

Census Scientific Advisory Committee (CSAC)
Recommendations from Spring 2014 Meeting
Census Bureau Responses

1. 2014 Census Test

1.1. What series of Census Tests are planned up to the 2020 Census? In particular, what is the strategy for previous tests informing the design and implementation of future tests?

Census Bureau Response

In 2013, the U.S. Census Bureau conducted a detailed program re-assessment in order to prioritize the research and testing we needed to complete so that we could make our major design decisions by the end of fiscal year (FY) 2015. This work helped us develop our single conceptual framework for the 2020 Census (narrowed down from 5 design options we laid out in 2011). We received a good budget with the final appropriations for 2014, so have been able to conduct key activities for 2014 and prepare for those in 2015. FY 2015 is a critical year for conducting research about the feasibility and likely cost savings of design changes that can fundamentally change the way the 2020 Census is conducted. In the event of a Continuing Resolution or other FY 2015 budget situations, we have begun work to prioritize our FY 2015 request so we can quickly assess and adapt to possible effects on the work we have planned.

The results of the 2013 re-assessment effort now are reflected in our integrated 2020 Census schedule. The 2020 Census integrated schedule currently consists of 48 active project schedules, with more than 3,800 activities and milestones. As the details for all components of the 2020 Census emerge, the schedule will grow in detail as well. Within the same overall schedule system, we already have a much more detailed schedule for the 2014 Census Test, and will develop similar detailed schedules for 2015 testing. The integrated schedule charts the path to the 2020 Census major design decisions in September 2015, and constructs the initial frame for anticipated work required to conduct the 2020 Census.

We also used the results of the 2013 program re-assessment and the integrated 2020 Census schedule to determine what needed to be done in the next two years as we developed our FY 2015 and FY 2016 budget requests. This information also will be used to develop impact statements, appeals, or updates to our plans due to budget reductions, continuing resolutions, or other funding changes.

Concurrently, the Census Bureau is currently preparing a document entitled “The Path to the 2020 Census Design Decision.” This document will outline the four key components of the 2020 Census - reengineering address canvassing, optimizing self-response, utilizing administrative records, and reengineering field operations. It will include the design options that are currently under consideration and the key questions that will need to be answered in order to make the design decisions required by the end of 2015. The document will also outline a schedule of key milestones that are related to the design decision and to the success of the 2020 Census. It will also include supporting documents that outline the lifecycle cost analysis.

Based on the 2013 program re-assessment, and consistent with “The Path” document mentioned just above, the purpose of the 2014 Site Test (now underway) is to study self-response and non-response field components in a single site to help answer key research questions about:

1. Self-response modes and the contact strategies for pre-registration;
2. Email and automated voice invitations;
3. Testing of the mobile devices that are used for followup enumeration with non-responders in the field;
4. Testing of alternative contact strategies (telephone or personal visit) for non-responders;
5. Using administrative records to remove cases from the non-response workload; and
6. Applying adaptive design methodologies in managing the way field enumerators are assigned their work.

Prior to the design decisions, we also will need to execute several major tests in FY 2015:

- Address Canvassing Test - This test is critical for informing the performance of the methods and models that will help us develop the address list, test the use of aerial imagery for change detection, and assist in the delineation of the Reengineered Address Canvassing workloads;
- 2015 Census Test - This test will allow the Census Bureau to begin the process of developing a field operations management system that leverages planned automation and available real-time data, as well as data households have already provided to the government, to transform the efficiency and effectiveness of data collection operations;
- Optimizing Self-Response Test - This test is critical for: (1) conducting early research on the use of advertising and outreach to engage and motivate respondents; (2) determining the extent to which we will use pre-registration; (3) the operational feasibility of real-time non-ID processing and the potential resulting workloads for system development; and (4) the extent to which allowing non-ID responses will contribute to the national self and internet responses rates.

In 2015, we also are planning to conduct the National Content and Self-Response Test, but we do not need the results of this testing in advance of our design decisions at the end of FY 2015. This test will use a large nationally representative sample, which is critical to collecting information on how to ask the questions about race and ethnicity, refining our language support plans for 2020, and refining estimates of national self-response and internet response rates.

While there are some common activities for our 2014 and 2015 testing, we do not need to have finalized results of the 2014 testing in order to plan and prepare for the 2015 testing. Because many staff members are involved in both efforts, they learn a great deal in real time—that is, long before detailed reports are written, vetted, and released. For example, the planning efforts for the 2014 Census Test already are informing the planning for these 2015 tests.

In addition, regarding the capture of research results and lessons learned from our tests, evaluations, and assessments, the Census Bureau has built a knowledge management database (KMD) to record and track this type of information. Initially, the KMD included all the recommendations from the 100 2010 Census CPEX reports, and all the recommendations from GAO and OIG audit reports concerning the 2010 and 2020 Censuses. We also will be using this database to capture and track recommendations from our advisory committees and the National Academy of Sciences panel. In addition to capturing this information, senior planning staff determined (and documented in the KMD) which recommendations should be assigned to which current research team(s) for action, and which should be put on hold to be addressed by research

or planning efforts later in the decade. We also are developing a tracking tool component of the KMD to monitor the implementation of these recommendations as we complete our 2013, 2014, and 2015 research and tests. In addition, we will use the KMD to capture, assign, and track recommendations coming out of those tests.

1.2. What strategies have been put in place to address the five bullet points under "Issues identified during the Test," on slide 8 of the "2013 Census Test Report" presented to CSAC by Peter Miller?

Census Bureau Response

The five points on the slide described as “Issues identified during the Test” were:

1. Response propensity models need further scrutiny and testing to ensure effectiveness
2. Geographic location of cases needs to be integrated into prioritized case assignments
3. More research on models and rules for handling vacant households and “deletes” is needed
4. More research on models and rules for obtaining proxy responses is needed
5. More research on daily case assignments for enumerators is needed

The status of response propensity research is described further in the response to question 1.3, below. Geographic proximity is a factor being used in determining which cases are identified as priorities in case assignments for the 2014 Census Test. Screening out vacant units based on available administrative records continues to be a focus for the 2014 and 2015 Census Tests, and additional research is underway to identify more effective models for identifying deleted units. Further development of procedures and rules for obtaining proxy responses is underway, especially with a focus on the 2015 test. Preparations for the 2015 Census Test include a significantly enhanced case prioritization and routing system that optimizes case attempt assignments for enumerators each day based on several key factors including geographic proximity, time available for the enumerator to work that day, distance between cases, and best time to reach the unit.

1.3. What response propensity models are being used and how are they calibrated/estimated?

Census Bureau Response

Response propensity models are not being used in the 2014 Census Test. The 2013 Census Test attempted to model and use response propensity models to predict cases with higher chances of responding. Analysis showed that this initial application was not as fruitful as desired. One issue is that the 2013 Census Test had a maximum of three field contacts for each case. The propensity models were sensitive to this limited amount of data. The adaptive design panels for the 2014 Census Test would have person-visit cases receiving between one to three total visits. This presented challenges in building and using response propensity models in the 2014 Census Test based on a limited contact cycle. At the time that we were finalizing the 2014 Census Test, a decision was made to launch a field reengineering effort to be tested in the 2015 Census Test. This reengineering effort is attempting to predict best contact time. For this work, we are building contact time models using paradata from the American Community Survey interviewing.

1.4: The use of adaptive sampling designs represents an important part of the 2014 Census Test. What inferential methods are in place to allow valid conclusions to come from the 2014 Census Test? Specifically, what statistical methodology is available to calculate biases and variances for measured responses that come from adaptive sampling designs?

Census Bureau Response

The 2014 Census Test is not utilizing adaptive sampling. It is utilizing an adaptive survey design. One example is stopping work during the fieldwork due to the presence of administrative records. A second example is identifying new priority cases for an field interviewer to complete each day that account for the cases that they worked the previous day. The 2014 Census Test sample design is utilizing a fixed sampling procedure. The suggestion about adaptive sampling designs to help increase efficiencies in comparing possible approaches is something to be kept in mind as we develop future tests.

1.5. A sampling-based inference for adaptive sampling designs would require knowing the sample-inclusion probabilities. After each wave of adaptive sampling, the inclusion probabilities change. Is there a methodology for calculating the sample-inclusion probabilities for the final set of responses based on an adaptive sampling design?

Census Bureau Response

The question about sample-inclusion probabilities entails two issues: a sequentially evolving sampling frame, and making inferences from adaptively collected information. Neither of these issues apply to the 2020 Census (mode effects, of course, still apply), but do apply to adaptive surveys. For example, the National Survey of College Graduates is using R-indicators adaptively to incentivize groups for which an improved response rate is needed. By definition, sample inclusion probabilities will change, but so long as the changes are protocol-driven, the overall sample inclusion probabilities can be computed sequentially and used for a design-based analysis. An important point is to implement a more general concept of “mode effect,” with “mode” not just being the one that ultimately generated the response, but also the sequence of modes that failed to produce a response. We are initiating research in this area.

2. Census Internet and Electronic Data Collection

2.1. Please provide CSAC with details of the cost-benefit analysis for BYOD, the Bureau's plan for testing BYOD prior to the 2020 census, and details on the decision-making process.

Census Bureau Response

Cost-Benefit Analysis: By definition, the cost-benefit analysis presents facts and supporting details among competing alternatives. It considers not only the life-cycle cost costs, but quantifiable and non-quantifiable benefits. The cost benefit analysis is broken down into the following life-cycle phases: (1) Planning; (2) Requirements; (3) Design; (4) Integration and Test; (5) Deployment; (6) Operations and Maintenance; (7) Disposition. The going in assumption is the Census Bureau will procure X number of devices to support the 2020 Census. Our current

cost model assumes 75 percent of all enumerators in 2020 will bring their own device, which means some will not. The full Cost-Benefit Analysis is still in process and not expected to be completed for 30-60 days, but we anticipate savings of close to \$200 million. To assist us with these efforts, we have brought on an expert consultant.

The following is a breakdown of the inputs by phase in the Cost-Benefit Analysis:

- **Planning:** Inputs include development of a Project Management Plan, System Engineering Master Plan, Risk Profile/Security System Plan, Project Management Level of Effort and eSDLC Phase Gate Review. No differing design costs have been identified between Government Furnished Equipment (GFE) and BYOD at this point.
- **Requirements:** Inputs include requirements development and documentation, a security requirements analysis, risk assessment, the Acceptable Use Policy, eSDLC Phase Gate Review, etc. Possible cost differentiators in this phase include devices and the contract acquisition management process.
- **Design:** Inputs include Solution Architecture, Detailed Design Specification Document, Security Design Analysis, eSDLC Phase Gate Review. No differing design costs have been identified between GFE and BYOD at this point.
- **Integration and Test:** Inputs include System Assembly, Installation and Checkout, Test Analysis Report, System Test and Evaluation, etc. At this point, System Assembly, Installation and Checkout, and System Test and Evaluation have been identified as potential cost differentiators between GFE and BYOD.
- **Deployment:** Inputs include Prime Mission Product (i.e., Procuring or Building Hardware, Software/Licenses Procurement, Voice and Data Service, Support, etc.), Training, Storage, Shipping and Tracking, and Inventory Management have been identified as inputs. Each area is a potential cost differentiator between GFE and BYOD.
- **Operations and Maintenance:** Inputs include Contractor Technical Support, Help Desk Support, Software Application Maintenance, etc. have been identified as inputs. At this point, Contractor Technical Support and Help Desk Support have been identified as potential cost differentiators between GFE and BYOD.
- **Disposition:** Inputs include Collection of Hardware. At this point, Collection of Hardware has been identified as a potential cost differentiator between GFE and BYOD.

The Cost-Benefit Analysis is intended to be a living document and will be updated often to reflect changes in the scope, schedule and budget of the project.

BYOD Testing: The following tests related to BYOD are planned prior to the 2015 Design Decision:

- **2014 Census Test:** Objectives are to test the Acceptable Use Policy, Privacy Policy and clarity of instructions on self-provisioning devices, ease of provisioning and employee perceptions of BYOD in general and on reimbursement. Test will occur at Census Headquarters using Usability Lab resources. No PII will be involved. Participants will be selected from the staff hired for the 2014 Census Test.
- **2015 Census Test:** As part of this test, we will select a sample of about 125 non response follow up enumerators to collect data using personally owned devices (i.e., BYOD), as well

as test the Acceptable Use Policy, Privacy Policy, Reimbursement Policy and perception of BYOD of both enumerators and respondents. The selected enumerators must utilize their own device, provided it is on a “white list” of supported devices (i.e., iOS and Android). We currently estimate this study will involve 5,000 interviews.

Decision-making Process: These testing activities will help us make a decision about BYOD for the 2020 Census. We will make this decision, including understanding the budget, policy, security, and accountability implications, by the end of FY 2015 as part of our major design decision. Understanding how much of the workforce can use their own device or would need Government Furnished Equipment (GFE) will continue to be studied into FY 2016 and FY 2017. To permit final decisions about the execution of BYOD closer to the beginning of field operations, we are building data collection tools that will run on either consumer grade GFE or BYOD.

2.2. Please provide CSAC with a detailed briefing of the plans to adapt online instruments (for ACS, decennial census, and economic surveys) for respondents using mobile devices (smartphones).

Census Bureau Response

The Information Technology (IT) Directorate continues to work with the Research & Methodologies Directorate, as well as with subject matter experts, mathematical statisticians, survey owners, and reimbursable sponsors to formulate an efficient and effective approach for rendering online surveys to respondents, including the presentation layer for various device types. With the rapid adoption of mobile devices as the preferred means of connecting to the web, the Census Bureau is engaging in a number of activities to understand and adapt the appearance of our online surveys and censuses for mobile devices, including tablets of various sizes and cell phones. These activities will better position the Census Bureau to make informed decisions for electronic survey design as we move throughout the decade and improve the quality of data provided regardless of device type.

The following activities are either planned or are in progress:

- ACS Mobile Device Optimization Research: This effort focuses on the optimization of survey content for mobile devices as it relates to the ACS program. The proposal received approval by the ACS Portfolio Management Governing Board to begin work in 2015. Several rounds of usability testing will be included as a part of this process, with a goal of answering a number of research questions including but not limited to:
 - Do the mobile device optimization changes lead to a larger number of responses via a mobile device?
 - Do the mobile device optimization changes affect overall self-response rates?
 - Do the mobile device optimization changes affect item nonresponse rates for selected questions?
 - Do the mobile device optimization changes affect the number of errors rendered on selected screens?

- Do the mobile device optimization changes lead to a reduced break-off rate among mobile device respondents?
- Centurion Variant-Framework Testing utilizing “Responsive Design”: Responsive web design is not a new concept in the industry, but it has not yet seen vast expansion, nor become the norm for the majority of websites. However, in 2014, we are beginning to see “responsive web design” as one of the leading trends for 2014 websites and becoming more common place. “Responsive design” is simply an easy way to refer to making websites mobile device friendly. Therefore, an effort is currently in place to research, design, and develop a variant of the Centurion framework that will take advantage of responsive design techniques to make surveys more friendly to users of any device type. The effort began with research and design, and will continue with a proof-of-concept instrument for review and further analysis throughout 2015.
- The 2020 Optimizing Self Response Methodology Sub-team: This sub-team was established to begin research into the desired approach of optimizing content for devices other than desktops and laptops, for Decennial content looking forward to testing efforts in 2015 and 2016. The team, comprised of staff from the Decennial and R&M Directorates, are investigating options and alternatives to 'display configuration'.
- The Consumer Expenditure Diary (CED) Test for Bureau of Labor Statistics - Mobile Optimized/Responsive Design: The CED asks participating consumer units to keep a diary of all household expenditures for two consecutive one-week periods. The diary survey is conducted throughout the year and across geographic locations to account for seasonal and geographic differences. We have been working with BLS over the past several years on a web version of the CED survey. However, in FY2014 we began work on a “Mobile Optimized” version of the Diary test (from 2013) which aims to make the CED usable for INDIVIDUALS to record purchases, rather than just for the primary householder, and be more friendly for mobile device users. This mobile friendly version was released for pilot testing in March of 2014 for round 1 and again in August 2014 for round 2. The efforts on making this survey more mobile friendly will continue throughout 2014 and 2015 to include the addition of responsive design techniques.

2.3. Please provide CSAC with information about the plans for a 2015 test, and whether the Bureau is considering additional tests after 2015.

Census Bureau Response

Purpose of 2015 Testing Activities: The primary purpose of testing activities in 2015 is to prove in the major design decisions for the 2020 Census by evaluating the feasibility of fully utilizing the advantages of planned automation and available real-time data to transform the efficiency and effectiveness of data collection operations.

We will execute the following tests in fiscal year 2015:

- **Address Validation Test:** This test is critical for informing the performance of the methods and models that will help us develop the address list and define the reengineered canvassing

workload needed for the operational design decision point in September 2015. Field Operations will occur September 2014 through December 2014. The test will examine both Model-Based and Microtargeting approaches:

- **Model-Based Approach:** This will test our ability to use statistical modeling to measure error in the MAF and to identify areas experiencing significant change. Data collected during the test will be used to assess the statistical models, which in turn will be used later to identify geographic areas to be canvassed or not canvassed. Measures of quality in the model outputs will inform the level and location for in-field address canvassing. The results will also inform the performance of the models used to define the in-field Address Canvassing workloads.
- **Microtargeting Approach:** This will incorporate aerial imagery reviews to detect changes and discrepancies, and will include in-field updating of addresses for portions of blocks.
- **2015 Census Test:** In the 2015 Census Test, we will examine our abilities to reengineer the roles, responsibilities, and infrastructure for field operations, and to evaluate the feasibility of fully utilizing the advantages of technology, automation, and real-time data to transform the efficiency and effectiveness of data collection operations. To accomplish these objectives, we will move to automated training for enumerators and managers, test and implement routing and/or navigation, and reengineer the approach to case management. The test has an April 1, 2015 Census Day. The test is critical in determining the following information about key cost drivers:
 - Workload from the use of adaptive design and administrative records to determine housing unit status and contact strategies
 - Reduce NRFU workload and increase NRFU productivity with:
 - Administrative Records
 - Reduce cases that need to be resolved in NRFU by varying type of cases removed and timing of case removal from the workload
 - Reduce the number of contact attempts to cases resolved in NRFU
 - Field Reengineering and Adaptive Design
 - Reduce the number of contact attempts
 - Leverage dynamic case management with route planning and other methodologies to improve enumerator productivity through automation
 - In addition, we will test the Census Commercial Mobile Device/Bring Your Own Device (BYOD) Project objectives which examine our ability to reduce capital expenditure in mobile devices and service, establish BYOD related policies that enable three-out-of-four individuals hired for the 2015 Census Test to BYOD, and determine if we can reduce the costs of acquiring and deploying equipment if managers and/or other staff use their own equipment and work at home.
- **Optimizing Self-Response Test:** The test is critical for making decisions on the use of preregistration; how non-ID processing of responses will contribute to the national self and internet responses rates; and, in determining workloads for system development and information technology planning. Pending the outcome of the 2014 Census Test, we will

further refine the procedures for pre-registration in the Census. The test will also study the feasibility of implementing real-time processing for the “non-ID” response option.

The test also includes communication and partnership research objectives, with a goal of developing an approach for the use of advertising and promotion to engage and motivate respondents to take action. The test will include use of traditional, digital, and hyper-(micro) targeting methods; have two to three phases which include awareness, call-to-action, and, nonresponse reminders; implement lessons learned from 2010; and, explore the use of new communication channels and analytics. The test has an April 1, 2015, Census Day.

- **National Content and Self-Response Test:** The full scope of the test is to be determined, but is likely to continue testing of the following “short-form” questions:
 - Race and Hispanic origin
 - Relationship
 - Other possible topics such as within-household coverage questions

The test will use a nationally representative sample, with oversampling of key sub-population groups, and has a planned September 1, 2015, Census day. Note that the results of this test are not needed in order to make our major 2020 Census design decisions at the end of FY 2015.

Future Testing Activities: Results of the testing activities in FY 2014 and 2015 will be critical in determining major design decisions by the end of FY 2015. Refinement of major design decisions will drive additional testing beyond FY 2015 relative to the areas of optimizing self-response, utilizing administrative records, reengineering field operations, and reengineering address canvassing. These areas were the focus of our initial research and testing (FY 2012-15) because they have a major impact on census cost drivers, and thus are most likely to achieve major cost savings for the 2020 Census. However, research beyond FY 2015 also needs to focus on other components and operations for the 2020 Census, such as question wording, coverage measurement, coverage improvement, and outreach and partnership efforts. The specific details of these future tests have not yet been determined, although work to define the requirements for tests in FY 2016 has recently begun.

2.4. Please provide a timeline of decision points and process for making decisions regarding cyberinfrastructure alternatives (e.g., cloud computing) for 2020. Will the cyberinfrastructure alternatives be tested in 2015? If not, how will they be evaluated/tested prior to 2020?

Census Bureau Response

The 2020 Decennial Census Program Office and the IT Directorate continue to work together to define the cyberinfrastructure requirements of the 2015 Census Test, other tests, and the operational infrastructure that will be required to deliver a successful 2020 Decennial Census. These efforts include the following activities:

1. 2020 Decennial Census Concept of Operations (being updated)
2. 2020 Decennial Census Milestone Schedule including Build/Buy decisions (being updated)

3. 2020 Decennial Census Operational Design Decisions (scheduled for 9/30/15)
4. 2020 Decennial Census Target Solutions Architecture and IT Roadmap Project (scheduled for completion 9/30/15)
5. Census Bureau IT Infrastructure Roadmap

The results of these activities and the detailed technical solution-level requirements (including performance requirements) from the individual 2020 Decennial Census tests and projects will be used to identify cyberinfrastructure design alternatives as part of the enterprise systems development lifecycle process. In anticipation of possible cloud-based alternatives, the Census Bureau has recently entered into a Cloud Contact Management Support Services Blanket Purchasing Agreement (BPA), which includes the following language: “provide the U.S. Census Bureau with essential expert cloud consulting services in two technology areas critical to the successful completion of the 2020 Decennial Census: call center usage for survey operations (telephony) and cloud computing. The goal of the required support is to leverage innovative approaches to including and using both technologies in a comprehensive plan for the 2020 Decennial Census that both optimizes self-response and reduces costs.”

As part of this BPA, the Census Bureau has identified three initial Use Cases to test out in a cloud-environment during FY15. The BPA holder will assist in clarifying and finalizing requirements, performing a suitability assessment, and then helping develop a test plan for each. The BPA holder also will assist in assessing other business capabilities and associated technical requirements where cloud computing may be a suitable alternative. The cloud computing services under this BPA include: 1) Cloud Computing Technical Support; 2) Cloud Computing Acquisition Support; 3) Cloud Computing Assessments; and 4) Cloud Design.

2.5. CSAC respectfully recommends that the Census Bureau seek CSAC input on design decisions relating to field tests and experiments before they are set in stone. This is especially true of the decennial census tests. For example, it seemed clear in the April meeting that the design of the 2014 census test has already been set, and CSAC had no input into the design of the test. What about the 2015 census test? If the advice of the CSAC is sought after the design has already been fixed, there is little point in our providing it. For example, we were presented with plans to test a) obtaining e-mails from commercial vendors, b) pre-registration of e-mails, and c) experiments on the wording of e-mail invitations for ACS. While we are pleased to see that the Bureau is taking these steps, ideally these plans would be discussed with CSAC before the implementation decisions are made.

Census Bureau Response

The Census Bureau agrees it would be beneficial to receive early input from the Committee on test designs. We believe the best way to ensure successful review in a timely manner would be to use the working group structure. Thus, we would like to explore establishing some working groups of the Committee focused on our major research tracks. Unfortunately, it is probably too late to make any major changes to the Address Validation Test or to the two tests planned for Spring 2015.

3. Other suggestions and recommendations

3.1. Use of administrative data. CSAC respectfully suggests that the Bureau consider using administrative data as a bunch of covariates to be used to impute (multiply) non-response to actual responses, NOT to substitute for the missing values -- administrative answers differ from actual responses, but should be highly correlated with each other. The procedure would be to estimate the relationships using data from the respondents and use those estimated relationships to impute the missing responses via multiple-imputation.

Census Bureau Response

Census Bureau programs must decide whether to use administrative records directly or indirectly, depending on the data element and the data collection. There are many (often longstanding) examples of direct uses within the agency, including data from corporate tax returns in the Economic Census and County Business Patterns, certain estimates in the Longitudinal Employee Household Data program, and person-place data from tax and Medicare records for population migration estimates. There are also examples of indirect uses, including Small Area Estimates of Income and Poverty, Small Area Health Insurance Estimates, and Model Assisted Estimation for the American Community Survey.

To determine whether direct or indirect use of administrative records is appropriate, program managers must consider candidate data sources for specific uses. If an administrative data source aligns well to the item/concept required by the survey or census, the Census Bureau generally chooses direct use, subject to relevant constraints on such use. Indirect use may be preferred or required due to poor quality or concept alignment with direct use. A panel of senior managers familiar with both methodological and policy aspects of administrative records use will consider the recommendation and discuss how program areas can assess data quality and consider best practices (including multiple imputation).

In preparation for the 2020 Census, the Census Bureau is researching and testing the use of administrative data in support of a reengineered address canvassing and in reducing the non-response follow-up workload.

The 2020 Census program also is researching the use of data from the 2010 Census, the United States Postal Service (USPS), state and local governments, and commercial sources to determine where to conduct in-field address canvassing and in-office address updating. These modeling efforts will be tested in the Address Validation Test, scheduled to begin in September 2014.

In addition, we are researching the use of administrative data from sources such as the Internal Revenue Service, the Social Security Administration, the Center for Medicare and Medicaid Services, and the USPS to help reduce the non-response follow-up workload. First, the program is testing ways to remove vacant and deleted housing units from the workload. Next, the program is testing ways to determine the population count and characteristics for non-responding households based on administrative records data. Additional research includes the use of modeling to impute unresolved housing unit and person characteristics. These efforts are currently being tested as part of the 2014 Census Test, and will be further tested during the

2015 Census Test. The 2014 Census Test has a July 1 Census Day while the 2015 Census Test has an April 1 Census Day. As mentioned above, this research and testing will also consider both methodological and policy aspects of administrative records use in relation to data quality and best practices (including multiple imputation).

The Census Bureau will continue to consult with and keep the Census Scientific Advisory Committee informed as this research progresses.

3.2. Recommendation for CSAC executive session. CSAC respectfully recommends that time to withdraw into executive session be explicitly included in the meeting agendas. The final Committee Discussion session on the last day of the meeting would ideally be in executive session. As well, it would be useful to have an executive session at the end of the first day of the meeting.

Census Bureau Response

Thank you for suggesting the addition of an Executive Session to the CSAC Meeting Agenda. The Census Bureau has consulted with the U.S. Department of Commerce's Office of General Counsel to better understand provisions related to "closed" and "partially closed" advisory committee meetings. Upon consulting with Counsel, we were advised that only under the most narrow circumstances can federal agencies close or partially close an advisory committee meeting.

Advisory committee activities (including meetings) are subject to FACA, Department of Commerce provisions and Government in the Sunshine Act of 1976 (Public Law 94-409). Meetings may be closed or partially closed only under the following circumstances:

1. Those including discussions of classified information;
2. Reviews of proprietary data submitted in support of Federal grant applications; and
3. Deliberations involving considerations of personnel privacy.

Unfortunately, the CSAC meetings do not meet the provisions for a closed session. We will ensure that the Executive Session is on the agenda on the second day of the meeting to allow the committee time to discuss any issue it deems important and requiring the full committee's attention, however we cannot disinvite the public.

3.3. LGBT Inclusion in Federal Data. CSAC respectfully requests that the Census Bureau provide it with a more detailed plan regarding how the Bureau can work in concert with other federal agencies) to enhance LGBT Inclusion in federal data collection efforts.

Census Bureau Response

Thank you for your recent recommendation in reference to the inclusion of the Lesbian, Gay, Bisexual, Transgender (LGBT) population in federal data collections. We want to take this opportunity to respond to your request to provide a more detailed plan regarding how the Census Bureau can work in concert with other federal agencies to enhance the LGBT inclusion in federal data collection efforts.

The Census Bureau is moving forward in several important ways. First, we are working with the Office of Management and Budget (OMB) and other federal agencies to improve the relationship question used in a variety of current surveys and in the decennial census. Work is underway to modify the question and revise editing procedures so that same-sex couples will be shown along with all married couples. In 2010, as part of the interagency group on Measuring Relationships in Federal Household Surveys led by OMB, the Census Bureau conducted focus groups and cognitive interviews as part of the process to improve the relationship question, shown below:

How is this person related to Person 1? Mark (X) ONE box.	
<input type="checkbox"/> Opposite-sex husband/wife/spouse	<input type="checkbox"/> Grandchild
<input type="checkbox"/> Opposite-sex unmarried partner	<input type="checkbox"/> Parent-in-law
<input type="checkbox"/> Same-sex husband/wife/spouse	<input type="checkbox"/> Son-in-law or daughter-in-law
<input type="checkbox"/> Same-sex unmarried partner	<input type="checkbox"/> Other relative
<input type="checkbox"/> Biological son or daughter	<input type="checkbox"/> Roomer or boarder
<input type="checkbox"/> Adopted son or daughter	<input type="checkbox"/> Housemate or roommate
<input type="checkbox"/> Stepson or stepdaughter	<input type="checkbox"/> Foster child
<input type="checkbox"/> Brother or sister	<input type="checkbox"/> Other nonrelative
<input type="checkbox"/> Father or mother	

The Census Bureau is revising existing processing (edits) in order to show same-sex married couples along with all married couples; testing the new question, and implementing the new question. The information below details plans for each of these processes.

The Census Bureau is working to revise the editing procedures so that same-sex married couples will be shown along with all married couples. Previously, those who reported as same-sex married couples were edited and shown as unmarried partners. This change will be reflected in the American Community Survey (ACS) 2013 data that will be released this fall. This change will be done for the Current Population Survey (CPS) 2014 Annual Social and Economic Supplement (ASEC) data. We are not sure when the revised data will be released. The change will not be reflected in tables and reports issued from the public use file that will be released. The edit change will be reflected in Survey of Income and Program Participation (SIPP) 2014 production data, which also uses the new relationship question.

Timing of the implementation of the new relationship question varies by survey. It has already been implemented in SIPP 2014. The new question will be phased into CPS starting in January of 2015. The full ASEC sample will not have it until 2017, since only new sample receives the demographic questions. This means that reports and tables cannot show estimates of same-sex married couples until that data year. The new question is planned for implementation in ACS in 2019 after the content testing cycle is complete. We are working toward implementation of the new question for the 2020 Census.

While the Census Bureau has conducted several relatively small scale tests of the new question so far, further testing of the new relationship question is planned. Within the decennial program area, the following tests will include the new question. Some are panel tests: 2014 Census Test; 2015 spring site test; and the 2015 fall content test. In the ACS program, the new question is planned for the ACS 2016 content test. Cognitive testing in Spanish will happen before then.

The second important way the Census Bureau is contributing to the inclusion of the LGBT population in federal data collections is the addition of a measure on sexual orientation in the National Health Interview Survey (NHIS). The NHIS is a national survey that collects information on health related behaviors, health status, health care service utilization and health case access. For the first time, the 2013 NHIS included a measure on sexual orientation as outlined below:

"1a" Which of the following best represents how you think of yourself? (for Males)

1. Gay
 2. Straight, that is, not gay
 3. Bisexual
 4. Something else
 5. I don't know the answer
- Refused

"1b" Which of the following best represents how you think of yourself? (for Females)

1. Lesbian or gay
 2. Straight, that is, not lesbian or gay
 3. Bisexual
 4. Something else
 5. I don't know the answer
- Refused

"2" What do you mean by something else?

1. You are not straight, but identify with another label such as queer, trisexual, omniseual or pansexual
 2. You are transgender, transsexual or gender variant
 3. You have not figured out or are in the process of figuring out your sexuality
 4. You do not think of yourself as having sexuality
 5. You do not use labels to identify yourself
 6. You mean something else
- Refused
Don't know

"3" What do you mean by don't know?

1. You don't understand the words
 2. You understand the words, but you have not figured out or are in the process of figuring out your sexuality
 3. You mean something else
- Refused
Don't know

"4" What do you mean by something else? (Response allows up to 75 characters)

- Refused
Don't know

The first panel of data from the NHIS that included the sexual orientation question was recently released to the public.

Finally, moving forward to the 2020 Census, the Census Bureau will continue to work with OMB and other federal agencies to examine the changing requirements and data recommended for program implementation. Paramount to any decision about a proposed change is evidence that the change is needed to collect data for a federal legislative or programmatic need. Since the first census in 1790, census data collection has reflected the information needs of our changing society. The Census Bureau is constantly examining the effectiveness of census questions to collect accurate data on families and people. We will continue to study all content questions to ensure they reflect our society with regard to legislative and federal program needs for an enumeration of the U.S. population.