#### SUPPORTING STATEMENT

U.S. Department of Commerce U.S. Census Bureau

Computer and Internet Use Supplement to the Census Bureau's Current Population Survey (July) OMB Control Number 0660 - 0021

#### B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

# 1. Purpose and Use of Data

The impetus for collection of the Current Population Survey (CPS) computer and Internet use data centers on their utility in informing policies that promote the country's well-being. The President has emphasized the importance to the nation's competitiveness of state-of the-art infrastructure such as broadband, plus a skilled workforce to use and maintain it. As the Internet agency, Commerce's National Telecommunications and Information Administration (NTIA) sponsored the July CPS supplement to promote these goals. The CPS provides a balance between statistical reliability, collection costs, and meaningfulness of the survey data. The result has been minimal standard errors for various demographic and geographic categories; collection costs at a level that periodically affords sponsorship; and survey questions that yield useful data.

In order to limit respondent burden and control costs, this supplement collects data through self response where possible and uses proxy respondents as necessary. This procedure is identical to that used for basic CPS to collect the labor force data and results, for adults 15+, in an approximate 50/50 split between self and proxy responses. There are limits to the data. These are detailed in the "Accuracy of the Estimates" section of attachment D to this package, the Source and Accuracy Statement. NTIA regularly analyzes the data and sets forth its findings in reports and/or blogs. For the July 2013 data as with previous data bases, the study topics chosen depend on a number of factors, such as Administration priorities and the richness of a given topic's data. A preliminary assessment points toward a close look at Internet and device mobility and those who are non-users in the upcoming NTIA report on the July 2013 CPS data.

#### 2. Nature of the Questions

For the July 2013 CPS Computer and Internet Use Supplement, a portion of the questions will be posed to the primary respondent on behalf of a randomly-selected member of the household. Most of these questions are aimed at obtaining detailed person-level data on the activities in which Americans engage while using the Internet. While the CPS is primarily a household-level survey, it routinely includes questions about individual persons, which are often answered by the primary respondent acting as

a proxy for the rest of the household. Questions asked in this fashion range from basic demographics such as age, education, and race, to more detailed questions about labor force participation. According to the Census Bureau's Technical Paper 66, nearly half of CPS labor force data are collected by proxy from the household respondent (TP 66, p. 7-3).

Based on the standard practice, the CPS Computer and Internet Use Supplement has often included person-level questions answered in large part by proxy, including questions about who uses the Internet, the locations in which users go online, and the devices they use to do so. The July 2013 questions being asked of random respondents will be collected in the same fashion; the interviewer will ask about a specific. randomly-selected member of the household, and will rely on the primary respondent to answer on that person's behalf. We believe this represents an improvement over the collection of similar data in the July 2011 Supplement. In that survey, questions about online activities were always asked of the primary respondent. It is likely that the individuals who tend to serve as primary respondents in the CPS – those who answer the door or pick up the phone and proceed to answer interviewer questions – are in some ways inherently different from the American population as a whole. Some of the traits that set primary respondents apart may be unknowable given available data, but we have readily observed others, such as a noted lack of young adults in the July 2011 sample of primary respondents. By randomly selecting a member of each household, irrespective of whether that person speaks to the interviewer, we should arrive at a sample that is more representative of the U.S. population.

The choice to switch the sample used for this series of questions from primary respondents to random respondents is not without tradeoffs. All questions asked by proxy, including the ones included in the CPS every month, are likely subject to a higher probability of respondent error compared with self-response. Additionally, there is some risk that a few of the proposed questions are detailed or personal enough that the proxy is at greater risk of not knowing or misreporting the true answer compared with more biographical questions like employment status or Internet use. Just as data users will benefit from the more representative sample offered through the use of random respondents, they should be aware of the increased potential for respondent error compared with using primary respondents. In particular, researchers should note the pitfalls of response by proxy when analyzing responses to questions that may be more difficult for proxies to accurately answer.

## 3. Universe and Respondent Selection

The July supplement is conducted, in conjunction with the CPS, for which the universe is 114 million households. From this universe, CPS selects a sample of approximately 72,000 households each month, of which approximately 59,000 households are eligible for interview. We ask the items in the July supplement, as appropriate, for members of these households. Due to budget

constraints, the sample size for this iteration of the Computer and Internet Use Supplement was reduced by 25 percent. This was accomplished by deleting 2 of the 8 rotation groups that comprise the full monthly CPS sample. Each rotation group is selected independently and is representative of the nation as a whole and each of the 53 areas that comprise the CPS sample (48 states, the District of Columbia, New York City, the balance of New York state, Los Angeles County, and the balance of California). This decreases the size of the sample for the Computer and Internet Use Supplement to approximately 44,000 interviewed households. The result on the data quality of this sample reduction will be approximately a 15 percent increase in the size of the sampling errors for the supplement estimates when compared to earlier years when the full sample was utilized. This 15 percent increase is calculated by taking the square root of eight/sixths, which was the size of the sample reduction.

When comparing the accuracy of the supplement estimates to that of basic CPS, there would be differences in accuracy also due to differential non-response rates to the supplement data when compared to the basic CPS data. This is accounted for in the parameters derived for use in gvf calculations. The parameters for the Computer and Internet Use Supplement are derived by fitting the supplement estimates to the gvf curves not basic CPS estimates.

Based on previous response rates for similar questions conducted in July 2011, we expect the supplement response rate to be approximately 88 percent.

# 4. <u>Procedures for Collecting Information</u>

The Computer and Internet Use Supplement is a supplemental survey associated with the CPS in July. Attachment E gives an overview of the CPS sample design and weighting methodology and response rates. The statistical properties of these supplemental items will fall within those associated with the CPS itself.

# 5. Methods to Maximize Response

The Census Bureau maintains response rates and data accuracy for the CPS at high levels through interviewer instruction and training and close monitoring of data output. (Refer to Item 5 of Attachment E for a discussion of the CPS nonresponse.)

A full allocation for item nonresponse is done within the July Computer and Internet Use Supplement for eligible people. (Item nonresponse is not expected to exceed five percent.)

# 6. <u>Testing of Procedures</u>

We do not require testing of procedures and methods since the Census Bureau has conducted the supplements as part of CPS for more than 50 years. Attachment D discusses the reliability of estimates produced by the July 2011 Computer and Internet Use Supplement.

For this supplement, the entire supplement questionnaire content was subject to a expert review by The Center for Survey Measurement at the Bureau of the Census. A copy of their report is attached. All recommendations made the the Center were incorporated into the final questionnaire. We made no distinction between old, new or revised questions in our request of the Center. They reviewed the content as a whole and not individual items that may have been revised or added.

# 7. Contacts for Statistical Aspects and Data Collection

The following individuals may be contacted on the statistical data collection and analysis operations:

#### **Statistical Design:**

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#### **Statistical Analysis:**

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## Data Collection/Survey Design:

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## **Attachments**

- A. July 2013 Computer and Internet Use Supplement Questionnaire
- B. CPS Advance Letter (CPS-263)

- C. Confidentiality Brochure
- D. Source and Accuracy Statement
- E. Overview of CPS Sample Design and Methodology
- F. Expert Review of July 2013 CPS Computer & Internet Use Questionnaire