OVERSIGHT OF THE 2000 CENSUS: PUTTING THE DRESS REHEARSALS IN PERSPECTIVE

HEARING

BEFORE THE

SUBCOMMITTEE ON THE CENSUS

OF THE

COMMITTEE ON
GOVERNMENT REFORM
AND OVERSIGHT
HOUSE OF REPRESENTATIVES

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OVERSIGHT OF THE 2000 CENSUS: PUTTING THE DRESS REHEARSALS IN PERSPECTIVE

THURSDAY, MARCH 26, 1998

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON THE CENSUS,
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 210, Cannon House Office Building, Hon. Dan Miller (chairman of the subcommittee) presiding.

Present: Representatives Miller, Davis of Virginia, Shadegg, Snowbarger, Hastert, Burton, Maloney, Blagojevich, and Davis of Illinois.

Ex Officio present: Representative Waxman.

Staff present: Thomas B. Hofeller, staff director; Thomas Brierton, deputy staff director; Jennifer Safavian, chief counsel; Timothy Maney, chief investigator; Kelly Duquin, professional staff member; David Flaherty, senior data analyst; Liz Podhoretz, communications director; Phil Schiliro, and Michelle Ash, minority counsels; David McMillen, and Mark Stephenson, minority professional staff members; and Ellen Rayner, minority chief clerk.

Mr. MILLER. Good morning.

A quorum is present and the Subcommittee on the Census will come to order for its first meeting.

Before the ranking member and I deliver opening statements to the subcommittee, I must first dispose of some procedural issues.

I ask unanimous consent that all Members' and witnesses' written opening statements be included in the record. Without objection, so ordered.

Let me make my opening statement and then the ranking member, Mrs. Maloney, will make her opening statement.

Good morning and welcome to the inaugural hearing of the new Subcommittee on the Census. Before I get started, I would like to welcome the new members to the subcommittee and say how much I look forward to working with them on the critically important matter of overseeing the Census Bureau's preparations for the 2000 census.

This morning, I was quite disturbed by what I read in an Associated Press wire story. The article was entitled, "Report: Government Unprepared for 2000 Census." Let me quote from the first paragraph of the story. "Despite an estimated $4 billion cost, congressional investigators caution the millennium census could be doomed by problems ranging from questionable address lists to a new sampling system that could be inaccurate." The story goes on

to say that "The GAO, Congress' investigative arm, concluded there was a risk of a failed census in 2000, one on which the Nation will have spent billions of dollars but still have demonstrably inaccurate results." This is not the kind of news with which I like to start my day.

The Census Bureau has laid a proposal on the table for conducting the 2000 decennial census that is based on the concept of using several highly complex and difficult-to-execute statistical processes as a substitute for the traditional, neighborhood-based head counts that have worked for the last two centuries.

Both advocates and critics of this complex census plan have concentrated their energies on trying to defend or block it. In the process, both sides have missed many opportunities to help find and correct numerous flaws in the 2000 decennial census plan that are common to both a sampled, and a non-sampled census.

Many proponents of sampling are so enamored with the academic concept of the Bureau's complex proposal, that they have virtually ignored the repeated warnings from the Commerce Department Inspector General and the GAO that the plan is in disarray. They immediately dismiss any questioning of the census plan as unenlightened, or a partisan attack. Since they believe the intentions of the plan are good, the details just don't seem to matter. However, I doubt that the people who went down with the Titanic were comforted in their last moments by the thought that all the experts had claimed the ship was unsinkable.

Thankfully, the Commerce Department Inspector General and the GAO have been looking at what the Bureau has proposed and whether it will work as advertised. And what they are finding scares me—all indications are that we may be headed toward a failed census.

Three times during the last 12 months, the GAO has warned us that the 2000 census is at a high risk for failure. Each successive report has rated the risk as even higher than in the previous report. In a startling report we will hear about today, they state "the risk of a failed census in 2000 has increased since our July 1997 report."

The GAO is not alone in its concerns. On December 31, 1997, the Commerce Department Inspector General issued a report that described the Bureau's design as risky, identified over a dozen major problems, and urged immediate action by the Bureau to simplify its plan and prioritize its activities. Unfortunately, nearly 90 days have passed and we have not yet seen any action by the Bureau to implement the Inspector General's recommendations.

[The report referred to follows:]

UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, D.C. 20230

DEC 30 1997

The Honorable John McCain
Chairman, Committee on Commerce,
Science, and Transportation
United States Senate
Washington, D.C. 20510-6125

Dear Mr. Chairman:

During the Committee's May 14, 1997, oversight hearing on the Department of Commerce, you requested our views on what needs to be accomplished by what dates in order to ensure a successful 2000 decennial census. You planned to use this information as a benchmark to track the progress of the census.

In response to your request, the enclosed paper discusses decennial census milestones and associated risks. This paper does not take into account the recent decision to include plans for conducting the decennial without the use of sampling. The Census Bureau is currently in the early stages of adjusting its scheduling and cost models to reflect that decision, and we will closely monitor and report on the bureau's progress in making these adjustments.

We conclude that although the 2000 census design is risky, the bureau's fundamental problem is that it simply may not have enough time to plan and implement a design that achieves its dual goals of containing cost and increasing accuracy. The problem is evidenced by the decennial Master Activity Schedule—the primary decennial program management tool. The schedule's tightness is due to changing design details, lagging progress in some critical activities, less than full implementation of strategies and procedures, and a continuing lack of agreement between the Administration and the Congress on the appropriate use of sampling.

A recurring theme of this paper is our conclusion that, as a result of its lack of time to complete various aspects of the design, the bureau will need to ask for additional funding, reprogram funds, or accept potential quality shortfalls. To minimize the need for such actions, the bureau should immediately (1) prioritize and assess the readiness of its major design components, (2) simplify the design, (3) realistically reassess costs, (4) communicate results both internally and externally, and (5) redirect the 1998 dress rehearsal accordingly.

We discussed our findings and recommendations with senior bureau managers who generally concurred. They stated that some planned corrective actions had been delayed by the Fiscal Year 1998 continuing resolution and the recent legislation requiring both a sampling and a non-sampling 1998 Dress Rehearsal. However, the bureau has initiated a comprehensive design review to be completed in January 1998 that is intended to address our concerns. We look forward to assessing the adequacy of those corrective actions.

If you have any questions about this paper, your staff may contact either me at (202) 482-4661 or Jessica Rickenbach, our Congressional Liaison Officer, at (202) 482-3052.

Sincerely,

Francis D. DeGeorge
Inspector General

Enclosure

cc: The Honorable Ernest F. Hollings, Ranking Minority Member
L. Nye Stevens, GAO

December 1997

U.S. DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL

2000 DECENNIAL CENSUS: KEY MILESTONES AND ASSOCIATED RISKS

INTRODUCTION

History of Decennial Census Design

The Census Bureau, in consultation with expert advisory panels, "reengineered" census-taking methods to meet the challenges of accurately and cost-effectively counting an increasingly hard-to-count population in 2000. An accurate census is crucial because the Constitution requires that it be used to apportion seats in the Congress. Additionally, census data are used for a host of other important activities, including federal and state redistricting, the implementation and enforcement of the Voting Rights Act, and the distribution of billions of dollars of federal and state funds each year. Because of its centrality to decisions that last 10 years, the bureau must address concerns about the content and method of conducting the census raised by its stakeholders—federal, state, and local governments and a myriad of advocacy groups whose constituents are affected by census results.

The 1990 census was long, expensive, and labor-intensive, a situation exacerbated by a lower-than-expected public response. Because of the low response, the bureau required additional appropriations from the Congress during the census to complete the count. Despite the census' higher cost, post-analysis concluded that the count was less accurate than that of the 1980 census. Particularly alarming to the Congress and other stakeholders was the increase over past censuses in the disproportionate undercount of minorities.

The Congress convened a panel of experts from the National Academy of Sciences to study these problems and recommend actions to address them. In 1994, the panel determined that traditional counting methods alone are no longer sufficient, and recommended that to contain cost and increase accuracy, the bureau use statistical sampling and estimation as an integral part of the 2000 census design. In addition, the panel recommended that the bureau rethink and reengineer the entire census process and operations. The bureau agreed with the panel's recommendations and decided to incorporate sampling and estimation, multiple response modes, updated computing tools, and an improved national address file into the design.

The dress rehearsal, scheduled to begin in the spring of 1998, offers the Census Bureau its first opportunity to test the interrelationships of the various decennial design components. The bureau plans to closely approximate all major decennial components and their supporting automated systems in the dress rehearsal. Only a complete dress rehearsal will allow the bureau and outside observers to document the efficacy of the 2000 census design.

OIG Monitoring of Decennial Census Design

The OIG has long been concerned about the need for the bureau to develop a sound decennial design. In an inspection report issued two years ago, we concluded that the bureau had not sufficiently refined and optimized a design that was supported by adequate research and analysis and that it lacked a credible cost estimate.[1] Among our recommendations was that the bureau derive a coherent, substantiated, cost-effective design for meeting decennial goals. Since that time, we have continued to monitor the bureau's progress in finalizing its design, offering our views on what actions needed to be taken.

This paper was developed in response to a request made by Senator John McCain, Chairman of the Committee on Commerce, Science, and Transportation, at a May 14, 1997, oversight hearing on the Department of Commerce. The Chairman wanted the OIG's perspective on milestones that the Census Bureau needs to meet in order to ensure a successful census, intending to use this information as a benchmark to track the progress of the census.

To define the requested decennial census milestones and associated risks, we present several analyses of the design using some of the bureau's activities for the dress rehearsal and the census itself. First, we identify the key activities and design components in each of the four phases of the census. Then we briefly describe how the Master Activity Schedule defines relationships between activities and calculates start and finish dates. Based on the body of work done by our office, we next provide a design risk analysis, component by component. Since few dress rehearsal activities, and even fewer decennial activities have yet occurred, we identify *potential* future delays in milestone activities.

BACKGROUND

Decennial Census Phases

Pre-Enumeration

Before census enumeration can start, the Census Bureau must produce, distribute, and publicize the 2000 Census questionnaire. Perhaps the most complex step in this process is creating the Master Address File (MAF)—the list of addresses of all households to be counted in the census. The MAF is being developed from information obtained from the Postal Service, the 1990 census, local governments, and field checks. Rural address capture requires temporary staff to canvass areas that have rural delivery routes or post office boxes. Before the MAF is finalized, it will be sent to local governments for review and correction.

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[1] *Inadequate Design and Decision-Making Process Could Place 2000 Decennial at Risk* (OSE-7329-6-0001, November 1995).

Enumeration

Once all address information is complete, the bureau will create the address file that will be used to label questionnaires. Questionnaires will then be distributed to households in one of two ways, depending on whether they are in urban or in rural areas. Questionnaires with urban, city-style addresses will be delivered by Postal Service mail carriers. In rural areas, temporary census staff will drop off questionnaires at each household and verify the location of residences in the process.

There will always be some individuals who do not return a questionnaire or do not receive one in the first place. To allow residents to obtain census forms at locations other than their residences, the bureau will distribute additional census forms, known as "Be Counted" forms, at high-profile public places. Distribution sites in each community will be determined through consultation with local officials and community organizations. Additionally, temporary staff will visit shelters and soup kitchens to enumerate transient populations.

The Census Bureau anticipates that about two-thirds of all households will mail back a census form. To obtain information on the remaining one-third of households, temporary staff will visit them and attempt to conduct in-person census enumeration. Interviewers will obtain responses from at least 90 percent of all households in each census tract before terminating their activities. The bureau will use statistical estimation to determine the characteristics of the remaining nonrespondents.

Processing

As census questionnaires are mailed back, collected through follow-up interviews, or received over the telephone, they are sent to one of several processing centers. The data is then "captured," or translated from paper to electronic format for computer processing. Questionnaires from within a defined geographic area are compared to eliminate any duplicate responses from a single household. The results are compiled into the unedited census file, which is used in the post-enumeration phase to produce final counts.

Post-Enumeration

After enumeration and processing, the Census Bureau will conduct an independent survey, called the Integrated Coverage Measurement (ICM) survey, during which 750,000 households will be re-interviewed by temporary staff. These second interviews serve as a quality check on all preceding census activities. Responses to the ICM survey will then be matched to each household's original census form, if one was obtained, and the data transmitted to census headquarters. The results of the quality check will be used in calculating the final statistical adjustment of the census count.

At the end of December 2000, the Census Bureau will deliver to the Congress the population counts to be used in reapportionment. By April 2001, the bureau will release the redistricting data to the states. Later, the census database will be formatted for use by other data users—federal agencies, state and local governments, and the general public.

Project Management

To help manage the planning for the 2000 Census, the Census Bureau spent much of 1997 building its Master Activity Schedule (MAS) for the census. The schedule was developed using Primavera Project Planner (P3), a sophisticated project management software tool. P3 allows the bureau to identify relationships among activities in the schedule, such as whether one activity must be completed before another can start, or whether two must end at the same time. Using activity durations developed by the bureau, P3 calculates the earliest date an activity can begin based on its relationship to predecessor activities, as well as the latest date an activity can begin before it delays successor activities. The interval between those two dates is known as "float" time.

The bureau's planned beginning and ending dates for each activity generally fall within the float period. Activities with zero or negative float are considered critical, meaning that they either are delaying or will delay subsequent activities unless their durations are shortened. In part because P3 provides the bureau with the opportunity to vary activity durations or relationships as part of "what if" analyses. it is an important tool in determining the cost, schedule, and performance trade-offs inherent in implementing the census.

The milestones identified throughout this analysis come from the MAS as of late October 1997. For major milestones, we selected important end points from a possible list of several thousand activities in the schedule. Unless otherwise specified, we used the bureau's planned start and finish dates. Appendixes I and II to this paper lists key dress rehearsal and decennial milestones from the schedule. Appendix III depicts the interrelationships among those key activities as portrayed in the schedule. Appendix IV provides a summary of our results.

RISK ANALYSIS

Phase One: Pre-enumeration

Master Address File (MAF)

Background

In 1990, the bureau purchased commercial address lists, available only for metropolitan areas, to begin its address-building process. Temporary field staff went door-to-door nationwide in 1989 to develop the 1990 Census Address Control File. Because the address list was the source of

millions of errors. it was a gobd candidate for reengineering. Further, the list was of particular interest to local officials, who believed that they could help to improve it. In October 1994, partially in response to local government requests, the Congress passed Public Law 103-430, which requires the bureau to allow local governments to review its address list before the 2000 decennial. Consequently, bureau officials adopted an address-building program that centered on partnerships with the U.S. Postal Service and up to 39,000 local governments to build and review the MAF before the census.

This program was designed to produce an improved list at a lower cost by assigning a unique geographic code to city-style addresses based on the bureau's mapping system. This list is a combination of addresses from the Postal Service, the 1990 census, and local governments. Rural address capture would still require temporary staff to canvass areas that had rural delivery routes or post office boxes. The address list that emerged from both sets of activities would be sent to local governments for review and corrections. In addition to meeting the legal requirement for local government review of the address list before the 2000 census, this review would enable the bureau to obtain the most current information available while receiving early acceptance from local officials to preclude challenges after the census.

Activities at Risk

Developing base MAF

Although the MAF program seemed sound in concept, when bureau staff began implementing it, a number of deficiencies became apparent. The quality, currency, and usability of the Postal Service and local government address lists varied greatly. Additionally, few local governments participated in the address-building part of the program. The bureau addressed these deficiencies by planning for targeted canvassing operations, such as a search for hidden units and checks of multi-unit structures. However, as time progressed, bureau analysts became increasingly alarmed about their inability to clearly identify the attributes of areas where errors would be most likely to occur. If it cannot identify such attributes, the bureau will be unable to accurately select the areas in need of the planned targeting, resulting in error-prone areas not being among those checked.

Acknowledging the MAF program concerns, during this past summer, the bureau's Deputy Director established a team to assess the 2000 decennial address-list building strategy. Finding this strategy to be complex, risky, and incapable of providing an adequate final product, the assessment team concluded that a 1990-style, 100-percent field check was essential and that the local review process needed to be redesigned. Consequently, the bureau has requested an additional $108.7 million to complete the MAF building process. Bureau officials say that, if the funding request is denied, they will reprogram the money from other areas to conduct the field operation.

Conducting local review of MAF

Despite its conclusions and the associated need for additional funds, the assessment team developed performance measures based on the number of local governments participating in MAF building. These participation measures seem to be considered as important as quality measures. This apparent emphasis is troubling since evidence suggests that, in some cases. local lists may contain significant numbers of inappropriate or erroneous addresses.

Further, the redesigned process calls for a more interactive process with greater technical assistance from the bureau; as a result, depending on the intensity of the bureau's efforts and the number of local governments participating, the bureau could be facing an enormous unanticipated resource drain. For example, local officials may require detailed geographic assistance to conduct reviews consistent with MAF requirements or technical assistance to match and unduplicate multiple lists using computer software. However, the current program infrastructure calls for staff whose primary skills are in public relations, not technical support. If the emphasis on local participation is not subordinated to quality concerns and the local reviews become unexpectedly numerous and intense, either cost and complexity will further increase or MAF accuracy will decrease.

Conclusion

To deliver the decennial MAF on schedule, the bureau must receive additional funding, reprogram funds, or accept potential quality shortfalls.

Phase Two: Enumeration

Nonresponse Follow-up

Background

The largest single operation in the decennial census is nonresponse follow-up—repeat mailings, visits, and telephone calls to non-responding households. In 1990, 35.7 million housing units required follow-up. In 2000, nonresponding housing units will reach nearly 40 million, if the bureau's projections of voluntary mail response are correct.

After the traditional mail-out/mail-back phase of the census, the 2000 plan calls for applying new methods, such as making questionnaires (known as Be Counted forms) widely available in up to 32 languages, and other coverage improvement programs to further boost participation. Then, the bureau will end the initial enumeration phase, tally the responses in each census tract, and select a sample of the remainder of sufficient size to increase response rates in each tract to at least 90 percent. Using this strategy, according to bureau projections, will reduce the nonresponse workload to about 22 million housing units.

In addition to using statistical methods, another strategy for the 2000 census is building partnerships at every stage of the process with state, local, and tribal governments; community-based and other organizations; and the private sector. The bureau believes that such partnerships are valuable because local officials and community leaders understand and know their communities, and can therefore help to tailor plans for conducting the census. Local and tribal governments will have the opportunity to review, confirm, and augment the list of neighborhoods identified for targeting methods, including distributing Be Counted forms in multiple languages. Additionally, community-based organizations and local governments will help the bureau to identify strategic and high-visibility locations to serve as Be Counted form distribution sites.

According to bureau officials, despite the significant reduction in workload under the current sampling strategy, the single biggest threat to a successful census is completing nonresponse follow-up within six weeks so that the ICM survey can be completed in time to meet the December 31, 2000, legislative deadline.

Activities at Risk

Making Be Counted forms widely available in multiple languages

The 2000 decennial census program to improve coverage of the hard-to-enumerate by targeting questionnaires in multiple languages may not be necessary and may conflict with the bureau's dual goals of increasing accuracy and containing costs.[2] The program may be unnecessary because the bureau has made sampling an integral part of its 2000 design to compensate for ineffective coverage improvement programs used in past censuses. Further, the 1995 Census Test results indicated that targeting areas with blank census questionnaires in multiple languages did not increase response rates for the intended populations.

Although specific program details are not yet in place, if the program is large and results in an unanticipated increase in workload, it could hamper the bureau's ability to complete nonresponse follow-up on schedule. According to decennial census managers, the limited period available to complete nonresponse follow-up in time to conduct the ICM survey is the single biggest risk in the census. A delay in the start of the survey could compromise the bureau's ability to deliver the apportionment counts to the President by the legal deadline.

Acknowledging these limitations, bureau managers have identified the goal of promoting partnerships as a justification for expanding the number of languages included, suggesting that measures of cost effectiveness are less important. Given bureau managers' intensive efforts to communicate and implement partnerships, community leaders are likely to expect to play a significant role in determining the program's ultimate scope and nature. In light of past

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[2] *2000 Decennial Census: Expanded Targeted Questionnaire Program May Be Unnecessary and Counterproductive* (ESD-9610-7-0001, September 1997).

experience, local officials will probably advocate an expansive program. Unless cost-effectiveness is a fundamental criterion, program cost growth is likely.

Conducting non-response follow-up

A long-standing bureau concern has been the difficulty and expense of recruiting, hiring, training, and retaining a qualified, temporary workforce. Even under a sampling scenario, this task involves recruiting millions of people to ensure the hiring of about 500,000 staff to maintain a peak workforce. The magnitude of the problem is exacerbated by a number of potential external developments over which the bureau would have little or no control; e.g., a decline in voluntary mail response rates below the projected 67 percent, a booming economy shrinking the available workforce, or a greater-than-expected difficulty in enumerating nonrespondents.

To help address the workforce problem, the bureau contracted with WESTAT Inc. to devise a formula to calculate the optimal pay rate for each area of the country to minimize staff turnover without unnecessarily increasing wages. WESTAT concluded that the bureau could achieve an 80 percent turnover rate (a significant improvement over 1990) by setting wage rates at 70 percent of locally prevailing rates and by increasing the number of enumerators working at any one time by 50 percent over 1990. Given the nearly unprecedented pace and scale of hiring involved, however, WESTAT's calculations are subject to uncertainty. (For a discussion of some of the estimation issues related to nonresponse follow-up, see the ICM/Estimation section.)

Phase Three: Processing

Data Processing

Background

Unlike with previous labor-intensive decennial censuses, the bureau's plan for the 2000 decennial depends heavily on technology and automation. In previous censuses, the bureau used internally designed and developed technology for data processing. A prime example is its approach to data capture, the process of translating data from paper questionnaires to an electronic format for computer processing. Because the system that the bureau used in 1990 is expensive, obsolete, and unsupportable, it is acquiring a modern system, called Data Capture System 2000 (DCS 2000), which uses electronic imaging. The bureau is seeking to maximize the use of commercial-off-the-shelf components for DCS 2000, but the unique and stringent decennial census requirements necessitate customizing parts of the system. Further, DCS 2000 is a key system for the 2000 census because every response to a census questionnaire or personal visit must be processed through the system in order to become a part of the census.

Once all census questionnaires are processed, questionnaires potentially from the same address or person must be matched and "unduplicated." In the 1990 census, census questionnaires were tightly controlled, with a unique identification number printed on each, and only one was sent to each household. Conversely, a key strategy for the 2000 Census is making questionnaires widely available. The bureau plans to mail two questionnaires to every household in the nation; mail a follow-up questionnaire to large households; place unaddressed questionnaires, called "Be Counted" forms, in public places; and allow responses by telephone and possibly over the Internet. The potential for duplication is therefore much greater than in previous censuses.

Activities at Risk

Capturing data from census questionnaires

The bureau's plan for testing and implementing DCS 2000 appears feasible, but only if two conditions are met. First, the bureau must fund the contractor at agreed-upon levels. Second, the processing plan cannot be altered significantly to accommodate changes from other decennial census activities. If the bureau fails to meet the first condition, the contractor will be unable to provide full functionality. The DCS 2000 project faces the continuing threat of funding shortfalls. Without needed funds, the contractor will be unlikely to complete the full range of planned testing, which increases the risk of delays during operations.

If other parts of the decennial census require changes (e.g., in the questionnaire design or to the duration of the Be Counted program), either increased funding will be needed to pay for additional equipment and tasking, or the system will be unable to perform at the required level. For example, the bureau will be unable to process Be Counted forms in languages other than English until they are translated. If large quantities of Be Counted forms are submitted late in the census, the bureau will have to wait for translators to complete their work. To compensate for the delay, the bureau will have to process data in extra shifts, reduce quality assurance procedures, or extend the processing period. If the bureau is unable to process all questionnaires by its "drop dead date," the matching of the census data to the ICM survey will be delayed, jeopardizing timely census completion.

Conducting matching and unduplication of census questionnaires and concluding all ICM matching

Because limited time is available for processing the millions of questionnaires involved in the 2000 census, the bureau must rely heavily on automated procedures to match potential duplicate questionnaires. Preparing the algorithms necessary to automate the matching process requires a set of detailed rules indicating what constitutes a match and a duplicate. Those rules cannot be completed until the programs under which questionnaires will be made available are fully defined. The uncertainties associated with the bureau's plan to use the telephone, the Be Counted campaign, and a second questionnaire mailing, as well as each one's interaction with the sample design, have delayed the preparation of the automated matching rules.

In fact, it appears that the bureau's concern about its ability to automate this process caused it to limit to one block the size of the area it will search for potential duplicates for both the census and the ICM survey. Limiting the search area decreases computational complexities and timing constraints, but increases the likelihood of duplication because housing units placed erroneously in adjacent blocks will go undetected. This limitation is particularly problematic for matching the ICM survey and census results because it increases the likelihood that a household could be incorrectly designated as undercounted.

For example, if a household at 1075 Main Street is mistakenly recorded as 1076 Main Street in the ICM survey, the household will be incorrectly sorted across the street from its actual location and placed in an adjacent block. A matching process that searched nine blocks, as was previously considered, would probably discover that this household had been enumerated in the census. A single-block search would not find this household's census enumeration and would erroneously include the household in the undercounted population. An abbreviated search area would virtually guarantee more errors in the ICM survey.

Errors in both the census and the ICM matching will be further exacerbated without adequate software development and testing. To date, however, the bureau has not completed defining the matching rules and other procedural requirements needed to develop the specifications to guide software developers. Without adequate software, the matching and unduplication process will ultimately depend more heavily on labor-intensive clerical procedures, which are expensive, time-consuming, and error-prone. A high rate of errors in this arena could result in overcounts for certain groups, which could exacerbate the differential undercount, given that the method used in the ICM survey operates through "netting out" over- and undercounts. (See the Post-Enumeration Phase for more discussion about issues associated with completing the survey.)

Conclusion

Completing processing of census questionnaires in time to deliver the census unedited file to the ICM survey will require stability in the rest of the design, which appears unlikely. Moreover, to deliver accurate apportionment counts on time, the bureau must have well-defined, automated procedures to match and weed out duplicate questionnaires. Without improvements in this area, quality may suffer.

Phase Four: Post-Enumeration

Integrated Coverage Measurement

Background

The census has always had an undercount. Since 1940, the Census Bureau has been able to measure the undercount; since 1990, methods have been sophisticated enough to consider

correcting for it. In the 1990 decennial census, the bureau intentionally produced two sets of numbers: the census counts and the counts "adjusted" through a quality check called the Post Enumeration Survey (PES). The PES was a separate operation conducted upon the completion of regular census operations, in order to provide the option of adjusting the census counts for over- and undercounts. The results did not have to be completed as early as the first set of counts. Opposition to the adjustment ranged from technical to parochial, and the adjustment was not made. Bureau statisticians later conducted extensive analysis of the PES design, methodology, and results to help them develop the next-generation PES—the 2000 ICM survey.

The 1990 PES and the 2000 ICM survey differ in size, precision, and function. A major criticism of the PES was the use of indirect state estimates, which were based on samples from several states combined. In response to this criticism, the bureau increased the 2000 ICM sample size fivefold (to 750,000 households) to ensure that each state would have a large enough sample to allow for direct state estimates. This increase will provide every state with comparable levels of accuracy, as well as the assurance that corrections to a state's count are derived from residents of that state. Partially as a result of this change, the ICM survey should define the undercounted groups more precisely than the PES would. The survey should also feature improved categorization of subgroups that would share a probability of being counted or missed.

The most significant difference is that the ICM survey will be integrated into overall census operations, producing a single set of official Census Bureau counts. This "one-number census" is intended to be a seamless, accurate calculation of the population that will not distinguish between a housing unit determined through the ICM survey and one enumerated in any other manner. The bureau plans to provide data users with a single point estimate of a relevant population count and its combined level of error.

Activities at Risk

Conducting ICM Field Interviews

- *ICM Size and Schedule.* Because of its complexity, the ICM survey is highly vulnerable. In particular, the survey's magnitude, quality demands, and tight schedule all present serious challenges. Other than the census itself, the ICM is the largest survey the bureau will ever have undertaken—the bureau must survey 750,000 households in 25,000 census tracts nationwide. Because the ICM survey serves as a quality measure and adjustment for the entire census, it must also be extremely accurate. The bureau has stated that the survey must have a 98-percent response rate to produce a high-quality, accurate adjustment.

  Perhaps the biggest obstacle facing the implementation of the survey is the time pressure it faces at both ends. At the front end, survey interviews cannot take place until the bureau receives a household's initial census response. Because the survey is one of the last census operations, it is already at risk of delay from lags in earlier projects, like

nonresponse follow-up. If the survey begins late, ICM activities themselves could require ad hoc operational shortcuts, sure to compromise quality. At the back end, the bureau must implement a whole host of complex estimation and review steps.

- *Interview Mode.* As one approach to ensure quality, the bureau plans for its thousands of interviewers to use laptop computers, rather than paper and pencil. Originally, the bureau selected Computer Assisted Personal Interviewing (CAPI) to save time by eliminating the need to process paper questionnaires and to improve quality through standardization of interviews and built-in quality control measures. Unfortunately, this area is subject to cost growth, because the bureau's cost estimates for the ICM survey do not fully capture the costs necessary to successfully manage, implement, and process it. Areas of likely cost growth include better-trained interviewers, a technical support structure, a more complicated field structure to implement laptop use, additional telecommunications to transmit data to headquarters for processing, special contractual arrangements with vendors to ensure the readiness of CAPI software, and hardware delivery nationwide.

  To alleviate time pressures, the bureau recently decided to include in the dress rehearsal some early ICM interviews over the telephone after a household has returned its census questionnaire but before nonresponse follow-up has been completed in the block. Not having been tested, this approach introduces new risks and complications. Using two ICM interview techniques poses methodological concerns, and early enumeration could violate the separation of the census and the ICM survey. The integrity of the ICM design hinges on the assumption that it is fully independent of nonresponse follow-up. If residents or enumerators realize that a block is in the ICM sample before nonresponse follow-up is complete, independence is compromised, error is introduced, and the ICM survey becomes a less effective correction for the undercount. Ultimately, because early telephone ICM interviews only recently became the subject of serious consideration, there has not been enough time to develop a solid understanding of their implications. An attempt will be made to validate this approach during the dress rehearsal.

Concluding All ICM Matching

- *Matching.* The most sensitive aspects of ICM quality control arise after initial field interviews, when ICM responses are matched to census responses and when interviewers conduct follow-up, or reconciliation, interviews. The two sets of responses must be compared to identify who was missed or erroneously counted in census operations. Households that have not yet been counted in the ICM survey, or who have offered incomplete or inconsistent responses, must then be contacted by expert interviewers. These final steps will be critical to minimize error and to raise response rates to the necessary 98 percent.

- *Response Rate.* Current ICM interview plans propose a response rate of 98 percent, since research has shown that the undercount correction could be imprecise at response rates as high as 95 percent. Raising response rates to 98 percent will require exhaustive efforts to contact all households. In fact, some senior decennial census field division managers do not find that goal realistic. If the ICM survey begins late, the probability of achieving such a high response rate is further reduced. Perhaps the only solution involves using statistical methods (imputation) or sampling of ICM nonrespondents (subsampling). The bureau is considering the implications of both of these options. Continued indecision in this area limits the bureau's opportunities to address the ICM survey's quality assurance measures. However, at present, the bureau does not fully understand how the treatment of ICM nonrespondents will interact with other design components, contribute to error, or otherwise influence the results.

- *Movers.* Further, the bureau has yet to finalize decisions about handling ICM responses from households that move in and out of ICM blocks between census day and ICM enumeration. Since the 1990 census, there have been concerns about accurately enumerating movers in the ICM survey. The bureau's decision to select a means for handling movers was expected during the summer of 1997. Instead, the bureau will test different methods for the treatment of movers during the dress rehearsal, and will select an approach after analyzing dress rehearsal results. Because of the delay of this decision, there will be limited time to evaluate the selected method, address any questions arising from the dress rehearsal, and prepare software specifications and quality assurance measures relating to movers. The treatment of movers is yet another example of the questions that remain about the reliability of matching and follow-up and the adequacy of quality control in these operations.

Combining All Estimation Streams to Produce Final Counts

Census 2000 includes numerous avenues for data collection and statistical adjustment; late in the census, all these elements must be brought together into one file. Nonresponse follow-up will estimate the characteristics of the final nonresponding portion of the population and merge the results into the census data file. Included in nonresponse follow-up are a number of unique treatments for a series of special populations. For example, the bureau must estimate how many housing units in the address file are vacant buildings and adjust census files to include counts for transient populations. Finally, the file will incorporate ICM estimates.

- *Estimation Design and Quality Control.* Because this process is long, complex, and operating under a tight schedule, there will be many opportunities for operational and statistical errors. These conditions heighten the need for procedures to control for sampling and non-sampling error, while also managing the interplay of estimation and software components. Given the importance of ensuring that undiscovered errors do not creep into the final results, the bureau must ensure timely development, refinement, and

testing of the software. These activities cannot be undertaken until the bureau solidifies the estimation design.

However, estimation associated with the ICM survey in particular faces lingering methodological questions. Decennial census managers intend to make all sampling and estimation design decisions by December 31, 1997. Since significant research questions have not yet been answered, the bureau is unlikely to have the information it will need to announce a fully adequate integrated sampling and estimation plan by then.

- *Conducting Estimation for Small Areas and Groups:* Among the research yet to be completed is research to address two issues related to the accuracy of the ICM survey. First, ICM estimates have higher error rates for small geographic areas. The survey is intended to increase accuracy by significantly reducing the differential undercount. Although the ICM survey does introduce error, for larger geographic areas it improves the data quality greatly. However, in its current design, the survey introduces increasingly error-prone estimates for small localities and in particular for block-level data.

  Second, the assumption that members of demographic subgroups share a probability of being missed in the census, called the homogeneity assumption, limits the accuracy of the estimates. The ICM survey estimates a person's chances of being undercounted based on only a few characteristics. In reality, a person may be missed for many diverse reasons. Therefore, the survey offers only an approximation of who is undercounted. The bureau examined several techniques for addressing this problem. Only one showed promise, and it has serious unresolved mathematical questions. Therefore, the bureau will be forced to address this important issue with a tool that may not be fully evaluated and tested before implementation.

- *Applying Estimation to Blocks.* The bureau is reconsidering its initial plan for applying all estimates to individual census blocks. The bureau intended to produce all population estimates in the form of households, making enumerated and estimated households indistinguishable. This approach was designed to address data user concerns about the 1990 PES method, which added an additional "group quarter" to each census block to hold all persons estimated as undercounted. This new approach raises fundamental questions about how results will be formatted for the data file and provided to all data users. Because of difficulties in applying the new technique, the bureau is considering re-using the 1990 method.

- *Implementing the One-Number Census.* To deliver a one-number census that is accurate and credible requires not only mathematically proven sampling and estimation methodologies, but also highly reliable, robust, and confidentiality-assured software programs. Software of this caliber requires a controlled development approach and rigorous testing and retesting. Before the software development begins, decennial census

statisticians should produce numerous sampling and estimation requirements specifications, or detailed sets of rules to implement the intended methodology, which can guide software developers. These specifications address selecting households for many applications ranging from receiving a long form to being included in the ICM survey. However, since many design decisions will not be made until December 1997, and the dress rehearsal begins in March 1998, the period available for specification preparation and subsequent software development is extremely limited.

In fact, even the long form sampling specifications, which are not based on a new technique, are almost a month late. Bureau officials plan to address delays in sampling and estimation specifications by having knowledgeable staff begin programming before the specifications are completed and formally delivered. They will then make software adjustments in an iterative manner as the dress rehearsal progresses. In a recent inspection of the decennial census software development area, we found that (1) software is not being developed in accordance with any well-defined process, (2) estimates of software development schedules and resources are not realistic for the dress rehearsal or the census, and (3) requirements for headquarters processing are immature, volatile, and likely to be late.[3] These findings call into question the bureau's ability to develop and implement complete, accurate software for the census.

Bureau managers acknowledged the deficiencies and are taking steps to address them. For example, they have contracted with a recognized software expert to recommend improvements to the software development and testing process that will assist in achieving decennial census goals. However, there is not enough time to make significant changes before the dress rehearsal software development effort begins.

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[3] *Headquarters Information Processing Systems for the 2000 Decennial Census Require Technical and Management Plans and Procedures* (OSE-10034-8-0001, November 1997).

Mr. MILLER. Indeed, the only response the Commerce Department has provided to date has been to blame Congress and make the claim that a Continuing Resolution that lasted just a few weeks has caused virtually all of the problems. I suspect we will hear that claim repeated today. Of course, this ignores the reality that the real problem is the operational and design flaws in the Bureau's plan, flaws that have existed for several years and which have nothing to do with funding.

At an Appropriations Subcommittee hearing yesterday, Mr. Dixon, a Democrat from California, warned the Commerce Department that this denial of reality must simply stop. The administration needs to face up to the numerous problems present in its complex, risky census design. Then Congress and the administration must work together to change the course of the census Titanic before it hits an iceberg. We need to ask five key questions about the Bureau's plan.

Has its design been properly and completely researched and evaluated?

Can its academic theories be adequately and successfully tested in real-world conditions with convincing results?

Can it be executed in an extremely tight timeframe under the unforeseen difficulties certain to arise in the census?

Has this new methodology convincingly and truthfully been disclosed to the American people, who may see their own census forms subtracted from the counts due to a statistical theory?

And what happens if something goes wrong and the plan doesn't work as promised?

These five questions will be the basis of our oversight hearings.

Today, we examine the 1998 census dress rehearsals. What is a census dress rehearsal? Perhaps the best way to answer this question is to define what it is not. A census dress rehearsal is not the equivalent of an actual census. It is not a test that will accurately predict what will work in an actual census. And most importantly, it is not a contest where different census methodologies can be compared to one another.

Far from being a dry run on the actual census, the dress rehearsal is really a limited demonstration process taking place under conditions significantly different than those present in the actual census. The dress rehearsal is highly unlikely to satisfy those who are seeking to use it as a predictor of what will happen in the real census.

It is quite easy to lose the proper perspective on the dress rehearsal. Those who do not understand the process will be tempted to approach the dress rehearsal as a contest and will want to declare one site the winner and the other the loser. However, such an approach is at best misguided, and at worst irresponsible. The GAO sums it up best by stating, "Although the use of the different methods at the dress rehearsal sites invites a comparison of the results, the dress rehearsal is not a test of competing census designs."

Neither will the Columbia dress rehearsal be an accurate indicator of the Bureau's ability to do a traditional, neighborhood-based census. The Columbia plan is nearly identical to what they will do in Sacramento, with only a few cosmetic changes. Even more im-

portant is what the Bureau did not change through lack of time or lack of effort. The small modifications to the original plan are not a valid test in a neighborhood-based census.

Since the dress rehearsal is not a contest—meaning that politicians won't be able to argue about it endlessly and observers won't be able to declare a winner and a loser—just what good is the dress rehearsal anyway? The most valuable thing we learn from a dress rehearsal is what procedures will not work in the actual census. The Census Bureau can almost certainly be sure that if something doesn't work in the dress rehearsal, it will not work in the actual census.

For example, we will undoubtedly hear from both of our panels today that the Bureau's master address file plans have already failed in the dress rehearsal. No census will succeed without a good master address file and no amount of statistical slay of hand can compensate for a bad one.

While the dress rehearsal is a good tool for identifying what doesn't work in a census, the reverse is not true. If some process works in the dress rehearsal setting, it is not guaranteed to work in the actual census. There are three simple reasons why this is true.

First, there is a vast difference in the scale of dress rehearsal operations compared to that of an actual nationwide census. Second, the demonstration sites are not reflective of the demographic diversity of our Nation as a whole. And finally, problems already encountered in the dress rehearsal—such as the failed master address process—will taint the validity of subsequent dress rehearsal operations and results.

In short, a census dress rehearsal is not a mini-census. It is a huge mistake to think of it as such.

I look forward to hearing the testimony from our panels today on this important subject as we begin the subcommittee's process of census oversight.

[The prepared statement of Hon. Dan Miller follows:]

OPENING STATEMENT OF CHAIRMAN DAN MILLER

SUBCOMMITTEE ON THE CENSUS HEARING OF MARCH 26TH, 1998

"OVERSIGHT OF THE 2000 CENSUS: PUTTING THE DRESS REHEARSALS IN PERSPECTIVE"

Good morning, and welcome to this inaugural hearing of the new Subcommittee on the Census. Before I get started, I would like to welcome the new Members to the Subcommittee, and say how much I look forward to working with them on the critically important matter of overseeing the Census Bureau's preparations for the 2000 census.

This morning, I was quite disturbed by what I read in an Associated Press wire story. The article was entitled "Report: Government Unprepared for 2000 Census". Let me quote from the first paragraph of the story. "Despite an estimated $4 billion cost, congressional investigators caution the millennium census could be doomed by problems ranging from questionable address lists to a new sampling system that could be inaccurate." The story goes on to say that "The GAO, Congress' investigative arm, concluded there was a "risk of a failed census in 2000, one on which the nation will have spent billions of dollars but still have

demonstrably inaccurate results."" This is not the kind of news with which I like to start my day.

The Census Bureau has laid a proposal on the table for conducting the 2000 decennial census that is based on the concept of using several highly complex and difficult-to-execute statistical processes as a substitute for the traditional, neighborhood-based head counts that have worked for the last two centuries. Since this complicated concept involves such a radical departure from all previous censuses, it has stirred tremendous controversy.

Unfortunately, this controversy has hindered good, bipartisan oversight of the Census Bureau's plan. Both the advocates and critics of this complex census plan have concentrated their energies on trying to defend or block it. In the process, both sides have missed many opportunities to help find and correct numerous flaws in the 2000 decennial census plan that are common to both a sampled and a non-sampled census.

Many proponents of sampling are so enamored with the academic **CONCEPT** of the Bureau's complex proposal, that they have virtually ignored the repeated warnings from the Commerce Department Inspector

General and the GAO that the plan is in disarray. They immediately dismiss any questioning of the census plan as unenlightened, or a partisan attack to be ignored. In their view, since they believe the intentions of the plan are good, the details just don't matter. However, I doubt that the people who went down with the ***Titanic*** were comforted in their last moments by the thought that all the "experts" had claimed the ship was unsinkable.

Thankfully, the Commerce Department Inspector General and the General Accounting Office have been looking at the mechanics of what the Bureau has proposed, and whether it will work as advertised. And what they are finding scares me – all indications are that we may be headed directly to a failed census.

Three times during the last twelve months, the GAO has warned us that the 2000 census is at high risk for failure. Each successive report has rated the risk as even higher than in the previous report. And in a startling report we will hear about today, they state "the risk of a failed census in 2000 has increased since our July 1997 report."

The GAO is not alone in its concerns. On December 31, 1997, the Commerce Department Inspector General issued a letter report that described the Bureau's design as "risky", identified over a dozen major problem areas that need to be addressed, and urged ***immediate*** action by the Bureau to simplify its plan and prioritize its activities. Unfortunately, nearly 90 days have passed since this report was issued and we have yet to see any action on the part of the Bureau to implement the Inspector General's recommendations.

Indeed, the only response the Commerce Department has provided to date has been to blame Congress and make the claim that a continuing resolution that lasted just a few weeks has caused virtually all of the problems. Of course, this ignores the reality that the real problem is the operational and design flaws in the Bureau's plan – flaws that have existed for several years and which have nothing to do with funding.

At an appropriations subcommittee hearing yesterday, Mr. Dixon, a Democrat of California, warned the Commerce Department that this denial of reality must simply stop. The Administration needs to face up to the numerous problems present in its complex, risky census design. Then,

Congress and the Administration, Republicans and Democrats alike, must work together to build on the work of the Commerce IG and the GAO , and change the course of the census ***"Titanic"*** before it hits the iceberg. To do so, we must put aside preconceived notions and ask five key questions about the Bureau's plan to judge its viability:

(1) Has its design been properly and **completely** researched and evaluated?

(2) Can its newly developed academic theories be adequately, thoroughly, and successfully tested in real-world conditions with convincing results?

(3) Can it be executed in an extremely tight timeframe under the often unforeseen difficulties certain to arise in a huge field operation like the census?

(4) Has this new methodology convincingly and truthfully been disclosed to American citizens, who may see their own actual census forms **subtracted** from the counts due to a statistical theory?

(5) What happens if something goes wrong and the plan doesn't work as planned?

These five questions will guide the work of this subcommittee throughout the year and will be the basis of our oversight efforts.

The topic we will explore today is the 1998 Census Dress Rehearsal, and its ability to help us answer these five key questions about the Bureau's proposal.

What **IS** a census dress rehearsal??? Perhaps the best way to answer this question is to define what it **IS NOT**. A census dress rehearsal is **NOT** the equivalent of an actual census. It is **NOT** a test that will accurately predict what will work in an actual census. And, most importantly, given the context under which this year's dress rehearsal takes place, it is **NOT** a contest or competition where different census methodologies can be compared to one another.

When most people think of a dress rehearsal, the image of a bunch of actors and actresses rehearsing a play comes to mind. The script is fully written, the play is opening the very next night, and all the costumes and sets are fully designed. This is not the case in the census context.

Far from being a dry run of the actual census, the dress rehearsal is better described as a limited demonstration process. It is taking place under conditions significantly different than those present in an actual census. So the dress rehearsal is highly unlikely to satisfy those who are seeking to use it as a predictor of what will happen in the real census.

Unfortunately, because of the controversy over the Census Bureau's complex plan, it might be easy to lose the proper perspective on the dress rehearsal. Those who do not understand the process will be tempted to approach the dress rehearsal as a contest, and will want to declare one site the winner and the other the loser. However, such an approach is at best misguided, and at worst irresponsible. The General Accounting Office sums it up best in its testimony by stating "Although the use of the different methods at the dress rehearsal sites invites a comparison of the results, **the dress rehearsal is not a test of competing census designs**. Geographic, demographic, and possibly other differences among the dress rehearsal locations preclude such a comparison."

Neither will the Columbia dress rehearsal be an accurate indicator of the Bureau's ability to do a traditional, neighborhood-based census. A close

examination of what the Bureau has actually done in South Carolina reveals that it has not implemented a true, neighborhood-based enumeration plan. Instead, it has simply dropped one component of its complex statistical methodology, called "Sampling for Non-Response Follow-Up" and planned on hiring more people to complete follow up on those individuals who don't respond to the first census mailing. It has fully retained the size and scope of its complex statistical methodologies used to "adjust" the numbers after the census is taken. Indeed, this aspect of the plan is identical to what they will do in Sacramento, with only the cosmetic change of renaming the procedure the "Post Enumeration Survey" instead of calling it the "Integrated Coverage Measurement". It is important to realize that these small modifications to the South Carolina methodology are not a valid test of a neighborhood-based census.

Perhaps even more important than what the Bureau did change at the South Carolina site is what it **DID NOT** change. By all reasonable indicators, the Bureau has made an insufficient effort to plan and test a neighborhood-based census in South Carolina. For example, only 3 of the 11 test counties has a "Complete Count Committee" present. The activities of these committees, composed of local governmental, civic, and religious

leaders, in promoting census participation through community outreach and awareness programs is critical to the success of a neighborhood-based census.

So, since the dress rehearsal is not a contest or competition between different methods of census taking, -- meaning that politicians won't be able to argue about it endlessly, and observers won't be able declare a winner and a loser, -- just what good is the dress rehearsal anyway? What exactly can we learn, if anything, from doing one?

The most valuable thing we can learn from the dress rehearsal is what procedures will **NOT** work in the actual census. The Bureau can almost certainly be sure that something that doesn't work in the dress rehearsal it will not work in the actual census.

For example, the Bureau's new plans to construct the critical Master Address File, the basic building block of any successful census, has already failed in the dress rehearsal. This failure is extremely troubling, since according to the National Academy of Sciences' report "*Modernizing the U.S. Census*", **fifty percent** of the undercount in the 1990 census was due

to bad address lists. Think about that for a moment. HALF of the people not counted last time were missed not because they were "hard-to-count", but rather because they were never even mailed a form by the Bureau or had an enumerator sent to their house. And since the Bureau's complex statistical processes are dependent on the address list to work correctly, and will NOT compensate for a poor address list, we all should be gravely concerned with this failure. To its credit, the Bureau has recognized this failure and is working on re-engineering its process for the 2000 census so this failure will not be repeated on a far more catastrophic scale. Unfortunately, the address lists that will be used at the three dress rehearsal sites were compiled under this failed procedure, and as a consequence, the reliability of the results at all three sites will be highly questionable.

While the dress rehearsal is a good tool for identifying what doesn't work in a census, unfortunately, the reverse is not true. If some process works in the dress rehearsal setting, it is not guaranteed to work in the actual census setting. There are three major reasons why this is true.

First, there is a vast difference in the scale of dress rehearsal operations compared to that of an actual nationwide census. The demands

on the resources of the Bureau are much smaller. For example, although the Sacramento dress rehearsal will take place only within the actual city limits, large numbers of temporary employees from surrounding outlying suburban areas, will be available for the Bureau to hire to do census work within the city. In a real census, these individuals would be employed in their own neighborhoods and would be unavailable to augment the effort in the city itself. And there simply not as many opportunities for things to go wrong.

A second reason the dress rehearsal cannot predict what will work is that the demonstration sites are not reflective of the range of demographic realities of the nation as a whole. For example, the so-called "urban" dress rehearsal in California is being taken only in the City of Sacramento. The rest of the metropolitan area is not included. This city of 380,000 inhabitants certainly does not reflect the enumeration difficulties that will be encountered in large metropolitan areas such as New York, Los Angeles and Chicago.

Finally, the third reason the dress rehearsal cannot predict success is that problems already encountered in the dress rehearsal process may endanger the validity of subsequent dress rehearsal operations. If, for example, the process which compiles the master address file, upon which all

subsequent operations depend, is not successful, the whole demonstration process is tainted. Unfortunately, as I mentioned earlier, this has already happened. The problems of the Bureau's Master Address File program has called into question the validity and reliability of any data received from all three sites. Similar problems that may occur with the mapping and geocoding files may create an unrealistic evaluation of the results.

In short, a census dress rehearsal is not a mini-census, it is a demonstration of proposed procedures which may or may not actually be used in the real census. Its value lies in developing clear and objective standards by which to identify those items that do not work, and then using the time available between now and when the 2000 census activities must start to fix those parts of the plan that fail, and jettison those that we are not completely confident can be fully fixed in time.

Today we will hear from witnesses from the General Accounting Office, who will comment on the state of the Bureau's preparations for the dress rehearsal, and their criteria for evaluating its success or failure, and from the Census Bureau, which will explain the dress rehearsal processes and its own internal goals by which it hopes to judge its performance.

At this time, I would like to recognize my distinguished ranking Member, Mrs. Maloney of New York, for her opening statement.

Mr. MILLER. At this time I would like to recognize the distinguished ranking member, Mrs. Maloney of New York, for her opening statement.

Mrs. MALONEY. Thank you, Mr. Chairman, for calling this hearing. I am pleased to see that we are getting off to a quick start.

I would like to begin by quoting a headline from Roll Call. "The failure of Congress"—and I might edit that a little bit to the Republican-led Congress—"and President Clinton to resolve major issues in the 2000 census, including whether to use sampling, is a key reason that the Census Bureau faces a 'high-risk of a failed census' at a disturbingly late stage, according to a new report." I even got a quote in here that said that the Republican-led Congress has kept the Census Bureau dangling on a string. The failure to approve the plan, the late funding, the fiscal year 1998 appropriations were 6 weeks late, they were under-funded in fiscal years 1997 and 1996.

And literally the Republican-led Congress has spent 2 years trying to tear down the census and the Bureau instead of supporting and building them up. It is a very difficult environment to approve and go forward with a plan.

I do want to welcome all the new members of this subcommittee, particularly Mr. Blagojevich and Mr. Davis.

I hope that we can work together on this subcommittee to create the same bipartisan record of oversight that Representatives Sawyer and Ridge provided for the 1990 census. They jointly, along with Senator Herb Kohl, requested that GAO provide the capping report for the 1990 census that is the most valuable summary of the successes and failures of that census. That report laid the groundwork for legislation calling for a study by the National Academy of Sciences. And the report from the Academy is the groundwork for the census plan being tested next month.

It was the GAO capping report that brought to our attention that there were 26 million errors in the 1990 census. Similarly, it was that report that warned us that traditional methods had reached the limits of their effectiveness and that fundamental changes must be implemented for a successful census in 2000.

Unfortunately, in mid-decade, Congress lost sight of the importance of the census and the funding for these fundamental changes began to slip. In both fiscal years 1996 and 1997 the Census Bureau received only 80 percent of the funds requested for the planning of the 2000 census. And in fiscal year 1998, when planning for this dress rehearsal should have been in full swing, the census planning efforts had to inch forward at a level 75 percent below what was requested by the President for nearly 2 months.

I hope that we can get on the record today the way in which these funding constraints have made the Census Bureau's job more difficult. The GAO has issued another report and not surprisingly it identifies four areas of concern. There is nothing new there. The challenges of improving the census are the same today as they were in 1991 when we started this design process.

How do we improve the address list? How do we improve public participation? How do we hire and train enough temporary workers to get the job done in this tight labor market? How do we make the best use of statistical methods to assure that all Americans are

included in this census? And it is appropriate that GAO raise these issues again.

What is missing from the GAO report is some notion of how severe these risks are. We know that these are not insurmountable problems. The question is: What do you do about them? It is no longer acceptable for GAO to simply stand on the sidelines and point out possible problems—this may happen and that could happen—it is time for GAO to participate in solving these problems.

The question is no longer: How does one procedure or another stack up against some ideal? The question is whether or not it is an improvement over 1990. The only place where we have any evidence so far is with the address list. For the dress rehearsal, the Census Bureau followed the prodding from Congress and updated the 1990 census list with lists from the postal service. Then again at the urging of the entire Congress, they asked local governments to provide address lists. In the end, that didn't work very well. Both the postal service lists and the local governmental lists had far too many errors. So they redesigned the process drawing on the lessons from the 1990 census.

Remember in 1990, the address list was 97.5 percent accurate. I suspect even my good friend, Professor Horn, would say that that is pretty good.

Will the new procedures for the 2000 address list be as good or better than the dress rehearsal? The answer is an unqualified yes. Will the new procedures be as good or better than 1990? Again, the answer is yes. Will the new procedures be perfect? Probably not, but the failure to reach perfection should not be the standard. If we reject every improvement to the census that does not measure up to perfection, we will wind up doing 1990 over again. And we know that that is far from perfection.

It is time we return to basics. We cannot have a census that is a repeat of 1990 or worse. A census with 26 million errors is unacceptable and throwing money at old methods will not make them any more accurate, especially when we know that they did not work before.

I look forward to the testimony today and I look forward to the work of this census to assure that every American is included in the census and every American is included only once.

[The prepared statement of Hon. Carolyn B. Maloney follows:]

STATEMENT OF THE HONORABLE CAROLYN MALONEY

March 26, 1998

Thank you Mr. Chairman for calling this hearing. I am pleased to see the Subcommittee getting off to a quick start. I hope that this Subcommittee can create the same bipartisan record of oversight that Representatives Sawyer and Ridge provided for the 1990 census. They jointly, along with Senator Herb Kohl, requested that GAO provide the "capping" report for the 1990 census that is the most valuable summary of the successes and failures of that census.

That report laid the groundwork for legislation calling for a study by the National Academy of Sciences, and the report from the Academy is the groundwork for the census plan being tested next month.

It was the GAO capping report that brought to our attention that there were 26 million errors in the 1990 census. Similarly, it was that report that warned us that traditional methods had reached the limits of their effectiveness and that "fundamental changes must be implemented for a successful census in 2000."

Unfortunately, in mid-decade Congress lost sight of the importance of the census, and the funding for these fundamental changes began to slip. In both fiscal years 1996 and 1997 the Census Bureau received only 80 percent of the funds requested for planning the 2000 census. And in 1998, when planning for this dress rehearsal should have been in full swing, the census planning efforts had to inch forward at a level 75 percent below what was requested by the President for nearly two months. I hope that we can get on the record today the way in which these funding constraints have made the Census Bureau's job more difficult.

The GAO has issued another report, and not surprisingly, it identifies four areas of concern. There is nothing new there. The challenges of improving the census are the same today as they were in 1991 when we started this design process.
How do we improve the address list?
How do we improve public participation?
How do we hire and train enough temporary workers to get the job done in this tight labor market?
How do we make the best use of statistical methods to assure that all Americans are included in the census?

And it is appropriate that GAO raise these issues again.

What is missing from the GAO report is some notion of how severe these risks are. We know that these are not insurmountable problems. The question is what do you do about them. It is no longer acceptable for GAO to simply stand on the sideline and point out possible problems. This may happen. That could happen if.... It is time for GAO to participate in solving these problems.

The question is no longer how does one procedure or another stack up against some ideal. The question is whether or it is an improvement over 1990. The only place where we have any evidence, so far, is with the address list.

For the dress rehearsal the Census Bureau followed the prodding from Congress and updated the 1990 census list with lists from the Postal Service. Then, again at the urging of the entire Congress, they asked local governments to provide address lists. In the end, that didn't work very well. Both the Postal Service lists and the local government lists had far too many errors. And so, they redesigned the process drawing on the lessons from the 1990 census. Remember, in 1990 the address list was 97.5 percent accurate. I suspect even my good friend Professor Horn would say that is pretty good.

Will the new procedures for the 2000 address list be as good or better than the dress rehearsal? The answer is an unqualified yes. Will the new procedures be as good or better than 1990? Again, the answer is yes. Will the new procedures be perfect? Probably not, but the failure to reach perfection should not be the standard. If we reject every improvement to the census that does not measure up to perfection, we will wind up doing 1990 over again, and we know that is not perfection.

It is time we return to basics. We cannot have a census that is a repeat of 1990 or worse. A census with 26 million errors in unacceptable, and throwing money at old methods will not make them any more accurate.

I look forward to the testimony today and I look forward to the work of this census to assure that every American is included in the census, and every American in included only once.

Mrs. MALONEY. I would like to note that the distinguished ranking member is here, Mr. Waxman. I hope the chairman will allow him to make a statement, if he so wishes.

Mr. MILLER. No, I think we are going to proceed with the panel and we will have opening statements included in the official record.

The first panel is from the General Accounting Office: Nye Stevens, Christopher Mihm, James Burow, and Robert Goldenkoff.

[Witnesses sworn.]

Mr. MILLER. On behalf of the subcommittee, we welcome you here today.

Mr. Stevens, I understand you have an opening statement. You may proceed at this time.

STATEMENT OF L. NYE STEVENS, DIRECTOR, FEDERAL MANAGEMENT AND WORKFORCE ISSUES, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY J. CHRISTOPHER MIHM, ASSOCIATE DIRECTOR, FEDERAL MANAGEMENT AND WORKFORCE ISSUES; AND JAMES BUROW, ASSISTANT DIRECTOR

Mr. STEVENS. Mr. Chairman, I will be very brief, as you requested.

It is an honor to be here in the inaugural meeting of this subcommittee. We certainly welcome the formation of the subcommittee because one of the principal recommendations that emerged from the capping report that Mrs. Maloney referred to was that a vigorous program of congressional monitoring and oversight was absolutely essential to improving the accuracy and cost-effectiveness of the national census.

I know you will want to turn quite quickly to the report that is being issued today. We developed that at the request of the Senate Governmental Affairs Committee. I brought along three of GAO's most knowledgeable staff members about the census, both from the past and from the work done to develop the present report.

Christopher Mihm, to my immediate right, did much of the work on the 1990 census and was responsible for the capping report that Mrs. Maloney mentioned. Jim Burow, on my left, has directed census work for the past couple of years and was responsible for GAO's high-risk report that in February 1997 first identified the 2000 census as a high risk, warning that preparation for the 2000 census was behind schedule and faced a number of unresolved design and operations issues. And then finally, on the far right, is Robert Goldenkoff, who is the most recent addition to the census staff and has worked directly on preparations for this year's dress rehearsal, including leading our teams that went to Sacramento and Columbia that resulted directly in the report that is being issued today.

The fundamental message of that report is that the dress rehearsal, which was originally intended to demonstrate and to fine-tune the Bureau's plans for 2000 will instead leave a large number of operational and design questions unresolved. We concentrated on four major census activities. First, the master address file. This list, with its associated maps, is the absolute cornerstone of an accurate and comprehensive census no matter what the final design is. It is just as essential for a design that involves sampling and

statistical estimation as it is for one of the more traditional head count models.

The address list that was developed for the dress rehearsal had a large number of errors. Recognizing this last September, the Bureau decided to re-engineer its process. And we have no quarrel with the decision to do so. But we do note that the new sequence of steps to be taken in address list development has not been tested. The sequence has not been tested together and it will not be tested in the dress rehearsal. We have also found, as was the case in 1990, local governments often do not have the resources, the time, or the data of their own to play a consistent role in verifying and improving the list. Just 34 of the 60 jurisdictions involved in the dress rehearsal found themselves able to participate in local review, which is a key component of the improvement effort.

The second area of the report deals with outreach and promotion, which the Bureau has presented as a vital part of its effort to halt the steady decline or downward trend in the questionnaire response rate, which is a key to both accuracy and cost measures.

The effort to develop partnerships with local community organizations has had mixed results, particularly in South Carolina where there were communications there was a very thin level of Bureau support—resulting in active complete count committees in just a minority of the jurisdictions down there.

While the dress rehearsal cannot provide a really realistic test of staffing for the 2000 census, when the Bureau is going to need to recruit we estimate about 2.6 million people to fill 300,000 positions. We think that the current level of unemployment, if it persists, and the changes in workforce patterns that have taken place since 1990 present major uncertainties in the staffing arena, which was a troublesome part of the 1990 census as well. The staffing challenge, of course, will be even greater if the census is not able to use sampling.

Our work found that the plans for sampling and the Integrated Coverage Measurement Program, or ICM, are still undergoing revisions and therefore they involve unanswered questions as well, such as whether the Bureau can finish its non-response followup and its ICM in a very tight timeframe involving a heavier work load, less time, and tighter deadlines than the Bureau faced in 1990. For example, there may be an undue amount of optimism in assuming that the ICM can be completed by September 2000, when the much smaller post-enumeration survey in 1990 took until January 1991 to complete.

In closing, Mr. Chairman, we do not intend to imply that the Bureau, which has increasingly been more carefully overseen by the Department of Commerce, has failed to address challenges as they have arisen. But there are nevertheless a disturbing number of unanswered questions at this quite late stage in the census cycle when the emphasis should be on fine-tuning rather than on revision to operating plans and to evaluation plans, which we also can discuss if you like.

As long as the final design of the census itself is one of these unanswered questions, the risk of a failed census in 2000 will continue to increase.

That concludes my oral statement, Mr. Chairman. We will be able to respond to any questions you have or other Members have.

[The prepared statement of Mr. Stevens follows:]

PREPARATIONS FOR DRESS REHEARSAL UNDERSCORE THE CHALLENGES FOR 2000

Summary of Statement by
L. Nye Stevens, Director
Federal Management and Workforce Issues
General Government Division

The dress rehearsal for the 2000 Census is currently under way at three sites: Sacramento, CA; 11 counties in the Columbia, SC, area; and Menominee County in Wisconsin, including the Menominee American Indian Reservation. Although it was originally intended to demonstrate the Census Bureau's plans for the 2000 Census, the dress rehearsal will instead leave a number of design and operational issues unresolved. These unresolved issues led GAO in 1997 to raise concerns about the high risk of a failed census in 2000.

Accurate address lists and associated maps are the building blocks of a successful census. However, the Bureau has concluded that its original procedures for building the 2000 Census address list might not meet its goal of being 99 percent complete. Although the Bureau has since revised its address list development procedures, they will not be tested during the dress rehearsal, thus it will not be known until the 2000 Census whether they will meet the Bureau's goal.

The Bureau's outreach and promotion initiatives are designed to boost mail response rates and thus avoid costly follow-ups to nonresponding households. While the Bureau is to rely on partnerships with local governments and organizations to raise public awareness of the census, the level of participation in these efforts has been inconsistent during the dress rehearsal, suggesting their impact on public response in 2000 may be limited.

Uncertainties surround the Bureau's ability to staff the 295,000 mostly temporary office and field positions necessary to conduct the census. Census jobs may not be as attractive as other positions, and, if current trends continue, the Bureau could find itself competing for workers in a tight labor market.

The Bureau's sampling and statistical estimation procedures, while they could reduce costs and improve accuracy if properly implemented, face methodological, technological, and quality control challenges.

In addition to these operational challenges, the Bureau has not finalized its plans for evaluating the dress rehearsal, thus it is not known whether the evaluations will provide needed data to assess the feasibility of the Bureau's plans for the 2000 Census. Further, Congress has not endorsed the Bureau's overall design of the 2000 Census because of its concerns over the Bureau's plans to use statistical sampling and estimation procedures. The longer this impasse continues, the greater the likelihood of a failed census.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the U.S. Census Bureau's preparations and operational plans for its dress rehearsal for the 2000 Census, which is currently under way at three sites: Sacramento, CA; 11 counties in the Columbia, SC, area; and Menominee County in Wisconsin, including the Menominee American Indian Reservation. To the extent that the dress rehearsal mirrors the actual census, the dress rehearsal could foreshadow how well key census-taking activities might work in the decennial, and thus indicate where additional congressional and Bureau attention is needed now to ensure successful results in 2000. My overall point today is that the dress rehearsal, originally contemplated as a concerted demonstration of a well-defined census design for 2000, instead will leave a number of design and operational questions unanswered. These unresolved issues led us in 1997 to raise concerns about the high risk of a failed census in 2000.

At your request, my statement focuses on the progress, if any, that the Bureau has made since July 1997,[1] when we reported that the risk of a failed census in 2000 had increased since we originally designated the 2000 Census as a high-risk

[1] 2000 Census: Progress Made on Design, but Risks Remain (GAO/GGD-97-142, July 14, 1997).

area in February 1997.[2] Specifically, we pay special attention to the challenges the Bureau faces in implementing such key census-taking activities as (1) creating a complete and accurate address list, (2) increasing the mail response rate through outreach and promotion, (3) staffing census-taking operations with an adequate workforce, and (4) carrying out its sampling and statistical estimation procedures. These subjects are covered extensively in our report prepared at the request of the Chairman and Ranking Minority Member of the Senate Committee on Governmental Affairs, which we are making available today.[3] I also provide my preliminary observations on the status of the Bureau's dress rehearsal evaluation program.

To develop our report, we reviewed Bureau documents that describe the Bureau's plans and procedures for the dress rehearsal, and interviewed Bureau headquarters and regional officials. To help verify the Bureau's information and also obtain a local perspective on the dress rehearsal activities, we (1) visited the Sacramento and South Carolina dress rehearsal sites, and contacted Menominee officials by telephone; (2) conducted in-person and telephone interviews with local officials on their experiences in reviewing address lists, promoting the census, and

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[2]High-Risk Series (GAO/HR-97-2, Feb. 1997).

[3]2000 Census: Preparations for Dress Rehearsal Leave Many Unanswered Questions (GAO/GGD-98-74, March 26, 1998).

recruiting and hiring census workers; and (3) where applicable, reviewed relevant documents on these activities.

Information on the Bureau's dress rehearsal evaluation program was obtained by conducting a content analysis of the Bureau's evaluation proposals and by interviewing cognizant Bureau officials. Since the Bureau has yet to finalize its evaluation plans, our observations should be considered preliminary.

BACKGROUND

The 1990 Census was the most costly in history, and it produced data that were less accurate than those from the 1980 Census. About 6 million persons were counted twice in the 1990 Census, while 10 million persons were missed--for a total of 16 million gross errors in the count. Of particular concern was the fact that the 1990 Census was more likely to miss minority groups and renters, particularly those living in rural areas.

To address the problems that occurred in 1990, the Bureau redesigned key components of the census, such as procedures for developing a complete and accurate address list, increasing the mail response rate through outreach and promotion, staffing census-taking operations with a capable workforce, and reducing costs and improving accuracy through sampling and statistical

estimation. However, Congress has not endorsed the Bureau's overall design because of its concerns over the validity, legality, and operational feasibility of the Bureau's statistical sampling and estimation procedures. Because of the significant and long-standing operational and technical challenges that the Bureau faces in taking the census, and the continuing disagreement between Congress and the administration over the use of sampling, in February 1997, we designated the 2000 Decennial Census as being at high risk for wasted expenditures and unsatisfactory results.[4] In July 1997, with still no agreement and uncertainties surrounding the feasibility of some key census operations, we reported that risks of a failed census in 2000 had increased.[5]

According to the Bureau, questionnaires are to be delivered to residents of the dress rehearsal sites by April 1, 1998. The Bureau is encouraging respondents to return their questionnaires by Dress Rehearsal Census Day--April 18, 1998. However, as is the case with the actual census, the Bureau's dress rehearsal activities span a much wider period of time than this single day. Following the selection of the dress rehearsal sites in July 1996, the Bureau developed preliminary mailing lists and materials for these locations, contacted local governments at the three sites, and conducted staffing activities to hire temporary

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[4]High-Risk Series (GAO/HR-97-2, Feb. 1997).

[5]2000 Census: Progress Made on Design, but Risks Remain (GAO/GGD-97-142, July 14, 1997).

census employees in those locations. Similarly, after April 18, the Bureau is to develop its census count by conducting the necessary follow-up activities at nonresponding households and completing other fieldwork.

The key to a successful dress rehearsal is making it as much like the decennial census as possible. Thus, according to the Bureau, the dress rehearsal for the 2000 Census should test nearly all of the various operations, procedures, and questions that are planned for the decennial under as census-like conditions as feasible.

However, as an indication of increasing congressional concern over the Bureau's plans for the 2000 Census, the administration and Congress agreed, as part of a compromise over the Bureau's fiscal year 1998 appropriation,[6] that the Bureau would use sampling and statistical estimation methods only in the Sacramento site, rather than at all three dress rehearsal sites as it plans to do nationally in 2000. In the Columbia site, the Bureau is to follow up on all nonresponding households just as it did nationwide in the 1990 Census. At the Menominee dress rehearsal site, the Bureau is also to follow-up on all nonresponding households, but is to use sampling and statistical estimation to improve the accuracy of the population count. Although use of the different methods at the dress rehearsal

[6]Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998, P.L. 105-119, Nov. 26, 1997.

sites invites a comparison of the results, the dress rehearsal is not a test of competing census designs. Geographic, demographic, and possibly other differences among the dress rehearsal locations preclude such a comparison.

PREPARATIONS FOR THE DRESS REHEARSAL UNDERSCORE THE CHALLENGES TO A SUCCESSFUL CENSUS

At a point in the census cycle when the Bureau should be finalizing its approach, it instead finds itself revising some of its basic operational plans. The key census-taking activities that we examined are all facing operational challenges that could jeopardize the 2000 Census. This, combined with the continuing disagreement between Congress and the administration over the design of the 2000 Census, increases the likelihood of a failed census--one on which the nation would have spent billions of dollars and still have demonstrably inaccurate results.

The Accuracy of the Bureau's Address Lists and Maps Is Uncertain, and Local Reviews May Be Too Sporadic to Greatly Improve Them

Complete and accurate address lists, along with precise maps, are the foundation

of a successful census. Accurate addresses are essential for delivering questionnaires, avoiding unnecessary and expensive follow-up efforts at vacant or nonexistent residences, and establishing a universe of households for sampling and statistical estimation. Accurate maps are critical for assigning correct portions of the population to their proper locations--an operation that is the foundation of congressional redistricting.

To build its address list, which is known as the Master Address File (MAF), the Bureau initially planned, in part, to (1) use addresses provided by the Postal Service, (2) merge these addresses with the address file the Bureau created during the 1990 Census, (3) conduct limited checks of the accuracy of selected addresses, and (4) send the addresses to local governments for verification as part of a process called Local Update of Census Addresses (LUCA). However, the Bureau's analyses of the completeness of the Postal Service's addresses, when combined with the Bureau's 1990 addresses for a selected number of locations, have shown that the resulting address list was not always complete. For example, address lists created in 1995 for two test locations did not include from 3.6 to 6.4 percent of the addresses identified through other Bureau operations, such as field verification.

Following these and similar analyses for lists created in 1996, the Bureau concluded in September 1997 that primary reliance on the Postal Service's and the

Bureau's 1990 address files was not sufficient, and that it needed to redesign its procedures in order to build a MAF for the 2000 Census that, as a whole, is 99 percent complete. Under the new procedures, which are estimated to cost an additional $108.7 million, the Bureau now plans to canvass neighborhoods across the nation to physically verify the completeness and accuracy of the address file for the 2000 Census prior to local address review. While the components of the new approach have been used and tested in prior censuses, the Bureau has not used or tested them either in concert with each other or in the sequence as presently designed for use in the 2000 Census, and does not plan to do so in the dress rehearsal. Consequently, it will not be known until the 2000 Census whether the Bureau's redesigned procedures will allow it to meet its goal.

Further, the dress rehearsal results to date suggest that LUCA may be too inconsistent and face too many obstacles to systematically verify or increase the accuracy of the MAF. For example, despite the Bureau's efforts to encourage all local jurisdictions to participate, just 34 of the 60 local jurisdictions involved with the dress rehearsal participated in LUCA. Reasons for the low participation rate included the lack of resources and/or information to review address lists or maps at the local level. Jurisdictions that participated in LUCA said that problems with the level of Bureau assistance, as well as with the accuracy and completeness of the address lists and maps, impeded their review efforts.

Although the Bureau's reengineered address development procedures call for obtaining earlier assistance from local governments to review addresses and maps, this does not address other problems encountered by local officials in reviewing address lists during the dress rehearsal, such as the unavailability of Bureau assistance and the inconsistent quality of the address list and maps.

The Bureau's Outreach and Promotion Efforts Face Obstacles That Could Impede Its Ability to Achieve Its Mail Response Rate Objective

To help increase the mail response rate and thus reduce its costly nonresponse follow-up workload, the Bureau plans to partner with local governments and other organizations to raise public awareness of the census. The Bureau expects that its outreach and promotion efforts, combined with other initiatives, such as simplified census questionnaires, should produce a mail response rate of 66.9 percent for the 2000 Census. This is 12 percentage points higher than the 55-percent response rate that the Bureau expects it would achieve without these activities and slightly higher than the 65-percent response rate achieved in the 1990 Census. Nevertheless, the Bureau's experience thus far during the dress rehearsal suggests that, in 2000, this goal might be difficult to achieve.

According to the Bureau, the success of its outreach and promotion efforts will

depend heavily on the effectiveness of the partnerships it hopes to build with state, local, and tribal governments; the private sector; various media; and other organizations. Citing agency policy, the Bureau has said that it is unable to fund local outreach and promotion efforts. It is therefore placing a priority on working with partners because they can help publicize the census, foster participation, and dispel myths, among other activities.

A critical component of the Bureau's local outreach and promotion efforts are Complete Count Committees (CCC). Consisting of elected, business, community, social service, religious, and other local leaders, CCCs are to help mobilize grassroots promotion efforts. However, not all of the dress rehearsal jurisdictions where the Bureau hoped to establish committees had done so at the time of our review. For example, in South Carolina, of the 11 counties and the City of Columbia participating in the dress rehearsal, just 3 counties and Columbia had active committees at the time of our review. The eight remaining counties either had not started committees or had formed committees that subsequently became inactive.

We found that the operational problems the CCCs were encountering had several sources. Among these were communication difficulties between the CCCs and the Bureau. Four of the six active CCCs we contacted at the three dress rehearsal sites indicated that the Bureau did not set clear expectations for their CCCs,

especially when they were first initiated, and/or Bureau guidance and literature had been minimal.

Another element of the Bureau's outreach and promotion strategy is a paid advertising campaign. In the 1990 Census, the Bureau relied on pro bono public service advertising to get its message across. In October 1997, the Bureau announced that it had awarded its 2000 Census paid-advertising contract to Young & Rubicam, which is a private advertising agency. The Bureau has budgeted about $100 million dollars for this effort, of which about 80 percent has been earmarked for buying advertising in print and broadcast media. Nevertheless, the advertising agency faces not only the familiar task of developing public awareness of the census, but also the greater challenge of motivating people to return their questionnaires in spite of a long-term decline in the mail response rate. While the Bureau found that 93 percent of the public was aware of the census in 1990, the mail response rate was only 65 percent, 10 percentage points lower than it was in 1980.

The Bureau Could Encounter Difficulties

Staffing the 2000 Census

For the 2000 Census, the Bureau estimates that it will need to recruit over 2.6 million applicants to fill about 295,000 positions. Aside from the large numbers of

people needed, hiring census workers could be difficult because most census jobs are part-time and temporary and do not come with such benefits as health insurance. Consequently, potential applicants may not find census jobs as attractive as alternative work opportunities.

To address this staffing challenge, the Bureau plans to focus its recruitment efforts on people already employed who are seeking additional work ("moonlighters"), and retirees. The Bureau also plans to pay employees a wage that is based on local rates and to offer productivity incentives. However, if current employment trends continue, the Bureau could find itself recruiting workers in a tighter labor market than prevailed in 1990. Furthermore, the Bureau's decision to focus its recruitment efforts on moonlighters and retirees is based on informal discussions with census workers during the 1995 Census Test, the hiring practices of private survey research firms, and census workforce studies that may not necessarily be comparable to the 2000 Census situation.

The Bureau's Sampling and
Statistical Estimation Design Faces
Several Uncertainties

Declining response rates have posed problems for the Bureau since it began its mail-out/mail-back procedure in 1970. Hundreds of thousands of additional

enumerators must be hired to collect census information from an increasing number of nonresponding households. To reduce its nonresponse follow-up workload, the Bureau plans to sample nonresponding households for the 2000 Census. The Bureau has also designed a procedure called Integrated Coverage Measurement (ICM) by which it is to take a separate sample after the nonresponse follow-up is completed to make adjustments to the census counts. However, these activities face several challenges.

For example, it is uncertain whether the Bureau can complete its nonresponse follow-up and ICM operations in the time allotted, considering that in 1990 similar processes took longer even though the amount of work was less. In 1990, the Bureau allowed 4 weeks from Census Day for mail response before beginning nonresponse follow-up. In 2000, the Bureau also plans to allow 4 weeks from Census Day for mail response. In 1990, nonresponse follow-up was scheduled to last 6 weeks, but in some locations lasted 14 weeks.[7] For the 2000 Census, the Bureau will again allow 6 weeks for completion of nonresponse follow-up. In 1990, an operation similar to the ICM was not completed until January 4, 1991, while for the 2000 Census, the Bureau plans to perform the same tasks for five times the number of households by the end of September 2000.

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[7]In 1990, Bureau enumerators were able to complete about 90 percent of their followup workload within 8 weeks, with the final 10 percent requiring more than 6 weeks to complete.

Uncertainties also surround the Bureau's ability to achieve its target of a 98 percent questionnaire completion rate for ICM operations. If the ICM completion rate falls below 98 percent, there is increased risk that ICM-based adjustments to census data may not accurately reflect different segments of the population. The need to obtain a high response rate in a short time could require the Bureau to collect data from neighbors and other individuals outside of the nonresponding households, a method that in the past has been shown to be less accurate.

A RIGOROUS DRESS REHEARSAL EVALUATION PROGRAM IS CRITICAL TO THE ULTIMATE SUCCESS OF THE CENSUS

A properly designed evaluation program that provides information on the cost, performance, required resources, timing of various census operations, and the quality and completeness of census data, is essential for the Bureau to assess the feasibility of its operational plans. We believe that, to be most effective, the evaluation effort needs to begin with a determination of what information will be required to support critical decisions and when that information needs to be available to Bureau and other decisionmakers. However, we are concerned that, with Dress Rehearsal Census Day a little over 3 weeks away, the Bureau's evaluation program plan is still a work in progress, and that uncertainties

surround the Bureau's approaches and methodologies for carrying out specific studies.

According to the Bureau, its dress rehearsal evaluation program or "report card" is designed to validate plans for the 2000 Census, measure coverage of persons and housing units, and evaluate the completeness and quality of census data. Specifically, it is to consist of

-- a status report to track the performance of key census operations at different points in time during the rehearsal,

-- a quality assurance checkpoint system to monitor key dress rehearsal processes and signal where additional assistance is necessary to ensure operations remain on track, and

-- a series of evaluations to determine how good the census data is in terms of statistical and other quality measures.

The Bureau plans to establish a set of performance standards for measuring success at each site. Such performance standards are to measure, for example, the completeness of the MAF and the effectiveness of the paid advertising

campaign. The standards, however, will not be used to measure the operational performance of one site against another.

In the March 10, 1998, draft of its evaluation program--the Bureau's latest--the Bureau presented plans for 36 evaluations covering 8 census-taking operations, including address list development, coverage improvement activities, and nonresponse follow-up and field procedures. However, even though key dress rehearsal operations are already under way--and some have been completed--the Bureau has not finalized its evaluation plans, and the methodologies for some of these evaluations are not sufficiently defined to provide assurances that needed evaluation data will be available on a timely basis. The Bureau continues to complete the methodological details of its evaluations, and plans to issue those details as they are finished.

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In summary, although the Bureau has made progress in addressing some of the problems that occurred during the 1990 Census, key activities continue to face operational challenges at a disturbingly late stage in the census cycle when the Bureau should be fine tuning rather than revising its basic operational plans. Moreover, the ongoing lack of an agreement between Congress and the administration over the final design of the 2000 Census has only added to the

challenges facing the Bureau. So long as this condition persists, the risk of a failed census in 2000 will continue to increase.

We look forward to supporting congressional oversight of the planning and conduct of the decennial census, and we will continue monitoring the dress rehearsal and the census evaluation program, as well as the Bureau's preparations for the decennial census.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions you or other members of the Subcommittee may have.

(410306)

Mr. MILLER. Thank you. Your report was obviously very informative, as the other ones, and the risk of a failed census is a great concern to every Member of Congress, as it should be to every American.

We will work under the 5-minute rule and alternate between majority and minority.

Is the disagreement between Congress and the administration over the design of the 2000 census the cause of all of the problems that you have illustrated, or have other factors affected them independently?

Mr. STEVENS. By all means, Mr. Chairman, there are a number of operational questions that are unresolved and are independent of whether there is sampling and statistical estimation in the census or not. The address file, as I mentioned—the accuracy of that is an absolutely critical factor, no matter what the design. Outreach and promotion has been a problem and that would be even more important, perhaps, in a traditional design than in one that involves statistics.

Mr. MILLER. So those problems are not affected by the disagreement between Congress and the administration?

Mr. STEVENS. That's true. However, the disagreement is certainly—the longer that persists, the more difficult it is for the Bureau to do its job. I think we are right in saying that the risks will also increase.

Mr. MILLER. Can you tell us again why the two dress rehearsal sites are not a test of competing census design?

Mr. STEVENS. They were deliberately selected to provide some diversity and some difference. The Sacramento area is one that represents an urban area. Neither of them can really be typical, but the selection of two sites was deliberately given to gather a variety of demographic variables. Direct comparison between them was never intended and would not result in an instructive comparison of the two methods that are now being applied in the two areas.

Mr. MILLER. So for comparison, the Bureau would have had to choose sites that consisted of similar census tracts with geographic and demographic similarities?

Mr. STEVENS. Right. And when these were selected, that was certainly not their criteria. In fact, it was the opposite.

Mr. MILLER. When the Bureau chose the dress rehearsal sites several years ago, they never intended on comparing the different methods. Is that correct?

Mr. STEVENS. Yes, that is correct.

Mr. MILLER. The Census Bureau has been very zealous in asserting that the delay in passing the fiscal year 1998 budget last fall delayed the dress rehearsal schedule. While we do agree that being funded on a Continuing Resolution for 7 weeks may have delayed some contracting, we are interested in the real impact this delay had on the success of the dress rehearsal and the 2000 census. I have several quick questions.

First, as far as the GAO was able to ascertain, did this lack of resolution of the fiscal year 1998 budget for the Census Bureau have anything to do with the problems the Bureau has had implementing the dress rehearsal program, which you feel had a serious problem?

Mr. STEVENS. We really did not look at that question, Mr. Chairman. So the technical answer is no, but it is not from a very well-informed basis. We didn't look at the effect of the budget situation.

Mr. MILLER. Could you review two or three of these programs which had problems—such as the master address file, the local update of census addresses, or the partnership program—and explain the effect or lack of effect of last year's CR on those three items? Would you say that the CR had any impact on those three issues?

Mr. MIHM. Mr. Chairman, fundamentally we didn't see anything in those operations that was significantly hampered by the Continuing Resolution. The types of challenges that the Bureau has faced are in developing an accurate address list and getting a good promotion and outreach program. Staffing was another area that you didn't mention but would also be a big challenge for them.

These are longstanding problems. They certainly were things that confronted the Bureau in 1990.

There was a bit of delay in awarding the contract for the paid advertising campaign. We weren't able to identify really to what extent that is hampering or would have an effect on dress rehearsal operations. But taking a longer view, we don't see anything with the CR that would have an effect on 2000 operations.

Mr. MILLER. Do you feel that a 2-week delay in the setting of the dress rehearsal census day will have any serious effect on the success or problems demonstrated in the dress rehearsals in either Sacramento or South Carolina?

Mr. STEVENS. While not having looked at that specifically, I cannot imagine that the 2-week delay would have much effect in a 2-year preparation period.

Mr. MILLER. With regard to the 2000 census itself, do you feel that a 7-week delay in funding last year will have any serious effect on preparations for the actual census 2 years from now?

Mr. STEVENS. Not that we have seen, Mr. Chairman.

Mr. MILLER. So is this issue being a little overworked by the Census Bureau and the Commerce Department about the issue of the CR last year?

Mr. STEVENS. That would go beyond our knowledge of the funding situation and its effects, Mr. Chairman. The Inspector General would be better able to answer that. They have done more work on the budget situation.

Mr. MILLER. Let Mrs. Maloney have her time.

Mrs. MALONEY. Thank you.

How is the re-engineered address list different from 1990? And to what extent does the experience from 1990, where the address list was 97 percent accurate differ from what is being done in 2000?

Mr. STEVENS. What are the differences?

Mrs. MALONEY. Yes.

Mr. STEVENS. The address list development program should be improved from 1990. We do not believe that the address list from 1990 was good enough for the census and is an area that could stand some improvement. So I think it is an improved process. They are involving local governments at an earlier stage than was true before. At Congress' urging, local governments are actually giving addresses rather than counts within census blocks. Their

latest plan involves the 100 percent canvassing, that was the basis of the 1990 address list, adds a local review, increases the time available for a local review, but does not resolve all the problems we found in evaluating the preparations for the dress rehearsal address list—for example, the quality of the information local officials have to work with.

Mrs. MALONEY. As I said in my opening statement, to just come forward and say that the preparation is not as good as you feel it should be and finding fault is not good enough. I hope that you will work with us to help us find solutions and help lead us in this way.

Sampling is not easy, but it also solves some of the problems the Bureau has pointed out. Do you think that maybe in the future we might have a hard time hiring people? Could you get back to us with a report that if we don't use sampling, how would we hire the people needed to do the other method? Exactly how much would it cost if we did a door-to-door count, where you literally do a door-to-door count and if they're not there you come back eight times to find that person—can you give us a report on exactly how much that would cost and planning of how you would do that, if it is possible?

Mr. STEVENS. Yes, we can do work in that area, Mrs. Maloney. We do have some information in this current report on the number of employees that would be required to carry out a traditional head count enumeration census compared to those in sampling.

Mr. MIHM. According to Bureau estimates, if they go with a full enumeration it would require an extra 59,000 staff over and above the 300,000 they are already planning to hire. They of course have very ambitious recruitment goals over and above that. So there is a multiplier effect as well as to how many more people they would have to recruit because they find that a number of people either don't pan out through the hiring process or don't complete training.

Unquestionably, it would require more people and more cost on the part of the Bureau.

Mrs. MALONEY. Did you come up with a cost estimate?

Mr. MIHM. We have not independently derived a cost estimate. We would be happy to work with the Bureau and get you the information you requested on that.

Mrs. MALONEY. One of the reasons Dr. Bryant, who served under President Bush, recommended sampling was because of the historic undercount of minorities and the poor. If the Census Bureau is not allowed to use sampling, how will we eliminate the historic undercount of the poor and the minorities? We are supposed to count everyone, even the hard-to-count. The Census Bureau says that, using sampling, we will be able to do that. All the experts say that it will get us the most accurate count.

So if we are not allowed to use sampling, would we be able to eliminate in any way the historic undercount of minorities and the poor that have been documented by GAO and others in the 1990 census?

Mr. STEVENS. No. I think the result of our capping report was that at a conceptual level that made sense. It has never been eliminated in the past. And on a conceptual level we believe that is true.

Mrs. MALONEY. So you can't think of a way to count the people?

Mr. STEVENS. The answer would be increased outreach, promotion, a more effective advertising targeted at specific groups. The Bureau is indeed undertaking all those initiatives. I don't think they believe—and we certainly don't believe—that that will be enough to eliminate the persistent differential undercount that has been with us for so many decades.

Mrs. MALONEY. I think that is a very important point.

But back to your other point on the promotion and outreach, do you think the Census Bureau should be spending more than is now budgeted for promotion and outreach activities?

Mr. STEVENS. We have shied away from making that recommendation, because then the next question would be; from where do you take the money? I don't think we have identified any low-priority activities that the Bureau is engaged in that we would recommend eliminating.

Mrs. MALONEY. The point is that we are charged with getting an accurate count. If you think we need to be spending more on promotion and outreach, then you should be saying so and helping us to justify it to the appropriators, not through the existing Census Bureau budget, but by further allocations.

Mr. STEVENS. The State and local officials and those involved in the complete count committees in the dress rehearsal that we talked to certainly would say that. They say that lack of resources is the fundamental reason why they feel that they were not as effective as they could have been, either in the local review or in promoting knowledge and participation in the census.

But the Bureau traditionally has refused to start down the line of funding local efforts. I think they have good reasons for doing so. I don't know where it would stop once it started. And as I said, we are in a balanced budget situation, and not about to recommend that some budget be increased when we don't have corresponding recommendations for something that is less worthwhile that is being done that should be decreased.

Mrs. MALONEY. But if we need——

Mr. MILLER. We are going to have another round.

Mrs. MALONEY. Where is the light?

Mr. MILLER. The light has been on.

Mrs. MALONEY. I'm sorry. I'm used to it being over there.

Mr. MILLER. By the way, with respect to cost, I know Chairman Rogers has been trying to get the Bureau to come up with those numbers the past couple of hearings. It came up yesterday, so I know the Bureau was supposedly going to get the numbers. But I know Mr. Rogers has had trouble getting the numbers.

Mr. Snowbarger.

Mr. SNOWBARGER. Thank you, Mr. Chairman.

One suggestion for the chairman, you might provide us with binoculars the next time we use this room so we can see who is sitting out there. My eyes are just old or something.

I want to go back to a question the chairman started to raise and didn't follow through—at least not to my suggestion—and that was on this differential between the two initial sites. Could one of you explain to me the significant differences in the census process, between the two sites that were chosen?

Mr. BUROW. The Sacramento site, as you may well know, is typically an urban area. It has a government which pretty much oversees the entire activity of the dress rehearsal site there. So if you do get some local level involvement, it has a view of the entire operation. And Sacramento is all city-style delivery.

When you go to South Carolina you have a very diverse population, much of it rural, many of them small communities that have city-style delivery addresses where the questionnaires would be delivered by the postal service. You also have Columbia, which is a medium-sized city. But you have some 60 jurisdictions that you are trying to deal with from the Census Bureau standpoint.

When you get into trying to reach them through the media, the media attention would be much different in Sacramento than it would be in South Carolina. How do you reach the folks to make sure that people are aware of the census and that they are willing to respond? It is just diversity in the South compared to Sacramento.

Again, as Nye Stevens said, I think it was never really intended to be a comparison of the two. You can't use either of these to compare with each other, nor can you use them to project the success of the 2000 census. It is simply a demonstration of what can and cannot work in those locations.

Mr. SNOWBARGER. You have indicated that the intent wasn't to test those two different methods. Isn't it true that the fact of the matter was that these two areas were chosen because of their differences?

Mr. STEVENS. Precisely because they provided two very different contexts, yes.

Mr. SNOWBARGER. Let me ask this question because it has popped into my mind, trying to figure out the better method to use, whether specific head count or statistical—in order to do that, wouldn't you have to do both methods in the same area at roughly the same point in time to get an accurate measurement of the two methods?

Mr. STEVENS. Yes. If the purpose was to test the two methods against each other, you would certainly want to minimize the other differences and to isolate just the methodological difference as being the only one between the two. You would want to select two places that were quite similar in all other respects.

Mr. SNOWBARGER. Just so we are not fooling ourselves here, this April 18th run is not in any means meant to be a comparison between the two different methodologies, sampling or enumeration?

Mr. STEVENS. That's correct.

Mr. SNOWBARGER. Let me jump to a different line here.

Is a dress rehearsal a true indicator of what is going to happen in 2000 when we do the census?

Mr. STEVENS. Again, no. It is designed to fine-tune some operational plans, but it can't duplicate census conditions by any means. You can learn from it, but it certainly is not going to tell you what the 2000 census will bring.

I think the chairman's opening statement made the point that it can probably rule out the effectiveness of some activities, but it certainly cannot by itself prove their effectiveness.

Mr. SNOWBARGER. We are all getting used to new kinds of language. There is a process called ICM, Integrated Coverage Measurement. My understanding is that it is basically the shorthand term for sampling. Is that a fair statement?

Mr. MIHM. It's the shorthand term—there is sampling to build the original count, or sampling is part of the non-response followup operation. The ICM is the shorthand for the coverage adjustment that takes place after basic data collection and seeks to get an integrated count that they use as a statistical estimation of missed individuals.

Mr. SNOWBARGER. On this dress rehearsal, is it the plan to use the ICM?

Mr. STEVENS. Only in Sacramento, yes.

Mr. SNOWBARGER. And is it the same ICM process that will be used in 2000?

Mr. STEVENS. They will try to make it as comparable as possible, yes.

Mr. SNOWBARGER. My time is up.

Mr. MILLER. With respect to funding resources for the Bureau to do a non-sampling census, a point brought out yesterday in the Appropriations Committee, the Bureau requested $128 million. The President's OMB submitted request was only $36 million, which is $92 million less than what was requested by the Bureau. Right now the Bureau is 6 months behind staffing capabilities compared to the 1990 census. That is my understanding.

Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you, Mr. Chairman.

Mr. Stevens, you indicated that the 1990 census was the most costly in the history of census-taking, and yet less accurate than the 1980 census. Is this cost adjusted for inflation and other economic factors?

Mr. STEVENS. Yes, that is adjusted both for inflation and the growth in the size of the population. So on a per household basis, I believe the cost went up from $20 to $25.

Mr. DAVIS OF ILLINOIS. Do we have any projection or any data information as to why?

Mr. STEVENS. Yes. There are many factors, Mr. Chairman. I think the major one, though, is the decline in the voluntary participation or coming forth of the American people through sending back questionnaires that are mailed to them and actively participating in making themselves part of the count. That percentage went down from 78 percent two censuses ago to 65 percent in the 1990 census. The cost of following up, sending enumerators out often many, many times to get the information that could easily have come from an individual just sending back his form is very high and the single largest cost-driver in the census.

Mr. DAVIS OF ILLINOIS. And yet we are projecting that the return rate now for 2000 will be essentially the same as it was in 1990?

Mr. STEVENS. That's the best case scenario, Mr. Davis. I think without commitment to do some things quite differently, the Bureau projects and the trend lines would bring you down to about a 55 percent return ratio.

Mr. DAVIS OF ILLINOIS. So it is not inconceivable that we could be looking at a smaller return rate?

Mr. STEVENS. Absolutely.

Mr. DAVIS OF ILLINOIS. Which means that we need to do something more drastic if we're going to get back to even where we were in terms of accuracy. Would that be an accurate analysis?

Mr. STEVENS. Well, the accuracy is a slightly separate question. We have also found the data that is provided by the methods the Bureau uses in the absence of people sending back their own questionnaires is less accurate than data they do provide. For example, enumerator-collected data is less accurate than respondent-provided data. And the least accurate of all is that gotten from last-resort procedures where they have gone five or six times back to a house and never found anybody. They have to collect data on it from the neighbors or the mailman or somebody less knowledgeable about the occupants.

Mr. DAVIS OF ILLINOIS. So the bottom line is that we're likely to have to put forth more effort than what we have done in the past to get the kind of information we need.

Let me move to another kind of question.

We have talked about the inability to agree on design and how that may affect the ultimate outcome. Is there a date certain in your mind when a design must be agreed upon if we are to move forward with any real degree of accuracy?

Mr. STEVENS. I think if you had asked us that question a year ago, Mr. Davis, we would have pointed to the dress rehearsal. I think we did point to the dress rehearsal as a key step in the process. And the fact that there has not been an agreement at the time the Bureau should be fine-tuning its plans rather than making basic design decisions is very worrisome. But that it can't be rescued at this point, we are not prepared to say.

Mr. DAVIS OF ILLINOIS. There seems to be a great deal of emphasis placed upon the accuracy of the address file and the fact that they are not accurate and we have had difficulty with those. How do we correct that?

Mr. STEVENS. We do not quarrel with the Bureau's decision to use a variety of means, including returning to the 100 percent canvassing that they decided to do in September 1997. We do simply point out that that doesn't absolutely assure that they will get the 99 percent accuracy that they need because the sequence of steps they have taken has not been tested together.

Mr. DAVIS OF ILLINOIS. We have talked a little bit about cost in terms of enumeration. How much time do we expect these individuals to actually work that we're talking about temporarily hiring?

Mr. MIHM. If 1990 is a guide and the schedule now is much tighter, it is typically about a 4- to 6-week duration. The actual amount of time that any given enumerator will work, unfortunately, can be quite a bit less. The Bureau experiences very significant turnover in the first couple days of census-taking. People find out that this isn't what they thought. In many cases they are dealing with a hostile public that slams the door in their face and says, "This isn't what I'm interested in in terms of employment." So the amount of time that any given enumerator works can actually be quite a bit less than the 4 to 6 weeks.

Mr. DAVIS OF ILLINOIS. So if we had to hire an additional 59,000 people, we would be talking about at least 4 to 6 weeks at what rate?

Mr. MIHM. There are geographic pay rates. It is an expensive proposition, sir. We will work with the Bureau and get you the actual numbers, but something like that does not come cheaply.

Following up on non-responding households is among the most expensive and time-consuming aspect of the census.

Mr. DAVIS OF ILLINOIS. So the bottom line is that it is quite expensive and we still may not end up with the information that we are seeking?

Mr. MIHM. It is a substantial challenge for them to get good data out of the field followup process. The data from 1990 shows the longer you are in the field, the more the data has a tendency to degrade; people's memories change, there is more pressure to close out or to use these last resort and close out procedures. That is correct, yes, sir.

Mr. DAVIS OF ILLINOIS. Thank you very much, Mr. Chairman.

Mr. MILLER. Are you ready, Mr. Shadegg, or would you like us to come back to you?

Mr. SHADEGG. Come back, please.

Mr. MILLER. OK.

Mr. Waxman.

Mr. WAXMAN. The census gives us very important information to make a number of decisions that must be made. I think we need as accurate a census as possible, but this should not be politicized. It should not be a political matter.

It is unlikely we are going to get a perfect census. That should be our goal, but the reality is that we should work for the best census possible.

In light of the report you have given us, how much of the problems you have identified were due to the fact that the budget was cut for the Bureau?

Mr. STEVENS. I believe the chairman's questions were along the same line and I made the point that we really hadn't studied that aspect of the preparations. And while I said we couldn't say there were effects, equally we cannot say that there were not effects. That is an aspect—one of many—that we wish we had the resources to study. We did not.

Mr. WAXMAN. In giving Congress, through oversight, the best information so that we can develop census-taking—so that we can get to our joint goal, which should be the best census possible, it seems to me that if we shortchange them and then identify deficiencies, it seems to me that we ought to have the information as to whether those deficiencies are a result of actions by Congress that caused those deficiencies because we didn't fund them adequately.

But you are not prepared to give us any conclusion on that?

Mr. STEVENS. The only firm thing we can say is that it did delay the advertising contract.

Mr. WAXMAN. There has been a lot of talk about sampling. If sampling were taken out of the equation for the 2000 census, are your predictions of a high-risk census still there? Or is the census going to be just fine?

Mr. STEVENS. Whichever decision is made, we believe the sooner it is made the less the risk. It is already very late in the census cycle to have that as an unanswered question.

Is your question, if sampling were removed from the census, would there be less risk of a failure?

Mr. WAXMAN. You have stated that the 2000 census sampling design is a high risk. Without sampling, what level of accuracy can we expect in the 2000 census?

Mr. STEVENS. I think a lot of the operational problems we found apply to any census design. It is not simply a matter of what hasn't been worked out in the sampling in the ICM. The address list, for example, will affect the quality of any census that is carried out. Outreach and promotion, decline in civic participation—all those are factors that are independent of the sampling side or lack of it.

Mr. WAXMAN. About 4 million people were missed during the 1990 census. All preliminary data indicates that the rate of growth for those who were missed—particularly minorities—is rising at a greater rate than the rate of growth for the population as a whole. Should we assume that 5 million people instead of 4 million will be missed if the 2000 census is conducted with the traditional head count? And what will be the differential undercount of a traditional head count if used?

Mr. STEVENS. One of the reasons that we were so critical in our 1992 report on the 1990 census was that the numbers missed were actually much higher than that. The latest analysis we did indicated that about 10 million Americans were missed, about 6 million were double-counted, which did result in the 4 million figure you mentioned. But the characteristics of those who were double-counted and those who were missed were quite different. So we believe that the 16 million gross errors is a much better indicator of the overall quality and accuracy of the census than the 4 million net number.

And we think that number needs to be improved. When we are pressed on what a failed census would be, I think we ought to say it had better be a better one than the 1990 census.

Mr. WAXMAN. One of the ways to make it a better one has been the idea that perhaps we do some sampling to project what the actual population statistics are in reality. And your report showed us, if we did no sampling and took that traditional head count approach, what the result would be.

If statistically sampling is abandoned, what are the alternatives? Are we going to do the 1990 census again and not do the new 2000 design? What suggestions would you have for a plan that will get us to a more accurate count?

Mr. STEVENS. There are elements in which the traditional design can be improved, the master address file being one, certainly improved outreach and promotion, a simplified questionnaire. There are a number of improvements that can be made aside from the sampling innovation.

Mr. WAXMAN. You have indicated several risks associated with the current plan. What would be the risks of this plan if Congress prohibits the Census Bureau from using statistical measures?

Mr. STEVENS. If that decision is made late in the game, the need to retool their plans and their budgets would be a difficult chal-

lenge. They would have to turn around on a dime, so to speak, not 180 degrees but about 20 degrees. That would be a challenge at this late stage in the cycle.

Mr. WAXMAN. So Congress is really creating a lot of the problems because we have created a great deal of confusion? Is that an accurate statement?

Mr. STEVENS. I wouldn't put it that way, Mr. Chairman. [Laughter.]

Mr. MILLER. And with that, Mr. Shadegg.

Mr. SHADEGG. Thank you, Mr. Chairman.

Let me followup on Mr. Waxman.

I think I heard you say repeatedly that if Congress delays this decision for a long time, that complicates the issue. But since the sampling process that is currently proposed and not very well defined nor very well tested is extremely complex, would it not be true that a decision now to refuse to take sampling out would reduce the risk of a census failure or of a serious problem?

Mr. STEVENS. A factor in the other direction, Mr. Shadegg, is that sampling and the Integrated Coverage Measurement Program do allow you to make adjustments after the count itself is completed, or mostly completed. That ability to make adjustments—which can also be characterized from the opposing side as manipulation—does allow you to live with some errors that emerge from the basic count.

Mr. SHADEGG. As one who is very concerned about the idea of adjustments to the census—which is supposed to be an actual enumeration—that doesn't give me much comfort.

Mr. STEVENS. The Bureau will have to defend that. I am not going to.

Mr. SHADEGG. You have now issued three different GAO reports, all of which have been extremely critical of where we are at this point. How much longer do you think we can go without the Commerce Department heeding that, and being in dangerous risk of having a failed census?

Mr. MIHM. We really haven't gone and looked at it and defined it. If there is a particular date and time or series of occurrences at which point we would have to say that the proposed model isn't viable and we need to go back to 1990 with some enhancements the Bureau is planning.

What I would point out, though, is that even if the Congress decides that we're not going to go forward with sampling and statistical estimation, there are still a number of very critical census operations that are at risk. It would still—at least in your view—be at high risk for a failed census.

We have had some social and demographic changes over the last decade, which we have already discussed. In addition, there are still major technical questions and operational questions with the Bureau—separate from statistical estimation and sampling—that would lead us to conclude that it is a risky census no matter what model you take. That risk is exacerbated when you have, at this late date, still an awful lot of debate as to what we're going to do.

Mr. SHADEGG. As I read your report, you don't believe that the dress rehearsal will be a true test of what will happen under an actual nationwide census circumstance. Is that correct?

Mr. STEVENS. Yes, sir.

Mr. SHADEGG. Can you elaborate on that?

Mr. STEVENS. Yes.

The dress rehearsal sites are chosen in order to, in some broad senses, mirror the types of localities the Bureau will be enumerating in the actual census. So you have Sacramento, which is a unified media market, an urbanized area, diversity in its population and you have Columbia with lots of local governments, some of them very small. So basically what you get out of a dress rehearsal is a shake-down—if it is done as a dress rehearsal should be rather than as a test—of operational procedures. Things that are suggestive for what may happen in 2000 or in the actual census, but not necessarily definitive.

Again, I'm going to go back to what Chairman Miller said in his opening statement. The best indication you have is that if something really blows up on you in the dress rehearsal that should make you very, very nervous for purposes of the actual decennial. For example, if they can't recruit and hire people for a relatively small scale operation like they are going to be doing in the dress rehearsal, that would raise some major concerns for how things are going to look in 2000.

Mr. BUROW. I would like to add one other technical point here.

The address list development for the dress rehearsal was under the plan before the re-engineering process and the Census Bureau is continuing with that technology and the old method for doing the address list. In 2000, they will be using the re-engineered address list that they felt they had to do. So there is a difference between the two.

Mr. SHADEGG. As I read the report, Columbia indicates—you are not confident that it will be a fair test or complete test of an actual enumeration. Can you give me some examples or an explanation of the problems with Columbia, SC, for that particular test?

Mr. STEVENS. Columbia was selected to provide a quasi-rural area with lots of jurisdictions. It is a high minority population. But in those characteristics, there are other places like that, but it certainly doesn't mirror the whole Nation.

We found some differential problems there. Many local governments—the local government problem was more difficult since there are more local governments there. Reaching the population through media is more difficult because they don't have a single television market the way Sacramento does.

There was nothing wrong with its selection when it was selected to provide some diversity. But it certainly can't stand as a surrogate for the rest of the country.

Mr. SHADEGG. Thank you, Mr. Chairman. I see my time has expired. I yield back.

Mr. MILLER. Mr. Blagojevich.

Mr. BLAGOJEVICH. Thank you, Mr. Chairman. And thank you for pronouncing that correctly. Pronouncing my last name is harder than doing a fair and accurate count. [Laughter.]

Let me address my questions to the panel and whoever wants to answer it, feel free.

We are all aware that the Census Bureau has been acting without a director. Do any of you have an opinion with regard to wheth-

er or not that has impeded the 2000 census preparations and activities of the Census Bureau?

Mr. STEVENS. The short answer is no. And it hasn't been very long, either. It has been a little more than 2 months. Which is not to say that in the longer run it might. I do believe that the absence of a director for a longer period before the 1990 census was something that had emerged as a concern before Dr. Bryant was appointed. And we did find some deleterious effects from that.

Mr. BLAGOJEVICH. Your report is being seen by some as being very critical of certain aspects of the dress rehearsal and so forth. Are you saying that the 2000 plan is doomed and cannot be fixed, based on the conclusions in your report?

Mr. STEVENS. No.

Mr. BLAGOJEVICH. Are you highlighting areas that, if fixed, will provide a successful census for 2000? If so, what areas are you referring to?

Mr. STEVENS. What areas indicate that it will be successful in 2000?

Mr. BLAGOJEVICH. Right, based on your report.

Mr. MIHM. I'm sorry, sir. You mean, what areas, based on our report, need to be fixed in order to have a successful census in 2000?

Mr. BLAGOJEVICH. Yes.

Mr. MIHM. There are basically four broad areas that we touched on. First is the need to make sure that we have as accurate an address list as possible. The address list is the fundamental building block of the census, whether we take a full enumeration or a sample census. If you don't go into it with a good address list, you're not going to come out of it with a good population count. We know that.

Second, there needs to be a good and rigorous promotion and outreach program in place. We found some unevenness in the program that has been implemented during the dress rehearsal.

Third, there are questions in regard to staffing. Are we going to be able to get the people that we need when we need them in order to conduct the census and the essential followup activities?

Then fourth, there are questions at both the technical and the methodological levels for statistical sampling and estimation.

Those are the four key areas where we feel progress is most needed at an operational level with this census.

Mr. BLAGOJEVICH. You stated the geographic, demographic, and other differences among the dress rehearsal locations preclude a comparison of competing census designs. That is an accurate statement?

Mr. MIHM. Yes, sir.

Mr. BLAGOJEVICH. Since we have seen a traditional head count enumeration in 1990, what is the benefit of the dress rehearsal with regard to the Columbia, SC, site?

Mr. MIHM. The fundamental benefit in Columbia is that if the Census Bureau does not use a statistical sampling and estimation, the alternative is not the 1990 version. There have been some substantial improvements that they have made during the decade, many of which we outlined as being essential in our capping report in 1992 that we issued. So, for example, they have streamlined the

census questionnaire. They have gone to a multiple contact strategy to try to make it easier for people to respond. They have a paid advertising campaign this time. Last time they used pro bono.

So basically what this does provide is an operational indication of—with these augmented efforts over and above what they did in 1990—what does a full enumeration look like.

Mr. STEVENS. And society has changed in 10 years, too. That is an important factor.

Mr. BLAGOJEVICH. In 1992, there was a capping report.

Mr. MIHM. Yes, sir.

Mr. BLAGOJEVICH. And you strongly urged the Census Bureau to work with the Postal Service to develop the address list for the 2000 census, correct?

Mr. MIHM. Yes, sir.

Mr. BLAGOJEVICH. Given the preliminary results from the dress rehearsal, which indicate that the postal lists are not sufficient, do you have any further recommendations?

Mr. MIHM. We're going to have to study that, sir. The fundamental recommendation we made in regard to the address list development is that before the 1990 census they started over again and started with a brand new address list, or constructing the address list from scratch. We recommended that they keep an updated address list throughout the decade. They have done that. And as part of that, we advocated that they work closely with the Postal Service.

We understand and do not quibble with their decision, as Mr. Stevens mentioned in his oral statement, about how using the Postal Service address files directly without very detailed reviews is not going to give them the quality of the address lists they want. There are still opportunities, though, through Postal Service checks similar to what they did in 1990, that they could do again in 2000 that will help them get as accurate an address list as possible.

That's a rather long way of saying that we're going to be looking for additional opportunities for how the Postal Service and Census Bureau can work together to build an accurate address list.

Mr. BUROW. The significance of the law in 1994 allowed the Census Bureau and the Postal Service and local governments to share their lists of actual addresses as opposed to counts for individual blocks. So it does open up the avenue for better information than they had in 1990, sir.

Mr. BLAGOJEVICH. Now in the report you indicate that the participation rates for local governments in the address list activities was 44 out of 60, or 73 percent. That is in the report, correct?

Mr. STEVENS. I believe it was 34 out of 60.

Mr. BLAGOJEVICH. Is that substantially better than the 19 percent of jurisdictions that participated in the local review back in 1990?

Mr. STEVENS. Yes, it probably is.

Mr. BLAGOJEVICH. And therefore that is a good indication that we could have a better and accurate count in 2000 than in 1990? Is that a fair statement?

Mr. STEVENS. I think the state of local participation was a real sore point in 1990 and needed to be much improved. I remember there was a hearing specifically on that with complaints from local

officials. That it will be somewhat better is not too comforting because it had to get a lot better.

Mr. BLAGOJEVICH. Thank you.

Mr. MILLER. Mr. Davis.

Mr. DAVIS OF VIRGINIA. Thank you very much.

It has been asserted by some Members of Congress that the primary reason for the numerous serious problems cited by the Commerce Department's Inspector General and GAO reports—they are trying to claim disagreement between Congress and the agency. Specifically, they are trying to claim that the disagreement over the complex sampling methodology and the slightly lower funding for a few weeks during a Continuing Resolution last fall have caused most, if not all of these problems.

You have mentioned several times in your testimony that the disagreement between Congress and the administration over sampling is one of the factors that could put the 2000 census at risk. I would like to go down a series of areas and ask if you think they are the cause for these problems; if the rift between Congress and the Bureau is the cause for these problems.

First of all, the Commerce Inspector General's finding that the decennial census software is not being developed in accordance with any well-defined process.

Mr. STEVENS. Well, the software is needed to carry out the sampling and the ICM. Those are the critical points of the software.

Mr. DAVIS OF VIRGINIA. Is it Congress' fault?

Mr. STEVENS. No.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG's finding that the estimates of software development schedules and resources are not realistic for the dress rehearsal of the census? Is that Congress' fault?

Mr. STEVENS. Not to our knowledge, no.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG's finding that the requirements for headquarters processing are immature, volatile, and likely to be late? Is that Congress' fault?

Mr. MIHM. Again, sir, not to our knowledge.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG's conclusion that he questions the Bureau's ability to develop and implement complete, accurate software for the census? Is that Congress' fault?

Mr. MIHM. Not to our knowledge, sir.

Mr. DAVIS OF VIRGINIA. I want to get this on the record.

The Commerce IG's report that the Bureau's matching and unduplication of programs are so geographically restricted that they will virtually guarantee more errors. Is that Congress' fault?

Mr. STEVENS. No.

Mr. DAVIS OF VIRGINIA. How about the fact that the ICM sample drawn by the Bureau mistakenly included commercial addresses, which would have thrown it completely off? Any fault with Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the fact that this mistake was not caught until late in the sample process? Is there any blame on Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the fact that this mistake, if repeated under the pressure and on the scale of the full census would produce catastrophic results? Would that be Congress' fault?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the vague and incomplete guidance provided by the Bureau to local governments that, according to the GAO, hindered efforts to establish complete count committees?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. No fault with Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG's finding that the Bureau is not giving itself enough time to followup on households that don't respond in the first 2 weeks? Any fault with Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the fact that the Bureau's plan forces non-response followup to be completed in just 6 weeks instead of a more realistic timeframe, given that it took 13 weeks last time? Any problem with Congress on that one?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the fact that the Bureau's plan for the ICM assumes it can contact five times as many people as it did in 1990 and do it in half the time, 13 weeks versus 28?

Mr. MIHM. I don't believe Congress has been involved in that, sir.

Mr. DAVIS OF VIRGINIA. How about the fact that if the response rate in this short 13-week timeframe for the ICM falls below 98 percent the census will become less accurate? Any problems with Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG reporting that experience Bureau field managers feel the ICM sampling plan is unrealistic by assuming a 98 percent rate of response? Any problem with Congress on that?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the Commerce IG's finding that even the long form sampling specifications, which are not based on a new technique, are almost a month late? Did Congress have any culpability in that?

Mr. MIHM. No, sir.

Mr. STEVENS. But I believe there is a congressional requirement to use the form, is there not?

Mr. MIHM. The questionnaire itself.

Mr. DAVIS OF VIRGINIA. The incompatibility of the plan to start the ICM before non-response followup is complete with the findings of the Commerce IG that the integrity of the ICM hinges on the assumption that it is fully independent of non-response followup.

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the strategy of hiring moonlighters as census enumerators that the GAO has described as questionable? Any congressional culpability there?

Mr. MIHM. No, sir. It does not stem from Congress.

Mr. DAVIS OF VIRGINIA. How about the high rate of missed housing units on the Bureau's address list?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the high rate of duplicate or non-existent housing units on the address list?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. How about the problem with accuracy and completeness of the address list and maps provided to localities by the Census Bureau?

Mr. STEVENS. None at all, sir.

Mr. DAVIS OF VIRGINIA. How about the lack of information and resources provided by the Bureau to local communities that wish to review the address list?

Mr. MIHM. No, sir.

Mr. DAVIS OF VIRGINIA. And how about the Bureau's failure to complete and present a comprehensive design review in January 1998 as promised to the Commerce IG?

Mr. MIHM. I am not familiar with that statement.

Mr. DAVIS OF VIRGINIA. They have promised to report to the Commerce IG in January 1998 and I guess missed the deadline. From your perspective, you don't see any congressional culpability there?

Mr. STEVENS. That did not involve us.

Mr. DAVIS OF VIRGINIA. Are any of the above problems a result of last fall's 5-week Continuing Resolution that kept the Bureau funding at a very slightly lower level for a few weeks?

Mr. STEVENS. I don't believe so.

Mr. DAVIS OF VIRGINIA. Some claim that to remove sampling from the design will further complicate these problems. How does removing sampling in order to identify the plan make it harder to do an address list, or community outreach, or develop computer software?

Mr. STEVENS. The main problem is when this decision is made. If there is going to be no sampling in the census, the census and the Bureau would be much better off if that were known today than if that is known 6 months from now.

Mr. DAVIS OF VIRGINIA. I see my time is about expired. I thank you very much and I yield back.

Mr. MILLER. Thank you, Mr. Davis.

I suggest that we have a second round, but I would encourage just Mrs. Maloney and I have a round of questions and then if everybody would pass, we could go right to the next panel.

Let me start with the first question. This is a followup to Mr. Waxman's and Mr. Shadegg's question. Does the inclusion of sampling in the ICM increase the operational risk of the census?

Mr. STEVENS. I don't think we have looked at the question precisely that way, Mr. Chairman. I would be hesitant to give an answer off the top of my head.

Mr. MILLER. Does sampling make it operationally more difficult?

Mr. STEVENS. It certainly raises novel operational questions different from the traditional census. They both involve operational difficulties, and they are different operational difficulties. Whether one surpasses the other or not—I don't think we tried to weigh the two that way.

Mr. MILLER. One of the things you stated is to simplify—and the Inspector General did, too—simplify things.

Mr. STEVENS. Simplified questionnaire, certainly.

Mr. MILLER. Design simplification.

Mr. STEVENS. Yes.

Mr. MILLER. And a full enumeration is simpler. Would that be——

Mr. STEVENS. It is conceptually less complicated. Yes, sir. And more familiar.

Mr. MILLER. By having a simpler design, such as enumeration, there would be a reduced risk for failure than with a complex design?

Mr. STEVENS. Yes, that would be a factor of reducing risk, the familiarity of the design.

Mr. MILLER. And the simplification of it?

Mr. STEVENS. Whether that actually resulted in a less risky pattern I guess we are not prepared to say at this point.

Mr. MIHM. On the other hand, certainly as Mr. Stevens points out, a full enumeration is something that the Bureau and all of us are more familiar with, so it is easier in that regard. However, we also know that, in essence, that model has not given us the full population counts in the past. So if we could effectively implement sampling—which I know is the big $64,000 question—that can become a compelling point as well.

Mr. MILLER. The question has been raised about a failed census. Is there a higher risk of a failed census under sampling? Or is there a higher risk of a failed census under full enumeration?

Mr. MIHM. I think, Mr. Chairman, it all turns on—if we go with a sample census and statistical estimation—the extent to which those efforts are effectively implemented. As we point out, the working definition of a failed census we use is one that leads to inaccurate results at high cost. In this case, it would be less accurate results than we had in 1990 and higher unit cost than we had in 1990. If the Census Bureau can have an effectively implemented sampling at the conceptual level, it does suggest that you can have a more accurate and less costly census.

However, the big question again is the extent to which we can have that effectively implemented. And that is the unanswered question, which in part is the reason we have put them on the high risk list.

Mr. MILLER. But using sampling can be a risk for failure?

Mr. MIHM. Certainly, either one could result in a failure.

Mr. MILLER. You mentioned in your opening statement that "a properly designed evaluation program is essential for the Bureau to assess the feasibility of an operational plan." What is the status of the Bureau's evaluation program?

Mr. MIHM. It is in flux, as far as we can see, Mr. Chairman. And that is the most recent draft of the—and I will underscore draft here—of the evaluation program for the dress rehearsal that we saw was dated March 10th. I can tell you that this was a substantial improvement over the one that we saw in September. But nevertheless, it still raises a concern for us that less than 3 weeks before census date for the dress rehearsal we are still at the draft stage for the evaluation program. And that is not something that necessarily gives us a very good feeling.

One of the things that we will be doing at the request of the subcommittee is looking a little bit more at the evaluation program that the census has. One of the key questions we are going to ask is the extent to which the various planned evaluations are the result of a disciplined evaluation program that looks at what information we need, when we need it, and then what are the studies that are going to give us that information.

Our concern going in is that we may have more of an ad hoc and more of a building up of who wants to do an evaluation and we will go ahead and fund that study, rather than having a more top-down approach that is more disciplined in saying what key information we need and how best we are going to get it.

So we do have some concerns about the evaluation program. We are going to be probing those much more deeply in the coming weeks.

Mr. MILLER. We talked about the risk. Part of the evaluation of risk going through this dress rehearsal is their ability to develop an evaluation program. The fact that we are so close to the dress rehearsal gives us concern that the much more complex decennial census is even more at risk. If they can't even get the evaluation program this close to the dress rehearsal resolved, that raises more concerns, doesn't it?

Mr. MIHM. I would agree with you. Yes, sir, that does raise some significant concerns for us. Even though we have had detailed discussions here this morning, these are not competing models between Sacramento and South Carolina. There are still some key operational issues that need to be resolved. We know from experiences with census tests and dress rehearsals in the past that we sometimes have some rather significant changes going into the census, into the actual decennial. So it is a cause of some concern that the evaluation program is not nailed down. That is why we are going to be looking at it.

Mr. MILLER. One final question.

Mr. MIHM. Yes, sir.

Mr. MILLER. The full enumeration is a simpler design than the sampling design. Is that correct?

Mr. STEVENS. Simpler, yes.

Mr. MILLER. Thank you.

Mrs. Maloney.

Mrs. MALONEY. Thank you.

First of all, I would like to ask you to clarify what you said earlier to the chairman and Mr. Waxman. You said that you did not look at the effect that the nearly 2-month delayed Continuing Resolution had. Is that right?

Mr. STEVENS. Yes.

Mrs. MALONEY. And that you could not draw conclusions because you had not looked at the effect of a delayed funding. Is that correct?

Mr. STEVENS. Yes. Then we also said that we were not aware of the facts. But then I qualified that by saying that we hadn't specifically looked for them.

Mrs. MALONEY. Can you look at it now? Can you look at what the effect of a 2-month delayed funding had and really what the 20 percent cut over 2 fiscal years had on the ability of the Census

Bureau to get ready? Can you look at that and go back and issue us another report on it? You stated that you hadn't looked at it. You should look at it.

Mr. STEVENS. Conceptually, there would be some difficulties. We would have to get back with you on that, Mrs. Maloney.

Mrs. MALONEY. I think that is an important point. If you have someone with their arms tied behind them and you're not giving them funds to get the job done, it is hard to get the job done.

I would like to really talk a little bit about how we can work together in a bipartisan way. I see my distinguished colleague, Tom Sawyer, here in the audience. He sat throughout the whole hearing. He had wanted to be the lead witness. I look forward—the chairman has assured at the next hearing he will be the lead witness. But he, along with his Republican colleague, had a bipartisan effort.

One of the things I have been promoting is really appointing Dr. Bryant, who served under a Republican administration, to head the Census Bureau so that we will have some leadership in there that is respected by the Republicans to go forward in a non-partisan way to just get the count done. I hope the Census Bureau will listen to this and put forward her name so that we can get somebody over there in charge.

If we solve all the problems that you pointed out in the address list and staffing and outreach and promotion—after we have solved all those problems and they are hitting 100 percent—and eliminate statistical methods from the census, will there be any reduction in the historic differential undercount?

Mr. STEVENS. I think we would have to be pessimistic about that, Mrs. Maloney. That is why we made a number of recommendations in 1992 following the 1990 census for some fundamental changes in the census.

Mrs. MALONEY. Fundamental changes in what way? Your changes talked about improving the staffing, improving outreach, improving promotion. I am saying that if all of that was done perfectly, would we still have the historic undercount of minorities and the poor that was documented in the 1990 census?

Mr. STEVENS. I think it would be quite likely that it would be in that range, yes. And that is worrisome, particularly when you take the gross errors as opposed to the net ones.

Mrs. MALONEY. And I would like to come back to that the Census Bureau recognized there was an undercount and instead of doing everything wrong, with the help of Congress they contracted with the National Academy of Sciences and others to come back with what needed to be done to correct the undercount. After all, everyone is supposed to be counted. And what we had was a large proportion of minorities and poor not being counted. And they came back with the suggestion of using statistical sampling.

My definition of not being totally stupid is that if you know you are doing something wrong, don't continue doing it wrong but try to correct it. This is the Census Bureau, the non-partisan Census Bureau. The Census Bureau came forward with a plan that was devised by the National Academy of Sciences to a non-partisan group. This plan called for statistical sampling. They said this plan

would correct the undercount and do something that the Republican majority is very concerned about, which is to save money.

I don't see why we are not going forward with what the non-partisan Census Bureau and the National Academy of Sciences have said will reduce this undercount. I think that is an important thing that we need to do.

How do you suggest—as you know, 1990 was the first census that was worse than the census before—that we measure and correct the historic and disproportionate undercount of minorities and the poor? How would you suggest we correct it after your study?

Mr. STEVENS. Did you say measure and correct? I think certainly nobody quarrels with the Bureau's plans to carry out a measurement of the quality of the census in terms of aberrant rates. The question of correcting for it is a policy question. It came up in 1990. Secretary Mosbacher, as you know, made a policy decision not to do so. I don't think anybody quarrels with Congress' ability and responsibility to make a decision for 2000. It is in Congress' hands.

Mrs. MALONEY. But you are talking about a decision. You are not talking about correcting or eliminating the disproportionate undercount of minorities and the poor. Mr. Mosbacher made a decision, but all reports say that decision resulted in a historic undercount of minorities and the poor.

Mr. STEVENS. Yes, it did. And the numbers can be shown. And the numbers will be available in 2000, if the Bureau can carry out the Integrated Coverage Measurement Program, as it intends to. What is done with those numbers is a very high policy question. And it is up to you to decide.

Mr. MILLER. We will try to reduce the number of questions.

Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you.

You can have a group that can be non-partisan and still not be competent to do things. What we are after here is not partisanship, it is just making sure that if we implement whatever—enumeration or statistical sampling—that it is done right in a competent manner and gets us to the end results. And I still have some concerns after hearing your testimony.

The master address file has already been completed and tested for the dress rehearsal. Isn't that correct?

Mr. STEVENS. It's not the one they intend to use for 2000, though. They did develop a master address file for the dress rehearsal, but it is not the one they will be using in 2000.

Mr. DAVIS OF ILLINOIS. They made the changes and if it worked out they might have used it. Is that fair to say?

Mr. STEVENS. That was certainly the intention, but it didn't work out.

Mr. DAVIS OF ILLINOIS. So it's like going to a dress rehearsal for a play and then it falls apart so you come back and scramble. Now we don't know what they are going to use?

Mr. STEVENS. They have been fully described or tested.

Mr. DAVIS OF ILLINOIS. For the dress rehearsal, the Bureau combined the Postal Service's delivery sequence file with the address file that was created during the 1990 census and limited amount of canvassing in cities. According to your word, you learned that

this plan didn't provide the Bureau with the results it needed and now they are going back and trying to scramble.

Mr. MIHM. It didn't provide the results they wanted. Yes, sir.

Mr. DAVIS OF ILLINOIS. And we don't know now what the next plan is?

Mr. MIHM. They presented their re-engineering proposal—or at least the design they are going to be pursuing, which is basically building on the existing address list and then using a full field enumeration in that sense similar to what they did in 1990, basically hiring people to go out and physically canvass and check the accuracy and the address.

Mr. DAVIS OF ILLINOIS. Why didn't the dress rehearsal plan work?

Mr. MIHM. Why didn't the dress rehearsal plan work? I think there are a variety of reasons, but Jim can speak to that.

Mr. BUROW. Why didn't it work? They combined their 1990 address list with the Postal Service's delivery sequence file. The computer match produced a number of non-matches, if you will. Some of the problem was also created by trying to geo-code those to the actual map of where those addresses were located because it is very important to locate the addresses for census purposes. What they didn't do was to try to reconcile those differences and those problems.

They sent those lists out to the local communities and asked the local communities to look at them and get back to them with the problems they saw. The local communities came back with a significant number of problems, then the Census Bureau decided that they had too many problems and they needed to look at reengineering the whole process.

Mr. DAVIS OF ILLINOIS. But in your report you stated that the Bureau had addressed some but not all of the GAO's concerns over the quality of the MAF. Was there time to correct these problems before the dress rehearsal took place?

Mr. BUROW. Before the dress rehearsal took place? According to the Census Bureau, they did not have the time to do that. We didn't look at that specifically. The next step after doing that address file was to do the ICM address file. And everything starts to pyramid on itself. So they did not go back and redo the list.

Mr. DAVIS OF ILLINOIS. So regardless of whether the Bureau uses actual enumeration or sampling to conduct the 2000 census, as you informed us in your opening statement, you believe that the MAF is really the foundation of a successful census?

Mr. STEVENS. Absolutely, Mr. Davis.

Mr. DAVIS OF ILLINOIS. It is the most critical component for taking a complete census? And right now they don't have it, right?

Mr. STEVENS. The one being used for the dress rehearsal is certainly not right. That is correct. And they know that. It is so clear I don't think they could pretend it to be anything else.

Mr. DAVIS OF ILLINOIS. Is it true that the MAF methodology used in the dress rehearsal would not be adequate for the 2000 census and we can assume that?

Mr. STEVENS. Yes, there is consensus on that.

Mr. DAVIS OF ILLINOIS. Given the inadequacies of the current MAF, the Bureau is planning to re-engineer the MAF process. Will it be tested prior to the 2000 census?

Mr. STEVENS. No. The dress rehearsal is the last testing. They will not use that process.

Mr. DAVIS OF ILLINOIS. I think that is important. So we have lost that window of opportunity. With the MAF being the foundation for what is going on, we are kind of in some unchartered waters.

According to the GAO report, you plan to spend about $100 million of a $230 million budget for a paid advertising campaign. Yet if I understand the GAO report, you plan on using the same general theme that you used for the 1990 census. Is that correct?

Mr. STEVENS. Well, these are the Bureau's plans for advertising. I think they would be in a better position to describe them.

The real problem with advertising is making the transition from knowledge of the census—which is a problem the Bureau and advertisers have solved—and to provoke the motivation to participate. That is what has been declining and that is the real challenge for the advertiser.

Mr. DAVIS OF ILLINOIS. Obviously they will be better suited to answer it and we will ask them at the appropriate time, but it looks to me like they are using the same general theme. Is that correct?

Mr. MIHM. The theme is essentially the same, Mr. Davis, as you are saying. It is the "What's in it for me?" approach to the census. The defining difference, in our view, is that by using a paid advertising campaign they are better able to target when those ads will show up. By relying on pro bono, as they did in 1990, they could show up at any time.

Mr. DAVIS OF ILLINOIS. Thank you very much.

Mr. MILLER. Mr. Blagojevich.

Mr. BLAGOJEVICH. Thank you, Mr. Chairman.

Socrates said that the unexamined life is not worth living. If we can take a moment to examine us here in Congress, I think that would be healthy for all of us. Perhaps you can shed some light on how we have behaved in this issue of the census in 2000.

In the opinion of the GAO, what do you think of Congress' inability to decide the issue of statistical methodology? Would you say we have been acting in a rational or irrational manner by our inability to decide this issue?

And be frank with us, in the spirit of Socrates. [Laughter.]

Mr. STEVENS. Can we submit a response for the record? [Laughter.]

I certainly think a lot of very good minds are addressing the problem. They are just not all coming to the same conclusions.

I would second something Mrs. Maloney said a moment ago, that in 1990 there was a very active congressional committee that oversaw the Census Bureau and had a very constructive influence on what happened in the census. There was the bipartisan relationship on that subcommittee. It was very successful and very active. I think it made the census better than it would otherwise have been.

From GAO's point of view, we would like to see something similar emerge by 2000. That is why the formation of this subcommittee is a very positive development in our estimation.

Mr. BLAGOJEVICH. Let me ask you something about your June 1992 report that was entitled, "Decennial Census: 1990 Results Show Need for Fundamental Reform." In that report you state, "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 head count approach and fundamental changes must be implemented for a successful census in 2000."

If statistical sampling is abandoned, what are the alternatives?

Mr. STEVENS. That was one of the recommendations in that report. There are 19 others, I believe, some of which have been taken: to improve the questionnaire itself, to improve outreach and promotion, to improve the address file through better use of Postal Service resources, to continue the address list in existence through the decade rather than create a new one. There were a number of improvements that they could take and many they did take.

Mr. BLAGOJEVICH. If we are not going to do in 2000 what we did in 1990—and that is certainly an objective here, is it not—what are your suggestions for a new plan?

Mr. STEVENS. We certainly would not try to devise a new one. There are two on the table. I think Congress should choose between one of those two rather than get a third. There is not time to develop a third design at this point.

Mr. BLAGOJEVICH. You stated that the 2000 census sampling design is a high risk. Is that a fair statement?

Mr. STEVENS. Well, we think the conduct of a census is a high risk. It is not totally dependent on the sampling design, but there are operational questions, such as the address file, that are independent of the decision on sampling.

Mr. BLAGOJEVICH. Absent sampling, what level of accuracy can we expect from the 2000 census?

Mr. STEVENS. We have no confidence that it will be any better than the 1990 census was. I think there are indications that the response rate will actually go down. It is the best case scenario that it will stay the same. The 16 million gross errors that took place in 1990 to us does not mean that that was a very good census. One that had a larger number of errors would be an unsuccessful one.

Sir, it is important to underscore what led us to conclude that there was a need for fundamental changes in the census design, that 1990 was the first of the modern censuses that had not been more accurate than the preceding census. Then when you combine that with the fact that the Bureau, in our view, did on the whole everything right in 1980—it is not as though we went in and operationally identified two or three glaring errors and said, but if you had just fixed this little thing everything would have been fine.

That is what led us, though—the fact that we did not find glaring errors in their operation or management of the census—that led us to step back and say there is something wrong with the design and we need to rethink the way we take the census. And that is what led to the recommendations for address list development,

better public outreach, and streamlining field operations, as we have been discussing.

Mr. BLAGOJEVICH. So then in closing, your statement is essentially that without sampling the best we can hope for is to replicate what was done in 1990, which you have stated in your 1992 report required fundamental changes? That is an accurate statement? And that it is likely that we could actually have a worse result in 2000 without sampling than in 1990? Am I fair in stating that?

Mr. STEVENS. No, I don't think we make that prediction that it will be worse because the implementation of the traditional design can be improved. Some improvements have taken place. I think if we had to lay odds, we would be pessimistic. But we cannot assure you that that would be the outcome.

Mr. MILLER. I just want to clarify one thing and then we will move on to the next panel.

If we use sampling and we fail, we could have a worse census?

Mr. MIHM. Yes, sir.

Mr. MILLER. Thank you.

Mr. MIHM. All of this turns, sir, on the effective implementation of sampling as to whether or not we get a better census.

Mr. MILLER. It is much more complex to implement sampling than non-sampling.

Gentlemen, thank you very much.

We will take a short recess while the next panel comes.

We ask unanimous consent that we keep the record open to submit questions for the record and witnesses may submit written answers as soon as practical.

Without objection, so ordered.

[Recess.]

Mr. MILLER. We will go ahead with the next panel.

[Witnesses sworn.]

Mr. MILLER. Thank you, please be seated.

On behalf of the subcommittee, we welcome you today. Mr. Holmes, I understand you have an opening statement.

Mr. HOLMES. Yes, Mr. Chairman, I have a very short opening statement that I would like to read.

STATEMENT OF JAMES F. HOLMES, ACTING DIRECTOR, U.S. BUREAU OF THE CENSUS, ACCOMPANIED BY JOHN H. THOMPSON, ASSOCIATE DIRECTOR FOR THE DECENNIAL CENSUS, U.S. BUREAU OF THE CENSUS; AND PAULA J. SCHNEIDER, PRINCIPAL ASSOCIATE DIRECTOR FOR PROGRAMS, U.S. BUREAU OF THE CENSUS

Mr. HOLMES. Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify at today's hearing, the inaugural hearing of the new Subcommittee on the Census. As Mr. Chairman mentioned, I am accompanied by Paula Schneider, who is the principal Associate Director for Programs, and by John Thompson, who is the Associate Director for Decennial Census. We welcome the new subcommittee and we are pleased that you and your staff have pledged to take a very active role in the oversight of not only the 2000 census but all the other important programs the Census Bureau undertakes.

Because the planning process for census 2000 has been and will continue to be the most open and inclusive in history, we value close working relationships with our oversight and appropriations committees in the Congress. The hearing and the additional hearings which I am told will be planned in the future will further the process of having an open and honest dialog on census 2000. As an organization and from a personal perspective, I appreciate that very much.

There has been much attention over the last year or so on the disagreement over how to take the census. I hope that we will not lose sight of the fact that there is an awful lot we do agree on. We all agree that the most important part of the census is that we come out of the process with the most accurate enumeration as possible. It is how to account for those portions of the population that are not tuned in to the process, who do not care to be counted, that we are all struggling with.

On a personal note, I have served in the trenches for the last three decades working on censuses as a survey statistician as well as a regional manager. I was most recently the regional director of our Atlanta region. Based on my experience, I can say without hesitation that traditional census methods alone will not eliminate the undercount in 2000. It doesn't matter how much money you throw at the problem. The way we have been taking censuses must be updated.

That is why I fully support the plan which includes scientific sampling as the most cost-effective way to address the problems that we are facing, and most importantly, to achieve the most accurate count.

The Census Bureau has an extremely dedicated and talented staff of hard-working individuals. I believe we are on target to have the best census possible. We have been and will continue to be responsive to the concerns and suggestions by the many review entities. I am confident that we are all up to the challenge of handling the complexities that are inherent with every phase of the census.

However, I must caution that by this time next year the train for census 2000 has to be on one track. If the uncertainty continues, if our staff continues to have to do two jobs, this great enterprise will truly be imperiled.

Mr. Chairman, as the name implies—and I tend to have a little bit of a different viewpoint than you, Mr. Chairman, as well as the GAO in terms of why we do a dress rehearsal and what dress rehearsals are all about. A dress rehearsal is designed to work out the kinks in the census plan with the full expectation that there will be kinks. I view the dress rehearsal, again, a little bit differently than some other people, but as a census in miniature.

While we have tested certain parts of the plan, the dress rehearsal will be our first opportunity to see how well the individual pieces fit together. The dress rehearsal will be a success if it provides us information about not only what works well, but what things need to be fixed and what things did not work well at all.

The success or failure should not be judged on how well a particular operation or operations are performed, but more importantly, what did we learn from the process. That is the function of

the dress rehearsal. That is the function dress rehearsals have always served.

The need to plan the two census designs is an added complication, but our plans for the dress rehearsal are fully responsive to last fall's compromise. And while this is no small task, we believe that we are equipped to handle the extra burden.

The three sites in the dress rehearsal provide a comprehensive environment for demonstrating the refined plan for census 2000 both from an operational standpoint as well as other activities. They reflect characteristics that will provide a good operational demonstration for census 2000 procedures and systems.

Even though we started the dress rehearsal 2 weeks late due to receiving late funding last fall, we still plan to issue all results by December 31st of this year. We plan to issue the report card on the standards for each site and for the dress rehearsal operations by January 31, 1999, to assist in validating and finalizing the census 2000 plan.

Dress rehearsal operations are consistent with the compromise reached last fall to pursue a dual track. The Census Bureau will use its full plan, including statistical sampling and estimation, to arrive at the totals in Sacramento and the Menominee Reservation. The official totals for South Carolina will not include such sampling and estimation procedures. In South Carolina, we will include some procedural enhancements, including increased partnership activities, increased quality assurance, increased marketing and promotion activities, as well as looking very closely at work force considerations and our ability to not only attract but retain a large work force that we obviously will need in 2000.

Mr. Chairman, this concludes my oral statement. In my written statement, which was submitted for the record, I have discussed more details about the dress rehearsal scheduled operations and evaluations. At this point, we will be very pleased to answer any questions that you or other members of the subcommittee might have.

[The prepared statement of Mr. Holmes follows:]

PREPARED STATEMENT OF

JAMES F. HOLMES

ACTING DIRECTOR, U.S. BUREAU OF THE CENSUS

Before the Subcommittee on the Census

Committee on Government Reform and Oversight

U.S. House of Representatives

March 26, 1998

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to testify at today's hearing, the inaugural hearing of the new Subcommittee on the Census. I am accompanied by Paula Schneider, Principal Associate Director for Programs and by John Thompson, Associate Director for Decennial Census. We welcome the new subcommittee and we are pleased that you and your staff have pledged an active role in providing oversight to both Census 2000 and all the other important activities the Census Bureau undertakes. Much has occurred in the 21 months since the Census Bureau was last invited to testify. One important development has been the start of our Dress Rehearsal for Census 2000 and that is what I will talk about today.

Because the planning process for Census 2000 has been and will continue to be the most open and inclusive in history, we value close working relationships with our oversight and appropriations committees in the Congress. The plan for Census 2000 is based on extensive consultation and advice and stems from congressional direction to seek alternative methods for increasing census accuracy and reducing costs. Congress passed the Decennial Census Improvement Act of 1991, which required the National Academy of Sciences to study the means of achieving the most accurate population count possible, including the use of sampling methods in combination with basic data-collection techniques.

Since 1990, the Academy's Committee on National Statistics has established three separate panels to study how to improve the next decennial census. These are the Panel on Census Requirements in the Year 2000 and Beyond, the Panel to Evaluate Alternative Census Methods, and the Panel to Evaluate Alternative Census Methodologies.

In addition to the three Academy panels, the Census Bureau has sought advice and guidance from the Congress, the 2000 Census Advisory Committee, the Census Advisory Committee of

Professional Associations, and four advisory committees representing particular racial and ethnic populations, as well as at public meetings, in numerous hearings, through responses to congressional letters, and in briefings of congressional staff. Since the inception of the 2000 Census Advisory Committee, the Chairman and ranking member of the House and Senate authorizing and appropriations committees and subcommittees have served as *ex officio* members of the Committee.

This hearing and the additional hearings I understand you plan to hold will further the process of having an open and honest dialogue on Census 2000, and we are very appreciative of that.

There has been so much attention over the last year or so on the disagreements over how to take the census that I hope we will not lose sight of the fact that there is much we do agree on. We all agree on the importance of the census and on the importance of having as accurate an enumeration as possible. Specifically, many of the improvements we plan for Census 2000, such as ensuring all residents in the United States have full opportunity to include themselves in the census, having the best address list possible, and working closely with the U.S. Postal Service are congressional directives that the Census Bureau applauds and has eagerly accepted.

It's how to account for those who are not tuned in to the process, who do not care to be counted, that we are all struggling with. On a personal note, I have served in the trenches for the last three decennial censuses both as a survey statistician and a regional manager. I was most recently Regional Director in our Atlanta region. Based on my experience, I can say that traditional census methods alone will not eliminate the undercount in 2000. It doesn't matter how much money you throw at the problem; the way we have been taking the census must be updated. That is why I fully support our plan to include scientific sampling as a cost-effective way of addressing the problem and achieving an accurate census.

Before I move on to discuss the Dress Rehearsal, I want to say that the Census Bureau has an extremely dedicated, talented, and hard working staff. I believe we are on target to have the best census ever. We have been and will continue to be responsive to the concerns and suggestions of our many review entities, and I am confident that we are up to the challenge of handling the complexities that are inherent to every phase of the census. However, I must caution that by this time next year, the train to Census 2000 has to be on one track. If the uncertainty continues, if our staff continues to have to do two jobs, then this great enterprise will truly be imperiled.

DRESS REHEARSAL

Purpose and Goals

Mr. Chairman, as the name implies, the Dress Rehearsal is designed to work out the kinks in the census plan with the full expectation there will be kinks. I view the Dress Rehearsal as a census in miniature. While we have tested certain parts of the plan, the Dress Rehearsal is our first opportunity to see how well all of the pieces fit together. The Dress Rehearsal will be a success

if it provides us with information about what worked well and what didn't and how to fix those things that didn't work well. It's success or failure should not be judged on how well a particular operation or operations are performed but on what we learn from that. That is the function our Dress Rehearsals have always served, and I understand that we've had them going back at least to the 1930's. Since we all agree that the decennial census is the largest peacetime activity our country conducts, it just doesn't make sense to take a $4 billion census without walking through the plan to see if modifications are required.

The need to plan for two census designs is an added complication but our plans for the Dress Rehearsal are fully responsive to last fall's compromise and, while this is no small task, I believe we are equipped to handle the extra burden this year.

The three sites in the Dress Rehearsal provide a comprehensive environment for demonstrating and refining planned Census 2000 operations and activities. They reflect characteristics that will provide a good operational demonstration of Census 2000 procedures and systems.

- Our large urban site is the city of Sacramento, California.
- The small city/suburban/rural site consists of 11 counties in an area near and including Columbia, South Carolina.
- Our American Indian Reservation site is the Menominee American Indian Reservation, which is basically contiguous with Menominee County, Wisconsin.

Schedule

As you are aware, due to the delays in receiving funding last fall, we had to postpone the Dress Rehearsal Census Day from April 4 to April 18. We also had delays in starting work under the paid advertising contract, in purchasing equipment for testing our data processing system, and in the printing of our questionnaires. The impasse also set back work on address list development for Census 2000 as well as the hiring of partnership specialists and production of supporting materials. However, all preparatory activities for the Dress Rehearsal--mapping, address listing, local update of addresses, opening and staffing offices, and printing questionnaires--have been completed.

Questionnaires are being hand delivered now to households by enumerators in the parts of the South Carolina site that do not have city-style addresses and on the Menominee Reservation. This operation began in mid-March and will continue until just before Census Day.

In Sacramento and the areas of the South Carolina site with city-style addresses, questionnaires will be delivered in the next week, about 2 ½ weeks before Census Day. A second mailing of questionnaires will go out about April 15 in the areas with city-style addresses and "Be Counted"

forms will be available in all three sites a day after that. By May 14, we expect to begin following up in all three sites on those households that do not return a questionnaire.

Even though we started the Dress Rehearsal 2 weeks late, we still plan to issue the results by December 31, 1998. We plan to issue the "report card" on the standards for each site and for Dress Rehearsal operations by January 31, 1999, to assist in validating and finalizing the Census 2000 plan.

Special Procedures for the South Carolina Site

Dress Rehearsal operations will be consistent with the compromise reached last fall and will pursue a "dual track." The Census Bureau will use its full plan, including statistical sampling and estimation, to arrive at the totals for Sacramento and the Menominee Reservation. The totals for the South Carolina site will not include such sampling and estimation procedures.

In South Carolina, we will include some procedural enhancements, including increased partnership activities, increased quality assurance, and increased marketing and promotion activities, as well as looking closely at workforce considerations and our ability to attract and retain a large staff for Census 2000.

Major features of the South Carolina site will include:

- 100-percent follow-up of nonresponding housing units and 8 weeks to complete the operation, instead of 6 in Sacramento, where we will use sampling to complete the follow-up of nonresponding units. (In the Menominee Reservation site, we will also conduct a 100-percent follow-up, because our plan for 2000 calls for 100-percent follow-up on all American Indian reservations and Alaska Native village statistical areas, as well as in the Virgin Islands and the Pacific Island areas. Here, we will allow only 6 weeks for nonresponse follow-up due to the small size of the site.)

- 100-percent follow-up of all addresses for which the USPS could not deliver a questionnaire because the housing units were believed to be vacant. This compares to following up a sample of 30 percent of these vacant addresses in Sacramento. This is an important quality check because experience has shown that some addresses the mail carriers designate as vacant are in fact occupied.

- To improve quality, we will increase the number of field supervisory staff so they can conduct more checks on the enumerators' work. In South Carolina, each crew leader will have two assistants to help conduct these quality checks, as opposed to one assistant each in the other sites.

- We have added an additional partnership specialist in South Carolina, so we will have two there, compared to one in Sacramento and one person on the Menominee Reservation handling both partnerships and operational activities. We have innovative and aggressive outreach and promotion programs--working with local and tribal governments, local media, community organizations, religious organizations, the private sector and others--in all our sites, and we have shared these plans with your staff.

- We will expand the scope of the paid advertising services, intensify media efforts, and expand the use of targeted, nontraditional paid advertising during the follow-up operation.

- We will extend the duration of the Be Counted program from 2 weeks to 4 weeks in South Carolina, and it will end about the time the nonresponse follow-up field work begins.

- Finally, there will be a follow-up survey to determine how well we counted the population, including estimates of undercounting and overcounting for various segments of the population. However, the results of this survey will not be used to improve the results of the initial enumeration for the official counts.

Evaluations

The Dress Rehearsal evaluation program has been designed to accomplish several major objectives, including: 1) operationally demonstrating field and office procedures and systems, 2) demonstrating the integration of methods, procedures, and systems in a "real-life" census environment, 3) validating the plan for Census 2000, 4) providing information about the coverage of persons and housing units and the completeness and quality of the data collected, and 5) testing components of a nonsample census.

The components of the evaluation program include a Mid-Term Status Report, which will include reports on the cost, timing, and completion rates of Dress Rehearsal activities at different points in time; Quality Assurance Checkpoints, which will be used to monitor Dress Rehearsal processes and to signal when extra efforts are needed to ensure the process continues to operate as planned; and the Evaluations, which will provide information on how good the census results are in terms of statistical and other measures of quality.

The evaluations will cover questionnaire and mail-out issues, the Master Address File, coverage measurement, coverage improvement operations, promotion and partnership, resolving multiple responses, the nonresponse follow-up operation, the field infrastructure, and technology.

For Census 2000, we have suspended development of the second mailing or the replacement questionnaire because concerns have been raised about the potential negative effects of the blanket mailing. First, there is concern that an adverse public reaction to receiving a second form could actually lower mail response. Second, a blanket mailing increases the possibility that we would receive numerous duplicate forms, thereby overloading our unduplication system. We plan to conduct the blanket mailing strategy during the Dress Rehearsal to assess the extent of potential positive or negative effects.

During the Dress Rehearsal, we will conduct a number of evaluations designed to improve our rules for detecting and dealing with duplicate enumerations. Duplications have occurred in all past censuses, even when we tightly controlled the distribution of questionnaires, and we realize that we have an even bigger challenge this time because we are committed to "bringing the census to the people." We must keep in mind the results of 1990, when multiple opportunities to respond to the census were not available and we controlled questionnaires so tightly that if a person did not receive a questionnaire in the mail, they had to wait several weeks for a personal visit from an enumerator. That is unacceptable, especially when we are bombarding people with messages about how important it is to be counted.

Lessons Learned--Local Update of Census Addresses

The Census Bureau has encountered some problems in its development of the address list and in its delivery of related maps for the Dress Rehearsal. Most of these problems were due to two factors:

First, schedule compression resulting from the continuing resolution at the beginning of the fiscal year delayed many address list development activities. This resulted in late delivery of some maps and address list-related products, including some materials needed by locally designated officials who checked the address list during the Local Update of Census Addresses or LUCA program. Some local participants were dissatisfied with this process, particularly those in the South Carolina site where many localities have a complex mix of address types and mail delivery situations.

Second, the newness of the complex automated systems we have been developing to improve our address list development process required more review and repair time than we anticipated. This has frustrated both our field staff and our local partners.

As a result of these problems, we gained valuable experience and information that have allowed us to improve our software and processing systems. Further, we are simplifying and improving many aspects of the address list review process in response to comments from our local partners. Although we face many new challenges for Census 2000, including first-time use of a more decentralized map production system and much larger production volumes for all products, the Dress Rehearsal has been invaluable in preparing us to meet these.

In addition, last summer the Census Bureau determined that it needed to improve the planned address list development process. We did this by adding a 100-percent field verification activity in areas with mostly city-style addresses. This change was needed to ensure address list completeness and quality. The timing of this finding was too late to allow the Census Bureau to add this new procedure to the Dress Rehearsal without seriously compromising many other scheduled activities. We will be able to see how this lack of verification affected the completeness of the Dress Rehearsal census later this year when evaluation studies are available.

OTHER DEVELOPMENTS FOR CENSUS 2000

That concludes my remarks about the Dress Rehearsal, but I want to briefly mention several recent developments related to Census 2000:

- First, in January we awarded the Data Capture Services Contract, valued at about $187 million to TRW, Inc. This contract is for designing and building centers to house the Data Capture System (DCS) 2000 imaging equipment, equipping the centers with office equipment and supplies, and hiring, training, and managing about 6,000 employees. All employees handling census questionnaires will be required to maintain the confidentiality of the forms and will be subject to the strong penalties in Title 13 should they fail to do so. A separate contract for DCS 2000 imaging equipment, data keying equipment, and processing systems was awarded last year to a group headed by Lockheed Martin.

- Second, by April 1, the Census Bureau will transmit to the Congress the exact questions planned for use in Census 2000. Title 13 requires that we inform the Congress of planned questionnaire subjects 3 years before the census, and we did that last year. Title 13 also requires that we inform the Congress 2 years before the census of the exact questions that we plan to ask and that is the transmittal I am referring to.

- Third, in mid-February we invited elected officials in over 39,000 local and tribal jurisdictions to participate in the Local Update of Census Addresses program for Census 2000. We are processing responses now and the regional offices will follow up on those governments that do not respond to determine their interest in participating.

  For areas that do not have city-style mail delivery, we mailed maps to participating jurisdictions during February and March. The goal is to get their updates back and entered into our geographic database before we begin address listing work for these areas later this summer. The address review for areas without city-style addresses will occur in 1999 after we process the address listing results.

Beginning in April, we will mail out, on a flow basis, address listings and maps to participating jurisdictions with city-style addresses. They will have three months, once they receive the listings to review them.

For the first time, under a new law the Congress passed in 1994, we will be sending local and tribal governments lists of specific addresses to review. We realize that not every jurisdiction will have the time or resources to conduct an address-by-address check. For those that don't, we are encouraging them to target their efforts to identify potential problem areas, such as those where there has been new construction, where there may be hidden housing units, where our block totals disagree with theirs, or where there have been boundary changes.

- Fourth, we discussed our FY 1999 budget request yesterday at a hearing before the House Subcommittee on Commerce, Justice, State, the Judiciary, and Related Agencies. FY 1999 is the last year of preparation before actual data collection begins, and our preparatory activities will be extensive. They will include completing evaluations for the Dress Rehearsal, continuing to develop an accurate address list, printing questionnaires and other related forms, purchasing the automation and telecommunications infrastructure, completing software development and testing, and intensifying partnership efforts. So as you can see, getting full FY 1999 funding is crucial.

In closing, let me emphasize that while the decennial census is our top priority, work continues on all the other important programs for which the Census Bureau is responsible, including the 1997 Economic Censuses, the continuous measurement program, 13 principal economic indicators, monthly trade data, and scores of current demographic and economic surveys. In this regard, I note that authority for one of our priority current programs, the Quarterly Financial Report (QFR) program, will expire this September 30. We will submit legislation to reauthorize this program in the near future and we invite your early and favorable consideration of it. The QFR program provides a widely-used and closely-watched principal economic indicator--corporate profits. The program is a model in making changes that reduce reporting burden for participating businesses, but particularly small businesses. I welcome the opportunity to discuss this and any of our other programs with you and this Subcommittee as your schedule allows.

Mr. Chairman, that concludes my testimony. I will be pleased to answer any questions.

Mr. MILLER. Thank you, Mr. Holmes.

Let me clarify one thing about the issue of what you learn from a dress rehearsal.

Is it an accurate statement to say that the dress rehearsal will tell you more what you will not be successful with than what you will be successful with?

Mr. HOLMES. That remains to be seen, Mr. Chairman.

Mr. MILLER. For example, the hiring of people, enough people. If you are successful this time, it doesn't guarantee you will be successful nationwide in 2000. Is that correct?

Mr. HOLMES. No. As I said, it is a census in miniature.

Mr. MILLER. But if you fail, it's a real problem.

Mr. HOLMES. That is not necessarily the case. It is important that you learn from the dress rehearsal as an example. Most people assume that dress rehearsals are something we just started doing. We have been doing dress rehearsals since 1930. And every dress rehearsal was intended to provide—it is like a classroom. It provides an opportunity for us to learn.

Mr. MILLER. I agree with that. But just because it works doesn't mean it is guaranteed to be successful nationwide.

Mr. HOLMES. Absolutely not.

Mr. MILLER. Thank you.

For the dress rehearsal, the Bureau plans on using statistical sampling at the Sacramento site and traditional methods in the Columbia site. Is that correct?

Mr. HOLMES. That is correct.

Mr. MILLER. Besides the differences in methodologies you plan to use, these two sites have very different demographic and geographic characteristics, correct?

Mr. HOLMES. That is correct.

Mr. MILLER. Some examples of the differences include one being primarily urban and the other primarily rural. The Sacramento site only includes the city of Sacramento and not the surrounding suburban and rural areas, whereas, the Columbia site includes the city of Columbia along with the surrounding suburbs and rural areas, correct?

Mr. HOLMES. Yes, sir.

Mr. MILLER. The racial and ethnic patterns are different. Sacramento contains great diversity among the racial and ethnic groups, including about 55,000 persons each of African-American, Asian, and Hispanic ethnic groups as well as about 4,000 Native Americans while Columbia contains a large number of African-Americans but not a large number Asians and Hispanics. Is that correct?

Mr. HOLMES. That is correct.

Mr. MILLER. Sacramento contains only city-style addresses with house numbers and street names while Columbia will provide the Bureau with an opportunity to test non-city-style addresses in hard-to-count rural areas. Is that correct?

Mr. HOLMES. That is correct?

Mr. MILLER. The labor markets are different, correct?

Mr. HOLMES. Yes, sir, they are.

Mr. MILLER. The numbers of local jurisdictions are vastly different?

Mr. HOLMES. Yes, sir.

Mr. MILLER. The political and social climates are different?

Mr. HOLMES. Yes, sir.

Mr. MILLER. The income levels are different?

Mr. HOLMES. Yes, sir, they are.

Mr. MILLER. The economies are different?

Mr. HOLMES. Yes, sir.

Mr. MILLER. So the Columbia and Sacramento sites were chosen because of their differences, and not because of their similarities?

Mr. HOLMES. You are correct.

Mr. MILLER. As the two sites are not directly comparable, then Sacramento using sampling and Columbia using the traditional method are not a scientific head-to-head contest between the two methods?

Mr. HOLMES. That is correct.

Mr. MILLER. So if the Bureau wanted to perform a true scientific test between the two methods, you would use both methods side by side at each test site using comparable census tracts?

Mr. HOLMES. Yes, sir. If time would permit it, I am sure that is exactly what we would have done.

Mr. MILLER. Then a true scientific comparison is not possible in the census context with these two dress rehearsals?

Mr. HOLMES. Not in terms of comparing one site against the other. But there are things that we can learn from Sacramento and there are specific things we expect and can and will learn from South Carolina.

Mr. MILLER. Last November the Bureau announced that it would be changing the procedures it is using on the Columbia dress rehearsal site to comply with a legal requirement to prepare for a census that does not use sampling or statistical adjustment, correct?

Mr. HOLMES. Yes, sir.

Mr. MILLER. Isn't it true that a census that does not use sampling or statistical adjustment requires different levels and types of preparation from a sample census?

Mr. HOLMES. Repeat the question, please?

Mr. MILLER. Isn't it true that a census that does not use sampling or adjustment requires different levels and types of preparation from a sample census?

Mr. HOLMES. Yes, sir.

Mr. MILLER. When did you originally start planning for Columbia and the other two sites?

Mr. HOLMES. If I am not mistaken, 1995 was the time period when we started to prepare for those.

Mr. MILLER. When did you start planning for the implementation of a full-scale enumeration in Columbia, South Carolina?

Mr. HOLMES. At the time of the negotiated settlement in November of last year.

Mr. MILLER. And if you had more time to prepare for a full-scale enumeration in Columbia, you might have designed and tested different procedures?

Mr. HOLMES. Yes, sir, that is a fair statement.

Mr. MILLER. For example, you might have tested some different non-response followup procedures if there had been more planning time?

Mr. HOLMES. I am not sure that I understand what you mean by different non-response followup.

Mr. MILLER. Different ideas or different methodologies or procedures. You could have designed more options in the test than you have right now because of the late time you started with full enumeration.

Mr. HOLMES. Yes, sir, in terms of more options. But non-response—especially in a traditional census environment—you go after everybody that didn't respond. I am not sure what variations of that we could use. That is why I asked the question.

Mr. MILLER. Is the post-enumeration survey being taken in Columbia the same size as the ICM survey you originally planned for Columbia prior to implementing a full-scale enumeration?

Mr. HOLMES. Yes, it is my understanding that it is.

Mr. MILLER. Then if you have used those resources from the large ICM sample survey, you should have implemented in Columbia and applied them to improve other programs such as outreach and non-response followup?

Mr. HOLMES. Would you repeat your question, sir? Again, I am not sure I got it correct.

Mr. MILLER. Then you could have used those resources from the large ICM sample survey you would have implemented in Columbia and applied them to improve their other programs such as outreach and non-response?

Mr. HOLMES. Unfortunately, sir, that is not a money issue. That is a timing issue. So the answer to that question is no.

Mr. MILLER. Thank you.

Mrs. Maloney.

Mrs. MALONEY. Thank you.

First of all, I would like to welcome Mr. Holmes. I am very glad to see you again. I would like to publicly thank you for coming to Washington, DC, and answering the call of Government to come in and serve as the acting director while the Bureau looks for a permanent director. It is people like you, the career civil servants, who are really the backbone behind getting an accurate and fair census. I thank you for all your hard work and for coming to Washington, DC, for what is a very difficult task.

There has been a lot of talk about the lack of funding or underfunding for the Census Bureau. I would like to know what activities for developing the master address file were affected by the cut in your fiscal year 1997 funding?

Mr. HOLMES. I would like to defer that question to Mr. Thompson, since I was not here during that time period.

Mr. THOMPSON. The effect of the 1997 reductions in funding were primarily in the area of restricting our ability to increase our local partnership programs. We also took a slight reduction in our ability to do some clerical matching on address list development.

This carried over into fiscal year 1998, in that we did not have the local partnership effort and were not able to buildupon it, as rapidly as we would have liked so that we were not then able to institute our address list re-engineering program of accelerating

our review by local officials. We needed these local people to deal with the local officials. We delayed that.

Mrs. MALONEY. What activities, Mr. Holmes, for promotion and outreach were not undertaken because of the cuts to your budget for fiscal year 1997, and what effect did they have on the dress rehearsal?

Mr. HOLMES. I think probably first and foremost, as was mentioned in the earlier panel, there was a slight delay in the award of a contract for the publicity campaign. The products that were to be developed by the company to support the activities—those were delayed. Whether it is creative work, whether it is associated with the ads, whether it is associated with conducting focus groups and research to get some sense of what the best message should be, how should we deal with certain communities or certain groups within the dress rehearsal area—those were slowed down.

So we ended up in a time crunch because the length of time that was available had not changed. But the amount of work that still had to be done was still there. And the fact that we slipped the census dress rehearsal date by 2 weeks really did not give the ad company much of a cushion.

Mrs. MALONEY. What effect did the delay in fiscal year 1998 funding have on promotion and outreach for the dress rehearsal? Just the 2-week delay? Or was there more effect on the dress rehearsal?

Mr. HOLMES. As a matter of fact, the answer I just gave was directly related to the dress rehearsal piece. Plus as John Thompson mentioned, it also had an impact on the staffing for outreach and that partnership staff. We ended up not hiring as many people as quickly as we had originally planned.

Mrs. MALONEY. Mr. Holmes, we have heard that one of the reasons certain Members oppose the use of statistical sampling—and I have heard this argument on the floor and other places—is out of fear of political fraud and/or manipulation.

Isn't it political fraud and manipulation to forego sampling knowing that there is an undercount?

Mr. HOLMES. I would like to respond to that a little bit differently.

As a career employee of 30 years, I think it is important that we look at the traditional census-taking methods. As an example, in the region that I just left, Atlanta, we had some 4 million households to followup on in 1990. That in itself equals the total number of people who were missed in terms of net in the census.

Now, when you think about that there seems to be more than opportunities to decide in that environment where to send people and what communities to followup on than in using statistical sampling because that is a pure process. There is no human intervention there. So I think those are little things that people probably need to weigh in to on this discussion.

Mrs. MALONEY. But isn't it manipulating the numbers if you knowingly choose a certain way of doing the census that will produce lower numbers of minorities, urban dwellers, children, and renters such as the studies have shown us?

Mr. HOLMES. The main focus we are concerned about is doing a census that produces the most accurate result at the lowest cost.

That is why we continuously say day in and day out that a census with sampling provides the best opportunity to do that.

Mrs. MALONEY. To followup, some people have suggested that if we just spend more time and money doing the traditional census methods that resulted in the undercount of 1990, we will solve all the undercount and overcount problems. Is there any evidence that supports or refutes that statement?

Mr. HOLMES. The responses from the scientific community as well as from experts at the Census Bureau and from my own personal experience, the answer to that question is no. No amount of money will solve that problem.

Mrs. MALONEY. My time is up, Mr. Holmes.

Mr. MILLER. I would just like to note for the record that the GAO's prior testimony was that the Continuing Resolution did not have a significant impact on the Bureau's activities.

Mrs. MALONEY. As a point of information, Mr. Chairman, I sat through this hearing and what I heard from GAO was that they didn't look at this problem, that they didn't look at what impact the funding had on the results. That was the statement that they made both to Mr. Waxman and to myself and to you.

Mr. MILLER. Mr. Davis did go through a very long list of questions about that and the answer was that it did not have an impact on it. That was a very long list of questions that was asked by Mr. Davis.

Mrs. MALONEY. Well, we also asked him to go back and do a study on what the lack of funding, late funding, under-funding had on the Census Bureau in doing their job. I look forward to having their report back. They stated that they did not look at it.

Mr. MILLER. Mr. Blagojevich.

Mr. BLAGOJEVICH. Mr. Holmes, Congress' inability to make a decision regarding the statistical method has created, I would imagine, some uncertainty at the Census Bureau. Could you elaborate on whether or not there is a feeling of uncertainty and whether or not that is having an impact on your employees?

Mr. HOLMES. Yes, sir. That uncertainty has had an impact. And it would be unfair to suggest otherwise. I can't give you a quantitative measure of that, but it is safe to say that the staff would obviously be less concerned if we were focusing on a single plan as opposed to two plans. But by the same token, we are prepared to deal with the dual track.

In terms of actually being able to get moving on the ultimate objective here—which is to do a fair and accurate count of all the people in the United States—with this uncertainty in your own Bureau, can you elaborate just a little bit more what impact if any you are seeing with regard to that uncertainty, questions or morale and so forth, and whether or not that is hurting the ultimate objective to do a fair and accurate count?

Mr. HOLMES. I have not observed anything from a morale standpoint because, as I said earlier, most of the employees I have met at the Census Bureau are interested in doing one thing: a good job. The Census Bureau is interested in producing a census that is fair and is accurate and that is also the most cost-effective we can produce.

Again, it would obviously be less stressful for everyone if we only had to focus on one plan. But to be honest, that is not the environment in which we are operating. And we cannot spend a lot of time worrying about that. We have to deal with the job that is at hand, which is focusing on two tracks until a decision is made.

Mr. BLAGOJEVICH. Mr. Holmes, I wonder if we can talk a little bit about the Milwaukee example. One of the only suggestions we have heard—which is a slight alternative to the 1990 experience but is not the 2000 plan—is this Milwaukee example. In that Milwaukee example, great efforts were expended, time and cost by local governments to increase the mail return rate. Is it not the case that with all that expenditures they were only able to raise the level of response by 2 percentage points above the national average?

Mr. HOLMES. That is my understanding, sir.

Mr. BLAGOJEVICH. Is it not also the case that the undercount in Milwaukee was nearly four times the undercount in the entire State of Wisconsin?

Mr. HOLMES. That is also my understanding.

Mr. BLAGOJEVICH. So what are your plans for evaluating the promotion and outreach campaign following the dress rehearsal?

Mr. HOLMES. We do have evaluation plans in place not only for the outreach and promotion piece but also some of the other operational aspects of the dress rehearsal. One of the things that I found interesting in the earlier panel was that there was criticism associated with the Bureau's evaluation plans for dress rehearsal as well as for census 2000. If you take those criticisms on their face, it seems to make sense. But I think it is important to understand that up until November of last year the staff only had to worry about developing evaluation programs based on one plan. But now we have to look at two.

That also suggests that you have to split resources. That is one of the things that I think has had a profound impact on—not to suggest that we are not going to do evaluations, because we are—but I think that has a lot to do with where the evaluations are now as opposed to where they would have been had we not to deal with that particular issue.

Mr. BLAGOJEVICH. Mr. Holmes, if Congress is unable to resolve the question of statistical methods, what do you foresee happening in this particular census and beyond?

Mr. HOLMES. Repeat your question again, sir?

Mr. BLAGOJEVICH. If we here in Congress are unable to ultimately resolve this question of statistical methods, what do you foresee could happen with this particular census coming and beyond the census?

Mr. HOLMES. I guess our position is that we will do a census of some sort in 2000. But our hope and our prayer is that we are allowed to do the census that will provide fairness to this country, the best coverage, the most accurate, and which costs the taxpayers the least amount of money.

Mr. BLAGOJEVICH. And if the statistical method is not a part of that particular method, what do you think will happen with regard to the census?

Mr. HOLMES. We will have a census that is either less accurate or at least no more accurate than the one we had in 1990.

Mr. BLAGOJEVICH. Thank you.

Mr. MILLER. Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you very much, Mr. Chairman.

Mr. Holmes, let me also add my welcome to you and express my appreciation for the assistance you have given to me personally in briefings and also your appearance before the Congressional Black Caucus to discuss with the group.

Let me ask, is it true that the Bureau has established a number of advisory panels?

Mr. HOLMES. Yes, sir.

Mr. DAVIS OF ILLINOIS. Could you tell me how many?

Mr. HOLMES. We have a professional advisory group that is composed of marketing, the American Statistical Association, and others. We also have the Secretary of Commerce's advisory committee. We have racial and ethnic minority advisory committees. There are at least three that I can think of. And CNSTAT——

Mr. DAVIS OF ILLINOIS. What is the role and function of these committees?

Mr. HOLMES. They are to provide guidance. They are supposed to provide insights to the Census Bureau and the Department on a variety of issues that are associated with the things we do day in and day out. Whether it is the decennial census, whether it is associated with current surveys we are conducting, whether it is associated with data products we are producing—a variety of issues.

Mr. DAVIS OF ILLINOIS. Have they given any advice on the possible use of statistical estimation?

Mr. HOLMES. It is my understanding, Mr. Davis, that they have endorsed the use of sampling as part of the census 2000.

Mr. DAVIS OF ILLINOIS. Are there professional individuals associated with these panels, or are they just people that you pick up off the street? [Laughter.]

Mr. HOLMES. They are professionals.

Mr. DAVIS OF ILLINOIS. So they are individuals who have actually studied the issues, understand them, and understand the processes, and all that?

Mr. HOLMES. Yes, sir.

Mr. DAVIS OF ILLINOIS. Are there any other countries that use statistical estimation in their census-taking?

Mr. HOLMES. I think so, but this is a question I would like to refer to Ms. Schneider.

Ms. SCHNEIDER. Censuses in other countries are done quite differently from the United States, especially in Northern Europe. For instance, there many countries have what is a population register, which of course we do not have in this country. Therefore, they use the register to do the functions that we use for the census. They use sample surveys to supplement and check on their register. So it is a very different process.

The Canadians, the British, and the Australians use sampling in conjunction with a process that improves the intercensal estimates of the population. They take the results of the census and use sta-

tistical methods to improve the results of the population, intercensal estimates as an integrated program.

But there really is no other country that uses exactly the same methodology that the United States uses.

Mr. DAVIS OF ILLINOIS. Are there any other areas of information-gathering that we use sampling as a part of?

Ms. SCHNEIDER. I would say nearly all our activities in the statistical community in the Federal Government use sampling. Our agricultural census uses sampling to improve quality and reduce cost. Our economic census likewise. All the surveys—the unemployment rate that is reported monthly is based on sampling and so forth.

Mr. DAVIS OF ILLINOIS. So when we get all of these quotations of this and that and something else and how many and how much and wherefore and whereas, we have used sampling in practically all of that. Is that what you are saying?

Ms. SCHNEIDER. Yes, sir.

Mr. DAVIS OF ILLINOIS. So it is nothing unusual? It is common practice. Is that pretty accurate?

Ms. SCHNEIDER. Yes, sir, that is accurate.

Mr. DAVIS OF ILLINOIS. I just wonder if it is common practice for practically everything else, why would some people not want to use it in taking the census? But that is not necessarily a question that you would have to answer.

Let me ask just one other question.

Mr. Director, could you tell us—we have talked about missing people and double counting people and all of this. What happens to people if they are missed? What difference does it make? Let's say that I live in a community where a bunch of people get missed. So what? Big deal. What happens?

Mr. HOLMES. I guess first and foremost—and I will use the tag line that is being used for the dress rehearsal promotion campaign. If you leave yourself out, it is like a blank page. What happens is that the funds that are used in that community are short-changed by the number of people that are missed. When it comes time to decide whether or not you are going to have a school or whether or not a particular company is going to relocate to that area and they start to look at the data, that data will not represent that community. In some instances, it boils down to just plain dollars.

So if people are concerned about the quality of life in their local community, they need to be part of the process. And if we don't include them, that is separate and apart from the political process of representation and voting. We are talking about the kinds of things that affect the lives of people day in and day out. That is the difference.

Mr. DAVIS OF ILLINOIS. Are you saying that there are people who would suggest that I be put at greater risk and not receive these things?

Mr. HOLMES. Yes, sir.

Mr. DAVIS OF ILLINOIS. Thank you, Mr. Chairman.

Mr. MILLER. We will begin a second round.

A followup to Mr. Davis, as a former statistics and marketing professor, sampling is used extensively and we use it in political polling and such all the time. What we are talking about here is the actual census of the population which affects the legitimacy of

every elected official in America. As the Constitution requires a full enumeration to reach that stage, trying to use that as an illustration I think is kind of a stretch. But let me proceed here.

I want to explore the dual track preparation mandated by Public Law 105–119 enacted by this Congress and signed into law on November 26, 1997. Section 209(j) mandates that "sufficient funds appropriated under this Act or under any other Act for purposes of the 2000 decennial census shall be used by the Bureau of the Census to plan, test, and become prepared to implement a 2000 decennial census, without using statistical methods."

Would you agree that this bill mandates that you should be able to take a more traditional census in 2000 if the courts, the Congress, or the administration directs you to change course away from the statistical adjustment?

Mr. HOLMES. Yes, sir.

Mr. MILLER. At this time, is the Bureau prepared to take a decennial census without the use of statistical methods?

Mr. HOLMES. No, sir.

Mr. MILLER. And about what percentage of that planning is complete at this time?

Mr. HOLMES. Unfortunately, I cannot give you that information, Mr. Chairman. I can assure you that the staff is working on a plan for that and we will have that plan in place at the decision date in January or February of next year. We will be prepared. If we have to do a traditional enumeration, we will be prepared to do so.

Mr. MILLER. But you won't be prepared until next January?

Mr. HOLMES. No, sir. I said that I do not have a time. I cannot give you a time line today. But I can assure that come February of next year we will have a full plan in place because it would be foolhardy of us not to have a plan in place if that is the ultimate decision.

Mr. MILLER. Has the planning process to conduct a full enumeration for the 2000 census been slowed by any of the dress rehearsal activities?

Mr. HOLMES. I wouldn't think so, no.

Mr. MILLER. As the acting director, can you make a promise to this Congress that the Bureau will fully comply with this law?

Mr. HOLMES. Yes, sir.

Mr. MILLER. Are you receiving any pressure from the Commerce Department to give the planning and preparation process for a full enumeration a lower priority than the planning and preparation process for the sampling and statistical method proposed by the administration?

Mr. HOLMES. No, sir.

Mr. MILLER. Regardless of which methodology the Bureau ultimately uses for the 2000 census, isn't it true that there are a number of procedures that are common to both methods?

Mr. HOLMES. That is correct.

Mr. MILLER. And among these common procedures are the building of the master address file?

Mr. HOLMES. Yes, sir.

Mr. MILLER. Local update of census addresses?

Mr. HOLMES. Yes, sir.

Mr. MILLER. The design and printing of the questionnaires?

Mr. HOLMES. Correct.

Mr. MILLER. The mail out and mail back of questionnaires?

Mr. HOLMES. Correct.

Mr. MILLER. The data capture programs and systems would be the same, correct?

Mr. HOLMES. Yes, sir.

Mr. MILLER. Would you agree that if we switched to a non-sampling census the Integrated Coverage Measurement could be converted into a post-enumeration survey perhaps at a lower magnitude and could be used to evaluate rather than adjust the count?

Mr. HOLMES. Yes, sir. But again I think it is important that we keep the goal in mind, which is to produce the most accurate and fair census at the lowest cost.

Mr. MILLER. But not a failed census?

Mr. HOLMES. Correct.

Mr. MILLER. And if you were able to convert the ICM into a PES, wouldn't you then have additional resources which you could use for other procedures?

Mr. HOLMES. That is possible, yes.

Mr. MILLER. And again, if we switch to a non-sampling census, would you agree that instead of performing non-response followup on only a portion of the households not returning their questionnaires, that followup would be performed on all non-responding households?

Mr. HOLMES. Would you repeat that again, Mr. Chairman?

Mr. MILLER. If we switched to a non-sampling census, you would agree that instead of performing non-response followup on only a portion of the households not returning the questionnaires, but the followup performed would be on all non-responding households?

Mr. HOLMES. That is correct. And obviously we would have to develop procedures for that.

Mr. MILLER. And this would increase the scope of the non-response followup program by about 30 percent?

Mr. HOLMES. That is correct.

Mr. MILLER. And that additional followup procedures and last resort procedures not in your present plan would need to be implemented?

Mr. HOLMES. Yes, sir.

Mr. MILLER. Since all these changes are not represented in the Columbia dress rehearsal site, the Columbia site is not a complete demonstration of what you would implement if statistical adjustment is not used?

Mr. HOLMES. No.

Mr. MILLER. The answer is——

Mr. HOLMES. Correct.

Mr. MILLER. Thank you.

So even with these changes, you can promise this Congress that the Bureau will be ready to change course if the decision not to use statistical adjustment is made in the first half of 1999?

Mr. HOLMES. Yes, sir.

Mr. MILLER. You are going to have a two-number census, correct?

Mr. HOLMES. No, sir. Our plan calls for a one-number census. A two-number census is associated with the non-sampling plan.

Mr. MILLER. Under public law last year, a two-number census was required, to my understanding.

Mr. HOLMES. You mean that we will provide the components for that, yes.

Mr. MILLER. So it is not going to be strictly a one-number census, as originally conceived by the Census Bureau?

Mr. HOLMES. What you are referring to is the dress rehearsal?

Mr. MILLER. No, I am talking about the 2000 census.

Mr. HOLMES. Yes.

Mr. MILLER. Yes, what?

Mr. HOLMES. The answer is yes, we will provide the components for that.

Mr. MILLER. So there will be more than just a single number, as originally conceived?

Mr. HOLMES. But one official number.

Mr. MILLER. But all the information will provide the numbers? OK.

We will proceed.

Mrs. MALONEY. Thank you.

We know that you were without full funding at the beginning of fiscal year 1998. We also know that your request for fiscal years 1997 and 1996 were fulfilled only at 80 percent. You mentioned in your testimony that it changed your original dress rehearsal time lines by 2 weeks. How has this under-funding affected the 2000 plan?

Mr. HOLMES. If we go back beyond the dress rehearsal, I would defer this to Mr. Thompson.

Mr. THOMPSON. The impact on the 2000 plan, as I mentioned—it delayed our ability to fully implement our reengineered address list proposal, which has a number of factors that I could provide later.

Mrs. MALONEY. Will you be able to accomplish the Census Bureau's goals for the dress rehearsal because of this lack of funding?

Mr. THOMPSON. We expect that we will be able to fulfill all the goals of the dress rehearsal.

Mrs. MALONEY. Mr. Thompson, you talked about the address file for 2000. Is there any reason to expect the address file for 2000 to be of lower quality than 1990?

Mr. HOLMES. No; we don't, as a matter of fact. As was mentioned in the earlier panel, the original plan we started with was one that we ended up with because of a lot of suggestions from the Congress and others which we followed through on. But it became clear that that particular product would not yield the level of quality we wanted. So we felt that it would be—to use your term—stupid to proceed ahead with that plan.

Our expectation is that the re-engineered MAF will produce a higher level of quality than the direction we were going.

It is also important to keep in mind——

Mrs. MALONEY. So we can expect it to be better?

Mr. HOLMES. Absolutely, because if nothing else, we are starting from a better base.

Mrs. MALONEY. If we solve all of the problems of the address list, staffing, outreach, promotion, and all the other factors and elimi-

nate statistical methods from the census, will there be a reduction in the undercount?

Mr. HOLMES. The experts suggest no.

Mrs. MALONEY. So we still need statistical sampling.

The locations you selected for the dress rehearsal had a relatively high turnover during the 1990 census. Do you have any experience yet to know whether there will be similar turnover problems this year?

Mr. HOLMES. It is interesting you raise that point because the turnover rates for the South Carolina area was just over 200 percent. They were in excess of 250 percent for the Menominee Reservation and just under 75 percent for Sacramento. We have been having difficulty hiring staff in the South Carolina site. As a matter of fact, as recent as about a week ago we had to raise the salary rates by $1 per hour. And we are not far enough along to see how much impact it has had on fully developing the applicant file.

Mrs. MALONEY. You mentioned the turnover in South Carolina and the Indian reservation. What was the turnover in the urban area?

Mr. HOLMES. Sacramento was just under 75 percent.

Mrs. MALONEY. GAO has raised concerns about the staffing levels. You mentioned that you are having a little bit of problems in South Carolina. Does the experience in the dress rehearsal suggest that there should be more outreach and specialists hired? If so, what will be the cost?

Mr. HOLMES. We have not done any cost estimates on that as of yet. One of the things we are concerned about is that while we can go ahead and hire additional specialists and we can do more promotion, those activities help us increase the mail return rate. There is no clear evidence that would suggest that that has a profound impact on reducing the undercount.

Mrs. MALONEY. I just want to say that we are having a very important markup in the Banking Committee and I have just gotten a note that I need to go to that committee. Thank you, Mr. Holmes.

Thank you, Mr. Chairman.

Mr. MILLER. Mr. Blagojevich.

Mr. BLAGOJEVICH. Mr. Holmes, I would like to address my question to Ms. Schneider. I would like to followup on a question that Congressman Davis asked earlier regarding using the statistical method of sampling in other areas where the Government relies on figures.

For example, Congressman Davis talked about unemployment figures. Can you give us a sense of other areas where the Government relies on the sampling method to put forth figures that we rely on, whether it be crime rate, economic indicators, and the like?

Ms. SCHNEIDER. I will focus primarily on what I know best. This is what the Census Bureau does and there are others. We do surveys either directly appropriated by Congress or a reimbursable basis for other Federal agencies. All of these surveys include the use of sampling. These results include the unemployment rate, information on crime victimization, information on consumer expenditures which goes into the consumer price index, information on the health status of the population especially the elderly population, information on education and the benefits of education to our youth

population, and so forth. It is almost an endless list. The income and poverty figures that are released annually are based on a sample survey. Nearly all the statistics of the Government are sample-based.

Mr. BLAGOJEVICH. And by and large those of us here in Congress generally accept those figures pretty much at face value. Is that fair to say?

Ms. SCHNEIDER. Yes, I believe so.

Mr. BLAGOJEVICH. And so we give 1-minute speeches or we get going on the House floor and we are on the stump and our soap boxes talking about a variety of concerns that we all have as a country and as a community. We use figures that you just elaborated on. Is that fair to say?

Ms. SCHNEIDER. I hope you use them, yes.

Mr. BLAGOJEVICH. I think it is fair to say that members of both parties rely on those figures when we get on our soap boxes. Is that fair to say?

Ms. SCHNEIDER. Yes. Something as important as the gross domestic product is based on a sample basis.

Mr. BLAGOJEVICH. I have to say, frankly, that I have heard members of Chairman Miller's party use figures on that subject from time to time and we never questioned the accuracy of those.

So there the discussion of using sampling here in the census scenario really isn't the exception in terms of how the Government does business on a lot of major indicators but rather the rule. Is that fair to say?

Ms. SCHNEIDER. Yes. You are speaking to a statistician, so of course I believe it is the rule.

Mr. BLAGOJEVICH. Thank you very much.

Mr. MILLER. Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you very much, Mr. Chairman. I just have a couple of followup questions.

Mr. Holmes, the GAO did not have any actual cost estimates in terms of what the additional costs would be if we did not use sampling. Has the Bureau developed any?

Mr. HOLMES. No, sir. The only hard figures that have been used—and we must keep these in context, they go back about a year ago—the Census Bureau said that if we replicated 1990 it would cost somewhere between approximately $600 million and $800 million more. But one of the things that we are working on as a part of that plan, to be ready come February if we have to go in a different direction, are costs associated with certain components.

Mr. DAVIS OF ILLINOIS. You said $600 million to $800 million more possible?

Mr. HOLMES. Yes, sir. That was in the context of just replicating 1990 about a year ago.

Mr. DAVIS OF ILLINOIS. That is a lot of money, especially given the fact that we talk a great deal around here about being cost-conscious and cutting different things and getting the greatest utilization out of the dollars that we spend.

We have heard a great deal about the Milwaukee experience. But we also know that the city of Milwaukee put a great deal into the effort themselves. Have we encountered any other communities

that have expressed a desire or an interest in putting that much in the way of time, energy, effort, and resources into the census-taking themselves?

Mr. HOLMES. Again, I can answer that from an anecdotal standpoint just based on my own experience in 1990. As an example, the State of Georgia, at the urging of the Governor, appropriated money and they had a State complete count committee that was very, very active that provided an enormous amount of support. The same thing happened in a number of communities across the State. The same thing happened with cities like Birmingham, AL, with the city of Miami, Orlando, Tampa—the list goes on and on. Milwaukee was not alone in that process.

Mr. DAVIS OF ILLINOIS. I know that we have talked a little bit about the difficulty of recruiting the numbers of individuals who might be needed to do the actual door-to-door, door-knocking, head count, back-and-forth in terms of the economy being strong and good and that kind of thing. But have we also given any consideration to making use of individuals who will be in transition from welfare?

It is interesting how strong the economy is, but I represent a district where sometimes we find that 20 to 30 percent of the people are unemployed, or even higher. I represent an area in the city of Chicago. After you leave downtown, I go out into what we call the west side. There is no shortage out there of individuals who could fill those temporary slots.

Mr. HOLMES. The short and the long answer to that, Mr. Davis, is yes. The Census Bureau is committed to the welfare to work program. As a matter of fact, our regional directors have met with representatives of each of the States to talk about specific plans of how we can make sure that we provide opportunities for welfare recipients.

One of the things that makes this process a little bit different than it has been in the past is that this is something that we have traditionally done, but there have always been waivers at the national level that allowed welfare recipients to work without the loss of benefits. But with a lot of the programs being moved to the States, those decisions are made at the State level. That is why we have had to have meetings at the State level in each of the States.

But again, the short and the long answer is, yes. We are committed to hiring welfare recipients not only for field work but also for the regional offices as well as for the regional census centers. That process is already underway. We have hired some number up to this point, but unfortunately I can't tell you what that is.

Mr. DAVIS OF ILLINOIS. I thank you very much and I am pleased to hear that because I think that if there are opportunities then they certainly ought to go to the needy and not the greedy. I am just pleased to know that we are looking out for that population group.

Thank you very much, Mr. Chairman. I have no further questions.

Mr. MILLER. Mr. Holmes, thank you very much for being here. I think we all agree on a common goal that we want the best census possible. My great concern is that we are going to spend $4 billion and we could have a useless product in the end. The last thing

we want to do is waste $4 billion of taxpayers' money. We want to make sure that we end up with the best results we can, but one that will stand the test of the courts and time.

Let me say that I understand the Bureau delivered to the subcommittee offices four boxes of documents that were requested. In order to give the subcommittee a chance to review these documents, I ask unanimous consent for the record to remain open for 2 weeks for Members to submit questions for the record and that these witnesses submit written answers as soon as practical.

Without objection, so ordered.

I also ask unanimous consent that all documents, exhibits, and extraneous material referred to be included in the record.

Without objection, so ordered.

[The prepared statement of Hon. Rod Blagojevich follows:]

STATEMENT OF ROD BLAGOJEVICH
Hearing of the Subcommittee on the Census
March 26, 1998

Thank you Chairman Miller:

I'm pleased to be a part of this Subcommittee on census oversight. Having the GAO and the Census Bureau here today will give us the opportunity to hear firsthand about the progress of the 2000 Census dress rehearsal.

As is always the case, this dress rehearsal will identify areas in which the Census Bureau's plan for the census is in need of improvement. Recently, we have heard a lot of rhetoric that "the sky is falling, the sky is falling." I am glad that we are holding this hearing to put that political spin to rest. I think we will learn today that the census sky is not falling.

Will this hearing today point out problems with the census dress rehearsal? Yes. That is what it is meant to do. In 1988, the Census Bureau held a 1990 decennial dress rehearsal similar to that which is about to be held next month for the 2000 decennial. The GAO reported that the value of the 1988 dress rehearsal was diminished because some of the automated data processing efforts were not fully tested at the dress rehearsal. At that time, the Census Bureau experienced delays in procuring computers that were to be used to complete the data gathering.

Similarly, during this dress rehearsal, problems must be addressed. For example, I understand that this dress rehearsal has already shown that improvements must be made to the Master Address File (MAF). In fact, many of the MAF problems stemmed from Congress insisting that the Census Bureau use local governments and the U.S. Postal Service to create the file.

In 1990, the Census Bureau sent employees out to survey each and every block in this nation and the MAF had a 97% accuracy rate. This dress rehearsal demonstrates that canvasing worked better than relying on the Postal Service. That "problem" is being fixed as we speak. Now the MAF will be created by using the successful canvasing technique of 1990.

As we review the dress rehearsal here today, and over the next few months, we must stay focused on the real issue of the 2000 Census, that of fairness.

As we look into the important details of management, computers, and data gathering, we must keep the failures of the 1990 Decennial Census in mind. In 1990, the census had more than 26 million errors.

In 1990, the Decennial Census created a large differential undercount by inadvertently omitted higher proportions of minority groups than of the majority populations. Estimates

indicate that the 1990 census missed 4.4% of blacks, 5.0% of Hispanics, and 2.3% of Asians and Pacific Islanders, and 4.5% American Indians. These omissions hurt minority populations because distribution of billions of Federal, State and local dollars ride on the data generated by the decennial census. In addition, minority populations are further hurt because census information is used by public and private planners to locate roads, schools, hospitals, parks, even McDonald's franchises.

It has been estimated that the 1990 Census missed counting 113,831 people in my home State of Illinois -- 68,315 of these in the City of Chicago alone. That means that my constituents got less road repair money and less assistance for mass transit than it should have. Because of the undercount, our police received less funds to help them fight crime and drugs, and our schools received less help than they should have.

The dress rehearsal is just one step on the road to fairness. I am pleased to have GAO and the Census Bureau here today to help explain that step. I am also looking forward to hearing from our friend and colleague, Tom Sawyer. Because Congressman Sawyer was the Subcommittee Chairman with oversight of the 1990 Decennial Census, I know he will help us to understand what we can learn from reviewing census dress rehearsals.

Thank you.

Mr. MILLER. I would also like to announce that if anyone did not receive a copy of the GAO report—apparently there were not enough copies here today—they can contact the subcommittee's office to get one.

Thank you and the subcommittee stands adjourned.

Mr. HOLMES. Thank you, sir.

[Whereupon, at 12:40 p.m., the subcommittee was adjourned, to reconvene subject to the call of the Chair.]

[Additional information submitted for the hearing record follows:]

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BERNARD SANDERS, VERMONT
INDEPENDENT

April 9, 1998

The Honorable James F. Holmes
Acting Director
Bureau of the Census
4700 Suitland Road
Suitland, MD 32256

Dear Acting Director Holmes:

Thank you for testifying at our recent hearing in which we examined the Bureau's plans for the 2000 Census. The testimony which you provided, as well as your colleagues, Mr. Thompson and Ms. Schneider, was informative and helpful to the Subcommittee's oversight of the Census.

As you may recall, during the question and answer period of your panel, you were informed that we may have additional questions to submit to you for a written response. Accordingly, I request that you provide written responses to the following questions within 20 days of the date of this correspondence.

Master Address File (MAF)

According to the March 1998 GAO report, "2000 Census: Preparations for Dress Rehearsal Leave Many Unanswered Questions," (hereafter referred to as the "GAO Report") there were several problems with the Local Update of Census Addresses (LUCA) program in the 1998 dress rehearsal. These included: lack of resources and/or lack of information to update address lists or maps; insufficient amount of time allowed to review; lack of Bureau assistance; and the lack of accuracy, completeness and format of lists and maps provided to the local governments.

What is the Bureau doing to address these concerns cited by local officials from the dress rehearsal sites about the quality of the address lists or maps?

Please explain the Bureau's plans to improve the amount of assistance it will provide to local governments for the 2000 Census?

The GAO report further discussed how officials in one South Carolina county found the same errors on the LUCA maps that the county had been trying to correct since the 1990 census. Why were these errors not corrected after the 1990 census?

Please explain the Bureau's plans for correcting errors on LUCA maps in a timely manner?

Mail Response Rate

According to the GAO report, the Bureau expects its outreach and promotion campaign, as well as simplified census questionnaires, to produce a mail response rate of 66.9%, which is only slightly higher than the 65% response rate achieved in 1990. Why is this rate only slightly higher with the addition of the outreach and promotion campaign?

According to the GAO report, the Bureau plans to spend about $100 million of a $230 million budget for a paid advertising campaign, although the Bureau plans on using the same general theme that was used for the 1990 census. "It's your future - don't leave it [blank]." Please explain why the Bureau has chosen to use the 1990 Census theme when the 1990 campaign was only able to produce a 65% response rate?

Please explain the advertising campaigns for both the Dress Rehearsal and Census 2000 that not only raises public awareness, but also motivates the public to return the questionnaires?

The GAO report holds the Bureau responsible for some of the operational problems that caused the Complete Count Committee's to suspend their activities. According to the GAO report, the CCC members complained of a lack of organization and leadership and vague communications between the Bureau and the CCC, no set clear expectations, lack of Bureau guidance, and minimal literature. Please explain the Bureau's plans for addressing these problems for the 2000 Census?

The GAO report also indicated that local communities have limited resources to carry out promotional activities and local businesses have not provided funding for the promotion. Please explain the effect of the lack of funding had on the Bureau's promotional efforts at each of the 3 dress rehearsal sites?

For the 2000 Census, how much is the Bureau depending on local communities and businesses to assist with funding for promotional activities?

What has the Bureau learned from the dress rehearsal concerning this issue and what, if any, changes will the Bureau make to address this problem for the 2000 Census?

What does the Bureau plan on doing to assist local governments in urban areas where response rates can be very low and where they may lack the funding needed?

According to the GAO Report, the Bureau has awarded its 2000 Census paid advertising contract to Young & Rubicam. Please explain the characteristics of the focus group interviews Young & Rubicam conducted at the Dress Rehearsal sites. What conclusions were reached by these focus groups?

Staffing and Partnerships

How much authority/autonomy will the Local Census Offices have in determining pay rates of workers, adjudication of grievances, etc.? What will be the chain of command for addressing local problems and concerns?

Does the Census Bureau plan to use an incentive program, such as a bonus structure for part-time workers, during the nonresponse follow-up portion of the 1998 Dress Rehearsals? If so, how is the incentive plan for part-time Census workers weighted during the nonresponse follow-up for part-time enumerators/workers?

How were the positions staffed for the dress rehearsal sites? What types of advertising and promotional aids were the most useful for finding qualified applicants?

What barriers has the Census Bureau faced in setting up local partnership initiatives in Columbia, South Carolina, Sacramento, California, and at the Menominee, Wisconsin dress rehearsal sites. Was the Bureau able to address a core set of principles and organizational structure in setting up local partnerships, or was each site unique?

How can the Bureau assist local governments and communities in ensuring that all counties have representation by Complete Count Committees?

Will temporary field staff operate local census data terminals for transfer to Census Bureau headquarters? If so, what will be their level of supervision and security?

Since the Census Bureau has stressed the importance of business involvement of the private sector in local partnership initiatives, what steps have been taken to ensure the coordination of these activities? Has the Bureau offered any incentives?

The Census Bureau is committed to hiring and training 10 percent of its workforce from the Welfare to Work rolls. What barriers has the Bureau faced in terms of meeting this goal? Was this criteria used in hiring for the dress rehearsals? How does the Bureau plan to face the challenge of hiring qualified people in regions of the country with vastly different sociological and economic profiles?

Please forward your responses to the Subcommittee at H1-114 O'Neill House Office Building. If you have any questions or concerns regarding the above, please contact our Chief Counsel, Jennifer Safavian at (202) 226-1973. Thank you in advance for your cooperation and assistance.

Sincerely,

Dan Miller
Chairman
Subcommittee on the Census

cc: The Honorable Dan Burton
The Honorable Carolyn Maloney

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

OFFICE OF THE DIRECTOR

MAY 27 1998

The Honorable Dan Miller
Chairman, Subcommittee on the Census
Committee on Government Reform and Oversight
House of Representatives
Washington, DC 20515-6143

Dear Mr. Chairman:

Thank you for your letter of April 9, 1998 submitting additional questions concerning the Census 2000 Dress Rehearsal and our plans for Census 2000.

Enclosed are our responses to your questions. If you or your staff have any questions, please contact Mr. Anthony Black in our Congressional Affairs Office at (301) 457-2171.

Thank you for your interest in Census 2000.

Sincerely,

Brad Huther for

James F. Holmes
Acting Director

Enclosures

Enclosure 1

Responses to Congressman Dan Miller's Letter of April 9, 1998

Master Address File (MAF)

Question 1:

What is the Bureau doing to address these concerns cited by local officials from the dress rehearsal sites about the quality of the address lists or maps?

Answer:

The Census Bureau has improved the address list development process to deal with the quality issues that arose during the Dress Rehearsal. To improve address list quality, the Census Bureau simplified program requirements, made needed software revisions, and added a quality assurance program that will identify potential problems before sending review materials to local and tribal governments. To deal with complaints about map quality in the noncity-style address areas, the Census Bureau implemented a new opportunity for local and tribal governments to provide map updates before maps are used to compile the address list. These changes will yield higher quality maps and address lists for local and tribal governments to review.

Question 2:

Please explain the Bureau's plans to improve the amount of assistance it will provide to local governments for the 2000 Census.

Answer:

A combination of approaches have been instituted to address this issue. Major changes were made to simplify the review process, including eliminating the requirement to record many geographic changes on both the address list and the maps, eliminating the addresses in blocks surrounding the jurisdiction from the review process, eliminating the request to locate addresses the computer could not assign to a census block, and suggesting alternative, less demanding strategies for participants conducting the review.

To improve staff support in the regional census centers, a larger proportion of the regional partnership staff has been authorized to work on the program than was planned originally. In addition, the Bureau has proactively sought assistance from agencies and organizations outside the Census Bureau. Letters were sent to 1,400 state data centers, regional planning agencies, councils of governments, etc., offering them the opportunity to assist in the program in a variety of ways. Finally, technical support to governments requesting the address list in computer-readable form will be provided through a toll-free telephone help desk operated by a contractor with the knowledge and experience required to answer hardware and software questions.

Question 3:

The GAO report further discussed how officials in one South Carolina county found the same errors on the LUCA maps that the county had been trying to correct since the 1990 census. Why were these errors not corrected after the 1990 census?

Answer:

Without knowing the specifics in this case, the Census Bureau cannot determine what happened with the South Carolina county in question. In some instances, timing considerations have required the Bureau to generate a map from the geographic data base for local use before it has been updated to reflect locally-supplied street corrections, but the Census Bureau attempts to avoid this and warns users about this possibility. As a matter of policy, the Census Bureau is actively seeking and applying locally-identified map corrections. The Census Bureau receives and uses many corrections. The Census Bureau attempts to avoid the kind of situation noted in your question and has instituted a feedback process as part of the Local Update of Census Addresses (LUCA) program to assure that it will not happen again.

Question 4:

Please explain the Bureau's plans for correcting errors on LUCA maps in a timely manner.

Answer:

The Census Bureau will enter the map corrections provided by LUCA participants that are required to conduct Census 2000 operations. It will do this as part of the overall process to incorporate the address corrections LUCA participants submit. To assure participants that their map corrections have been included, the Census Bureau will provide updated map copies as part of the formal "feedback" process associated with the LUCA program. The map and address update feedback materials will be provided to participants in the spring of 1999, following the Census Bureau's 100 percent block canvassing activity.

In addition to providing the opportunity for participants to see the results of their update efforts, the Census Bureau has drastically reduced its requirements for local and tribal map corrections by developing automated methods to transfer many needed corrections directly from the address list updates participants provide. The only map corrections the Census Bureau now requests from all participants are the location of new streets and corrections to street names. In areas with city-style addresses, the Census Bureau also is asking that participants show "address ranges" along each section of the new streets they draw on the maps. (This information will assure that the proper individual addresses are associated with the correct section of street.) In areas that use other types of addresses, the Census Bureau also is asking that participants enter a "map spot" to show the approximate location of each housing unit the participant believes should be added to

the Census address list. (This "map spot" information will allow Census Bureau staff to find the added housing units during Census 2000 questionnaire delivery and follow-up operations.)

Question 5:

According to the GAO report, the Bureau expects its outreach and promotion campaign, as well as simplified census questionnaires, to produce a mail response rate of 66.9%, which is only slightly higher than the 65% response rate achieved in 1990. Why is this rate only slightly higher with the addition of the outreach and promotion campaign?

Answer:

The Census Bureau has noted a decline in mail return rates from 1970 to 1990. If the Census Bureau were to repeat 1990 procedures, the Census Bureau fully expects mail return rates to fall even lower than the 65% experienced in 1990. Thus, the Census Bureau believes that the projected mail response rate for Census 2000—resulting from improvements in outreach and promotion, innovations in mailing strategies, and simplified questionnaires—not only will stem the decline in mail return rates but also will increase the rate modestly over the 1990 rate. The Census Bureau will continue to evaluate mail response as part of the Dress Rehearsal.

Mail Response Rate

Question 6:

According to the GAO report, the Bureau plans to spend about $100 million of a $230 million budget for a paid advertising campaign, although the Bureau plans on using the same general theme that was used for the 1990 census, "Its your future-don't leave it [blank]." Please explain why the Bureau has chosen to use the 1990 Census theme when the 1990 campaign was only able to produce a 65% response rate?

Answer:

The Census 2000 advertising theme "This Is Your Future. Don't Leave It Blank" was not the 1990 census theme. According to the GAO report, the Census 2000 theme stresses that responding to the census questionnaire benefits one's community, which may have been similar to the 1990 themes. The Census Bureau's advertising agency, Young and Rubicam, Inc., has chosen this census theme to answer the question "What's in it for me?" based on a thorough review of existing research leading up to, during, and following the 1990 census. (See response to Question 7.)

The creative message in advertising is only one part of many outreach and promotional strategies involved in influencing response rates. A major advertising distinction between 1990 and 2000 advertising is the fact that the media time and message will be purchased in 2000 and,

therefore, will be guaranteed to reach our various target audiences. A comprehensive media plan is being refined to ensure that the Census Bureau effectively and economically reaches its target. In 1990, the Census Bureau relied on public service advertisers to place the announcements in various media. There was no guarantee that media outlets would use the public service advertising material.

Question 7:

Please explain the advertising campaigns for both the Dress Rehearsal and Census 2000 that not only raises public awareness, but also motivates the public to return questionnaires?

Answer:

Advertising only has been developed for the Dress Rehearsal sites and not for Census 2000. The Census Bureau will await the outcome from the Dress Rehearsal sites before proceeding on any work for Census 2000.

Audience segmentation is the first step in developing a communications strategy. Segmentation was used to identify the best prospects from a demographic and psychographic perspective. Once the audiences are identified, it is critical to understand when and where to reach them. This was determined using syndicated research that defined media consumption habits.

All of the work developed for the Dress Rehearsal is based on a solid foundation built from research findings. Using research conducted by Young and Rubicam, Inc., (Y&R) and the Bureau of the Census, Y&R developed a set of "universal truths" (for example, "people have minimal familiarity with the census" and "benefits of participation and missed opportunities have broad appeal"). Focus group research on attitudes toward the census made it clear that the most important question to be addressed in making people aware of the census and motivating people to return their questionnaires was "What's in it for me?" Thus, the slogan "**This is your future. Don't leave it blank.**" addresses the point that if you choose not to participate, you miss an opportunity to make things better.

Question 8:

The GAO report holds the Bureau responsible for some of the operational problems that caused the Complete Count Committee's to suspend their activities. According to the GAO report, the CCC members complained of a lack of organization and leadership and vague communications between the Bureau and the CCC, no set clear expectations, lack of Bureau guidance, and minimal literature. Please explain the Bureau's plans for addressing these problems for the 2000 Census.

Answer:

In May 1998, the Census Bureau will send a letter to the highest elected official in 39,000 local and tribal governments inviting them to establish Complete Count Committees. The letter will be accompanied by the *Census 2000 Complete Count Committee Handbook for Local Governments*, which provides guidelines for the active involvement of government officials in promoting the census to employees and residents of their jurisdictions. The handbook defines the role of the Complete Count Committee, provides suggestions on how to organize a Complete Count Committee, recommends meeting schedules, offers examples of Complete Count Committee activities, defines Census 2000 programs and projects, describes exemplary 1990 partnerships, outlines census operations, and provides names, addresses, and phone numbers of Census Bureau contact persons.

Currently, the Census Bureau has approximately 100 Partnership Specialists who have already begun working with community organizations and governments to support local officials who are forming Complete Count Committees, encourage community leaders to serve on these committees, and provide ongoing guidance to existing committees. By the end of this fiscal year, the number of Partnership Specialists will increase to about 180. The Census Bureau plans to have about twice that number by the end of fiscal year 1999.

In addition, the first edition of a newsletter for partners and Complete Count Committee members is under development and will be ready for publication by mid-June. This newsletter will serve as the mechanism for information dissemination and exchange. It will include Census 2000 operation schedules, availability of promotional materials, highlights of exemplary Complete Count Committee activities, announcement of special events, and other items of interest.

Question 9:

The GAO report also indicated that local communities have limited resources to carry out promotional activities and local businesses have not provided funding for the promotion. Please explain the effect of the lack of funding had on the Bureau's promotional efforts at each of the 3 dress rehearsal sites?

Answer:

The Census Bureau will not fund local outreach and promotional efforts. The Census Bureau plans to conduct local outreach and promotional campaigns in addition to its national campaign. To the extent that local communities participate, the effect of the Census Bureau's efforts will be enhanced. However, if local communities choose not to participate, the Census Bureau still will conduct its local campaign.

Question 10:

For the 2000 Census, how much is the Bureau depending on local communities and businesses to assist with funding for promotional activities?

Answer:

The Census Bureau is asking local communities and businesses to help promote the census in whatever manner they are able and willing to do (for example, Target discount stores created shopping bags that promote the census and are currently being distributed in the Columbia and Sacramento sites). The Census Bureau is not depending on local communities or businesses for funds. In some cases, regional census centers might be able to assist local communities and businesses in printing materials or providing supplies for activities, such as poster contests, etc. Further, the Census Bureau plans to make available to local communities and businesses drop-in newsletter articles, posters, and other materials that they could use with little or no expenditure of their own funds. While the Census Bureau welcomes local participation, the Census Bureau is not planning a campaign that depends on funding local participation.

Question 11:

What has the Bureau learned from the dress rehearsal concerning this issue and what, if any, changes will the Bureau make to address this problem for the 2000 Census?

Answer:

The Census Bureau will not fund local outreach and promotional efforts. The Census Bureau plans to conduct local outreach and promotional campaigns in addition to its national campaign. To the extent that local communities participate, the effect of the Bureau's efforts will be enhanced. However, if local communities choose not to participate, the Census Bureau still will conduct its local campaign.

Question 12:

What does the Bureau plan on doing to assist local governments in urban areas where response rates can be very low and where they may lack the funding needed?

Answer:

The Census Bureau is developing an outreach and promotional campaign with local components. Part of that campaign is a contingency plan to increase or redirect promotional efforts on a quick turnaround basis in those areas where response turns out to be very low.

Question 13:

According to the GAO Report, the Bureau has awarded its 2000 Census paid advertising contract to Young & Rubicam. Please explain the characteristics of the focus group interviews Young & Rubicam conducted at the Dress Rehearsal sites. What conclusions were reached by these focus groups?

Answer:

Enclosure 2 provides the Executive Summary issued by Aguirre International, the research firm that conducted the focus groups, and a listing of locations and specifications of focus group participants.

Question 14:

How much authority/autonomy will the Local Census Offices have in determining pay rates of workers, adjudication of grievances, etc.? What will be the chain of command for addressing local problems and concerns?

Answer:

Local Census Offices (LCOs) will not determine pay rates for LCO workers. Those pay rates are established prior to hiring LCO staff and opening those offices. The LCO pay rates are based on recommendations from Westat, Inc., a private research firm retained to advise the Census Bureau on efficient and effective pay rates. Westat has recommended paying field workers a percentage of local prevailing wage rates, which are based on data from the United States Department of Labor. The rates are reviewed by Census Bureau regional office staff who have years of experience managing field interviewers and are familiar with local labor force conditions.

Ordinary problems and concerns that occur within the operations of the LCOs will be handled at the lowest possible level. For example, field enumeration problems and concerns will be addressed first at the Crew Leader level. If unresolved, those problems will pass from the Crew Leader to the Field Operations Supervisor, and, as necessary, to the Assistant Manager for Field Operations, and to the LCO Manager. Office clerical problems will pass from the Office Clerk to the Office Operations Assistant, to the appropriate Assistant Manager, and the LCO Manager. Problems and concerns that cannot be resolved at the LCO level will be referred to the Area Manager in the regional census center.

Formal grievances within the LCO will be filed with the Assistant Manager responsible for the matter being grieved. If the deciding official does not grant the full relief requested by the grievant, it is referred to the LCO Manager for final resolution.

(See Enclosure 3 for the 2000 LCO chart, and the Regional Census Center 2000 Management Organization chart.)

Question 15:

Does the Census Bureau plan to use an incentive program, such as bonus structure for part-time workers, during the nonresponse follow-up portion of the 1998 Dress Rehearsals? If so, how is the incentive plan for part-time census workers weighted during the nonresponse follow up for part-time enumerators/workers?

Answer:

Yes, we have established an incentive pay plan for nonresponse follow-up (NRFU). The plan is designed to increase employee retention, productivity, and quality of work. All NRFU workers who exceed the performance requirements and meet specific criteria will receive supplemental pay based on performance. A portion of this payment will be paid immediately after the week the worker earns it. The balance will be back loaded or paid only upon completion of all NRFU assignments for that worker. This incentive pay plan will apply similarly to part-time as well as full-time staff.

Question 16:

How were the positions staffed for the dress rehearsal sites? What types of advertising and promotional aids were the most useful for finding qualified applicants?

Answer:

Dress Rehearsal positions have been staffed through a variety of recruitment sources:

- Posters and flyers at civic, community, neighborhood, or religious organizations
- Posters and flyers in public areas
- Community or organization newsletters or newspapers
- Federal, state, tribal employment offices, job service, and information centers
- Presentations by census employees
- Job Fairs
- Friend or relative working for census
- Friend or relative not working for census
- Newspaper advertisements
- News articles
- Radio
- Toll-free census number or job line
- Census job mailings or postcards

- Internet
- School or college
- Business or private company
- TV

Some of the most effective sources to date have been:

- Newspaper advertisements
- Friends and relatives working and not working for census
- Community or organization newsletters
- Posters and flyers at community, neighborhood, or religious organizations
- Posters and flyers in public areas
- Federal, state, and tribal employment
- Census job mailings or post cards

The Census Bureau will evaluate further all recruitment sources upon completion of the Dress Rehearsal.

Staffing and Partnerships

Question 17:

What barriers has the Census Bureau faced in setting up local partnership initiatives in Columbia, South Carolina, Sacramento, California, and at the Menominee, Wisconsin dress rehearsal sites. Was the Bureau able to address a core set of principles and organizational structure in setting up local partnerships, or was each site unique?

Answer:

The Census Bureau did not experience any unexpected barriers to building partnerships in the Dress Rehearsal sites. It is not unusual for local organizations to experience staff changes, resource limitations, or other work demands that limit their ability to participate to the extent they would like. In fact, Census Bureau regional staff are trained to pursue a wide range of options. Thus, Complete Count Committees (CCC) may be composed of a single government; multiple governments; community organizations; umbrella governmental units, such as Councils of Governments; or a collaborative effort between private organizations and governments. In South Carolina, for example, a CCC for a very small county felt that they did not have adequate resources to conduct the LUCA review, so they asked their Council of Governments to take on that task and the original CCC became inactive. As a result, the CCC activities were transferred to a different entity (that is, the Council of Governments), but they were still done.

The Census Bureau realized that these challenges were a possibility in this environment because of the Census Bureau's knowledge of the area and past experiences. The Census Bureau prepared for these challenges by increasing its partnership activities with grassroots organizations, churches, and some of the CCC subcommittees (e.g., education, religious, business, etc.).

Question 18:

How can the Bureau assist local governments and communities in ensuring that all counties have representation by Complete Count Committees?

Answer:

The CCC program is a voluntary partnership opportunity extended to local and tribal governments to support Census 2000. While it is a key vehicle for planning and implementing local, targeted, and tailored efforts that address the special characteristics of the community, it is not the only mechanism to achieve that goal. Our experience indicates that local and tribal governments consider a variety of factors before they decide the most efficient and effective method (or combination of methods) to promote the decennial census in their community. CCCs may not be appropriate for all counties.

Furthermore, the CCC can function at many levels of government. For example, many CCCs are formed by city and even state governments. However, in rural areas of the country, it might be more appropriate to have the CCC operate at the county or township level. In some cases, several adjoining counties have come together to form CCCs. In other instances, CCCs are established through or coordinated by umbrella government units such as the Council of Governments, Regional Commissions, and County Associations. Other structures may already exist in the community (or county) for planning and implementing local promotional activities. These structures may be highly effective and serve as a perfect vehicle for implementing the work of a traditional CCC.

The Census Bureau's Government Partnership Specialists are responsible for working closely with local and tribal government officials to assist them in making the decision that is best for their specific community. In May 1998 each government will receive a copy of the Census 2000 Complete Count Committee Handbook for Local Governments. This handbook will provide local and tribal governments with guidelines for establishing, managing, and implementing programs developed by the CCC.

Question 19:

Will temporary field staff operate local census data terminals for transfer to Census Bureau headquarters? If so, what will be their level of supervision and security?

Answer:

Each LCO will have control and tracking capabilities for payroll and personnel data. Confidentiality of those data will be protected through individual user security, as well as various levels of access and file security.

Data from census questionnaires will be transmitted directly from the field enumerator and crew leader to the census processing offices for electronic scanning and will not pass through the LCOs. Laptop computers will be used only for one phase of interviewing during the Integrated Coverage Measurement program. Data transmitted between these laptop computers and the processing offices will be encrypted and decrypted for purposes of security and confidentiality.

We have taken extraordinary measures to safeguard the security of our data and to prevent unauthorized access. Also, we have extensive experience not only with decennial censuses, but with our monthly, quarterly, and annual current surveys, developing and using data security systems that prevent unauthorized access. These systems guarantee the security and integrity of census data.

Question 20:

Since the Census Bureau has stressed the importance of business involvement of the private sector in local partnership initiatives, what steps have been taken to ensure the coordination of these activities? Has the Bureau offered any incentives?

Answer:

Local private sector partnership initiatives will take place in the regions. The Census Bureau Partnership Specialists are responsible for initiating and monitoring partnerships with individual local businesses and providing staff support to local Complete Count Committees. Many CCCs are comprised of local business owners and members of Chambers of Commerce who implement special business initiatives through that forum.

The primary responsibility of the Partnership Coordinator is to supervise Partnership Specialists and manage and coordinate all regional partnership efforts. The coordination of all private sector initiatives will be carried out by the Partnership Coordinators. No incentives are being offered.

Question 21:

The Census Bureau is committed to hiring and training 10 percent of its workforce from the Welfare to Work rolls. What barriers has the Bureau faced in terms of meeting this goal? Was this criteria used in hiring for the dress rehearsal? How does the Bureau plan to face the challenge of hiring qualified people in regions of the country with vastly different sociological and economic profiles?

Answer:

The Census Bureau is committed to hiring 4,000 individuals from the Welfare to Work rolls during the 1998 Dress Rehearsal and other FY 1998 and 1999 field activities.

The barriers to hiring through the Welfare to Work program have included transportation concerns, lack of adequate child care, and low or failing test scores. During Dress Rehearsal, we have addressed these barriers by working jointly with state and local agencies to assist, where possible, with these concerns. Directly and through these agencies, we have given test preparation manuals and practice tests to Dress Rehearsal Welfare to Work applicants with good results.

Our hiring strategies are targeted to hire individuals to work in the communities where they live. This will be accomplished through coordination and assistance from community-based organizations, employment service centers, and other organizations such as local private industry councils.

Enclosure 2 - Question 13

Responses to Advertising Campaigns for Census 2000 Dress Rehearsal

January 9, 1998
Aguirre International

Submitted to:

Young & Rubicam
285 Madison Avenue
New York, NY 10017

EXECUTIVE SUMMARY

INTRODUCTION

In this report, we present the research findings that address the purpose of this study:

- To acquire feedback on various advertising campaigns developed by Young & Rubicam that are related to the U.S. Census 2000.

Young & Rubicam provided Aguirre International with the demographic specifications for the target population partaking in this research. This report is comprised of the 17 focus groups conducted in three dispersed geographical areas: Columbia, South Carolina, Sacramento, California, and Menominee, Wisconsin. The complete study was conducted approximately within a period of a week, in which the series of focus groups began on December 10, 1997 and ended on December 19, 1997.

Utilizing the focus group forum, Aguirre International moderators were able to both solicit information on how much information the target groups had about the census and how the group felt about print (magazine and newspapers), television, radio and out-of-home (billboards) advertisements. Furthermore, not all focus groups were exposed to the four types of media. The type of media produced for the target markets depended on the appropriateness and reach those media had in the specific markets. The following section provides a synopsis of participants' reflections on the materials presented in the discussions and what participants thought to be the effective media messages for each particular media channel tested.

TELEVISION ADVERTISEMENT

In general, participants across all focus groups that were exposed to the television advertisements perceived the content and message to be very positive and informational. They felt that by having real people represented in the commercial legitimized the services that could be provided by completing the Census form. The advertising message accenting the importance of Census participation and the possible results, i.e., "building" better community services, was clearly understood the majority of the focus group respondents.

With respect to the Hispanic television advertisement, the message was received very favorably by both Hispanic focus groups. They felt that the ad captured the essential connection between their census participation and community services. In one of two the Hispanic advertisements, the use of the "blank" screen to emphasize the outcome of not responding to the Census was not widely grasped. Although participants expressed that the overall advertisement was appealing, credible, and clearly conveyed the message, some also stated that they found the concept a bit puzzling, but nevertheless accepted the explanation given for that frame.

Furthermore, the great majority of the participants felt the message to be motivational and action-oriented toward filling-out the Census form. From these messages, they felt that with their participation, they had the opportunity to impact their future and their community. A common remark made by participants in several focus groups was that more examples of tangible benefits be listed in the message.

On the other hand, there were few participants from all focus groups who were slightly frustrated with the advertisement because they could not correlate the image with the text that was provided. This is not to say that the core message was not communicated, but that respondents did not clearly understand the concept of figuratively "building" services in the communities, as it had been suggested in the advertisement. In general, those participants who were not highly receptive to the ad, basically distrusted the government, and were skeptical of the services that the Census promised - they perceived it as broken promises and false hopes- or plainly not attracted to the visuals in the advertisement.

Radio Advertisement

Overall, reactions to the radio message were very complimentary among all focus groups. Participants felt that the "dead air" was extremely effective in the context it was presented and it transmitted a powerful message about empowerment and about community union. Not only did they find that the radio message had a

"good script" that captured their attention, but that within its concise form, it outlined important services that were relevant to them. Moreover, it allowed participants to visualize the probable consequences if they did not participate in the census. Another element pointed out by a great number of participants was that the radio message appeared to be credible because the simplicity of the language and content - tone, style, and phrases - in the advertisement seemed sincere.

Contrarily, the small minority of participants that disliked the radio advertisement faulted the use of some of the phrases or slang that are particularly used or known only to certain ethnic groups. To some degree, they found the language to be offensive. Others admitted that, in general, when a commercial of any comes up, people have a natural tendency to change the radio station therefore, to some participants radio serves mainly as a source of entertainment.

Print Advertisement

Magazine Advertising

The overwhelming majority of participants did comprehend the message that the ad was trying to convey. Primarily, that is to participate in the census because of the importance it has on prospective community services and impacts. Of the different versions of the magazine advertisement, the most convincing to the participants were the short advertisements with descriptive text that had simple and large representative icons of different benefits. More than half of the participants felt that the "blank" page, representative of the benefits not received if one did not participate or complete the census, would definitely catch their attention.

Unfortunately, the series of advertisements containing photographic images placed with one-line phrases did not assist in communicating a lucid message. Participants did not see the connection between the images and the Census 2000 and found the messages or "tag" lines too subtle, contradictory, or simply confusing. They also pointed out that there was no actual person in most of the

advertisements thus, it lacked a human contact or real-live feeling to the ads.

Newspaper Advertising

Only two focus groups were presented with newspaper advertisements as part of this series of focus groups. Both Asian focus groups were aware of the messages delivered in the two different advertisements. Although both messages were favorably received, participants felt that the advertisement with more words and greater details would more likely attract those who were fluent in the language, which also meant that this particular population probably read the newspaper on a daily basis. Those who were less fluent in the language felt that both advertisements would probably not seize their interest because of their low literacy level in the language.

Out-of-Home Advertisement

All participants understood the basic message behind the advertisement; that is to say, an individual's participation would increase the type of services available to the community and increased their awareness of the census. They voiced that the spare phrase and image on the side of a large bus would initially catch their attention.

However, a small number of participants remained somewhat confused with the relevance between the message (types of benefits provided) and image in the advertisements. Some questioned the phrases used, such as "building new roads", and did understand if should be literally or figuratively interpreted.

Across all focus groups, participants felt that the census (organization) was not easily identifiable and again, the message was extremely obscure – could not correlate the services mentioned with the Census 2000. To some, they felt that the elements in the advertisement were targeted to the "business" people, not the target market. There was no consensus in any of the groups to which billboard advertisement was the most significant or most influential. All of the variations of the billboard advertisements received mixed reviews, more frequently, they leaned towards an unfavorable position. A more positive note was that they were approving on the Census' slogan "This is your future. Don't leave it blank". They felt that it was

Enclosure 2 - Question 13

Listing of Locations and Specifications of Participants in Focus Groups Conducted by Aguirre International

South Carolina

- Rural, Caucasian Females
- Rural, African American Females
- Urban, Caucasian Females
- Urban, Caucasian Males
- Urban, African American Females

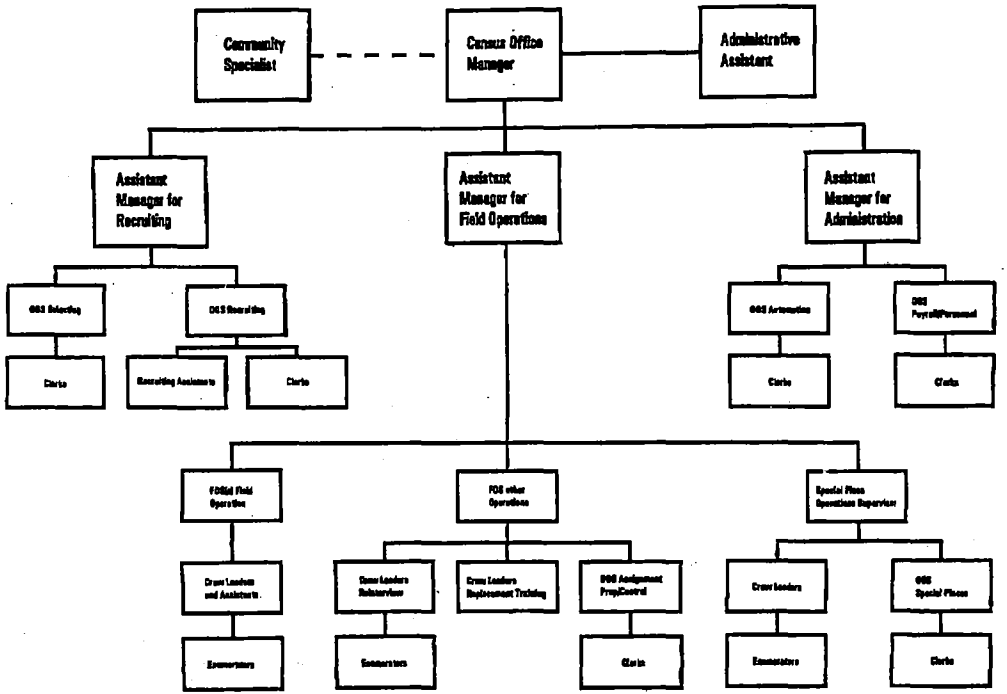
Menominee

- Indian Elders
- Indian Females
- Indian Males

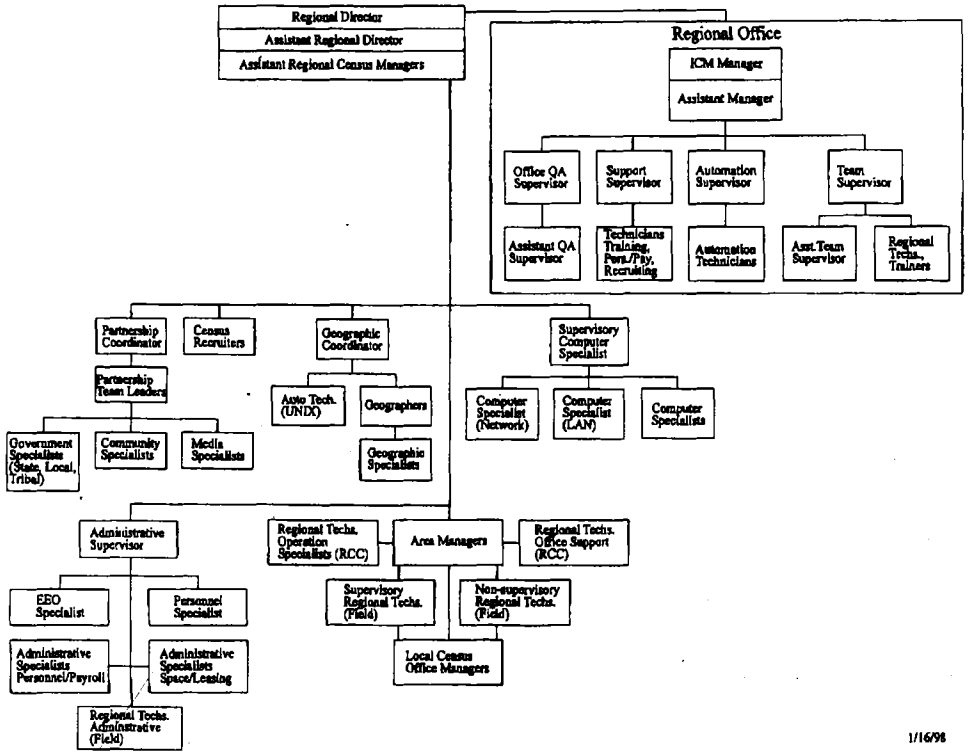
Sacramento

- Chinese, Cantonese Speaking Males
- Vietnamese Females
- Caucasian Females
- African American Males
- African American Females
- 20 Something Mixed Group
- Foreign-Born Hispanic Females
- US-Born Hispanic Females

2000 Local Census Office (LCO)



OOS - Office Operations Supervisor

8/6/97

Regional Census Center 2000 Management Organization