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DECENNIAL CENSUS

Opportunities for Fundamental
Reform

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DECENNIAL CENSUS:
OPPORTUNITIES FOR FUNDAMENTAL REFORM

SUMMARY OF STATEMENT BY
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GAO's report being released today, Decennial Census: 1990 Results Show Need for Fundamental Reform (GAO/GGD-92-94, June 9, 1992), reviews the major lessons learned from the 1990 census and the primary opportunities for census reform. The results and experiences of the 1990 census indicate that the current approach to taking the census has exhausted its potential for counting the population effectively and economically. Fundamental changes must be implemented for a successful census in 2000.

GAO believes the experiences of the 1990 census suggest the need for a rigorous exploration of reform opportunities in three broad areas: (1) improving address list development efforts; (2) responding to declining public response rates; and (3) reducing reliance on costly, lengthy, and error-prone follow-up efforts.

The labor-intensive procedures the Bureau of the Census used to develop its 1990 address list added significantly to the cost of the census and did not ensure an accurate or complete list. The Bureau has the opportunity to make substantial improvements for the future if it builds on its 1990 investment and aggressively explores increasing its reliance on the Postal Service.

The continuing decline in mail response rates in 1990 confirmed that the Bureau faces a long-term problem in securing the public's cooperation with the census. Revising the form or content of the questionnaire could promote a better public response. Decisions on reducing the number of questions require careful consideration as to whether or how data no longer to be collected as part of the census will otherwise be collected.

Sampling at least a portion of nonresponding households could minimize the cost and length of follow-up efforts, reduce the burden on respondents, and potentially increase data quality. Careful exploration is needed to determine the extent to which sampling can legally and technically be used.

The primary challenge for the Bureau now is to build on its advantages, heed the lessons taught by the 1990 census, and plan for 2000 with the discipline and inspiration needed for success. Strong and continuing congressional oversight is needed to ensure that the momentum for change is maintained and the redesign effort is successfully executed.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss our report on the major lessons learned from the 1990 census and the primary opportunities for census reform.¹ The report, which is being released today, was done at your request and that of the Subcommittee on Government Information and Regulation, Senate Committee on Governmental Affairs. My comments today will focus on the opportunities for fundamental reform and the need for a rigorous planning effort.

1990 CENSUS ACCURACY AND COST UNDERSCORE NEED FOR REFORM

The results and experiences of the 1990 census demonstrate that the American public has grown too diverse and dynamic to be accurately counted solely by the traditional "headcount" approach and that fundamental changes must be implemented for a successful census in 2000. Each recent census was more accurate than the preceding one, in part because of increased spending. However, the accuracy of the 1990 census fell below that of the 1980 census, even as census costs escalated significantly. On the basis of demographic analysis, a historically consistent measure of census coverage, the net 1990 census undercount was about 4.7 million persons, a greater percentage of the population than in 1980. We estimated that the 1990 census had at least 14.1 million errors, including missed persons and those improperly included in the count.

As social and demographic changes have made the population increasingly difficult to count, the cost of taking the census has also risen dramatically. In constant 1990 dollars, the \$25 spent to count each housing unit for the 1990 census is \$5 per household more than was spent for 1980. Overall, the \$2.6 billion the Bureau reports it will spend to complete the 1990 census represents a 65-percent increase in constant dollars over the cost of the 1980 census. The Bureau planning staff estimates that if the current approach to taking the census is retained for 2000, the costs could rise to about \$4.8 billion in current dollars.

We believe the experiences of the 1990 census suggest the need for a rigorous exploration of reform opportunities in the following three broad areas: (1) improving address list development efforts; (2) responding to declining public response rates; and (3) reducing reliance on costly, lengthy, and error-prone follow-up efforts.

¹Decennial Census: 1990 Results Show Need for Fundamental Reform (GAO/GGD-92-94, June 9, 1992).

IMPROVING ADDRESS LIST DEVELOPMENT PROCEDURES

An accurate and complete address list that identifies the mailing address and physical location of each housing unit is a cornerstone of a successful census. As with previous censuses, the Bureau developed an entirely new address list for the 1990 census. The labor-intensive procedures the Bureau used to develop its 1990 address list added significantly to the cost of the census and did not ensure an accurate or complete list. The Bureau's procedures resulted in millions of questionnaires being sent to vacant and nonexistent housing units. We estimate that follow-up on these units added about \$317 million to the cost of the census. Preliminary results from a Bureau evaluation show that the census missed about 3.5 million housing units and erroneously counted about 2 million units, including duplicated units and units counted in the wrong location.

The Bureau has the opportunity to make substantial improvements for the future. First, the Bureau must build on the investment it made to develop the 1990 list. For the first time, the Bureau developed an automated address control file to incorporate changes resulting from its various procedures. In a major improvement over the 1980 census, the Bureau invested about \$328 million to develop an automated geographic system to generate maps and geographically locate addresses. These automated systems provide the foundation for an improved address list in 2000, but only if the Bureau upgrades, updates, and integrates them.

Second, the Bureau needs to aggressively explore increasing its reliance on the Postal Service to limit the costly and labor-intensive procedures used to compile address lists. The Postal Service has developed an instantly accessible automated address file that is designed to include every address to which mail is delivered. Letter carriers update the system daily on changes to their delivery routes; this includes identifying additions and vacancies.

In addition to helping construct the address list, other fundamental opportunities exist for greater reliance on the Postal Service. We believe that letter carriers, who deliver mail to addresses regularly, should be in a much better position than temporary, inexperienced census workers to identify the occupancy status of housing units. At the urging of Members of Congress, the Bureau used the Postal Service during the 1990 census to help identify occupancy of some of the last, most difficult follow-up cases. The Bureau should now test relying on the Postal Service to determine the occupancy of housing units before census forms are mailed rather than just assisting with the cases hardest to resolve.

RESPONDING TO THE DECLINING LEVEL OF PUBLIC COOPERATION

A high level of public cooperation is the key to obtaining accurate data at a reasonable cost. However, the continuing decline in mail response rates in 1990 confirmed that the Bureau faces a long-term problem in securing the public's cooperation with the census. Research by Bureau staff suggests that a number of factors, such as illiteracy, non-English-speaking immigrants, concerns about privacy, and increasing numbers of nontraditional household and family arrangements, may make the environment for census-taking even worse over the next decade.

The problem of public cooperation is complex and not fully within the Bureau's control, but making it easier for people to respond may improve the level of cooperation. The differential response rates between the census short and long forms suggest that the public's willingness to cooperate is influenced, at least in part, by questionnaire length. Revising the form or content of the questionnaire could promote better response by reducing the time and effort needed for respondents to understand and complete the census form.

The Bureau tested simplified, more user-friendly census questionnaires in March through May 1992 and is currently evaluating the results. We think this test was an appropriate place to begin research on addressing the declining public response. We noted in our report that since 1976 we have suggested that the Bureau test a streamlined questionnaire to determine if it could improve the response rate and thereby reduce costly follow-up efforts. We also urged the Bureau to test related options that reduce dependence on costly field follow-up, such as targeting the use of reminder cards and second questionnaire mailings.

Decisions on reducing the number of questions require careful consideration as to whether or how data no longer to be collected as part of the census will otherwise be collected. Some items might be collected more appropriately--and in a more timely manner--through other sources, such as periodic surveys or administrative records. As an example of the scope of potential savings, the Bureau estimated that a radically streamlined questionnaire would have saved \$480 million in 1990. The cost savings from a simplified form might be reallocated to augment other data collection activities.

The Bureau also needs to reexamine census rules and definitions continuously to ensure that they are applicable to a changing society and understandable to the public. Projected social and demographic changes by 2000 will place an even greater strain on the Bureau's ability to define and apply concepts such as "household" or "usual residence." The Bureau's ethnographic studies on the behavioral causes of undercounts should provide

valuable insights into the extent to which census rules conform with social reality.

REDUCING RELIANCE ON COSTLY FOLLOW-UP EFFORTS

The Bureau's long-standing policy of trying to gather data on each nonresponding household has resulted in a reliance on labor-intensive and time-consuming field operations. Such efforts are extremely costly both in terms of the approximately \$730 million spent for census fieldwork and the quality of the data gathered. Specifically, the amount of error in the census increases precipitously as time and effort are extended to count the last few increments of the population. Moreover, despite tremendous efforts by the Bureau staff and an army of temporary census employees, the census still missed and double-counted people, and the persons missed were disproportionately members of minority groups. Such problems are inherent in the attempt to count the last and most difficult nonresponse cases using traditional enumeration methods.

The Bureau must anticipate greater difficulties in getting the most complete and accurate census count possible in 2000. As shown in our report, the potential nonresponse workload may approach 50 million housing units in the next census, and Bureau planners expect to encounter greater problems recruiting and retaining sufficient temporary workers in 2000 than were experienced in 1990. Thus, the Bureau needs to rigorously explore methods to streamline the census-taking process and reduce dependence on costly field follow-up operations.

Sampling at least a portion of nonresponding households could minimize the cost and length of follow-up efforts. However, careful exploration is needed to determine the extent to which sampling can legally and technically be used. Without addressing legal or technical issues, and in the absence of any other reforms, the Bureau estimates that it could have saved \$460 million if it had sampled 10 percent of nonresponding households in 1990 rather than collecting data on all of them.

In addition, sampling could reduce the burden on respondents and potentially increase data quality--for example by reducing duplications and other erroneous enumerations--in addition to identifying missed households and people. Results from census evaluations suggest that sampling could produce data of equivalent quality to the enumerations obtained at the end of follow-up efforts. A key objective of research on sampling should be to identify the point at which sampling can provide data of comparable quality to the existing follow-up procedures in a more timely and cost-effective manner.

STRONG PLANNING EFFORT NEEDED FOR 2000 CENSUS

While the need and opportunity for change are great, the Bureau must adopt a different posture to census planning if reform efforts are to be successful. Planning for the 1990 census did not aggressively seek innovative approaches to the census, and the Bureau consistently did not take full advantage of its field tests. For example, the Bureau has been slow to examine the extent to which a streamlined questionnaire would improve response rates. A 1985 Bureau field test was poorly designed and evaluated, and a test of alternative questionnaire designs done during the 1990 census focused on modifications to the long form rather than to the short form, which about 83 percent of the nation's households receive.

The Department and the Bureau face a variety of daunting technical and policy challenges in planning the 2000 census. Nevertheless, the Bureau is much better positioned today for planning the 2000 census than it was at a similar point in planning the 1990 census. As you know, Mr. Chairman, the Department and the Bureau have implemented a major effort to identify options for redesigning the census. We believe this initiative--as an early, open, and fundamental reexamination of the census--represents an important break with traditional census planning.

We also believe, however, that strong and continuing congressional oversight is essential because of the importance and political sensitivity of the census, the scope of the changes that appear to be needed, and the need to ensure that the current momentum for change does not diminish. We suggest that Congress maintain a schedule of oversight hearings beginning early in and continuing throughout the decade to ensure that consistent progress is made in designing and planning the 2000 census. Topics for individual oversight hearings should include the extent to which the Bureau is making timely and appropriate decisions on specific reform opportunities in improving address list development efforts, addressing the declining response rate, and minimizing costly follow-up work.

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In summary, Mr. Chairman, the current approach to taking the census appears to have exhausted its potential for counting the population effectively and economically. The primary challenge for the Bureau now is to build on its advantages, heed the lessons taught by the 1990 census, and plan for 2000 with the discipline and inspiration needed for success. In that regard, strong and continuing congressional oversight is needed to ensure that the momentum for change is maintained and the redesign effort is successfully executed.

This concludes my prepared statement. My colleagues and I will be pleased to answer any questions.