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Status of 1990 Census Follow-Up
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Statement of
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Subcommittee on Census and Population
Committee on Post Office and Civil Service
House of Representatives



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STATUS OF 1990 CENSUS FOLLOW-UP AND EVALUATION EFFORTS

SUMMARY OF STATEMENT OF L. NYE STEVENS DIRECTOR, GOVERNMENT BUSINESS OPERATIONS ISSUES

GAO's last testimony before this Subcommittee on July 2 discussed the major challenges confronting the Bureau in the coming months, including completing census follow-up efforts and meeting tight time frames for the Post Enumeration Survey (PES). Today, GAO reports on the Bureau's progress in addressing those challenges as well as some possible early indications of the accuracy and completeness of census data.

The Bureau has completed nonresponse follow-up efforts, whereby it seeks to obtain completed questionnaires from households that did not initially respond to the census, in almost all of the 447 district offices that had such work. The two offices that have not finished hope to complete work by July 27. This is 7 weeks after the scheduled completion date of June 6, and 1 month after the 3-week period the Bureau built into its planning assumption for expected delays.

With the completion of most nonresponse follow-up efforts, the Bureau has initiated important coverage improvement efforts, including verifying the status of the approximately 14 million housing units identified as vacant or nonexistent during nonresponse follow-up. As of July 18, the Bureau reported it had completed about 76 percent of this workload. However, as a result of delays in completing nonresponse work, these subsequent follow-up efforts also have been delayed in some areas. The timely completion of follow-up efforts is important to ensuring that the preliminary counts provided to local governments at the end of August are as complete as possible.

Delays in completing nonresponse follow-up also have delayed the PES. For example, PES field interviewing will not be completed in all areas by the scheduled July 27 end date. GAO continues to believe that given the tight time schedule and the scope and complexity of the PES, it will be very difficult for the Bureau to complete all PES activities, including its evaluations, in time for a possible adjustment by July 15, 1991.

Finally, GAO notes that for about 3.5 percent of the occupied households on its address list, the Bureau was forced to gather data from a nonhousehold member because the Bureau could not locate a resident. However, this occurred much more in urban areas than elsewhere. The exact data quality implications of this last resort data are not known. However, such data introduces a potential source of error into the census that falls disproportionately in some of those areas where the Bureau has experienced the greatest difficulties counting the population.

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the status of the 1990 decennial census as the Bureau completes follow-up efforts and implements critical coverage improvement and census evaluation efforts. My comments are based on our continuing effort, as requested by the Subcommittee, to monitor census operations at Bureau headquarters and in the field.

Our last testimony before this Subcommittee in Austin, Texas, on July 2 discussed the status of the Bureau's nonresponse follow-up operation, which seeks to obtain completed questionnaires from households on its address list that did not initially respond to the census.¹ We noted that the major challenges confronting the Bureau in the coming months included completing nonresponse follow-up efforts and meeting tight time frames for the Post Enumeration Survey (PES).² Today, I will discuss the progress the Bureau is making in addressing those challenges as well as some possible early indications of the accuracy and completeness of census data.

¹1990 Census: Status of Questionnaire Follow-up Efforts (GAO/T-GGD-90-52, July 2, 1990).

²The PES is a matching study in which the Bureau interviews a sample of households independent of the census. The persons enumerated in the PES households are matched to census questionnaire records to determine whether each person was correctly counted or missed in the census.

FOLLOW-UP EFFORTS DELAYED
IN SOME AREAS

Since the Subcommittee's last hearing on July 2, the Bureau has continued to make progress completing nonresponse follow-up. Based on information available at that time, 38 of the 447 district offices with a nonresponse follow-up workload either had not finished or were not in the final stages of nonresponse follow-up. Since July 2, most of these remaining offices have completed nonresponse follow-up. The only offices that have not finished--the West Manhattan and Northwest Manhattan offices--hope to complete work by July 27. Such an end date, if met, would mean that the Bureau fully completed nonresponse follow-up about 7 weeks after the scheduled completion date of June 6 and 1 month after the 3-week period the Bureau built into its planning assumption for delays.

The Bureau's Philadelphia region, which covers the states of Pennsylvania, New Jersey, Delaware, and Maryland, and is of particular interest to the Subcommittee today, reported that it completed nonresponse follow-up on July 10. Lancaster, Pennsylvania; Landover, Maryland; and Rockville, Maryland, were the last of the region's 45 district offices to complete the activity.

With the completion of most nonresponse follow-up efforts, the Bureau has initiated two important coverage improvement efforts:

field follow-up and the "Were You Counted?" campaign. During field follow-up, the Bureau follows up on questionnaires that did not contain complete information and could not be resolved by telephone.

Field follow-up also includes the vacant/delete check, during which the Bureau verifies the status of housing units identified as vacant or nonexistent during nonresponse follow-up and instances where the status of the housing unit was not resolved at the end of nonresponse follow-up. In 1980, the Bureau visited about 8.4 million households and estimated that the check added about 1.7 million individuals to the census count, many of them minorities who otherwise may have been missed by the census. For 1990, the Bureau expects to add between 1.5 and 2 million individuals to the census as a result of the 1990 vacant/delete check. The Bureau presently plans to visit about 14 million households to verify their status.

As of July 18, the most recent data available at the time we developed this statement, the Bureau reported it had completed about 76 percent of its vacant/delete workload. Field follow-up was scheduled to be completed by July 24. However, as a result of delays in completing nonresponse follow-up, 27 offices, primarily in the New York and San Francisco regions, had not yet reported completing any vacant/delete verifications by July 18. This includes the West Manhattan and Northwest Manhattan offices,

which have not yet completed nonresponse follow-up and are not expected to begin field follow-up until the first week in August.

The timely completion of field follow-up is important to ensuring that the preliminary counts provided to local governments as part of the post census local review program are as complete as possible. To carry out this program, the Bureau provides local governments with housing unit counts at the census block level and asks them to identify or "challenge" the counts they believe are incorrect. If the vacant/delete check is not completed when the housing unit counts are provided to the governments in late August, the less-than-complete counts could result in challenges from local governments that otherwise would not have been made if field operations were completed on time.

The Bureau began its "Were You Counted?" campaign as areas completed nonresponse follow-up. The "Were You Counted?" campaign is designed to provide individuals who believe that they or members of their household were missed in the census with the opportunity to fill out a census questionnaire printed in their local newspaper or obtained from various locations. Individuals may also provide information to the Bureau over the phone. Upon receipt of the questionnaires, the Bureau determines if the respondents were actually missed in the census and adds those

that were to the census count. The operation is now ongoing throughout the Nation.

PES EFFORTS CONTINUE TO BE DELAYED IN SOME AREAS

We noted in our July 2 testimony that delays in completing nonresponse follow-up delayed the start of PES field interviewing in some areas, but the Bureau did not expect that these delays would materially affect the PES. Since that time, additional delays in completing nonresponse follow-up further impeded PES field activities. According to a headquarters official who manages PES field activities, after it became evident that nonresponse follow-up efforts would not be completed by the planned June 25 start date for PES interviewing, the Bureau established a new internal deadline. This deadline called for all areas to begin PES interviewing no later than July 17, or 3 weeks later than originally planned. However, the Bureau has been forced to revise that deadline to allow interviewing in seven New York region district office areas to begin as late as July 23. This deadline will need to be further revised because the West Manhattan and Northwest Manhattan offices will not finish nonresponse follow-up by July 23.

PES interviewing was originally scheduled to end on July 27, with an additional week to complete field quality control efforts. In addition to beginning PES interviewing late in some

areas, delays in sending completed PES questionnaires to the processing offices are slowing the keying of PES data and may delay efforts to match PES data with census data. As of July 13, the Bureau reported it had completed about 35,600 PES questionnaires, or about 22 percent of its workload. However, the Bureau also reported it had shipped only 3,200 questionnaires to the processing offices for keying.

The slow progress in transmitting completed work may be the result of important and stringent PES quality control measures, according to a Bureau official. For example, the work of each PES interviewer is grouped into batches; the Bureau will not transmit for processing any completed work from a batch until a sample of the work has cleared quality control procedures.

According to the Bureau official, the lag may also be the result of normal start-up delays as regional census staff learn PES field procedures. The Bureau will not know until the week of July 23, at which time regional staff would be expected to have fully learned PES procedures, the extent to which each of these factors is contributing to the lag in shipping completed work, or what, if any, corrective actions are needed to improve the flow of completed work.

The Bureau continues to believe that it will be able to overcome the delay in beginning PES interviewing and subsequent efforts

will not be impaired. However, as we previously reported to the Subcommittee, we believe that in light of the tight time schedule and the scope and complexity of the PES, it will be very difficult for the Bureau to complete the PES and related evaluation activities in time for a possible adjustment.³ The Department of Commerce, in accordance with a court-approved stipulation and order, agreed that if the Secretary decides to adjust census counts, it would publish adjusted counts no later than July 15, 1991.

RATES OF SURROGATE POPULATION DATA VARY
SIGNIFICANTLY AMONG DISTRICT OFFICES

The Bureau's procedures call for it to go to great lengths in its attempts to gather information from households on its address list that did not return a census questionnaire by mail. However, in some cases, primarily in urban areas, the Bureau is forced to gather information on households from persons who are not members of the household. Such surrogate information introduces a source of potential error into the census.

In instances when a housing unit is occupied but the Bureau cannot locate a resident at home, the Bureau instructs its enumerators to make up to three personal visits at different

³Critical Issues for Census Adjustment: Completing Post Enumeration Survey on Time While Protecting Data Quality (GAO/T-GGD-90-15, Jan 30, 1990).

times of the day on different days and, if a phone number is available, up to three phone calls, to try to gather information.

If, after repeated attempts, the Bureau still is unable to locate a household member or if the household refuses to respond to the census, the Bureau generally will collect census information from other knowledgeable sources. These knowledgeable sources may include neighbors, mail carriers, building managers, or others. This "last resort" information consists, at a minimum, of a household roster, certain characteristics of the individuals in the household (for example, sex and race), and characteristics of the housing unit (for example, whether the unit is a single family detached home, an apartment, or other type of dwelling).⁴

The Bureau gathered last resort data on almost 3 million, or about 3.5 percent, of the 89 million occupied housing units on the Bureau's address list. This percentage therefore includes the 63 percent of the Nation's housing units that mailed back a completed census questionnaire as well as those that did not but were identified as occupied during nonresponse follow-up and other enumeration efforts. While our results are preliminary at

⁴Once a district office has completed 95 percent of its nonresponse follow-up workload, the Bureau will accept "less than last resort" information for the remaining cases. Less than last resort information consists of a household roster and a description of the building in which the household resides. The Bureau's reported rates of last resort data include cases where it collected less than last resort information.

this point, the rate of such data varied significantly among district offices, from a low of 0.82 percent of occupied housing units in the South St. Louis office to 17.46 percent in the Chicago Near South office.

Urban district offices generally had the highest rates of last resort data. For example, all of the 46 offices that gathered last resort data at more than double the national average are urban offices, including the 13 offices that had last resort rates for occupied units of 10 percent or more.

In the Philadelphia region, two of the region's 16 urban district offices gathered last resort data on 10 percent or more of all occupied housing units, including the West Philadelphia office, which led the region with over 13 percent last resort data on occupied units. Again, it is important to keep in mind that these rates express last resort data as a percentage of all occupied housing units and not merely those in the nonresponse follow-up workload.

Urban areas traditionally have proven hardest for the Bureau to enumerate, and the factors that lead to high rates of last resort data in these areas appear to be among those that contribute to a low census mail response rate and a possible census undercount. Bureau district office and regional officials in 5 of the Bureau's 13 regions, including Philadelphia, whom we interviewed

pointed to a number of factors that may explain high rates of last resort information. For example, undocumented residents may fear reprisals if they cooperate with the census and residents in high crime areas may fear opening their doors to strangers, including census enumerators. District office officials in a number of cities, including New York and Los Angeles, said that difficulties in obtaining access to secured multi-unit buildings contributed to high rates of last resort information.

In Pennsylvania, district office officials in Pittsburgh and Philadelphia also noted that last resort rates tend to be high in areas with concentrations of public housing. They said that households with more than the authorized number of residents in the unit may not be willing to cooperate with the census despite the Bureau's assurances of confidentiality. Similar to other urban areas, two of the three Philadelphia region district offices with the highest rates of last resort data for occupied housing units-- West Philadelphia and Newark, New Jersey--had a 45 percent mail response rate, the lowest in the region and among the lowest in the Nation.

In the past, the Bureau has not studied the effect that collecting census information from nonhousehold members has on the accuracy and completeness of census data nor is last resort data from 1980 available. We understand that the Bureau is examining 1990 last resort rates in offices that significantly

exceeded the national average. While the extent to which last resort information impairs data quality is not possible to determine at this point, such data clearly introduces a source of potential error. This error will have its greatest impact in urban areas with high rates of last resort data. In addition, to the extent last resort data does have an impact on the quality of the census, it occurs disproportionately in some of those areas where the Bureau has experienced the greatest difficulties counting the population.

We believe that high rates of last resort data, especially in the traditionally hard-to-enumerate areas, point to the need for a vigorous exploration of alternative methodologies to taking the census. In particular, we believe the use of sampling and other statistical techniques for future censuses needs to be considered. We therefore agree with the Bureau's decision to study the use of sampling for the census as part of its 1990 research program.

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This concludes my prepared statement, Mr. Chairman. My colleagues and I would be pleased to respond to questions.