

## **SUPPORTING STATEMENT**

**U.S. Department of Commerce  
U.S. Census Bureau  
2012 NATIONAL CENSUS TEST  
OMB Control Number 0607-XXXX**

### **Part B. Collection of Information Employing Statistical Methods**

#### *1. Universe and Respondent Selection*

For the 2012 National Census Test (NCT), the initial sample will be selected from housing units in mailout/mailback areas of the 50 states and the District of Columbia, using the current Master Address File. In addition, group quarters and housing units in any other types of enumeration areas will not be included in the sampling frame. Further, to reduce burden on respondents, any housing units selected for the 2012 American Community Survey (ACS) sample (entire year) will also be excluded from the sampling frame.

We closely examined response rates in the 2003 and 2005 National Census Tests, as well as the 2010 Census Quality Survey (CQS), to determine the response rate assumptions for the 2012 NCT. The 2010 CQS Internet ‘push’ panel is the starting point for the methodology and design of the 2012 NCT. That test is not directly comparable, since it was a reinterview of households that had already responded by mail to the 2010 Census and thus were already more inclined to respond to surveys, but 24.8 percent responded using the Internet survey and 46.5 percent responded overall. Given the further increase in Internet accessibility and usage in the two years since the CQS, we expect 25 percent of the 2012 NCT to respond online and at least 45 percent to respond by some means (Internet, mail, or phone).

The sample of 80,000 housing units will be randomly assigned to one of five Internet content paths (coverage design and race and origin) and one of six contact and notification strategies. The test panels will be assigned in two stages, first by assigning each selected housing unit to an Internet content path, and then by assigning each selected unit to a contact strategy.

Two sampling strata will be used. The first stratum, “CFU,” will include a substantial oversampling of units that were in the 2010 Census Coverage Followup operation, in order to optimize the sample for purposes of reaching more units with unique coverage situations. The sample size for the CFU stratum is 50,000 housing units. The second stratum, “All Other,” will consist of all other eligible housing units in the sampling frame. The sample size for the All Other stratum is 30,000 housing units.

All units that respond to the Internet instrument will be selected for the reinterview.

## *2. Procedures for Collecting Information*

The standard paper questionnaire used in the census typically begins with a set of instructions or residence rules to guide the respondent on whom to include as members of the household as of a set reference date. Furthermore, the questionnaire later poses questions to the respondent that ask about people who the respondent may have missed (undercounted) or included by mistake (overcounted). An Internet data collection mode allows the respondent to be guided through the residence rules and the undercount and overcount questions using a series of questions and conditional probes, in an effort to collect better data about who was living in the household on the reference date.

In addition, the race and Hispanic origin data collection will incorporate the use of predictive text. That is, the open-ended text boxes in the race and Hispanic origin questions will produce a dynamic drop-down list of suggested options based on the initial text string entered in the box. The use of predictive text will automate and streamline the race and Hispanic origin coding processes. This component allows for near-real-time data processing by increasing the speed of automated coding, thus reducing and/or eliminating back-end processing.

To fully assess the validity of the new approaches, a real-time, probing coverage reinterview will be conducted by telephone with 100% of households that respond by Internet up to a maximum of 20,000. Reinterviews will be conducted shortly after initial responses are received. The purpose of this reinterview is to evaluate the accuracy of the within-household coverage by comparing the final household population roster collected via each Internet coverage approach to the final roster collected via telephone. The main goal of this test is to obtain a “truth” measure for who was living in the household on the reference day, with reinterview being the truth.

Proposed contact strategies build off previous Census and ACS research and include Internet Push with alternate/additional reminder approaches, new motivational wording, and varying the timing of the paper questionnaire mailout. Under an Internet Push methodology, households will not receive a questionnaire in the initial mailing. Questionnaires will be sent to those households who failed to respond by a pre-determined date.

## 2012 NCT Contact Strategy Panel Design

Panel	Thursday August 23, 2012	Thursday August 30, 2012	Tuesday September 4, 2012	Tuesday September 13, 2012	Tuesday September 20, 2012
1) Internet Push with <b>Advance Letter</b>	Advance letter	Letter + Internet instructions	Reminder postcard		Mail questionnaire (w/choice)
2) Internet Push w/o <b>Advance Letter</b>		Letter + Internet instructions	Reminder postcard		Mail questionnaire (w/choice)
3) Internet Push w/ <b>2<sup>nd</sup> Reminder</b>		Letter + Internet instructions	Reminder postcard	2 <sup>nd</sup> Reminder Postcard (blue)	Mail questionnaire (w/choice)
4) Internet Push w/ <b>Accelerated Q followed by 2<sup>nd</sup> reminder</b>		Letter + Internet instructions	Reminder postcard	Accelerated Mail questionnaire (w/choice)	2 <sup>nd</sup> Reminder Postcard (blue)
5) Internet Push w/ <b>Accelerated Q, phone fallback, and 2<sup>nd</sup> reminder</b>		Letter + Internet instructions <b>with phone fallback</b>	Reminder postcard	Accelerated Mail questionnaire (w/choice)	2 <sup>nd</sup> Reminder Postcard (blue)
6) Internet Push w/ <b>Accelerated Q, and Alternative Cover Letter/2<sup>nd</sup> Reminder</b>		Letter + Internet instructions	Reminder postcard	Accelerated Mail questionnaire (w/choice) <b>with alternative cover letter</b>	2 <sup>nd</sup> Reminder Postcard (blue) <b>(alternative language)</b>

The 2012 NCT mailing period will begin in late August 2012. Data collection will begin on August 30, 2012. The subsequent reinterviews will begin within two weeks after the response period begins. The reinterview workload will be updated on a flow basis, each weekday during the interview period.

In general, with alpha level of 0.10 and power of 0.80, we expect the minimum detectable statistically significant difference in the national-level response rates to be less than 1.5 percentage points. Further, we expect the minimum detectable statistically significant difference for within-household coverage measures such as the percentage of count discrepancies and the population count gross difference rate to be less than 1 percentage point.

### *3. Methods to Maximize Reponse*

This survey is mandatory, which will be evident to respondents on the materials they receive in the mail.

In an effort to maximize response, a reminder postcard containing the Internet instructions and a telephone number will be mailed to all sampled households. Additionally, all nonrespondents will be sent a paper questionnaire either 12 or 19 days after the initial invitation (depending on panel assignment). Some nonresponding households will also receive a second reminder postcard, distinguishable from the first reminder by its blue color. The majority of nonresponding households will receive a total of three followup contacts, after the initial invitation, while a smaller number will only receive two (dependent on panel assignment).

Question-specific help is available in the Internet instrument and respondents who need help with the paper questionnaire can receive it via Telephone Questionnaire Assistance (TQA). Respondents who are unwilling or unable to respond online or via mail, can provide their information to a telephone agent by calling the TQA number.

### *4. Tests of Procedures or Methods*

After the initial design phase, the Internet instrument will undergo comprehensive laboratory usability testing by internal experts. Usability testing will include observing the participants' behaviors, noting difficulties and comments, and conducting post-testing interviews to gain qualitative feedback about potential confusion. In addition, quantitative measures will also be gathered, including time to complete the survey and eye-tracking variables. Testing will incorporate accessibility testing to check for compliance with Section 508 of the U.S. Rehabilitation Act.

All associated contact materials, such as the 2012 NCT invitation and reminders, will undergo an internal expert review. In selecting members of the expert review panel, we sought a diverse group of methodological and subject-matter experts. The review panel includes experts with experience in different areas of expertise, including survey methodology, questionnaire design, and research psychology.

The mail questionnaire will be nearly identical to one of the experimental questionnaires used in the 2010 Alternative Questionnaire Experiment. Thus, the mail questionnaire content has gone through comprehensive cognitive testing in preparation for the 2010 Census.

5. *Contact(s) for Statistical Aspects and Data Collection*

For questions on statistical methods or the data collection described above, please contact Erin Love of the Decennial Management Division at the Census Bureau (Phone: 301-763-2034 or email [Erin.S.Love@census.gov](mailto:Erin.S.Love@census.gov) ) or Robert Packard of the Decennial Management Division at the Census Bureau (Phone: 301-763-5424 or email [Robert.J.Packard@census.gov](mailto:Robert.J.Packard@census.gov) ).

**Attachments**

Attachment A	Draft 2012 National Census Test Mail Questionnaire (DA-1)
Attachment B	Draft screen shots of the 2012 National Census Test Internet Application
Attachment C	Draft 2012 National Census Test Letters
Attachment D	Draft Internet Access Instruction Card
Attachment E	Draft FAQ and Help Text for 2012 National Census Test Internet Application
Attachment F	2012 NCT CFU Spec