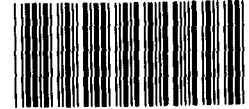


GAO

Testimony



141969

For Release
on Delivery
Expected at
10:30 a.m. PDT
Wednesday,
August 8, 1990

Decennial Census: Preliminary 1990 Lessons Learned
Indicate Need to Rethink Census Approach

Statement of
L. Nye Stevens, Director
Government Business Operations Issues
General Government Division

Before the
Subcommittee on Census and Population
Committee on Post Office and Civil Service
House of Representatives



049151/141969

DECENNIAL CENSUS: 1990 PRELIMINARY LESSONS LEARNED
INDICATE NEED TO RETHINK CENSUS APPROACH

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

Escalating census costs, declining public cooperation, and a shrinking workforce are among the challenges that indicate the need for a reassessment of the 1990 decennial census methodology. Key decisionmakers--Congress, the Census Bureau, other executive agencies, data users, and statistical experts--must begin to rethink the current census methodology while the experience of the 1990 census remains fresh and opportunities for change exist. These decisionmakers need to begin a dialogue now on several important questions.

First and foremost, agreement is needed on whether the decennial census should be streamlined and alternative data collection approaches developed for some important socioeconomic data. Second, alternatives to the 1990 census methodology need to be explored. A critical question for future census methodologies focuses on the extent to which sampling can be used. Dialogue on these questions will serve as a catalyst to examine the Nation's larger information needs and how to best meet them.

One vehicle for focusing discussions on these issues would be a commission or panel such as the one proposed in the Federal Information Resources Management Act (S. 1742). In February 1990, GAO testified in support of this bill's provision to create a commission that would identify long-term information needs and set priorities for information in light of changes in the economy and society. GAO believes such a commission could also assess alternative census methodologies.

Mr. Chairman and Members of the Subcommittee:

We welcome this opportunity to contribute to your hearing on the preliminary lessons learned from the 1990 census. We believe that holding this hearing as part of the annual meeting of the American Statistical Association is particularly appropriate because it underscores the central role of the decennial census in providing vital statistical information for the ensuing decade.

We have been monitoring the 1990 census since the mid-1980s and have testified before this Subcommittee on numerous occasions on the status of the census, operational problems encountered in different census operations, and actions taken by the Bureau in response to these problems. Although many important census operations are still underway or pending, it is not too early to begin to examine the implications of the 1990 census experience for the way we carry out future decennial censuses.

Essentially, we believe that a series of challenges to taking the census, some of which are longstanding, indicate the need for rethinking the census methodology. Besides its use as a forum for discussions about rethinking the census methodology, we believe that today's hearing is a critical first step toward creating an environment to begin discussions on the Nation's information needs and how best to meet them. While the decennial

census was never intended to meet all the Nation's information needs, it is clearly the cornerstone of the Nation's statistical effort. We live in an emerging information age with an increasingly integrated world economy; public and private sector decisionmakers require timely, complete, and accurate information to successfully manage and compete in this dynamic environment.

Reassessing the current census methodology is clearly a major part of the agenda for discussing the Nation's information and statistical needs. Efforts to reexamine the census methodology and our national statistical policy need to begin in earnest because key decisions need to be made soon if new data collection strategies are to be tested in time for the next decennial census.

LONGSTANDING CHALLENGES REQUIRE A
REVISED CENSUS METHODOLOGY

The basic census methodology is essentially a "head count" whereby the Bureau attempts to take a "national snapshot" as of April 1--counting every individual one by one, household by household, in every community. In addition to this head count, the decennial census is used to collect information on the nation's housing stock and a wide variety of other socioeconomic data. For example, the 1990 decennial census short form questionnaire asks questions on the type of housing unit, the number of rooms in the unit, and the market value of

that unit. In addition to these questions, the long form also asks such questions as the number of automobiles, vans, or trucks that are kept at the housing unit and the type of fuel that is used for heating.

For the 1990 census the Bureau asked about 95 percent of the Nation's estimated 106 million households to mail back their census forms; the other 5 percent were asked to hold their questionnaires for pick-up by census enumerators. The Bureau's procedures called for it to make up to six contacts per household that did not mail back their questionnaires. If after repeated attempts the Bureau could not obtain population data directly from the household, the Bureau would generally obtain data from other sources such as neighbors, postal carriers, or building managers.

We believe that several challenges, some of which are longstanding, have affected the 1990 census and may become even more difficult to address in the future. Among these are escalating census costs, a declining level of public cooperation, and a shrinking workforce available for temporary employment. We believe these challenges indicate the need for a reassessment of the 1990 census methodology.

Escalating costs

Decennial census costs have risen dramatically in recent decades. The Bureau spent (in 1980 dollars) \$5.04 in 1950 and \$12.10 in 1980 to count each housing unit. In 1990, the cost to count each housing unit will increase again, and, based on current Bureau estimates, will rise to about \$17.00 (in 1980 dollars). Overall, the Bureau estimates it will spend about \$2.6 billion for the 1990 census. This is a significant increase over the \$1.1 billion spent for the 1980 census and \$221 million spent for the 1970 census. In terms of constant 1980 dollars, the cost of the 1990 census will have increased about 73 percent over 1980 costs. If the Bureau uses the 1990 methodology for the 2000 census, the Bureau's 21st century planning staff estimates that the 2000 census could cost \$4.8 billion (in current dollars). These costs assume a 55-percent mail response rate and a 10-percent increase in the workload.

Declining Public Cooperation

Reduced public cooperation, another continuing challenge, has significant cost and data quality implications. The mail response rate for the 1990 census was 7 percentage points below what the Bureau expected and 12 points below the rate obtained during the 1980 census. Preliminary results from an evaluation of the Bureau's promotion program indicate that almost 93 percent

of the general public was aware of the census just prior to Census Day. However, awareness alone did not sufficiently motivate a large segment of the public to respond. There has been considerable speculation in the media and from the Bureau about the reasons for the lower-than-expected mail response rate. Potential explanations offered include a growing reluctance to respond to questionnaires and surveys; a perception that the census questionnaire is burdensome and/or intrusive; and a general increase in the volume of mass mailings, which may make it difficult for the public to identify the census questionnaire.

The lower-than-expected mail response rate increased the cost of follow-up activities by about \$70 million; the increase was primarily used to hire additional field staff to gather census data. An additional \$14 million was needed to cover the costs of a pay increase instituted to expedite the completion of nonresponse followup. As a result, nonresponse followup field costs rose to almost \$260 million. If public cooperation continues to decline, the current census methodology will be even more costly for the 2000 decennial census.

Even after incurring the costs for personal follow-up visits, the Bureau still had to collect surrogate population data; that is population data from sources other than the household itself. Some major urban areas had a disproportionate percentage of their population enumerated with surrogate population data.

Nationwide, the Bureau collected surrogate population data for 14 percent of the occupied housing units it visited during nonresponse followup. However, in some urban areas, the Bureau relied on surrogate population data for as many as 40 percent of the occupied housing units it visited during nonresponse followup. These statistics raise questions about the cost-effectiveness of followup procedures and the quality of population data obtained, particularly in major urban areas.

Staffing difficulties

Another longstanding challenge for the Bureau has been recruiting the army of workers needed to take the census--the majority of whom are required for nonresponse followup. Despite the Bureau's actions to implement geographic pay rates and the enactment of legislation enabling federal annuitants and military retirees to work on the census without reductions to their census salary or retirement benefits, the Bureau still experienced widespread staff shortages. These shortages delayed the completion of the 1990 nonresponse follow-up operation.

The Bureau took several actions that generally put the census back on schedule. One such action was to implement a pay raise during the final stages of nonresponse followup to address staff shortages. However, staff shortages may be more severe in the future because workforce projections for 2000 indicate a

continuing decline in the number of available, qualified workers.

IMPORTANT QUESTIONS NEED TO BE EXAMINED

The fundamental constitutional objective of the decennial census is obtaining a complete and accurate population count for reapportioning the House of Representatives. However, decennial census data are also used to redraw state and municipal legislative districts and will be used during the decade for allocating billions of federal and state dollars. In addition, businesses and researchers make extensive use of decennial census data, including socioeconomic data.

While socioeconomic data are important, decisionmakers in Congress, the executive branch, and the private sector need to consider whether the decennial census is the appropriate mechanism for collecting socioeconomic data, particularly given the increasing demands for timely and accurate data. After decisionmakers agree on the scope of the information needed for the census, alternatives to the 1990 census methodology need to be explored for taking future censuses.

First and foremost, agreement needs to be reached on whether the decennial census should be streamlined and whether alternative data collection approaches should be used for gathering important socioeconomic data. We believe some of the critical questions on

the scope of information needed from the decennial census include the following:

- What, if any, short form housing data should be collected on a sample basis?
- What, if any, of the socioeconomic data currently included on the long form could be deleted?
- What alternative sources exist or could be developed to obtain information currently collected on the long form questionnaire?
- Could alternative data collection approaches for socioeconomic data improve data quality and timeliness? At what cost?
- To what extent should the Bureau collect, tabulate, and disseminate data that are primarily used by the private sector?
- Should private sector data users share the financial burden associated with collecting certain socioeconomic data, and if so, to what extent?

Once agreement is reached on the scope of information that should be obtained during the decennial census, alternatives to the 1990 census methodology need to be explored. Experience with previous censuses has shown that even the best attempts to ensure a complete enumeration of the population still result in some portion of the population being missed, particularly certain

minority population groups. Although the net national undercount has declined over the past four decades, according to the Bureau's estimates, the disproportionality of the undercount has not. Missed persons may result from either an incomplete address list or missing persons within a household. In addition, some segments of the population, such as undocumented residents or households in public housing projects with more than the number of authorized residents, may want to avoid being counted.

Also, as I stated earlier, even after several personal visits to households that did not mail back their questionnaire, the Bureau had to obtain surrogate population data for a substantial number of housing units, particularly in some urban areas. Given these conditions, several questions about the census methodology should be considered. These include the following:

- How extensively can sampling be used for the decennial census, considering legal and data quality issues? For example, should the Bureau visit a sample of households that do not return census questionnaires in lieu of visiting every nonresponding household?
- What is the best method to develop and maintain a complete address list for mailing questionnaires?
- Could the U.S. Postal Service be used more extensively during the enumeration process?

In addition to questions about the census methodology, another important area of inquiry focuses on the causes for declining levels of public cooperation, which is a key determinant of the accuracy and completeness of the census counts. Although the effectiveness of the 1990 promotion and outreach campaign is still being evaluated, it appears that the Bureau significantly underestimated the amount of public resistance to the census. Several evaluations are underway to determine the variables that contributed to the low mail response rate. The results of these studies may shed some light on changes needed in the promotion and outreach program or the census questionnaire itself.

STRONG LEADERSHIP NEEDED FOR
EARLY DECISIONMAKING FOR THE 2000 CENSUS

The critical questions that I have just discussed need early and sustained attention. The dialogue must begin now on these questions so that innovative approaches for the 2000 census may be identified and tested to determine whether they warrant implementation, and if so, to what degree. We previously reported that the Bureau's past census planning efforts generally started late; experienced delays; were incomplete; and, perhaps most importantly, failed to fully explore innovative approaches.¹ Before discussing the importance of early planning, Mr. Chairman, I want to emphasize that thorough planning begins

¹Transition Series: Commerce Issues, (GAO/OCG-89-11TR, Nov. 1988).

with analyzing the results of past experiences. We cannot overstate the importance of timely completion of the evaluations planned for 1990 census operations.

Several evaluations are being done of 1990 census operations, including the factors that influenced the mail response rate, the reasons why the Postal Service could not deliver millions of census questionnaires, and the Post Enumeration Survey. We encourage the Bureau to closely monitor the progress of these evaluations and complete them expeditiously so that the results can be used in determining approaches for the future census.

Now turning to planning, a repetition of the planning process for the 1990 census must be avoided. That is, we believe that after the 1980 census was completed, interest in planning for the 1990 census waned. This, in part, is understandable in view of how far apart decennial censuses are. We have previously reported that the Bureau would need to complete its plans for the 2000 census early in the decade to have sufficient time for effective execution. In addition, we recommended in 1988 that the Secretary of Commerce ensure that the Census Bureau develop and implement an effective management structure, planning capacity, and decision timetable in sufficient time to help guide the Bureau in making decisions and changes necessary for the 2000 census.

To the Bureau's credit, it established a 21st century planning staff to begin the planning process for the 2000 census. This staff is researching a range of options for future censuses. We believe that creating this staff is an important first step to rethinking the current census methodology. However, because the reexamination of the census methodology has broader implications about the Nation's data collection strategies, the Bureau alone cannot make these decisions without input from a broad range of decisionmakers--other executive agencies, Congress, data users, and statistical experts.

One vehicle for focusing discussions on these issues would be a commission or panel such as the one proposed in the Federal Information Resources Management Act (S. 1742). This act provides for comprehensive information resources management of federal departments and agencies. In February 1990, we testified in support of the bill's provision to create a commission which would, among other things, identify long-term information needs and set priorities for information in light of changes in the economy and society.² However, we expressed concern about the commission's broad mandate coupled with its short reporting deadline. Such a commission could also be used to assess alternative census methodologies and may provide some consistent high-level leadership on important census issues.

²Federal Information Resources Management Act (S. 1742) (GAO/T-IMTEC-90-3, Feb. 21, 1990).

In summary, Mr. Chairman, my main message today is that we must begin rethinking the current census methodology now while the experience of the 1990 census remains fresh and opportunities for change exist.

- - - - -

This concludes my prepared statement. My colleague and I would be pleased to respond to questions.