout,
- Data capture of returned questionnaires,
- Coverage follow-up, a telephone operation designed to improve accuracy, and
- Headquarters processing of returned questionnaires.

The 2008 Census Dress Rehearsal remains critically important to the success of the 2010 Census. The lessons learned will provide vital information for us to fine tune plans for the 2010 Census.

Advance letters were mailed on April 7, and questionnaires will be mailed beginning April 14, 2008.

Post-Hearing Questions for the Record
Submitted to the Honorable Steven H. Murdock
From Senator George V. Voinovich

"Census in Peril: Getting the 2010 Decennial Census Back on Track"
March 5, 2008

1. It is unfortunate that Committee hearings and meetings regarding the 2010 Census prior to today lacked the level of transparency expected by Congress and GAO now. What assurance can you give the Committee that we have the level of disclosure the public deserves?

   Answer: As I indicated in testimony before our House oversight subcommittee on April 9, clearly we cannot continue to do things in the way that we have in the past. I have substantially increased the intensity of Senior Management involvement in day-to-day operations of decennial census activities. We have also strengthened our management program to include many of the elements that GAO has recommended.

   The Census Bureau understands Congress' important oversight responsibilities and appreciates the critical role GAO plays in keeping Congress informed on the status of major government operations such as the decennial census. We are committed to strengthening a transparent, cooperative relationship both with Congress and GAO to ensure that the Congress has the information it needs to execute its oversight role. I have instituted new policies and practices to expedite the processes by which we respond to congressional inquiries and have established procedures to monitor both the thoroughness and timeliness of their success.

Post-Hearing Questions for the Record
Submitted to the Honorable Steven H. Murdock
From Senator Tom Coburn

"Census in Peril: Getting the 2010 Decennial Back on Track"
March 5, 2008

1. When did the Census Bureau realize there were significant problems with the handheld contract?

   Answer: Evaluations by the MITRE Corporation in Spring/Summer of 2007 and by GAO later in the year provided early signals of potential problems, but Census Bureau officials believed at the time that such problems were being effectively managed.

   Evaluations of the Address Canvassing operations over the summer and early fall indicated that there were more substantial problems with the handheld computers. The intent of the Dress Rehearsal was to identify such problems, and at that time they appeared to be adequately managed. Of more concern were problems with the management of the Operations Control System, particularly the paper-based systems that the FDCA program would need to support. These problems came to light in the fall of 2007.

   In November 2007, the Deputy Director of the Census Bureau initiated a comprehensive assessment to determine the status of the program and to better understand these issues. This process identified issues that raised concerns about the complete development of all of the operations initially planned for the FDCA system in time for the 2010 Census. A primary obstacle to understanding the extent of these issues was the need for the Census Bureau to define all 2010 Census requirements for this contract to the level of detail necessary to satisfy the various needs of the Census Bureau's numerous field activities. In order to respond to these problems, the Deputy Director established an Integrated Project Team tasked with producing the final set of FDCA program requirements by January 16, 2008, instead of late February as initially planned.

   This process was nearing completion when I assumed my Directorship on January 4, 2008. When Harris Corporation responded to the final set of detailed requirements with a Rough Order of Magnitude (ROM) cost estimate on January 31, 2008, we recognized that the problems with the FDCA program were far more significant than we expected, and that the cost increases could potentially be higher than expected. I also understood then that there were serious questions about our ability to complete the FDCA program successfully unless changes were made. For both reasons I established the Task Force that is now completing its work.

2. One of the biggest problems with the handheld computer contract has been that hundreds of requirements were added after the contract was awarded, leading to schedule delays and cost overruns. When do you anticipate coming to a final agreement over requirements with the Harris Corporation?

   Answer: We have been working with the Harris Corporation since the contract award to more clearly define the original set of requirements. Many changes are clarifications of existing

requirements due to miscommunication between Census and Harris. In some cases, this discussion led the contractor to revise its proposed solutions and cost requirements. We delivered a final set of these detailed requirements to the Harris Corporation on January 16, 2008.

a. What is the current status of negotiations with the Harris Corporation?

Answer: We are working closely with Harris on a daily basis to resolve issues and develop a path forward.

3. Is the Census Bureau leaning toward an all-paper census in 2010 as the primary option?

Answer: No. All of the options being considered include the use of handhelds for Address Canvassing.

a. What are you doing to ensure that the handheld computers are not abandoned prematurely in favor of a paper census?

Answer: We are evaluating the risk of continuing to use the handheld computers for NRFU.

4. There are a lot of problems associated with an all-paper census that have not to my knowledge been addressed. Are you currently preparing the backup plans that would be necessary if you need to conduct the census solely by paper? If so, please provide details about this planning effort.

Answer: As far as reverting to paper for NRFU, this is one of the options identified by the Task Force to be considered by the Expert Panel whose views will be considered in making the final decision. We have not yet begun to develop plans for a paper-based NRFU but are prepared to do so if the option chosen involves paper-based NRFU.

a. What is the latest date that the Bureau can decide to revert to a paper-based operation and still conduct the Census on time?

Answer: If a decision is made to revert to a paper-based NRFU, we need to begin working on that as soon as possible. Although we have conducted paper-based NRFU in previous censuses, there is a lot of preparatory work involved with reverting to this approach for the 2010 Census.

b. What are the issues that need to be addressed in converting the census from one that is partly automated to one that is entirely done on paper?

Answer: If we revert to a paper-based NRFU, there are myriad issues related to such things as designing a new paper questionnaire; printing of maps and assignment lists for hundreds of thousands of interviewers; developing manuals, training, and quality assurance methods for a paper-based operation; developing a new paper-based weekly payroll system for all those interviewers; redesigning the interfaces with the geographic, data capture, and operational management systems; revising the cost, staffing, and field office infrastructure needs of such an approach; and determining schedule and other operational changes that must be made to preceding and succeeding operations. For example, we need to closely examine the schedule and

related operations to determine if we can still reduce the NRFU workload (and thus reduce overall costs) through the use of a replacement mailing of questionnaires (i.e., a second mailing).

5. Based on what you know now, how likely is it that the 2010 Census will be as good or better than the 2000 Census in terms of accuracy?

   Answer: Every effort is being made to ensure that the 2010 Census is as, or more, accurate than the 2000 Census. If key decisions are made and promptly implemented, I am convinced that we can achieve that goal. We appreciate this question because it is important for all involved to keep in sight the ultimate objective—an accurate decennial census.

   a. How likely is it that the 2010 Census will be lower in quality than the 2000 Census?

      Answer: No matter what option we choose in going forward, the Census Bureau and Department of Commerce will take whatever action is needed to ensure a successful and accurate count of this nation's population. This is our Constitutional mandate, and the core mission of the Census Bureau.

   b. How much does an accurate count in 2010 depend on making a timely decision regarding the handheld computer contract?

      Answer: A timely decision is critical no matter what option we choose.

   c. Do you believe that a paper census would be as accurate as one that is automated using handheld computers?

      Answer: Each of the options identified by the Task Force contemplates the use of handheld computers in Address Canvassing. Among the remaining decisions is whether or not to use them for NRFU. If we do not conduct Address Canvassing using the handheld devices, we will lose the opportunity to improve the geographic accuracy of final census results. At the conclusion of Census 2000, we estimated that nearly half of the remaining coverage errors had resulted from geocoding addresses to the wrong block. With the use of handhelds and the results of the MAF-TIGER Accuracy Improvement Plan (MTAIP) geocoding database realignment, we expect to eliminate almost all geocoding errors.

      As a result, most of the factors resulting from the use of the handheld computers intended to increase the accuracy of the 2010 Census are expected to be achieved under all of the options.

6. Once the Census Bureau finalizes its negotiations with the Harris Corporation, is there any reason to keep the handheld computer contract as a cost-plus agreement?

   Answer: As I said at my recent hearing, I intend to work with our procurement staff to explore this option. I will be back to you when I determine our options.

a. Are there any plans in place to convert the contract into a fixed-price agreement?

Answer: Please see previous response.

7. The Census Bureau has been planning for a May 1 Dress Rehearsal, which it has long argued is essential for a successful census. Do you believe that a dress rehearsal is essential to a successful census?

Answer: If we choose automated NRFU, it will be vital. Using new technology or methods for the first time in 2010 risks major operational failure that almost certainly would have a significant cost impact.

a. Do you still anticipate the Census Bureau holding a dress rehearsal prior to the 2010 Census?

Answer: Yes, although if we ultimately choose to use paper-based NRFU, it may be significantly scaled back.

b. Is there a chance that the 2008 Dress Rehearsal will be cancelled? If so, what are the reasons why it would be cancelled?

Answer: We are planning to conduct a Dress Rehearsal. The decisions we make about the FDCA contract could affect what we do during that Dress Rehearsal.

c. What are your plans for testing non-response follow-up during the dress rehearsal?

Answer: If we decide to continue our plan for using the handhelds to conduct NRFU for the 2010 Census, this will be part of the Dress Rehearsal. If we decide not to continue the use of handhelds for 2010 NRFU, we will not be able to conduct a paper-based NRFU in the Dress Rehearsal. There simply is not enough time to prepare for and carry out all the needed activities. However, we have conducted paper-based NRFU for many censuses, so this will not be a new operation if it has to be used for 2010.

Regardless of whether the handhelds are tested in the Dress Rehearsal, the Dress Rehearsal would enable us to test a variety of critical census operations, including: Address Canvassing, which has already been tested, mailout/mailback of questionnaires including tracts identified to receive the bilingual form, the second mailing, DRIS data-capture systems, and Census Coverage Measurement.

d. How will the Bureau's plans for the dress rehearsal change as a result of changes in FDCA requirements?

Answer: Please see previous response.

e. How will FDCA changes impact plans for 1) the extent and timing of systems integration testing? and 2) the removal of late mail returns?

Answer: These issues are being examined by the Task Force as they continue their review of the options. It may be possible, for example, to remove late mail returns

without relying upon automated NRFU. That is a key issue being examined by the Bureau.

8. Beyond the handheld computer contract, what is the current status of the key 2010 Decennial Census IT contracts?

   a. Are they currently on schedule and within budget?

Answer: I am conducting a top-to-bottom review of the decennial program. Once we complete the review of FDCA, we will turn to the other contracts. Pending my review the status of the key 2010 Decennial Census IT contracts is listed below.

MAF-TIGER Accuracy Improvement Program (MTAIP)
This effort, to complete the initial realignment of all 3,232 counties, will be completed in April 2008, on schedule and within budget.

Decennial Response Integration System (DRIS)
We have made schedule changes to the DRIS contract and believe it is on track to meet its budget and modified schedule.

Data Access and Dissemination System II (DADS II)
The DADS II effort is currently on schedule and within budget for the 2010 Census.

United States Government Accountability Office
Washington, DC 20548

April 18, 2008

The Honorable Joseph I. Lieberman
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate

Subject: *Census in Peril: Getting the 2010 Decennial Back on Track*

Dear Senator Lieberman:

This letter responds to your request that we answer questions related to our testimony on March 5, 2008.[1] During that hearing, we discussed the status of the 2010 Decennial Census and the actions taken to getting it back on track. Your questions, along with our responses, follow.

1. *I know that the Census Bureau is not alone in the federal government when it comes to troubled IT projects. How do the problems we've seen with the handheld project compare to those you have studied in other agencies? Are there lessons that other agencies can learn from the Census Bureau's failures here?*

Based on our work on the Census Bureau's Field Data Collection Automation (FDCA) acquisition (which included handheld mobile computing devices),[2] we reported that the Census Bureau did not have solid capabilities in acquisition management, including requirements development and management; as a result, changes to requirements contributed to both cost increases and schedule delays. In addition, we reported on critical weaknesses in risk management practices including identifying risks, establishing adequate mitigation plans, and reporting risk status to executive-level officials. In our experience, these types of management problems are common in troubled IT projects. We have reported on several other projects that experienced cost increases and schedule delays due to inadequacies in such areas as requirements management, project monitoring, risk management, and executive level oversight.[3]

---

[1]GAO, *Information Technology: Significant Problems of Critical Automation Program Contribute to Risks Facing 2010 Census*, GAO-08-550T (Washington, D.C.: March 5, 2008).
[2]GAO, *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems*, GAO-08-79 (Washington, D.C.: Oct. 5, 2007).
[3] For example, GAO, *Polar-Orbiting Operational Environmental Satellites: Restructuring is Under Way, but Technical Challenges and Risks Remain*, GAO-07-498 (Washington, D.C.: April 27, 2007); *United States Coast Guard: Improvements Needed in Management and Oversight of Rescue System Acquisition*, GAO-06-632 (Washington, D.C.: May 31, 2006); *Geostationary Operational Environmental Satellites: Further Actions Needed to Effectively Manage Risks*, GAO-08-183T (Washington, D.C.: Oct. 23, 2007); *Information Technology: Improvements for Acquisition of Customs Trade Processing System Continue, but Further*

Lessons can be learned from the FDCA experience. Specifically, agencies must define and validate their requirements. Without well-defined requirements, system acquisitions are at risk of cost increases, schedule delays, or performance shortfalls. In addition, agencies must implement key risk management activities, including developing adequate risk mitigation plans for significant risks and improving executive-level governance of acquisitions. Until project teams implement key risk management activities, they face an increased probability that systems will not be delivered on schedule and within budget or perform as expected.

2. *Beyond this troubled handheld project, are there other information technology initiatives at the Census Bureau that you think we should be paying attention to? Is there anything this committee should be doing to ensure that other potentially-troubled 2010 projects are on track?*

In October 2007, we reported on the status, plans and risk management activities of four key 2010 Census IT acquisitions that are expected to play a critical role in improving its coverage, accuracy, and efficiency. These major systems acquisitions are (1) a modernization of the databases that provides address lists, maps, and other geographic support services for the census (Master Address File/Topologically Integrated Geographic Encoding and Referencing Accuracy Improvement Project); (2) systems, equipments, and infrastructure for field staff to use in collecting census data (Field Data Collection Automation); (3) a system for integrating paper, telephone responses, and field operations (Decennial Response Integration System); and (4) a system used to tabulate and disseminate census data (Data Access and Dissemination System II).

As of October 2007, these four decennial system acquisitions showed mixed progress in meeting cost and schedule deadlines.[4] In addition, the bureau had revised the original Decennial Response Integration System (DRIS) schedule and had delayed or eliminated some functionality in DRIS that was expected to be ready for the Census Day mock dress rehearsal. The bureau had also delayed the Data Access and Dissemination System II (DADS II) contract award date multiple times. Because of these delays, we reported that DADS II would not be developed in time for the dress rehearsal.

Congressional leadership in aggressively monitoring the challenges facing the 2010 Census and the attention paid to at-risk information technology projects has assisted in highlighting the risks facing the 2010 decennial census, including significant problems with the FDCA program, resulting in replanning the contract. In March 2008, GAO designated the 2010 Census as a high-risk area. GAO has reported long-standing weaknesses in the Bureau's management of information technology. As we have recently testified, the IT acquisitions planned for the 2010 Census will require continued oversight

---

Efforts Needed to Avoid More Cost and Schedule Shortfalls, GAO-08-46 (Washington, D.C.: Oct. 25, 2007); *Office of Personnel Management: Improvements Needed to Ensure Successful Retirement Systems Modernization*, GAO-08-345 (Washington, D.C.: Jan. 31, 2008); *Homeland Security: US-VISIT Has Not Fully Met Expectations and Longstanding Program Management Challenges Need to Be Addressed*, GAO-07-499T (Washington, D.C.: Feb. 16, 2007); *Secure Border Initiative: SBInet Planning and Management Improvements Needed to Control Risks*, GAO-07-504T (Washington, D.C.: Feb. 27, 2007); *Business Systems Modernization: Internal Revenue Service's Fiscal Year 2007 Expenditure Plan*, GAO-07-247 (Feb. 15, 2007).
[4]GAO-08-79.

by GAO, Inspector General, and other stakeholders to help ensure that the bureau achieves its acquisitions on schedule and at planned cost levels.[5]

3. *I understand that OMB issues guidance for agencies to follow regarding project management best practices in circular A-11, sections 53 and 300. I further understand that in the President's FY 2009 budget, $27 billion in IT projects are listed by OMB as "poorly planned." This $27 billion represents 38% of the entire government's IT portfolio for FY 09. Are agencies properly following OMB guidance as they are required and is OMB holding them accountable? Why are we funding these projects if they cannot even be planned correctly?*

As indicated by the number of poorly planned projects on OMB's Management Watch List, agencies are not always following OMB guidance. To its credit, OMB is using the Management Watch List as a means to oversee the justification for and planning of agencies' IT investments. However, to improve oversight of the Management Watch List projects, in our April 2005 report, we recommended that OMB include a list of projects and their deficiencies and report this information to Congress.[6] In response to these recommendations, OMB began publicly releasing aggregate lists of Management Watch List and high risk projects by agency in September 2006 and, since then, has been updating the lists on a quarterly basis. However, OMB does not publish the reasons for placing projects on the Management Watch List. We reported that providing this information would allow OMB and others to better analyze the reasons projects are poorly planned and performing, take corrective actions, and track these projects on a governmentwide basis. Such information would also help to highlight progress made by agencies or projects, identify management issues that transcend individual agencies, and highlight the root causes of governmentwide issues and trends. Until OMB makes further improvements in its oversight of poorly-planned IT projects, funds are potentially being spent on poorly planned and managed projects.

---

[5]GAO, *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems,* GAO-08-259T (Washington, D.C.: Dec. 11, 2007).
[6]GAO, *Information Technology: OMB Can Make More Effective Use of Its Investment Reviews,* GAO-05-276 (Washington, D.C.: April 15, 2005).

4. *Senator Coburn and I have held two hearings in our subcommittee on IT investments that are poorly performing and poorly planned. We learned that OMB uses a "Management Watch List" and "High Risk List" to track these projects within agencies. However, up until a few months ago, Congress was unable to see the Management Watch List.*

   Was the handheld investment we're examining here today ever labeled by OMB as poorly planned and/or poorly performing? If so, do you know if there was effective communication between OMB and the Census Bureau about how to rectify the problems?

To help carry out its oversight role, OMB has developed several processes, including its Management Watch List and high risk projects lists. The Management Watch List identifies projects that are poorly planned based on OMB's evaluation of agencies' funding justification for major projects. Agencies identify high risk projects and report on those that are poorly performing (projects experiencing performance shortfalls, meaning that they do not meet one or more of four performance evaluation criteria).

The FDCA program had not been placed on the Management Watch List as a poorly planned project. Moreover, only recently (as of March 14, 2008) did the Department of Commerce identify the FDCA project as a poorly performing project. Therefore, OMB and the Bureau did not effectively communicate on how to rectify these problems. As we have previously reported, opportunities remain for OMB and agencies to strengthen oversight of poorly planned and performing projects.

Do you feel the OMB's lists were effective in this situation? If not, what could OMB or Census do to bring effective attention to at-risk projects?

As stated earlier, because the FDCA project was never identified as being poorly planned and only recently was identified as poorly performing, OMB's lists were not effective in this situation. We have previously reported on opportunities for OMB to strengthen their identification and oversight of these projects.[8] For example, as we reported in September 2007, questions remain as to whether all high risk projects with shortfalls are being reported by agencies and the accuracy and reliability of the information reported by agencies on their exhibit 300s. Consequently, the Management Watch List may be undermined by inaccurate and unreliable data. We have previously recommended that OMB take action to improve the accuracy and reliability of the exhibit 300s and

[8]GAO, *Information Technology: OMB Can Make More Effective Use of Its Investment Reviews*, GAO-05-276 (Washington, D.C.: April 15, 2005); *Information Technology: Agencies Need to Improve the Accuracy and Reliability of Investment Information*, GAO-06-250 (Washington, D.C.: Jan.12, 2006); *Information Technology: Agencies and OMB Should Strengthen Processes for Identifying and Overseeing High Risk Projects*, GAO-06-647 (Washington, D.C.: June 15, 2006); *Information Technology: Further Improvements Needed to Identify and Oversee Poorly Planned and Performing Projects*, GAO-07-1211T (Washington, D.C.: Sept. 20, 2007).

application of the high risk projects criteria, and that it perform governmentwide tracking and analysis of Management Watch List and high risk project information. While OMB has taken steps to improve the identification and oversight of the number of projects, additional efforts are needed to more effectively perform these activities. Moving forward, the Census Bureau will need to become more transparent with risks in order to effectively manage its at-risk projects.

Was there involved senior management within the Census Bureau to help manage the project?

In October 2007, we reported that the FDCA project team had not adequately reported risk status to executive-level officials.[9] Accordingly, we recommended that the Bureau provide regular briefings on significant risks to senior executives. The FDCA project team's failure to report risks to executive-level officials reduced the visibility of risks to the executives who should have been playing a role in mitigating them. During a recent testimony, the Secretary of Commerce discussed lack of effective communication with the contractor as a key reason for the problems being experienced with the FDCA acquisition.

5. *We've been spending a lot of time discussing the handheld contract that we may be forgetting that a significant number of decennial functions have already been tested during the dress rehearsal. In your view, is the Census Bureau doing what it needs to do to assess the processes and technology it's already tested and make the necessary adjustments?*

We are uncertain that the Bureau is doing what it needs to assess the processes and technology already tested in the dress rehearsal and make necessary adjustments. To date the following dress rehearsal operations have been completed—the Local Update of Census Addresses, Address Canvassing, Group Quarters Validation and Coverage Measurement Independent Listing operations. While assessments are planned for all four of these operations only one assessment report for the Local Update of Census Addresses operation has been published. The Bureau will need to finish and publish the results of all completed dress rehearsal assessments reports. The Bureau has issued a draft assessment of the dress rehearsal address canvassing operation. However, the final report was due on March 17, 2008, but has not yet been issued. The status of when the two remaining assessment reports will be issued could not be confirmed by Bureau officials.

6. *GAO has previously reported on and warned about the weaknesses in FDCA's IT acquisition management. In your opinion, what are the most immediate challenges that the Census Bureau must deal with to best control cost and to ensure a complete and accurate 2010 Census?*

The most immediate challenge facing the Bureau is developing a census design that includes reverting back to a paper-based nonresponse follow-up operation. Thus, now more than ever, the risks associated with the decennial census must be closely monitored, evaluated, and reported. We have previously recommended that the Bureau develop a comprehensive plan that includes milestones, itemized costs that are updated,

[9]GAO-08-79.

and measurable goals for the 2010 Census. In response, the Bureau developed the 2010 Census Operations and System Plan, dated August 2007. At the time, the plan was an important step forward. It included inputs and outputs and describes linkages among operations and systems, but the plan did not include risk mitigation plans, a detailed 2010 Census timeline, or itemized estimated costs of each component. Not only will the Bureau will need to complete the plan, the Bureau will also need to update the plan to incorporate a paper-based nonresponse follow-up operation.

7. *The addition of government programs to the GAO "High-Risk List" typically coincides with the start of each congress. Is the addition of the 2010 Decennial Census during the 110th Congress symbolic of the situation at the U.S. Census Bureau? How would you characterize the level of risk posed by the 2010 Census?*

We added the 2010 Census to the High-Risk list on March 5, 2008, during the 110th Congress because of immediate concerns over IT acquisitions and contracts, problems with the handheld computer, uncertainty of life-cycle cost estimate, and the elimination of several dress rehearsal operations. In determining whether the 2010 Census is high risk, we applied criteria used to assess all federal government programs. Criteria considered for the 2010 Census included a large investment exceeding $1 billion; whether the risk is detrimental to service delivery and citizens' rights; and whether the risk could result in unreliable decision-making data and a reduced confidence in government. Based on our work, the 2010 Census meets those criteria. The decennial census is a large investment, and there is a potential risk for an incomplete or inaccurate census, which would be detrimental to the administration of federal financial assistance for government programs and to the enforcement, for example, of citizens' rights under the Voting Rights Act. Furthermore, because the census is a foundation for elected government, threats to a timely and reliable census can affect the public's confidence in government.

8. *Secretary Gutierrez highlighted the creation of the FDCA Risk Reduction Task Force as a key portion of the Bureau's plan to identify and analyze options for ensuring the success of FDCA. These results are expected at the end of March. Given the dire situation, is this too little, too late? Should recommendations be issued sooner based on GAO findings? What, if any, recommendations should be implemented immediately to ensure corrective action happens in the short-term?*

After analyzing several options to ensure the success of FDCA, the Secretary of Commerce on April 3, 2008 announced that the Bureau would drop the handheld computers (HHCs) from the FDCA contract for the nonresponse follow-up operation and revert back to paper. Additionally, the contractor will continue to provide HHCs for address canvassing, and develop the information system for controlling field operations.

Given the redesign effort, implementing our recommendations associated with managing the IT acquisitions is as critical as ever. Specifically, the Bureau needs to strengthen its acquisitions management capabilities, including finalizing FDCA requirements. The Bureau also needs to strengthen its risk management activities, including developing risk mitigation plans for significant risks and improving its executive-level governance of these acquisitions. The Bureau will also need to plan and conduct tests, including end-to-end testing to help ensure decennial systems perform as expected.

It will also be important for the Bureau to fully implement our previous recommendation to develop a comprehensive plan that includes milestones, itemized costs that are updated, and measurable goals for the 2010 Census. In response, the Bureau developed the 2010 Census Operations and System Plan, dated August 2007. At the time, the plan was an important step forward. It included inputs and outputs and describes linkages among operations and systems, but the plan did not include risk mitigation plans, a detailed 2010 Census timeline, or itemized estimated costs of each component. Not only will the Bureau need to complete the plan, but in going forward it will be important for the Bureau to update the plan to incorporate a paper-based nonresponse follow-up operation.

Thank you for the opportunity to respond to your questions following the March 5, 2008, hearing on the FDCA program. If you have any further questions or if we can provide additional help on these issues, please contact David A. Powner at (202) 512-9286 or pownerd@gao.gov or Mathew J. Scirè at (202) 512-6806 or sciremj@gao.gov.

David A. Powner
Director, Information Technology Management Issues

Mathew J. Scirè
Director, Strategic Issues

(310876)

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Joseph I. Lieberman

"Census in Peril: Getting the 2010 Decennial Back on Track, Part II"
April 15, 2008

1. Secretary Gutierrez, in an April 2, 2008, hearing you testified before the House Appropriations Subcommittee on Commerce, Justice, and Science regarding background checks for the enumerators the Census Bureau will hire to conduct Non-Response Follow-Up during the 2010 Decennial Census. While you stated at the hearing that "the security of the American people is job number one," the Census Bureau has not committed to performing fingerprint background checks on the approximately 1 million people that will be screened before being hired as enumerators due, in part, to the estimated $493 million you testified it will cost to perform them. Instead, the Department of Commerce has only asked for a sufficient amount of money to do a name check for these would be enumerators.

   a. How did you arrive at the estimated $493 million you believe it will cost to perform fingerprint background checks for those who apply to be enumerators for the 2010 Decennial Census? Please provide an itemized breakdown of your figure and the assumptions that went into the cost estimate.

      Answer: I have determined that the 2010 Census should include fingerprinting, and the President's 2009 Budget Amendment includes $10 million to develop and implement a fingerprinting plan that is cost effective and appropriate for the decennial census environment. The Census Bureau is still exploring the best method to use to incorporate fingerprinting into the overall security screening process for temporary decennial census employees. Once a plan has been finalized, and the associated costs determined, we will provide the Congress the cost and assumption details supporting the plan.

   b. Did you consider leasing, or even outsourcing, this work?

      Answer: As noted above, while the decision has been made to incorporate fingerprinting into the security screening process for the 2010 Census we are still exploring the most efficient process for accomplishing this task. Our examinations are covering reviewing possible methods, issues, and costs of outsourcing the work.

   c. At the April 2 hearing, you stated that you have made the decision that $493 million is an unacceptable amount of money to spend on fingerprint background checks. What process and analysis did you use to reach this conclusion?

      Answer: I was expressing the viewpoint that as good stewards of taxpayer money, the Administration's aim is to try to accomplish the task in the most efficient way and at the least cost to the taxpayers, while ensuring public safety.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Claire McCaskill

"Census in Peril: Getting the 2010 Decennial Back on Track, Part II"
April 15, 2008

1. The Census Bureau hires approximately 700,000 temporary employees to serve as enumerators. It is imperative that these individuals be of sound moral character as they will be entering the homes of Americans representing the U.S. Government in the conduct of the 2010 census. You testified before the House Appropriations Committee on April 3, 2008, that a decision on how to ensure temporary employees are not criminals has not been made. That said, the estimate to conduct "name checks" on temporary employees is $28 million, while the estimated cost to conduct "fingerprint checks" is nearly $500 million. You indicated that you believe $493 million is an excessive figure stating in regard to ensuring enumerators are not criminals, "So far, I have made the decision that $493 million is unacceptable, unless someone can convince me that it is so clear that we have to spend that amount of money."

   a. It seems pretty clear that the Commerce Department does not believe the security of Americans and the reputation of the Census Bureau is worth the cost of performing fingerprint checks on the temporary employees. Have you made a decision on whether or not fingerprint checks will be performed? Have you sought a more concise estimate on the cost to perform fingerprint checks?

      Answer: I have determined that the 2010 Census should include fingerprinting, and the President's 2009 Budget Amendment includes $10 million to develop and implement a fingerprinting plan that is cost effective and appropriate for the decennial census environment. The Census Bureau is still exploring the best method to use to incorporate fingerprinting into the overall security screening process for temporary decennial census employees.

   b. Have you considered what the implication of a Census Bureau employee accosting a citizen in their home (e.g. sex offender) under the guise of entering as a Census Bureau would be? Are you aware of any past occurrences where a Census Bureau employee has engaged in a criminal act against a citizen in their homes while performing Census Bureau activities? If so, did the investigation reveal this person had a criminal record that could have been detected through a fingerprint check?

      Answer: As good stewards of taxpayer money, our aim is to try to accomplish the task in the most efficient way and at the least cost to the taxpayers, while ensuring public safety.

In Census 2000, out of almost 1 million total hires, there were four reported cases of an enumerator being accused of a crime. In three cases the charges were dropped, but in the fourth case the individual was convicted of misdemeanor trespassing. This person had no criminal history prior to this arrest. In all four cases a fingerprint check would have provided the same information about criminal history as the name check.

2. You testified that the Commerce Department is seeking concurrence from the House Appropriations Committee to reprogram FY 2008 funds within the Census Bureau and seek Congressional authorization to reprogram funds across the Department. $33 million is proposed to be reprogrammed from other programs within the Census Bureau to offset a portion of the cost to implement the "Re-plan." An additional $160 to $230 million also is being proposed to be reprogrammed from programs within the Commerce Department. The remaining necessary funds to pay for the increased costs are expected to be requested in an amended 2009 Commerce Budget request.

   a. Aren't you proposing to take money from Census-related programs that are on track and not at risk and effectively increasing the likelihood that they too could become at risk?

      Answer: No. Most of this funding resulted from the fact that we postponed hiring and other activities early in the year when we had limited funding authority under the Continuing Resolution. Although these delays were not desirable, we believe their impact will be far less serious than the consequences of not providing this additional funding at a critical time for the FDCA contract.

   b. $33 million is a lot of money to shift within a streamlined program. Is this proposal an acknowledgement that programs within the Census Bureau are funded in excess?

      Answer: No. As mentioned above, this funding resulted from not funding various positions and activities at the beginning of the fiscal year.

   c. What effect will a continuing resolution in FY 2009 have on the Census, especially if you are required to operate under FY 2008 funding levels for up to 4 to 6 months?

      Answer: In FY 2009, the Census Bureau will be engaged in major field operations for the 2010 Census. These operations, and the preparations for them, begin early in the year. With over $1.9 billion in growth in FY 2009, if there were no anomaly in place for funding the decennial census, a continuing resolution would place the entire program at risk.

      By the beginning of FY 2009, the Census Bureau will be conducting or making final preparations for several major operations for the 2010 Census itself (including Address Canvassing and Group Quarters Validation); making final preparations for the conduct of other major 2010 Census operations; opening, equipping, and staffing a subset of Local Census Offices (150 Early LCOs); conducting major components of the Integrated Communications plan (including hiring of regional partnership

specialists, other outreach and promotion efforts, and beginning to purchase 2010 Census advertising); opening and equipping Paper Data Centers (PDCs); continuing other major contracting efforts related to Field Data Collection Automation (FDCA), Decennial Response Integration Systems (DRIS), and Data Access and Dissemination System (DADS) contracts; and continuing the overall management and integration of development and implementation efforts for the 2010 Census.

3. I am particularly concerned about the offsets Commerce is proposing to cover the FY 2008 "Re-plan" costs. By and large these programs are aimed at promoting the economy, building and maintaining infrastructure at these agencies, and providing grants to assist Americans and American manufacturers. For example, the cuts within the National Telecommunications and Information Administration cuts are to the Public Telecommunications Facilities Program, which is responsible, through matching grants, to assist in the planning and construction of public telecommunications facilities so that these services reach as many Americans as possible, and the mission of the Economic Development Administration is to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas of the United States.

   a. As Commerce Secretary, do you believe cutting approximately 50 percent of Economic Development Programs and other programs aimed at helping Americans, particularly during this economic down turn, is the best alternative?

      Answer: At the same time the Administration submitted its legislative proposal for enhanced transfer authority to solve the FY 2008 Census shortfall, it provided a list of sources to be used to completely offset the increased 2010 Census requirements to avoid increasing the burden on the taxpayers. The sources were carefully chosen to have the least impact while still maintaining fiscal discipline. For the Economic Development Administration, Congress provided a funding level that exceeded the FY 2008 President's Budget. The proposed offset would reduce Economic Development Assistance Program grant funding to the FY 2008 request level. In light of the necessary offsets to address the 2010 Census requirements, EDA would still use $170 million to generate and retain jobs, stimulate business growth and assist the nation's distressed communities in achieving their long-term economic potential as well as respond to sudden and severe economic dislocations. This includes maintaining University Centers and the Trade Adjustment Assistance for Firms program, and providing at least $27 million for the Planning Program, as required by Congress. The basis for the requested funding level for EDA and the proposed termination of the Public Telecommunications Facilities Program can be found in the FY 2008 President's Budget. The Department continues to work with Congress to find a solution to the Census funding situation.

Post-Hearing Questions for the Record
Submitted to the Honorable Carlos M. Gutierrez
From Senator Susan M. Collins

"Census in Peril: Getting the 2010 Decennial Back of Track, Part II"
April 15, 2008

1. On April 3, 2008, you testified that the Decennial Census could cost up to $3 billion more than the existing $11.5 billion total life cycle cost estimate. However, given the frequency of the repeated revisions in the estimate, and the GAO concerns with the Bureau's cost estimating methods, I have concerns about the credibility and accuracy of the newest estimate.

   a. Can you explain why we should have confidence in this new estimate when the others have proven flawed?

      Answer: Between June 2001, when the Census Bureau made its first lifecycle cost estimate for the 2010 Census Program, and September of 2007, the estimate changed very little—less than 2.2% over that 6 year span:

      June 2001 $11.280 billion
      June 2003 $11.310 billion
      Sept 2005 $11.255 billion
      June 2006 $11.255 billion
      Sept 2007 $11.526 billion

      While the estimates over the decade have been relatively stable, it is clear the issues related to our automation efforts, and the decision to revert to a paper-based Non-Response Follow-Up (NRFU), have had a significant impact on the life cycle estimate. To mitigate the impact, and contain further cost growth, both the Department of Commerce and the Census Bureau have taken a number of steps to strengthen program and financial oversight of this program. These efforts include:

      - Instituting a new management approach that will strengthen planning and oversight relative to risk management, issue identification, product testing, communications, and budget/cost management.

      - Increasing the intensity and pace of senior management involvement, including daily status assessments and problem resolution sessions chaired by the Associate Director, weekly status assessment meetings with the Director and Deputy Director, periodic but unscheduled reviews by MITRE and Department of Commerce specialists in IT, project management, and contracting.

   b. Please explain what cost model assumptions were used to arrive at this figure?

Answer: Some of the major sources of the increases include additional funding for the contractor to automate Address Canvassing and its Operation Control Environment based on final requirements provided in January 2008; contract modifications to support a paper-based NRFU; a revised Help Desk solution to remedy shortcomings observed during the Dress Rehearsal; developing an improved Operation Control System for all paper-based operations; and common support requirements. However, costs associated with the FDCA contract have not been negotiated and finalized with the contractor, and the independent government cost estimate (IGCE) produced by MITRE was significantly lower than the Harris Corporation rough order of magnitude cost estimate for these activities.

The estimated cost to conduct NRFU on paper accounts for the largest increase other than the estimated contract changes. Other major increases result from more conservative estimates we have made concerning enumerator productivity (cases/hour), and the number of hours we believe these part-time employees will work each week.

c. If this latest cost estimate requires yet another substantial revision, do you have contingency plans to meet the additional funding requirements?

Answer: In our FY 2009 amended appropriation request, we have included a request for nearly $200 million for risk mitigation contingency funds associated with planning and implementation of field data collection operations and automation. If this entire amount is not needed for FY 2009 activities, the funding can be carried over as a contingency for FY 2010 operations.

2. Presidential transitions present challenges for virtually all federal agencies. The challenges faced by the Census Bureau during the upcoming transition could be particularly difficult as result of the problems associated with the FDCA program. What is the Commerce Department and the Census Bureau doing now, or planning to do, to mitigate the potential risk of disruption?

Answer: Both the Census Bureau and the Department of Commerce have experience working with new leadership during Presidential transitions, and we understand the importance of providing good information on critical program efforts, issues, and budget needs at such times. The Census Bureau is involving its senior career executive, the acting (?) Deputy Director, in all key 2010 Census decisions.

3. The FDCA program has not been transparent, both within the Bureau, the Department, and in communications with its Congressional oversight committees and the GAO. For example, a MITRE Corporation assessment from June 2007, which warned that contractor was overwhelmed with changes in requirements and recommended stabilizing them, did not come to light until December 2007. What steps are you taking to ensure full and timely communication with the oversight committees and GAO in these critical remaining months?

Answer: Over the past decade, the Census Bureau has spent many staff hours with, and provided hundreds of program and budget documents to GAO in the course of more than a dozen audits they have conducted on the planning and implementation of the 2010 Census efforts. The Census Bureau and Department of Commerce also have provided formal action plans in response to all the recommendations made in GAO's various reports, and kept them apprised of progress on completing those actions.

As concerns about the FDCA contract grew over this last winter, and during the ensuing efforts of the FDCA Task Force and related efforts that led to my decision, we have shared many documents and participated in dozens of meetings with the GAO and oversight committees. These efforts have continued following the decision—we have provided both the GAO and the committees with the details of the Task Force report, the advice the Secretary received from the members of his Expert Panel, our plan for conducting a paper-based NRFU, our integrated 2010 schedule, our revised management plan, our revised risk register and risk management plan, our plans for testing in preparation for next year's address canvassing operation, the revised requirements delivered to the FDCA contractor, both the contractor's and MITRE's cost estimates for the revised FDCA requirements, and additional information about the assumptions behind our revised program cost estimates. Both I and Director Murdock have testified several times before our oversight committees, and provided responses to numerous follow-up questions for the record. We are fully committed to maintaining this level of communication and interaction with both the GAO and oversight committees on this critically important program.

Post-Hearing Questions for the Record
Submitted to the Honorable Steven H. Murdock
From Senator Claire McCaskill

"Census in Peril: Getting the 2010 Decennial Back on Track, Part II"
April 15, 2008

1. In its reports, GAO has recommended that the Bureau improve acquisition management capabilities, operational planning, cost estimation, and performance measurement. I understand the Bureau has agreed with most of these recommendations, but has not fully implemented them. Clearly, the Bureau has major problems managing technology contracts and more important in this case, integrating technology into its business practices.

   a. What is your timeline for implementing the 18 open GAO recommendations to improve business practices within the Census Bureau?

   b. Will the Census Bureau seek external program management expertise, as recommended by GAO, to transition to a culture of accountability and sound contract and program management relative to information technology?

   Answer: We previously responded to similar questions that Sen. McCaskill sent in a letter to Director Murdock on May 8, 2008. A copy of our response to that letter is enclosed.

2. I understand a large portion of the increased costs are related to faulty estimates related to "Help Desk" requirements. The Help Desk requirement was initially $36 million and the estimate is now increased to $217 million. Harris Corporation testified before the House Appropriations Committee on April 3, 2008, "Original estimates were that the Help Desk would need to absorb about 160,000 calls. The figure has since been revised dramatically upwards to more than 750,000. A much more robust help desk is now proposed, driven by requirements as they are expressed today."

   a. Please explain to me how Census Bureau arrived at the need for an additional 590,000 calls, costing taxpayers potentially $181 million dollars, especially given the FDCA will not be used for the nonresponse follow up questions. How did the Census Bureau get this so wrong in the first estimate, and why do you expect increased calls when the FDCAs will not be used to the envisioned extent?

   Answer: The independent government cost estimate (IGCE) produced by MITRE contests these figures, and estimates that help desk costs should be much lower than Harris's estimates. We are still reviewing MITRE's estimate, and will be reevaluating this dimension in our negotiation with Harris for a revised contract.

b. How do you plan to guide the 2020 Census in terms of establishing contract requirements and selecting and managing the proper contracting vehicles? Will you utilize the Internet and leverage existing technologies for the 2020 Census?

Answer: Very soon, we will be assessing lessons learned from the contracting process we used during the last decade and deciding on a recommended strategy for the 2020 census life cycle.

At this time, we plan to use the Internet as a mode of data collection for the 2020 Census. We will use the period between the 2010 and the 2020 Censuses to determine the most accurate and cost-effective approaches to encouraging Internet response without harming the accuracy of responses, coverage, or the security of the data we collect.

Post-Hearing Questions for the Record
Submitted to the Honorable Steven H. Murdock
From Senator Susan M. Collins

"Census in Peril: Getting the 2010 Decennial Back of Track, Part II"
April 15, 2008

1. As costs continue to mount and as the Bureau approaches its constitutionally mandated deadline, the Bureau must apply vigorous and effective management techniques to succeed. The GAO recommended that the Bureau develop a comprehensive, integrated project plan for the 2010 Census that includes the itemized estimated costs of each component, including a sensitivity analysis and an explanation of significant changes in the assumptions on which these costs were based. Do agree with this recommendation? If so, how do you plan to implement it?

   Answer: We agree with many of the findings in the GAO's report. In May 2008, we finalized a 2010 Program Management Plan, which informs decennial census staff and contractors about how issues are resolved and decisions are made regarding the 2010 Census. The Program Management Plan ensures coordination throughout the organization involved with myriad, interconnected census operations and activities, and establishes clear lines of authority and mechanisms enabling leadership to focus on problems as they arise. An important and essential component of this plan is that it outlines the decision-making process and structure to ensure that timely decisions are made.

   Soon after, we released the 2010 Census Integrated Schedule. The 2010 Census is a complex program composed of 44 major independent operations incorporating over 11,000 unique activities needed to conduct the census. The 2010 Census Integrated Schedule delineates the time schedules relative to these operations and activities and outlines their interrelationships.

   We are continuing to develop additional tools that will assist us in the management of the 2010 Census. This includes efforts to improve the quality and rigor of our cost estimates through the development of a new budget management tool, called the Decennial Budget Integration Tool (DBIT), which is based on the Census Bureau's own identification of many of the same concerns and issues identified by GAO.

2. I understand that a key factor in the decision to move to handheld computers was the potential cost saving in the non-response follow-up portion of the decennial census. Under the revised plan, the handhelds will no longer be used for the non-response follow-ups, but will still be used for address canvassing. Will the handhelds still provide a net benefit if they are only being used for address canvassing?

   Answer: It is too late for an Address Canvassing paper-based contingency. Therefore, Harris and the Census Bureau will focus on developing, improving, and implementing

Address Canvassing based on what we learned during the Dress Rehearsal Address Canvassing last year. A high-quality national address list is the underpinning for a high-quality census, and we believe we can accomplish this using these devices for Address Canvassing. In addition, it allows us to collect GPS coordinates for residential structures, thus ensuring high geographic coding accuracy for the census results. Use of the hand held device ensures that listers provide all of the necessary fields when updating an address, thus ensuring higher quality data on the addresses we capture during this operation.

3. Making changes to the FDCA program at this point introduces a new set of risks that cannot be tested in the May 2008 Dress Rehearsal. How do you purpose to check the adequacy and performance of the full set of decennial systems before Census Day 2010?

   Answer: The 2010 Program Management Plan includes plans for the testing of all key decennial systems. Development for end-to-end testing is underway for 2009.

4. What are you doing to extract key lessons learned from the FDCA program, to improve the execution and outcomes of future technology programs at the Census Bureau?

   Answer: Very soon, we will be assessing lessons learned from the contracting process we used during the last decade and deciding on a recommended strategy for the 2020 census life cycle. We also are in the process of developing our formal 2010 Census Program for Evaluations and Experiments, which will specify the detailed requirements for program and operational evaluations, including all contracting efforts.

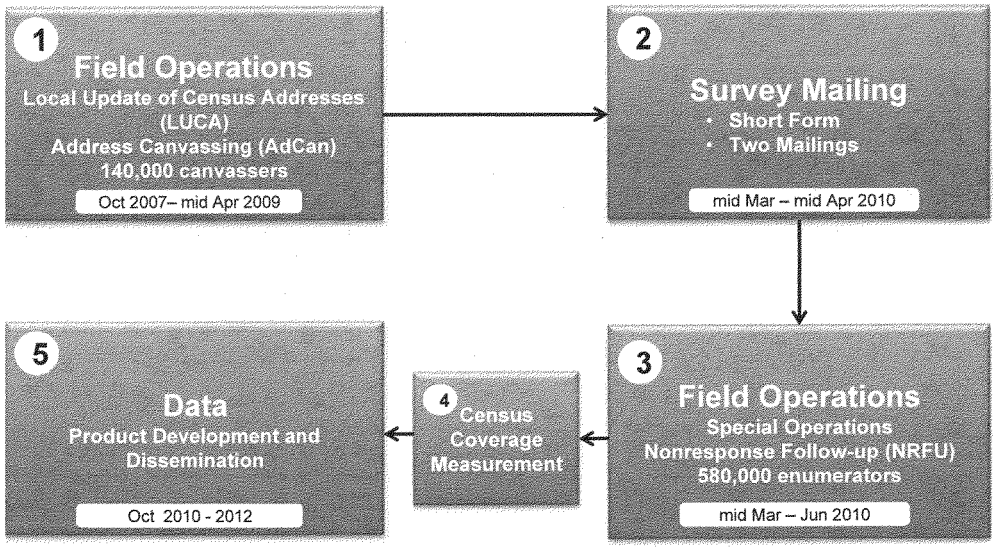
Decennial Census Progress Review and Program Replan

Key Discussion Points

- The Census
- Planning for the 2010 Census
- Cost Estimates
- Executing the Replan

The Census

Process at a Glance



The Census

Scope and Complexity

Largest peacetime mobilization in the United States

People and Infrastructure
- 140,000 address canvassers
- 580,000 NFRU enumerators
- 12 Regional Census Centers
- Over 450 Local Census Offices

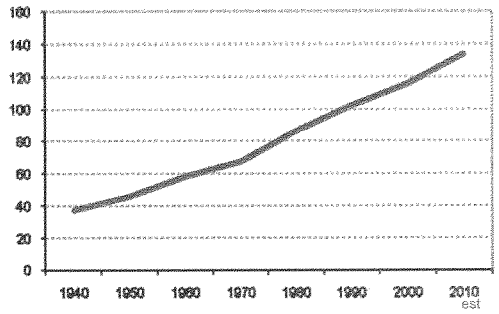
Supported by state-of-the-art technology

Information and Technology
- GPS address mapping
- Wireless handheld computers
- Sophisticated electronic and paper based data integration systems

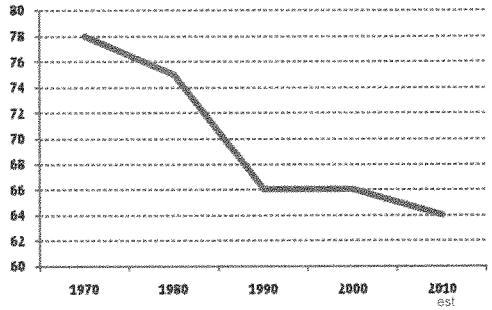
The Census

Becoming More Challenging

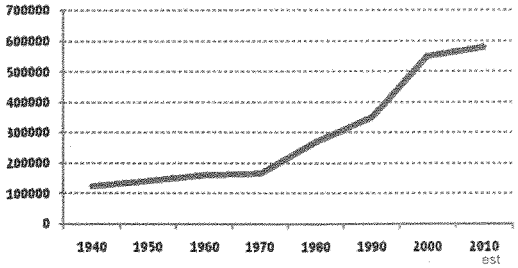
Housing Units (millions)



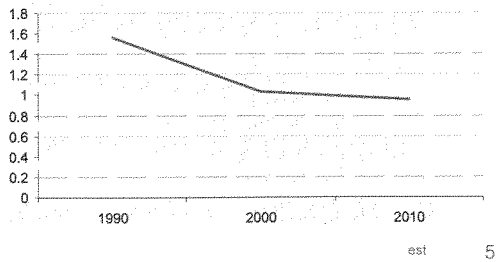
Survey Response Rates (%)



Enumerators



NRFU Productivity (Cases Per Hour)



Planning for the 2010 Census

Improvements Since 2000

American Community Survey
Starting in 2005, provides annual data for economic and social factors

Technology
GPS mapping
Handheld computers

Short Form Only Census
Provides all the data required for apportionment and redistricting, less burden on respondents

Multi Language
Questionnaires in both English and Spanish on the same form

Integrated Communications and Partnerships
Coordinated and targeted messaging

Planning for the 2010 Census

Status

Much of the decennial census is on track

- MAF/TIGER
- ACS
- DRIS
- Communications and Partnerships

Field Data Collection Automation (FDCA) problems

- Behind schedule
- Technical requirements not defined
- Program management
- Enumerator productivity estimates revised
- Escalating costs

Planning for the 2010 Census

FDCA History

2000 - 2002	• Decision to automate data collection
2002 - 2004	• Census in-house automation development efforts
2006	• FDCA Contract signed (Apr) • GAO report (Jun)
2007	• Address Canvassing Dress Rehearsal (Jun) • MITRE report (Jun) • GAO report (Jul) • GAO report (Oct) • Census Integrated project team assessment (Nov - Jan)
2008	• More than 400 additional requirements (Jan 16) • Harris rough order of magnitude response (Jan 31) • Clarified need for urgent action

Planning for the 2010 Census

Decision Inputs

- Office of the Inspector General
- Government Accountability Office
- MITRE
- 2010 Census Risk Reduction Task Force
- Expert Panel

Planning for the 2010 Census

Replan Options

	Revised Baseline	Option 1	Replan	Option 3
Address Canvassing (AdCan)	Harris (Handhelds)	Harris (Handhelds)	Harris (Handhelds)	Harris (Handhelds)
Non-Response Follow Up (NRFU)	Harris (Handhelds)	Census (Paper)	Census (Paper)	Census (Paper)
Operating Control System (OCS)	Harris	Census	Harris	Harris
Regional Census Centers Infrastructure	Census	Census	Census	Harris

Cost Estimates

Lifecycle Revised Baseline vs. Replan

(Dollars in millions)	Revised Baseline	Replan
Original Lifecycle Costs	11.546	11.546
Additional Resources	2.0-2.3	2.2-3.0
Total Lifecycle Costs	13.5-13.8	13.7-14.5

Cost Estimates

Additional Funding Requirements FY08 – FY13

(Dollars in Billions)	FY 2008 (remaining)	FY 2009	FY 2010 - 2013	Total Increase
Additional Funding Needed	0.21-0.28	0.6-0.7	1.3-2.1	2.2-3.0
Less Census Reprogramming	- 0.05	---	---	- 0.05
Additional Funding Needed	0.16-0.23	0.6-0.7	1.3-2.1	2.15-2.95
Possible Funding Mechanisms	Reprogramming/ Transfers	Budget amendment	Budget requests	

Cost Estimates

Major Cost Increases

People, Productivity and Workload
Additional enumerators and lower productivity $ 1.0-1.3B

Technology Costs $500M
Help desk
Upgrades to data capture system (DRIS)
Regional Census Center Network
Data center
Paper NRFU Control System

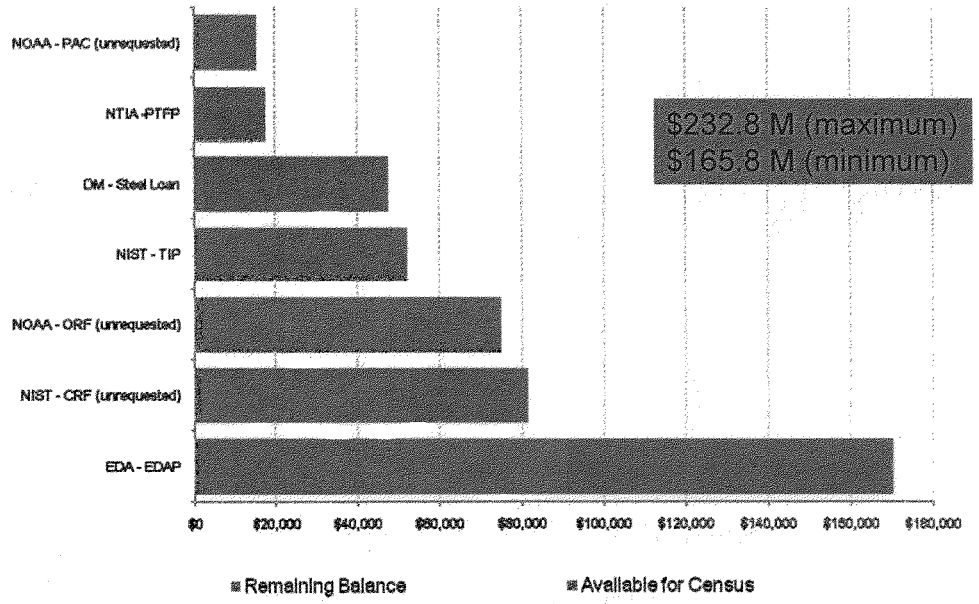
Other Costs $300M
Increased gas prices
Increased printing
End-to-end testing
Personally Identifiable Information Protection
Increased postage

Numbers are approximate

Cost Estimates

Transfer Candidates for FY08

(Unobligated Dollars in thousands)



Executing the Replan

Strengthening Management

- Clear Accountability and Leadership Expectations
- Better Integration Harris - Census
- Rapid Decision Making
- Real-Time Problem Solving
- Improved Communication