



**PREPARED STATEMENT OF  
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**Census: Planning Ahead for 2020**

**Before the Subcommittee on Federal Financial Management,  
Government Information, Federal Services, and International Security**

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I am pleased to appear before the committee and to discuss the future of the Census Bureau.

During my tenure as director, one of my greatest pleasures has been working closely with you, Chairman Carper, and with ranking member, Senator Brown, and especially, Senator Coburn. I thank you for your interest in and support for the work of the Census Bureau.

Below I review the 2010 Census evaluations to date, the Bureau's current efforts to increase efficiencies of processes and quality of its product, the current budget situation, and mid-term challenges that are relevant to the committee's oversight.

**A. Retrospective on the 2010 Census**

First, let me remind us all that at my nomination hearing in spring, 2009, most forecasts (OIG-19217, GAO 08 886T) warned that the 2010 Census was headed for disaster. That actually energized a whole group of people in the country who care about the Census Bureau as an institution. And that support clearly was related to my decision to take this position.

But it turned out that all of those predictions were wrong. The team that was assembled late in the decade to run the 2010 census was really much, much better than anyone knew at the time. They had organized things in a way that made for success. So I was the beneficiary of good things that were done before I arrived.

There were a variety of design decisions that created the success: the move to a short form led to higher response rates than in 2000; the replacement form sent to nonrespondents, although it generated a lot of grumbling, actually helped the return rate; and the bilingual form improved return rates for Latino households.

Recently, we announced the statistical evaluation of the census through the post-enumeration survey, the Coverage Measurement Program. And this showed that the 2010 census was one of the best (if not the best) censuses this country's ever seen. The results found that the 2010 Census had a net overcount of 0.01 percent, meaning about 36,000 people were overcounted in the census. This sample-based result, however, was not statistically different from zero. By way of comparison, the 2000 Census had an estimated net overcount of 0.49 percent and the 1990 Census had a net undercount of 1.61 percent. We recognize there are still some groups we have a harder time counting, for example, renters, young children, young adult males, blacks, Hispanics, and American Indians on reservations. Correspondingly, we tend to overcount owners of homes, older persons, females, and White non-Hispanics.

We returned nearly \$2 billion dollars of taxpayer money and presented the key results before the deadline. All the glory for these accomplishments should go to the incredible public servants at the Census Bureau. The Bureau has demonstrated the competencies to be a modern, efficient organization.

In addition to apportionment and redistricting results, we have released a number of other major data products including demographic profiles which show data for age, sex, race, Hispanic or Latino origin, household, relationship, household type, group quarters population, housing occupancy, and housing tenure. They were released for each of the 50 states, the District of Columbia, and Puerto Rico, down to place/functioning minor civil divisions, as well as for the U.S., regions, divisions, and other areas that cross state boundaries.

Our 2010 Census Program for Evaluations and Experiments (CPEX) is progressing well, and with requested funding we expect to wrap it up on schedule in 2013. Results from the 2010 CPEX will greatly inform how the 2020 Census is designed, tested, and implemented. We expect to complete 75 of 100 planned reports by the end of September, and the rest in 2013, funding permitting.

We are in the middle of the 2010 Census Count Question Resolution (CQR) Program by which State, local and Tribal area elected officials may challenge their jurisdiction's 2010 Census counts. We offer this program because historically, there has been a small percentage of cases where an incorrect geographic boundary or coding of a housing unit was used to produce the official census population and housing counts for a local area. There may also be Census processing errors that need to be considered.

For the 2010 Census program, we have several important activities that need to be wrapped up in 2013: a) dissemination of the final 2010 Census data products, b) completion of the Census Program of Evaluations and Experiments (CPEX) crucial to 2020 planning, and 3) completion by September 2013 of the Count Question Resolution program.

## **B. The Census Bureau and Change**

The stimulus for change at the Census Bureau comes from five external sources: 1) increasing difficulties gaining the public's participation in censuses and surveys; 2) increasing demand for timely, and small area social and economic statistics to help the country make key decisions; 3) new technologies that may make data collection more efficient; 4) new statistical methods of blending multiple data sources together; and 5) the real prospect of flat or declining budgets to do our work.

To adapt to these forces, we've tried to increase efficiencies and create new ways of doing our business.

### **B1. Restructuring and realigning key functions in the Census Bureau for efficiency.**

*Building a research and methodology directorate.* With the approval of Congress, we have restructured the Census Bureau, adding a research and methodology directorate (the basic division of the Bureau), led by a rotating chief scientist from outside the Census Bureau on a 3-year Intergovernmental Personnel Act agreement. The purpose of the new directorate is to discover innovations in statistical operations that reduce cost. This group is working with other directorates to increase our use of modern statistical methods to produce more efficient statistics for small geographical units, greatly expanding the utility of our information products for communities throughout the nation. This group is leading our effort at intensive analytics on our data collection operations, building cross-agency capabilities of modern management by quantitative data.

*Realigning the regional offices.* We reduced the number of regional offices of the Census Bureau from 12 to 6, simultaneously modernizing the supervisory structure and software support systems. We now have 24-hour reporting of initial statistics during data collection, along with richer process tracking of the operations. We attempted to keep ties with local communities

by increasing the number of public outreach staff. All of these combined are saving money.

*Using matrix organization to increase efficiencies in survey data collections.*

The Census Bureau provides survey data collection services for other Federal agencies, amounting to about 25% of its budget. Our clients face the same declining budget resources that we do. We have built cross-functional survey teams with technical and management resources to innovate and find efficiencies in our operations. Succeeding in this effort will benefit the budgets of these other agencies.

*Consolidating IT development and operations.* We have new leadership in the IT directorate and given it enterprise-wide authorities. Instead of building different IT systems that serve single directorates, whenever feasible, we are sharing services. We have a standard internet survey tool, that has been used by hundreds of thousands of Americans to reduce the burden of responding to surveys. We have utilized public cloud services for efficiencies in peak load demand for key statistical releases. We have consolidated data centers. We have virtualized our servers, building a private cloud environment, and storage systems to maximize usage of processing power and achieve economies of scale. We have committed to shared building block capabilities for internal collaboration tools, data base structures, and central software systems. We created a center for applied technology, which is increasing efficiencies in exploring the use of mobile computing for data collection and enterprise-wide tools of data processing. We have committed to computer systems that decouple the user device from any sensitive data, giving secure access to our private cloud through virtualization and expanding our telework capabilities without having to provide government-provided and purchased equipment.

*Modernizing dissemination of statistical information.* Through the new Center for New Media and Promotions, we have standardized the metadata structure of many of our statistics, and completed an application programming interface (API) that permits developers to build apps to access our statistics in new ways tailored to the needs of diverse audiences. Over the next several weeks, we will release our economic statistics app, running on diverse platforms, to provide mobile access to the latest economic statistics from the Census Bureau, Bureau of Economic Analysis, and the Bureau of Labor Statistics. More will come. We are simultaneously increasing the use of visualization tools in presenting our statistics, because that works for more audiences than reams of tables.

## **B2. Annual internal challenge grants for operational efficiencies.**

We have instituted an annual challenge to our staff – write down your ideas to make us more efficient and, if they're meritorious, we'll do them. Hundreds of proposals come forward each year; they're voted on by all staff using a new intranet social media tool; business cases are written for the

best of them; and we implement the very best of the best. We've discovered that many of the ideas don't require any investment; they immediately produce savings, and we do them. Through this process we are attempting to build a culture of innovation, one that empowers each staff member to replace old, inefficient processes with modern, efficient ones.

### **B3. Building better statistics through new analysis**

Just increasing efficiencies won't serve the American public's demand for better statistics. We're attempting innovations to produce more useful information.

*Statistical modeling for small domain estimates.* Every mayor, every community group, every small business wants to know the statistical characteristics of small groups. These may be a neighborhood in a city, a set of potential consumers with common characteristics, or a set of businesses in a certain industry. They want timely information – knowing what a group looked like two years ago is generally of little value in our fast paced society. We have launched a team devoted to using modern statistical modeling tools to produce more timely, small group estimates that our country needs. These require blending together data sets to produce new information; we can do this *without* launching expensive new data collection operations.

*Combining data resources within Census Bureau firewalls.* We have matched together data sets that then produce new information. For example, we have linked data on businesses to administrative and other data on their employees. This produces statistics on commuting patterns to work, and changes in the composition of growing and declining businesses. Once again, this new statistical information is created *without* creating expensive new data collections.

*Partnerships with external scientific talent.* The Census Bureau can never possess all the talent it needs to build its future. Through collaboration with the National Science Foundation, we have established a network of university research teams working on inventing new solutions to key statistical, geographical, and computing problems we face. These nodes will also act as a graduate student pipeline for new technical talent the Bureau needs to solve its problems. We hope the best of them will work at the Bureau.

*Challenge grants to seek solutions from external talent.* We plan to launch our first public challenge grant to produce statistical models predicting the patterns of participation in our demographic surveys and censuses. This will call on the collective statistical talent of the US to help us learn how best to identify areas and subpopulations that require new solutions for data acquisition.

## **C. An Example of the New Way of Doing Business – the 2020 Census Planning Effort**

The Census Bureau recognizes that the rising cost of the decennial census in recent decades cannot be sustained. The cost of the 2010 Census (which includes the American Community Survey or ACS) represented a 38 percent increase in the cost per housing unit over Census 2000 costs, which in turn represented a 76 percent increase over 1990 Census costs. If the Census Bureau makes no changes to the design of the decennial census, projected costs for the 2020 Census will increase at a similar rate. This is untenable.

We must find a way to maintain the quality of data produced by the decennial census while increasing efficiency and controlling costs. Accordingly, we have embarked on a research and testing program focused on major innovations to the design of the census oriented around the major cost drivers of the 2010 Census.

In restructuring the Bureau, we invented a new but small 2020 directorate charged with implementing new ways of planning the Census. As the design for 2020 becomes clear, the directorate will define its internal structure not to replicate the past but to tailor its organization to the needs of the next census. As the new structure grows, it will replace the old 2010 decennial directorate. And because we launched the 2020 research and testing program after we launched the organizational changes just listed, it will take advantage of their impacts.

Enterprise-wide synergies inform the 2020 planning effort. As a measure of our devotion to reducing the “siloes” inefficiencies, we have created an executive-level steering committee that directs cross-directorate collaboration in the planning. This permits, for example, the implementation of the method by which the IT directorate will facilitate enterprise-level systems, avoiding the 2010 experience of building one-use decennial-only systems.

We have restructured the research teams, making them smaller and more nimble. This will make the planning effort more efficient.

We have explicitly targeted cost efficiency as a key attribute for developments.

We are using many, small tests to evaluate alternative ideas rather than a very small number of very large tests.

### **C1. Key design features**

There are key design features that we are working toward:

*Targeted Address Canvassing.* In the 2010 Census, the Census Bureau mounted a substantial operation late in the decade to update the Master

Address File (MAF) and the associated mapping system we call TIGER (topologically integrated geographic encoding and referencing) used as the basis of the census. While the Census Bureau took the important step last decade of bringing TIGER into GPS alignment, we still conducted the decennial operation called address canvassing. During address canvassing, staff in the field walked almost every street in the Nation to ensure that we captured every housing unit in the correct geography. This was one of the more expensive components of the census.

Updating the MAF/TIGER system continually throughout the decade will enable us to reduce costs by targeting our canvassing efforts. This ongoing update also will benefit other census programs, including the ACS, other current surveys, and the Population Estimates program. Congress already has provided support for this ongoing initiative by appropriating funds for the Geographic Support System (GSS) in FY 2011 and FY 2012. The initiative supports ongoing geographic partnership efforts with federal, state, and tribal governments, as well as commercial entities, so that the Census Bureau can acquire the most up-to-date address and mapping information available.

*Multiple Mode Response Options.* The population is increasingly diverse, and the general public's willingness to participate in government surveys has declined in recent decades. Traditional procedures that offer the public only one way to provide us with their data, and then follow up in person with households that do not respond to the census, are inefficient.

The vast majority of costs during the collection phase come from following up with households that failed to return their census questionnaires. The 2020 Census will be a "multiple-mode" census, using mail, telephone, internet, face-to-face interviews, and other electronic response options that may emerge to ensure that diverse subgroups of the population, including those that speak languages other than English, have every opportunity to submit their information.

We also must fundamentally redesign the operations we use to enumerate households that do not initially provide their information to us. These operations, collectively referred to as non-response follow-up (NRFU), used a massive national infrastructure to manage hundreds of thousands of interviewers. This is the most expensive component of the decennial census. The Census Bureau must explore using existing data sources like the ACS and administrative records to obtain data about those households that do not otherwise respond to the census. Using administrative records for a substantial number of non-respondents could result in substantially smaller field and labor infrastructure, thereby saving billions of dollars. We can also save money by modernizing the Information Technology (IT) and field support infrastructure.

*Increased Program Management and Systems Engineering Efforts Early in the Decade.* Based on lessons learned, there were areas of program management that have potential for improvement. More robust models could have been developed for use in cost estimation. Project plans and schedules could have been formulated earlier in the program development process that included a decision matrix for determining the most effective utilization of evidence from research and testing. Moreover, the Census Bureau needed to take an enterprise approach for linking major acquisitions, schedule, and budget. The 2010 cycle experienced: (1) premature cutoffs for several design components, precluding technology upgrades; (2) a large mid-decade technology acquisition; and (3) a few very large field tests. These factors and others led to major, expensive design changes late in the decade, including the implementation of two high-risk contingencies—moving to a paper-based non-response follow-up operation and the last minute development of an operational control system for non-response operations.

To achieve the goals of the 2020 Census, the program's budget, schedule, and scope are being integrated, and an iterative process is being put in place that will allow flexibility in planning and design. The goal of this extensive up-front effort is to hold down costs later in the decade without compromising quality.

The Census Bureau will adopt a new approach to budget, schedule, and scope. Initial 2020 Census planning began in FY 2011 with preliminary analysis and discussions of operational design and program management options. We now have entered a 3-year phase for the FY 2012-2014 budget period. During this phase, we are conducting the initial research and planning that will lead to the major design decisions for the 2020 Census. In later phases of the 2020 Census lifecycle, particularly during the FY 2015-2018 period, we will continue efforts to research, test, and refine specific components of the program that follow from the major design decisions. During this second phase, we also will focus on operational development and system testing of the various components of the program. In FY 2019-2021, we will move into readiness testing and executing the census. An increasingly more informed approach will enable decisions to be made based on continually increasing information and analysis. We will be able to develop cost estimates that are adjusted annually and synchronized with the schedule, requirements, and scope of the 2020 Census program as the design matures in keeping with the objective for controlling costs.

The bottom line is that the more we can innovate, the more we can contain costs without sacrificing the high quality census that the country requires.

This final point is important, and speaks to the direction from the Congress that the Census Bureau should discuss "challenges the Bureau anticipates that could prevent it from staying below the 2010 or even the 2000 spending level." The Census Bureau is tasked with producing the most accurate data



possible in every census, including the 2020 Census. However, obtaining a complete and accurate census every ten years becomes more complex and difficult with each successive cycle. For the 2020 Census, a larger, more diverse population will be more difficult and expensive to count. While we can reduce costs considerably by utilizing advances in technology and innovations in the design of the decennial census as described in these documents, there is a point at which reducing costs could lead to a reduction in the quality of census data. The 2020 research and testing program will help us gain a better understanding of the extent to which we can contain costs without sacrificing coverage and data quality.

## **C2. The mixed mode data collection system**

As an example of our new way of doing business, we are building an enterprise-wide system for collecting and processing survey and census data. This one system will replace multiple systems now in use, each requiring maintenance and upgrade costs each year. We plan to use the system for the American Community Survey, the 2017 Economic Census, the 2020 decennial Census, and many of our ongoing surveys. Of special relevance to the 2020 Census, it guarantees that the decennial will not be forced to use core systems for the first time.

It will have the capabilities of ingesting sample identification data linked to administrative data or aggregate statistics informative of the likelihood of the unit participating in different modes of data collection. Through a set of prespecified business rules it will assign cases to internet, paper, telephone, face-to-face, and other modes of data collection, optimizing the cost and quality tradeoffs inevitable in modern surveys and censuses. It will use prespecified quality-cost tradeoff thresholds, and real-time estimation on key statistics in order to determine when the data collection efforts should optimally stop.

As a measure of the new way of doing business, the team working on this is a small, cross-directorate, multi-disciplinary team, consisting of some of the best talent the Bureau has. This team will serve all directorates and will report to the key executive committee of the Bureau when cross-directorate conflicts arise. It has the full support of the director's office.

Through such an effort we attain real benefits of 1) risk reduction for the 2020 system development; 2) shared system development to all directorates; 3) cross-directorate innovation diffusion; and 4) cheaper operating costs.

## **D. The Census Bureau Budget**

Our country faces important Federal government funding challenges. On the Census Bureau's part, we have been striving to cut administrative costs, reengineer our survey processes, and find innovative ways to squeeze every cent of taxpayer money we get. This is an important duty, I believe, we have

as public servants, and I am proud of the hard work of my Census Bureau colleagues on this score. It is also my duty to inform the country of the impact of budgets on the scope and quality of the nonpartisan statistical information the Census Bureau provides.

The FY 2013 House Appropriations Bill has the effect of cutting the President's Budget request by \$358 million or 37 percent and preventing implementation of core Census activities. The House bill lacks adequate funding to conduct the Economic Census, which measures the health of our economy. Moreover, due to a floor amendment, it does not permit spending for the American Community Survey, which produces the social and demographic information that monitors the impact of economic trends on communities throughout the country. In addition, the cuts will halt crucial development of ways to save money on the next decennial census and it eliminate many of the remaining 2010 Census data products and evaluation reports. It severely damages our efforts to build a cheaper 2020 census. In the last three years, the Census Bureau has reacted to budget and technological challenges by mounting aggressive operational efficiency programs to make these key statistical cornerstones of the country more cost efficient. Eliminating them halts progress to build 21st century statistical tools through those innovations. This bill, if enacted, will devastate the nation's statistical information about the status of the economy and the larger society.

#### **D1. The American Community Survey**

The ACS is our country's only source of small area estimates on social and demographic characteristics. Manufacturers and service sector firms use ACS to identify the income, education, and occupational skills of consumers and employees in the local product and labor markets they serve. Retail businesses use ACS to understand the characteristics of the neighborhoods in which they locate their stores. Homebuilders and realtors understand the housing characteristics and the markets in their communities. Local communities use ACS to choose locations for new schools, hospitals, and fire stations. There is no private sector substitute for ACS small area estimates. The prohibition for spending money on the ACS would have devastating consequences on what the United States businesses and communities know about their markets and socioeconomic conditions.

Even if the funding problems were solved in the proposed budget, the House bill also bans enforcement of the mandatory nature of participation in the ACS.

*Concerns of intrusiveness regarding ACS.* First, we take seriously all concerns expressed by our respondents. Some feel that the questions in ACS are intrusive. I understand that without knowledge of the benefits to the respondent's local community or the nation as a whole, the questions asked on the ACS would seem unusual and unnecessarily intrusive. We have

found that once people's concerns are addressed, they tend to participate in the ACS. In fact, over 97% of the households in the ACS sample participate in the survey.

Our research shows that having a message about the mandatory nature of the survey acts to convey the importance of the survey to the respondent. Rather than tossing out the letter, the mandatory nature leads to people opening the envelope to entertain the request. These census questions have been mandatory for the sampled units for over 70 years, since the long form of the census was formed. Individual actions that produce important common good results are often sanctioned by the central government: young men are required to register with the selective service; we are all required to reduce our auto speeds by posted speed limits; and we're not allowed to smoke on airplanes. So too the first Congress in 1789-90 decided that answering Census questions would be mandatory. They did this because of the importance of the information to the country.

We train interviewers to inform persons of the mandatory nature and to address their concerns about their participation. We offer to do the survey in separate pieces if they're pressed for time. We deliberately offer paper, telephone, and face to face interviewing, to fit the different lifestyles of the American public. We will add an internet option in January 2013

*Impact of making ACS voluntary.* At a recent House Joint Economic Committee hearing, it was noted that we get useful statistics from the Current Population Survey (CPS), yet it is a voluntary survey, so why not apply the same methods to make ACS voluntary. As a statistician, I know the purely technical response to this is that it probably could be done.

However, ACS was designed specifically as a different way to collect decennial census long-form sample. As part of the decennial census, our assumption from the beginning was that we were designing a mandatory survey. This had major implications for the survey design--e.g., we assumed it could start with a mailout/mailback mode because it was likely we'd get at least 50% response rate to a mandatory survey. A voluntary survey with this scope of content would likely have had such a low mail response rate as to make mailout/mailback impractical (not cost effective), which would have meant designing a survey for all personal visit interviewing (perhaps augmented with some telephone interviewing), as is done for the CPS. In short, a voluntary ACS achieving the same quality of estimates costs much more than the current design.

If we did have to design a voluntary ACS, given the expected reductions in response rates from the mail and Internet response options, we would need to increase the sample size for the survey in order to maintain current levels of reliability of the estimates. Working closely with House appropriations and authorizing staff, a test was conducted in 2003 to provide answers to key questions about a voluntary ACS. The ACS currently employs three

sequential modes of ACS data collection to maximize response and minimize cost: first mail, followed by telephone, and finally a sample of the unresolved cases are selected for personal visit. During the 2003 test, national cooperation rates fell across all three modes when the ACS was implemented as a voluntary survey.

The mail cooperation rate fell by over 20 percentage points. This decline has important consequences. Given the sequential design of mail, telephone and personal visit for the ACS, a lower response in earlier modes leads to higher workloads in the later more expensive modes.

Using the results of the 2003 test, and applying them to our current ACS sample size of 3.54 million addresses per year, we would expect that the telephone workload would increase by approximately 180,000 cases per year, and the personal visit workload would increase by approximately 219,000 cases per year, but the estimated number of completed interviews would actually decrease by approximately 320,000. Therefore, we would spend more money given the increased workloads, but the reliability of the survey estimates would decrease.

The design of the ACS seeks high rates of response by mail and telephone for two reasons. First, they are cheaper than personal visit follow-up activities. Specifically, based on the FY 2013 congressional submission of \$242M, the cost per case in the mail workload is approximately \$12.50, whereas it is \$20.89 per case in the telephone workload and \$149.57 per case in the personal visit workload. Second, the non-respondents after mail and telephone attempts are subsampled for personal visit follow-up, with inevitable loss of precision of the final estimates.

Although the logic above is correct, ACS is implementing an Internet response option in 2013, and the 2003 test provides no information about how a change to voluntary methods would impact response on the Internet.

If the ACS were to become a voluntary survey, the inter-related impacts on response, cost, sample size, and reliability would lead to the following options:

*Option 1. Maintain the same reliability of estimates from a voluntary design.* In order to preserve the current reliability of the survey estimates using voluntary methods, the initial sample size of the program would need to increase to compensate for the reduced overall number of addresses interviewed to approximately 4.25M addresses per year. Given the significant additional program funding required to support this (an increase of between \$78 and \$103 million based on the FY 2013 congressional submission of \$242 million), it is not reasonable in the current budget climate to support this option.

*Option 2. Maintain current costs by reducing the personal visit workload.* Without any increase in funds, the workload of cases sampled for personal visit would need to be reduced from 1,031,000 to 660,000 cases per year. This would have a significant negative impact on the reliability of the survey estimates (between 25 and 28 percent reduction), and would also have a significant detrimental impact on survey estimates for population groups that tend to be included at higher proportions in personal visit operations, such as households speaking a language other than English, households in rural areas, and American Indians to name a few, which puts at risk the ACS' mission to provide high quality estimates for small population groups and small areas.

*Option 3. Maintain current costs by reducing the initial sample size.* In order to keep the cost of a voluntary ACS consistent with current funding levels, the initial sample size would need to be reduced to approximately 2.9M addresses per year and reduced funds to support the lower mail workload would be moved to support the increased workloads in the telephone and personal visit operations. This would result in a reduction in the reliability (between 20 and 22 percent reduction) of the survey estimates, still putting at risk the ACS' mission of providing estimates for small areas and small population groups.

*Option 4. Maintain current sample size.* Keeping the initial sample size at the current level of 3.54M addresses per year, the ACS would become more expensive as a voluntary survey (between \$37 and \$58 million increase), given the higher workloads for the more expensive modes. Despite the additional cost, we would still experience a reduction in the reliability of the survey estimates. The reduction in the reliability (between 10 and 12 percent reduction) would put at risk the ACS mission to provide estimates for small areas and small population groups, but would be less damaging than options 2 or 3.

Finally, we are in the middle of a full scale program review of the ACS, assisted by an expert panel of the National Academy of Sciences. This has generated new ideas of seeking input from the public about our data collection procedures. We are restructuring the process of evaluating what questions are asked in the ACS, assisted by an interagency group led by OMB. We have improved our tracking of respondent concerns in order to be quicker at any needed interventions in data collection activities. Our eventual success is dependent on our ability to convey the large benefits of the ACS information made possible only with the participation of the sampled persons.

## **D2. The Economic Census**

The 2012 Economic Census provides comprehensive information on the health of over 25 million businesses and 1,100 industries. Done once every 5 years, it provides detailed industry and geographic source data for generating quarterly GDP estimates. The Economic Census is also the benchmark for measures of productivity, producer prices, and many of the nation's principal economic indicators. At this moment, we are poised to request the key data from individual firms. The internet infrastructure is nearing completion. We have already printed 7.5 million forms, and are preparing the October mailing. The House bill reduces Economic Census funding by \$44 million or 29 percent. Cuts of this magnitude will force the Census Bureau to terminate the 2012 Economic Census.

Such an outcome would have negative consequences that include the following:

- Without benchmark data from the 2012 Economic Census, the quality of the U.S. National Accounts and their GDP measure would degrade progressively, rendering these key statistics less useful for gauging economic performance, making effective economic policy, promoting jobs, and guiding recovery from the Great Recession.
- The loss of business list updates and benchmarks from the 2012 Economic Census would lead to progressive degradation in the quality of estimates from monthly and quarterly surveys that track the business cycle and provide much of the source data behind quarterly GDP estimates.
- For similar reasons, there would be progressive degradation in producer price indexes, productivity indexes, and indexes of industrial production.
- Without uniquely detailed statistics on industries, geographic areas, products, the characteristics of business owners, and specialized subjects from the 2012 Economic Census, state and local governments, businesses, and the American public would be deprived of information that guides decisions on hiring, starting or expanding a business, developing new products, or opening new business locations.
- Cancelling the program now wastes \$227 million already spent on preparatory activities.

Done every five years, the Economic Census program produces basic statistics on employment, payroll, dollar volume of business, and related content for nearly 1,100 industries, from anthracite mining to zoos, and nearly 15,000 geographic areas, from the nation as a whole to towns (for selected industry sectors, it also presents limited data for more than 41,000 ZIP Code areas). Economic Census statistics also provide details on business output for some 13,000 goods and services products, information on the characteristics of business owners, and many specialized measures, such as recently expanded data on franchising and employers' cost of

employee benefits. Additionally, new data for 2012 will highlight key characteristics of U.S. enterprises, including measures of globalization and innovation.

I have noted the Census Bureau's efforts to reduce administrative costs, re-engineer survey processes, and improve the operational efficiency of its programs. The Economic Census is no exception. This program's cost-saving measures include efforts to increase electronic response by offering web-based reporting for the first time; an improved data capture system that will incorporate optical character recognition for numeric data; use of the Postal Service's new Intelligent Mail Barcode to track report forms in the mail stream and optimize follow-up for businesses that are late in responding; targeted outreach to industries that are typically poor responders to reduce follow-up activities; and better data editing and review tools to reduce clerical and analytic intervention in the review of completed questionnaires.

### **D3. Implications on 2020 Census efforts of FY 2013 House Appropriations Bill**

The House appropriations bill reduces the funding for 2020 Census activities by \$51.6 million in FY2013. A cut of this magnitude seriously undermines efforts to reduce the cost of the 2020 Census by delaying or reducing the research and testing, and delaying the final design for the 2020 Census. The cuts to the Census budget by the House will result in the reduction of up to 150 permanent headquarters staff. Staff with knowledge of census operations drawn from their work on the 2010 Census will be lost. This cut will also minimize most of our contracts for technical expertise and services, and prevent us from contracting for people with skills and experience we do not have in house. Staff with technical skills, primarily in IT, that can only be gained from the private sector, will be lost as well.

Further, the detrimental effects of the proposed cut to the 2020 Census program is compounded by the proposed termination of the American Community Survey (ACS). The 2020 Research and Testing program plans to leverage the ACS as a test bed for the 2020 Census. If the ACS is not funded, a key underpinning of the 2020 research plan will be lost, increasing the cost of the 2020 Census, perhaps significantly so.

### **E. Near-term Challenges Facing the Census Bureau**

Modern societies run on statistical information. Businesses, governments, nonprofit institutions, and, increasingly, households make their decisions only after seeking statistical information for relevant issues. In all other developed countries, a central government organization like the Census Bureau produces this information. In most other countries, the populace is asked to provide their own answers to survey and census questions, under strict confidentiality pledges, which are aggregated to produce the statistics that are freely given to all in the society. A key challenge for the Census

Bureau is to effectively demonstrate how these small intrusions for the public produce sufficiently valuable common good information for the society. We must “make our case” every day, to diverse subpopulations with diverse attitudes toward the Federal government.

The world of statistical information is changing at a rapid rate. A key challenge for the Census Bureau is to develop effective ways to adopt new technologies useful for data collection, as soon as possible after they prove their ability to offer efficient solutions. This will require nurturing the ties we have developed with university researchers and extending our ties with technology firms. The challenges are greatest with mobile computing technologies, new features of the internet, and new geographical information technologies.

The world of data is changing at a rapid rate. In this country the private sector is assembling vast data sets, describing characteristics of households and businesses. Some internet-based data and other “big data” sources are relevant to the statistical information that the Bureau produces. A challenge to the Census Bureau is developing access to these data sources and learning how best to combine them with traditional surveys and census data to improve our understanding of the society and the economy.

The world of statistics is changing at a rapid rate. Government statistical agencies must utilize new statistical modeling techniques that can enhance the quality of estimates by combining data sources. Every program in the Census Bureau can potentially benefit from such usage. We have built a core team that is identifying rich targets for such improvements. The challenge to the Census Bureau will be to gain access to auxiliary data from other Federal agencies that is needed in the models.

It is my fervent hope that the future oversight provided by this committee can facilitate the Census Bureau in meeting these challenges.