

# Testimony



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#### STATUS OF PLANS FOR THE 1990 DECENNIAL CENSUS

# SUMMARY OF STATEMENT BY GENE L. DODARO DIRECTOR, GENERAL MANAGEMENT ISSUES GENERAL GOVERNMENT DIVISION

Given the inherent difficulty of taking a census, the Bureau has made some positive strides to improve its operations for the next decennial census. For example, the Bureau will process census data earlier, allowing more time for quality checks. While improvements have been made, GAO believes that two important issues require greater attention—controlling escalating costs and recruiting and retaining a huge temporary workforce.

GAO believes that the Bureau's estimate of \$2.6 billion for taking the 1990 census is understated because it does not fully incorporate prospective cost increases. The Bureau historically has had difficulty controlling costs. Cost estimates for the 1990 census are following the 1980 pattern, when they rose dramatically as the census year drew closer. GAO estimates that if the 1990 census is done as planned it could cost \$3 billion.

The Bureau's current approach to identifying cost reductions has not addressed the magnitude of possible funding shortfalls nor comprehensively identified program priorities. Not making early decisions on program priorities could force cutbacks in census operations more drastic than occurred in 1980. This could adversely affect data quality and compel the Bureau to request supplemental appropriations, as happened in 1980.

The Bureau also must confront serious difficulties in attracting and retaining the over 400,000 temporary employees it needs in 1990. Inadequate pay contributed to staffing problems in early census activities. To improve its pay competitiveness, the Bureau is considering geographic pay scales for 1990. GAO believes this is needed. The Bureau should expedite decisions on its pay structure so that recruiting efforts are not hampered.

The labor pool available for census employment needs to be enlarged. GAO supports legislation that would enable federal civilian and military retirees to accept temporary census jobs without reductions in their retirement benefits or salaries.

In addition to addressing the challenges of completing the 1990 census, the Bureau also must make progress in looking ahead to the 2000 Decennial Census. GAO believes that the combination of escalating costs and mounting staffing difficulties calls for a fundamental re-thinking of the current census approach and the need to design more innovative census strategies. To begin this effort, the Bureau needs to ensure that the research program included in the 1990 census will provide insights into developing an approach for the 2000 Decennial Census.

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear today to discuss our observations on the status of the 1990 decennial census. Taking an accurate and complete count is extremely important. Census data are used to apportion seats in the U. S. House of Representatives, distribute billions of dollars in federal aid, and meet other vital national data needs over the next 10 years.

My comments today are based on the results of our reviews of the Census Bureau's fiscal year 1990 budget request, which at \$1.3 billion represents about one-half of the Bureau's estimated \$2.6 billion full-cycle census costs; the 1988 dress rehearsal, which was the Bureau's final opportunity to test procedures and operations under census-like conditions; the prelist operation, in which the Bureau is developing the 1990 address list for suburban and rural areas; and Bureau planning documents for future censuses.

The Bureau has made some positive strides to improve its operations for the 1990 census and overcome significant problems experienced in the 1980 census. For example, census data will be processed earlier, which will allow more time for quality checks. The Bureau also has automated some error-prone manual operations, such as the preparation of maps. In the 1980 census, manually produced maps were in some cases illegible, had poorly delineated boundaries, were not timely, and contained

information which was inconsistent with information in other Bureau geographic files.

Two key areas in particular, however, will continue to challenge the Bureau throughout the census. These entail

- -- containing escalating census costs without significantly compromising data quality, and
- -- attracting and retaining the over 400,000 temporary employees needed.

The Bureau also needs to continue early efforts to plan for the 2000 census. In particular, it needs to execute its research and experimental program in the 1990 census to help prepare for the future. Early planning is critical if the Bureau intends to make significant changes in census methodology or technology for the 2000 census. The combination of escalating costs and growing staffing problems underscores the need for the Bureau to begin a fundamental reexamination of the current approach to taking the census.

#### CONTROLLING CENSUS COSTS

Controlling decennial census costs without compromising the quality of the data has been a longstanding dilemma for the

Bureau. For the 1980 census, cost estimates rose significantly during the 5 years preceding the actual census. In 1975 the Bureau originally estimated that the 1980 census would cost \$450 million. The estimate rose to \$565 million in 1977, and in 1980 it jumped to \$1 billion. The 1980 census eventually cost about \$1.1 billion. Because the Bureau had underestimated costs for 1980, it ran out of funds during the census, disrupting operations and requiring \$50 million in supplemental appropriations.

The funding shortfall in 1980 also prompted actions that reduced data quality and slowed dissemination of some publications. For example, the Bureau reduced the number of staff who coded the data from census questionnaires, thus contributing to a delay of about 1 year in the publication of some data on population characteristics. In addition, one-half of the data for some population characteristics was not coded at all, diminishing the usefulness of certain census publications.

Similar to 1980, cost estimates for the 1990 decennial have escalated in recent years. The Bureau's initial objective was to keep the 1990 per housing unit cost no higher than the 1980 level, after adjusting for inflation. Using this objective, the Bureau estimated in 1985 that the 1990 census would cost \$1.8 billion. In 1986, however, the estimate was raised to \$2.6 billion--a 44-percent increase. On the basis of continued

inflation and more current cost estimates, we believe that the 1990 census, as planned earlier in the decade, would cost about \$3 billion.

To keep the cost within its \$2.6 billion estimate, the Bureau has begun to make program reductions. So far Bureau officials have identified savings totaling more than \$40 million. These include:

- -- scaling back pay increments and eliminating proposed geographic pay scales for processing office personnel. Such changes would account for \$23 million, because to date the Bureau has not experienced problems in attracting and retaining staff for these offices.
- -- decreasing data editing of population characteristics in the nation's most rural areas, totalling \$5 million; and
- -- scaling back staff and travel funds for decennial promotion activities, for a savings of \$1.1 million.

The Bureau also has targeted other program reductions but, as of yet, has not calculated the exact savings to be accrued. For example, the Bureau decreased the number of first-line supervisors, increasing the ratio of enumerators (census takers)

to their supervisors from 8:1 to 9:1 or 10:1, depending on the type of office.

In addition, the Bureau has decided not to update its new automated geographic files prior to tabulating 1990 census counts to incorporate changes, such as new streets, noted in its field canvassing activities. These changes should not affect the completeness of the population counts because new streets and housing units will be included in the manually updated maps the Bureau will use in 1990. However, the maps the Bureau provides to localities to check the accuracy and completeness of preliminary census counts might not show recently built streets. This may create a perception among local officials that census counts are inaccurate. In addition, the published census maps will not contain the most current geographic information.

As the Bureau moves to contain costs, it simultaneously faces additional financial pressures, such as the need to raise its 1990 pay rates for district offices to competitive levels. As I will discuss later, the Bureau recognizes that in many areas, its pay rates are too low. The Bureau is considering adopting geographic wage rates based upon its analysis of local labor markets and an identification of competitive pay rates for each of its over 450 district offices.

The Bureau has not fully incorporated prospective cost increases, such as geographic pay rates and inflation, into its \$2.6 billion cost estimate. Moreover, its current approach to identifying cost reductions, while helpful, has not directly addressed the magnitude of possible funding shortfalls.

The Bureau needs to make a complete cost estimate and determine program priorities while time affords some flexibility. The Bureau needs such a list of program priorities to aid in making the difficult funding decisions that it confronts. The failure to make such decisions now could force later cutbacks in census operations—cutbacks that could be more drastic than those that occurred in 1980. As in 1980, the Bureau might then be compelled to request supplemental funding.

#### PERSISTING STAFFING DIFFICULTIES

Problems in attracting and retaining a quality workforce historically have plagued decennial census operations. During peak operations in 1980, for example, the Bureau was unable to fill 30 percent of its enumerator positions and suffered high turnover rates. Staff shortages and high turnover can lead to additional recruitment and training costs, as well as contribute to delays in completing census activities.

The Bureau faces equally severe challenges in 1990. To help ensure sufficient staff, the Bureau anticipates that it will need to recruit at least 1.6 million applicants for district offices in 1990, or about 45 percent more than the Bureau needed in 1980. This increase is due to several factors, including an estimated increase in the number of housing units, an expected mail response rate lower than in 1980, and anticipated high job refusal and turnover rates.

### Implementing Competitive Pay Rates

The most fundamental staffing challenge confronting the Bureau is ensuring that its pay rates are competitive. Problems in staffing early field activities for 1990 demonstrated how inadequate pay could hamper recruitment and retention. For example, about 28 percent of prelist areas reported difficulties in meeting recruiting and staffing goals. In addition, according to a Bureau official, the turnover rate was over 60 percent, or about twice what the Bureau had expected. While all of the staffing difficulties cannot be attributed to pay, inadequate compensation appeared to have played a major role in some areas, according to reports from the Bureau's regional recruiters.

To meet prelist staffing needs, the Bureau raised its enumerator pay in six east coast areas from \$5.50 to \$8.00 per hour --- a 45-percent increase. The Bureau is not finished evaluating

the effect of the pay increase on census costs or productivity, but preliminary data indicate that the higher pay rate increased the number of applicants. For example, in Northern Virginia, 200 persons had been recruited before the pay increase. However, in the 2-week period after the pay increase was implemented, 500 applicants were recruited.

The Bureau has initiated two major efforts to improve the competitiveness of its pay rates. First, in its fiscal year 1990 budget request, the Bureau is requesting \$21 million for pay increases in district offices. Second, the Bureau is reviewing the implications of a full-scale geographic wage system with six different rates. As currently envisioned, the proposal would pay enumerators between \$5.50 and \$7.50 per hour depending on where they work. An \$8.00 per hour rate would be reserved for district offices that suffer from extreme staffing shortages.

We have previously encouraged the Bureau to consider a geographic pay system that is more sensitive to local market conditions. To date, the Bureau has not reached a final decision on the design of its 1990 pay system. It needs to decide soon so that the Bureau has the time and flexibility to address the cost implications of its approach. Also, continuing indecision about pay could interfere with the schedule for hiring

<sup>&#</sup>x27;Status of the 1990 Decennial Census: An Update, (GAO/T-GGD-89-15, Mar. 23, 1989); Status of the 1990 Decennial Census, (GAO/T-GGD-88-53, Sept. 27, 1988).

activities for 1990, such as developing, printing, and distributing recruitment materials. In addition, because of problems it has had with timely delivery of pay checks in the past, the Bureau needs to test changes to its pay system to ensure that it can effectively administer a geographic wage system on a nationwide basis.

## Increasing the Number of Job Applicants

Better pay alone will not solve all of the Bureau's staffing problems. The Bureau now faces a diminished labor pool compared to the one available in prior decennials. Moreover, the nature of decennial work is unattractive to many potential employees. Census employment is temporary, in most cases lasting several weeks; most positions do not earn benefits; and access to an automobile is required for many field positions.

Federal retirees are an important potential source of census employees that has not been used. Legislation recently has been proposed that would enable federal civilian and military retirees to work on the decennial census without reductions to their annuities or salaries. We believe that passage of this legislation could improve the Bureau's staffing situation in 1990 by expanding the labor pool and thereby providing the Bureau with access to a source of reliable workers who have demonstrated their commitment to public service.

#### PREPARING FOR FUTURE CENSUSES

The two major challenges confronting the Bureau for 1990 that I discussed—controlling census costs and attracting and retaining a quality workforce—have been longstanding problems for the Bureau. For example, the census has become more expensive over time, measured in constant 1980 dollars. The Bureau spent \$6.85 per housing unit in 1970 and \$12.10 in 1980. The pattern of significant housing unit cost increases will likely continue for 1990.

The Bureau also repeatedly has confronted serious staffing problems. These difficulties will be heightened by continuing demographic changes. In the coming years, the Nation's population and workforce will grow more slowly than at any time since the 1930s. Workforce 2000, a study of work and workers in the 21st century initiated by the Department of Labor and done by the Hudson Institute, concluded that the labor force, which grew by 2.9 percent a year in the 1970s, will be expanding by only 1 percent annually in the 1990s.

Unless the Bureau fundamentally alters its approach to taking the census, the pattern of cost escalation and staffing problems will continue. In our recent transition report on the Department of Commerce, we noted that early planning is especially important if

basic methodological changes are to be considered.<sup>2</sup> We recommended that the Secretary of Commerce hold the Bureau accountable for a rigorous exploration of cost control approaches and alternative methodologies for doing the 2000 census. Some suggestions have been made that merit serious consideration. For example, the Bureau could develop relationships of shared responsibility and authority with the Postal Service or state and local governments for actual census operations, including address list development and data collection activities.

In addition, the Bureau is exploring the possibility of reducing the scope of the decennial census by decreasing the amount of information requested by the questionnaire. This streamlining could increase the mail response rate and reduce the cost of data collection and processing efforts. We previously have encouraged the Bureau to evaluate the use of a shortened questionnaire.

In our report on pretests for the 1990 census, we recommended that the Bureau begin earlier planning and testing for future

<sup>2</sup> Transition Series: Commerce Issues, (GAO/OCG-89-11TR, Nov. 1988).

<sup>3 &</sup>lt;u>Decennial Census: Issues Related to Questionnaire Development</u>, (GAO/GGD-86-74BR, May 1986).

decennial censuses.<sup>4</sup> The Bureau subsequently created a 21st Century Decennial Census Planning Staff to begin planning for the 2000 census. This new group has a two-fold mission: to prepare an early start for the 2000 census, and to stimulate informed debate about long-range trends and their effects on 21st century decennial censuses.

The formation of the 21st Century Decennial Census Planning Staff represents a major step toward preparing for future censuses. It is important that the Bureau sustain its commitment to early planning. In the past, the Bureau's planning efforts generally experienced delays, were incomplete, and failed to fully explore innovative approaches. For example, we have reported that a late start in detailed planning contributed to the Bureau's decision to discontinue consideration of optical mark reader technology for 1990. As a result, the Bureau excluded a potentially useful technology without fully exploring it.5

The Bureau also needs to ensure that its 1990 research and experimental program will provide it with valuable information to assist in making decisions about the census approach for the 2000 decennial. A decennial census offers the important opportunity to test innovative approaches and technologies under

<sup>4&</sup>lt;u>Decennial Census: Pretests Could Be Used More Effectively in Census Planning</u>, (GAO/GGD-87-24BR, Jan. 1987).

<sup>5 &</sup>lt;u>Decennial Census: Status of Plans to Computerize Questionnaire</u> <u>Data</u>, (GAO/GGD-86-76BR, May 1986).

actual census conditions. Thus far, the Bureau has not taken full advantage of its 1990 research and experimental program to help prepare for the 2000 census. For example, as I noted earlier, the Bureau is considering decreasing the scope of the 2000 census by reducing the number of questions included on the questionnaire. However, the Bureau does not plan to test the effectiveness of using a streamlined questionnaire in its 1990 research and experimental program.

In closing, Mr. Chairman, considering the inherent difficulties in taking a census, we feel the Bureau is making progress in a number of key areas. However, the Bureau must address some critical issues in the immediate future in order for the nation to have a cost-effective and well-managed 1990 census. The Bureau also needs to continue its effort to prepare for the 2000 census, because fundamental changes in census methodology may be needed.

Mr. Chairman, this concludes my statement. I would be pleased to respond to questions.