



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

MEMORANDUM FOR Distribution

From: Cynthia Clark
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Subject: Executive Summary from the Draft Preliminary Evaluation
 of Housing Unit Coverage on the Master Address File

I am pleased to present the executive summary for the evaluation study 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 for nonrespondents to mail census, 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@census.gov.

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 30th.

Evaluation of the Nonresponse Followup Operation (A1b)

Evaluation of the Mail Return Questionnaire (A2)

Evaluation of Telephone Questionnaire Assistance (A4)

Service Based Enumeration Coverage Yield Evaluation (D1)

Effectiveness of Paid Advertising (E1a)

Promotion Evaluation: Exposure to Paid Advertising and Likelihood of Returning a Census Form (E1b)

Field Infrastructure: EEO Process (G7)

Evaluation of the Housing Unit Coverage on the Master Address File (B1)

Executive Summary from the Draft Preliminary Evaluation of Housing Unit Coverage on the Master Address File

April 1999

Frank Vitrano
Planning, Research, and Evaluation
Division

EXECUTIVE SUMMARY

An integral part of a successful census is the development of a complete address list. For the Census 2000 Dress Rehearsal, a series of steps was developed to create the Master Address File . This file is the source of addresses for census enumeration. In this study, we present preliminary results of how well the Master Address File covered existing housing units at the time of the census enumeration.

The standards for measuring the completeness of the Master Address File in the dress rehearsal are based on 1990 Census estimates of net undercount. The net undercount is derived from the gross omission rate and the erroneous enumeration rate. The gross omission rate (what was missed in the Census) comes from the comparison of an independent listing of a sample of blocks to what was actually included in the Census in those sample blocks. The erroneous enumeration rate (what was included in the Census, but shouldn't have been) comes from a comparison of the same two samples.

The preliminary results for the Census 2000 Dress Rehearsal are based on the initial housing unit matching phase of the Integrated Coverage Measurement process in the Sacramento and Menominee sites and the Post Enumeration Survey in the South Carolina site. At the time of the initial housing unit matching phase, these census operations had not been completed:

- Postal Check
- Be Counted
- Telephone Questionnaire Assistance
- Update/Leave
- Urban Update/Enumerate
- Nonresponse Followup

We also use the results of the initial phase of the Census 2000 Dress Rehearsal as part of this preliminary evaluation. Considering the added and deleted housing units to the census from the time of the initial housing unit matching through to the end of the initial phase, we can make reasonable assumptions about what will happen to the final net coverage estimates.

The preliminary results in this report are subject to several limitations. Some of them are:

- The assignment of weights to census deletes from the Integrated Coverage Measurement and Post Enumeration Survey sample blocks is an approximation.
- Because of the preliminary nature of these estimates, we were unable to compute estimates of variances. The estimates of adds, deletes, gross omission rates, and erroneous enumeration rates are all subject to sampling variability.

In Sacramento, the standard is a 1.5% net undercount. In this site, the net undercount of housing units after the initial housing unit match was -0.5%. Following the initial housing unit match, there was a weighted estimate of 3,560 added housing units and 12,794 deleted housing units. The standard is above the initial net undercount estimates, but the number of additions and deletions after the initial housing unit match give us an indication that the net undercount could have been changed enough by the operations that followed the initial housing unit match to keep us from meeting the standard. For this reason, we do not have enough information to determine if the standard was met.

In Menominee, the standard is a 3.2% net undercount. In this site, the net undercount of housing units after the initial housing unit match was 0.0%. Following the initial housing unit match, there was a weighted estimate of 90 added housing units and 93 deleted housing units. The standard is above the initial net undercount estimates, and the number of additions and deletions after the initial housing unit match do not give us an indication that the net undercount was changed greatly by the operations that followed the initial housing unit match. For this reason, we conclude that the standard was met.

In South Carolina, there are two different standards, one for mailout/mailback areas and one for update/leave areas. For the mailout/mailback areas, the standard is a 1.0% net undercount. For the update/leave areas, the standard is a 3.2% net undercount. Initial estimates of net undercount were not available separately for the mailout/mailback areas and update/leave areas in the site. Also, estimates of additions and deletions were available only at the site level. We therefore computed a weighted standard for the entire site to be used for comparison purposes. The weighted standard is based on the number of census housing units in the mailout/mailback areas versus update/leave areas of the South Carolina site as identified in the dress rehearsal. The weighted standard for the entire site is a 1.5% net undercount.

In this site, the net undercount of housing units after the initial housing unit match was 10.5%. Following the initial housing unit match, there was a weighted estimate of 13,760 added housing units and 24,213 deleted housing units. The weighted standard is less than the initial net undercount estimates and the number of additions and deletions after the initial housing unit match do not give us an indication that the net undercount was improved greatly by the operations that followed the initial housing unit match. For this reason, we conclude that, at the site level, the standard was not met. However, without knowing how much the mailout/mailback areas and the update/leave areas individually contributed to the additions and deletions, we cannot say definitively whether or not each type of enumeration area individually met their standard.

Because of these results, we recommend that the Census Bureau continue to closely monitor and assess Master Address File quality.