MEMORANDUM FOR Distribution

From: Cynthia Clark

Associate Director for Methodology and Standards

Subject: Large Household Followup Evaluation

I am pleased to present the executive summary of one of the evaluation studies for the Census 2000 Dress Rehearsal. The dress rehearsal was conducted in three sites — Columbia, South Carolina; Menominee County, Wisconsin; and Sacramento, California. The evaluation studies cover detailed aspects of eight broad areas related to the census dress rehearsal — census questionnaire, address list, coverage measurement, coverage improvement, promotion activities, procedures addressing multiple options for census reporting, field operations, and technology.

The executive summary for each evaluation study is also available on the Census Bureau Internet site (http://www.census.gov/census2000 and click on the link to "Evaluation"). Copies of the complete report may be obtained by contacting Carnelle Sligh at (301) 457-3525 or by e-mail at carnelle.e.sligh@ccmail.census.gov. Please note that the complete copy of the following reports will not be publically released: reports regarding procedures addressing multiple options for census reporting and the Evaluation of Housing Unit Coverage on the Master Address File.

The evaluations are distributed broadly to promote the open and thorough review of census processes and procedures. The primary purpose of the dress rehearsal is to simulate portions of the environment we anticipate for Census 2000, so we can identify and correct potential problems in the processes. Thus, the purpose of the evaluation studies is to provide analysis to support time critical review and possible refinements of Census 2000 operations and procedures.

The analysis and recommendations in the evaluation study reports are those of staff working on specific evaluations and, thus, do not represent the official position of the Census Bureau. They represent the results of an evaluation of a component of the census plan. They will be used to analyze and improve processes and procedures for Census 2000. The individual evaluation recommendations have not all yet been reviewed for incorporation in the official plan for Census 2000. These evaluation study reports will be used as input to the decision making process to refine the plans for Census 2000.

The Census Bureau will issue a report that synthesizes the recommendations from all the evaluation studies and provides the Census Bureau review of the dress rehearsal operation. This report will also indicate the Census Bureau's official position on the utilization of these results in the Census 2000 operation. This report will be available July 30<sup>th</sup>.

## Large Household Followup Evaluation

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## **EXECUTIVE SUMMARY**

The Large Household Followup was a new mail-out/mail-back followup operation, tested for the first time during the Census 2000 Dress Rehearsal. Its purpose was to collect demographic data for people in households that responded by mail to the census but for whom there was no space on the census questionnaire to collect their demographic data. The Census 2000 Dress Rehearsal mail-out and update/leave questionnaires allowed respondents to report detailed demographic data for only five persons although there was space on each form for respondents to report the names of up to 12 household members. Households who reported on a mail return questionnaire that their household size was six or greater ("large" households) were mailed a Large Household Followup questionnaire and asked to return the questionnaire by mail. Each followup questionnaire was accompanied by a cover letter instructing respondents on which household members' data to report on the followup questionnaire.

This evaluation focuses on the results of the Large Household Followup. Its objective is to assess the completeness and quality of data for households and persons requiring followup. We provide operational summaries concerning the mail out and receipt of Large Household Followup questionnaires. Results on the potential effect of the Large Household Followup on the quality and completeness of census data are also discussed.

The Large Household Followup was not as successful as desired. A Large Household Followup questionnaire was received for fewer than one-third of the large households in all three dress rehearsal sites. Because of several operational restrictions, many large households were not sent a Large Household Followup questionnaire. The percent of these mail return households that were not sent a followup questionnaire was more than 33 percent in South Carolina, more than 29 percent in Sacramento and more than 37 percent in Menominee. The proportion of large households, for which the Large Household Followup was received, varied depending on the race and Hispanic origin of the household. For example, in South Carolina and Sacramento, the percent of Black Non-Hispanic large households that returned Large Household Followup questionnaire was more than 10 percentage points lower than the percent of White Non-Hispanic households that returned a followup questionnaire.

The response to Large Household Followup was low from those large households that were sent a followup form. Fewer than 44 percent of these households returned the Large Household Followup form in South Carolina and Sacramento. In Menominee, about 51 percent of these households returned the followup form.

The proportion of the mail return population represented by people in large households was 7.4 percent in South Carolina, 14.5 percent in Sacramento and 27.7 percent in Menominee. It was found that the proportion of the mail return population represented by people in large households varied across population groups defined by race, Hispanic origin and age. Higher percentages of children (person 17 and younger) live in large households compared to persons of all other ages. The proportion of children in the mail return population that resides in large households was more

than 14 percent in South Carolina, more than 30 percent in Sacramento and more than 46 percent in Menominee.

The low proportion of large households for which the Large Household Followup data was successfully collected had a profound effect on the number of statistically imputed persons in the census. This report focus on statistically imputed persons who were imputed into households for which a household size was known (i.e., the household size was not an imputed value). Because Large Household Followup data was collected from so few large households, most of the people statistically imputed into mail return households are persons in large households. In South Carolina, 1.9 percent of the mail return population were statistically imputed people and more than 70 percent of these were people imputed into large households. In Sacramento, 3.6 percent of the people in mail return households were statistically imputed people and more than 85 percent of these were people imputed into large households. In Menominee, these rates were 5.7 percent and more than 90 percent respectively. The proportion of the mail return population that was statistically imputed varies by race, Hispanic origin and age. Some of this variation is due to the effects of the Large Household Followup.

Young children (i.e., children 10 and younger) who were statistically imputed into mail return households comprise a high percentage of all young children in mail return households. More than 80 percent of all imputed young children reside in large households in all three sites. For mail return households in South Carolina, 4.8 percent of all young children were children statistically imputed into large households. The comparable rates for Sacramento and Menominee are 10.4 percent and 16.7 percent, respectively.

For the mail return population in South Carolina, 2.8 percent of the Black Non-Hispanic population and 2.2 percent of the Hispanic population were people statistically imputed into large households. The comparable rate for White Non-Hispanic population was 0.6 percent. Similar results for the mail return population in Sacramento show that 3.6 percent of the Black Non-Hispanic population and 4.4 percent of the Hispanic population were people imputed into large households. For the White Non-Hispanic population in Sacramento, the comparable rate was 1.2 percent.

When data were collected in the Large Household Followup, the completeness of the data for people enumerated on the Large Household Followup forms seemed comparable to the completeness of the data for persons enumerated on other census questionnaires. The amount of item nonresponse for non-imputed persons enumerated on the Large Household Followup questionnaires was comparable to the amount of item nonresponse for the balance of non-imputed persons enumerated in all mail return households. This holds true for both 100 percent data items and for those sample data items that are required for all persons in long form households.

The results of this evaluation support the decision by the Census Bureau to conduct a followup of large households by telephone in the Census 2000. The Bureau expects to complete a followup interview with about 80 percent of the cases using a telephone followup methodology. This response rate is much higher than can be expected from a mail-out/mail-back followup based on the dress rehearsal LHHFU results. The response to the mail out of Large Household Followup forms in the dress rehearsal ranged from 41.6 to 50.8 percent across the three dress rehearsal sites.

These results support the Census Bureau's decision to include six person panels in the design of the Census 2000 mail-out and update/leave census questionnaires. The increase in the number of person panels from five to six is expected to decrease the large household followup workload by more than 60 percent. Although a telephone followup is more expensive per case than the mail-out/mail-back followup used in the dress rehearsal, the substantial reduction in the followup workload allows the Bureau to implement a telephone followup methodology.