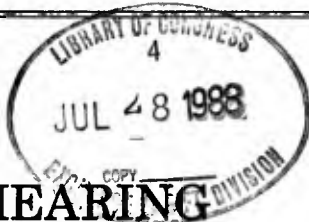


United States

1990 CENSUS AND HOUSING DATA FOR THE ELDERLY: CAN WE COUNT ON IT?



JOINT HEARING

BEFORE THE
SUBCOMMITTEE ON HOUSING AND CONSUMER
INTERESTS

AND THE

SELECT COMMITTEE ON AGING
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

SECOND SESSION

FEBRUARY 24, 1988

Comm. Pub. No. 100-663

Printed for the use of the Select Committee on Aging



U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1988

83-794 ||

For sale by the Superintendent of Documents, Congressional Sales Office
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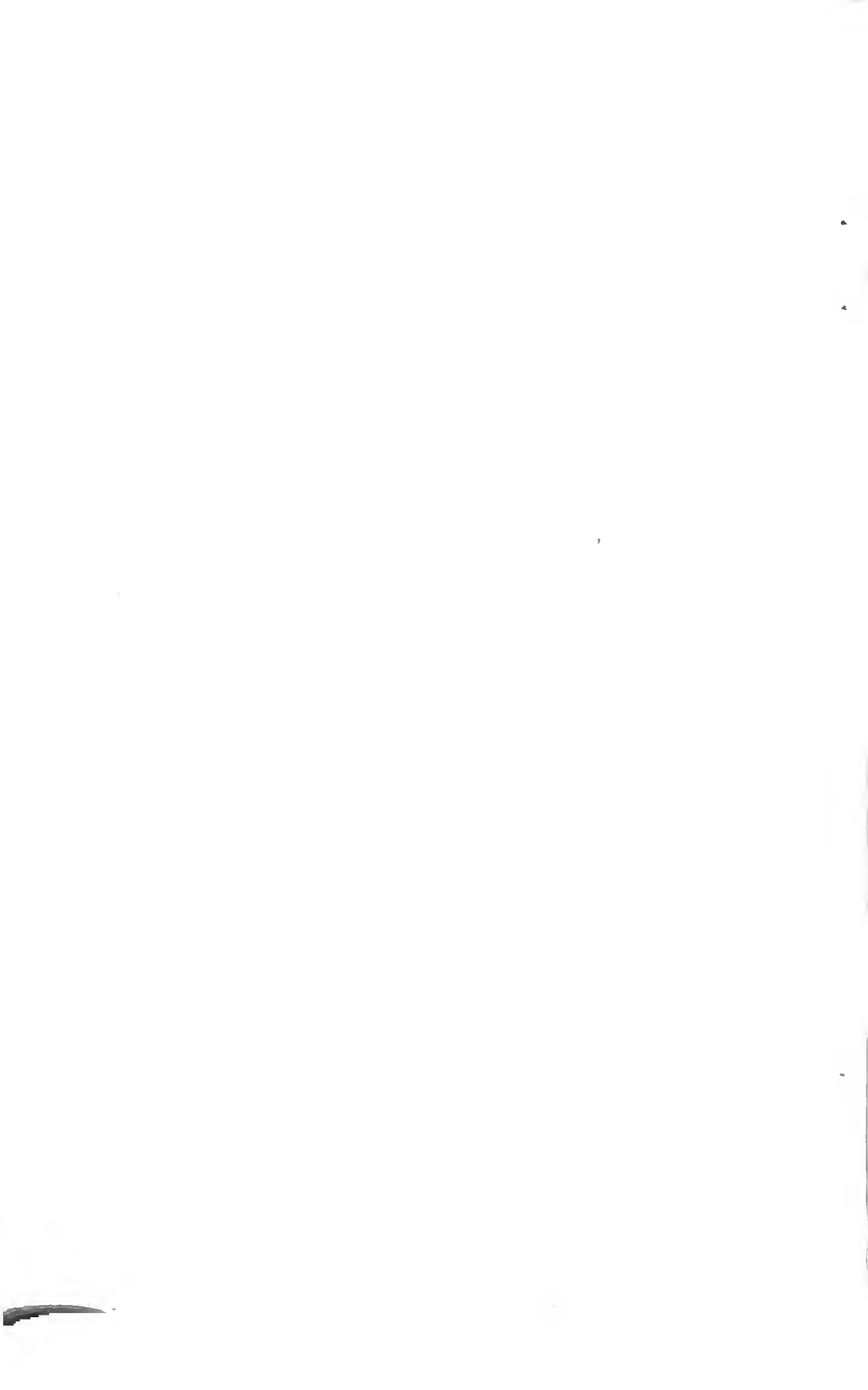
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1990 CENSUS AND HOUSING DATA FOR THE ELDERLY: CAN WE COUNT ON IT?

WEDNESDAY, FEBRUARY 24, 1988

U.S. HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON AGING, AND
SUBCOMMITTEE ON HOUSING AND CONSUMER INTERESTS,
OF THE SELECT COMMITTEE ON AGING,
Washington, DC.

The joint hearing was convened, pursuant to notice, at 9:30 a.m., in room 311, Cannon House Office Building, Hon. Edward R. Roybal (Chairman of the Select Committee on Aging) and Hon. Don Bonker (Chairman of the Subcommittee on Housing and Consumer Interests) presiding.

Members present: Representatives Roybal, Bonker, Kennedy, Stallings, Slaughter, Bilbray, Wortley, Smith, Saxton, Bentley, Meyers, Schuette, and Morella.

Staff present: Manuel R. Miranda, staff director; Valerie Batza, executive assistant; Brian Lutz, professional staff member; Diana Jones, staff assistant; of the Select Committee on Aging. Bill Benson, staff director; Brian Lindberg, legislative assistant; and David Dean, staff assistant; of the Subcommittee on Housing and Consumer Interests,

Chairman ROYBAL. Good morning. This morning, due to time constraints of our first witness, we will dispense with the opening statements, and they will be included in the record at this point without any of us having to read them.

[The prepared statement of Chairman Roybal follows:]

PREPARED STATEMENT OF CHAIRMAN EDWARD R. ROYBAL

Good morning ladies and gentlemen. The purpose of today's joint hearing of the Select Committee on Aging and the Subcommittee on Housing and Consumer Interests is to examine how proposed changes in the content and sampling methods of the 1990 decennial census will affect the ability of public officials and the private sector to effectively plan for the needs of older Americans.

In the fall of 1987, the Office of Management and Budget, citing its authority under the Paperwork Reduction Act, rejected several components of the Census Bureau's proposed questionnaires and sampling methods for the dress rehearsal of the 1990 census. Scheduled to be tested during the spring of 1988, these questionnaires are intended to be an operational dry run of the actual census to be taken in 1990.

Among the changes OMB proposed are to: one, eliminate three housing-related energy questions; two, move virtually all of the housing questions from the short form which goes to all households, to the long form which goes to a much smaller sampling of households; and, three, reduce the number of households which receive the long form from the Census Bureau proposal of 16 million households to 10 million.

I am greatly concerned that these changes are being imposed by OMB, despite comprehensive analyses done by the Census Bureau and other experts in the public

and private sectors, which reveal that they strike at the very heart of the intent, reliability and accuracy of the census data. Additionally, these changes ignore a 7 year process in which the Census Bureau put the census document and questionnaire through an extensive review and comment process. This process included the participation of a great number and variety of experts throughout the Nation.

One of the serious problems which these experts have outlined concerns the proposed elimination of the question on annual utility costs. Without this question, there is serious question whether Federal, State, or local officials will be able to calculate "gross rent," an item used extensively in housing cost analyses, including the establishment of Fair Market Rents (FMRs). The FMR is used by the Department of Housing and Urban Development to determine the amount of income which the elderly and other low income individuals must pay for subsidized housing.

Additionally, without this information being available in the 1990 census, comparisons with 1980 data would not be possible, ending long-term trend analyses from previous censuses. Consequently, the proposed changes will prohibit the analysis of the effects of housing policy during the Reagan administration.

These experts have also indicated that by reducing the sample size, the Census Bureau and local planners will be unable to obtain detailed data on the income, living arrangements and demographic characteristics of subpopulations of the elderly because sample sizes will be too small to yield statistically reliable results.

I am particularly concerned by proposals to reduce the sample sizes to as low as 1 in 20 in some urban areas. In my own district of Los Angeles, for example, overall response rates to the decennial census have historically been low. Cutting back on sample sizes will likely compound the problem of getting incomplete and inaccurate data in major urban areas.

Despite all these serious changes and cuts, budget savings do not seem to be a motivation for OMB's proposals. According to the Census Bureau, a cost analysis has never been done on these proposals, and rough estimates indicate that any savings will likely be negligible in comparison to the total cost of the decennial census. It is my understanding that the proposed budget for the census is the same now as it was before OMB's changes. What is worse, the lack of detailed local housing data could be extremely costly to local governments or the private sector. Many localities would have to run much larger samples of census data to obtain statistically reliable results, or would be forced to implement their own local surveys. Few local governments have the resources to undertake such detailed surveys, and those surveys which could be initiated would lack standardization of data.

In sum, preliminary information provided to my Aging Committee seems to reveal little rationale for OMB's proposed changes. I am aware of no information which indicates that the Federal Government will save money on this proposal, and there appears to be very little support for the changes among organizations and professionals which utilize the census data. Even the expert quoted by OMB in today's testimony before the Aging Committee—Professor Edward Deming—expressed surprise to my staff that he was being misinterpreted by OMB as justification for reducing the sample size in a decennial census. Although Professor Deming did write the statement OMB attributes to him, Professor Deming told my staff, "any quotation that I made regarding smaller sample sizes does not apply to the census at all as the census is engaged constantly in sample surveys as a model for the whole world."

Every American, from State and local officials, to the private sector, to the most vulnerable of our senior citizens, has a vital stake in the quality of information obtained through the 1990 census. It is the responsibility of the Congress to assure that this information is complete and accurate. Based on the information and recommendations received at today's hearing, I intend to work closely with my colleagues in the House and as a member of the Appropriations Committee to ensure that the census information is indeed reliable and responsive to the Nation's needs.

We are very fortunate to have with us today a very distinguished panel of experts who can describe not only the nature of the proposed changes, but also their implications for the ability of local officials, administrators, and businesses to plan for the needs of vulnerable groups such as the elderly, the poor, minorities, the disabled, and rural population. I look forward to today's testimony with great interest.

PREPARED STATEMENT OF CHAIRMAN DON BONKER

Good morning. I am pleased to convene this hearing of the Select Committee on Aging and the Subcommittee on Housing and Consumer Interests with the distinguished Chairman of the Full Committee, Mr. Roybal. I commend my distinguished colleague for his diligence concerning the 1990 census. This past fall Chairman

Roybal conducted a hearing which examined several census related issues. We have worked together for the past 7 months to ensure that the 1990 decennial census fully serves the public as the Nation's statistical base in the last decade of the century—and into the 21st century.

I want to also congratulate Mr. Dymally, the Chairman of the Subcommittee on Census and Population. He has played an important role on the census issues. He has been completely supportive on our efforts in behalf of the elderly and those who wish to retain the integrity of the census. We will continue to work with our distinguished friend from California on this issue.

Today's hearing will examine the changes that the Office of Management and Budget (OMB) has insisted upon for the 1990 decennial census. These changes include: deleting several housing and energy-related questions from the short form of the census questionnaire which goes to each household; moving seven questions pertaining to housing from the short form to the long form—which serves as a sample survey; and reducing the sample size used for the long form from 16 million to 10 million households.

We will hear from our witnesses about the implications of such changes in the census. I am afraid, however, that these efforts to reduce necessary housing data will only cover up the grim realities of the administration's failed housing policies. Federal housing programs have been cut by more than 70 percent over the past 7 years and the dramatic increase in the number of homeless persons across our Nation testifies to this. I suspect that the census data on housing is news that this administration is not eager to have.

Mr. Chairman, I would like to comment on the impressive witnesses we have before us today. To begin, we should acknowledge OMB's role in bringing this hearing about. We have tried for months to dissuade OMB from making this hearing necessary by urging them to withdraw their proposed changes to the census and the sampling process. Unfortunately they have not responded positively, which is why we are now here. Representing OMB today is Mr. Joseph Wright, Jr., who is Deputy Director of OMB. It is important to note that Mr. Wright is a former Deputy Secretary at the Census Bureau. I am certain, Mr. Wright, that your expertise with the census will be important to today's hearing.

We are extremely privileged to have the Honorable Art Holland, Mayor of Trenton, New Jersey, as a witness today. Mayor Holland, in addition to his extensive experience in running a major metropolitan area, is also the Vice President of the U.S. Conference of Mayors, which is deeply interested in the data that will come out of the 1990 census. I understand that he will be the next President of the Conference. Thank you for agreeing to testify, Mayor Holland.

Also testifying will be Arthur Young, former Chief of the U.S. Census Bureau's Housing Division. Having retired in January of this year, he is clearly one of the Nation's most informed individuals regarding the 1990 census and the justification for the Census Bureau's original proposal.

Margery Austin Turner will present testimony this morning written by Raymond Struyk. Both Ms. Turner and Mr. Struyk are research associates at the Urban Institute. Ms. Turner is representing the Housing Statistics Users Group which consists of individuals committed to facilitating the flow of information between governmental producers of data on housing and interested users—such as State governments and private businesses. I will submit for the record a list of this group's members, but, needless to say, it is a diverse and very distinguished group represented here.

Patricia Becker of the city of Detroit planning department, is representing the Council of Professional Associations on Federal statistics. She is an eminent expert in census procedures and is also the author of an excellent report entitled "The Office of Management and Budget's Changes to the 1990 Census: A Critical Commentary," which will be placed in the hearing record with her testimony.

I will not take the time to discuss in great detail the history of the census and what has happened during the past few months which has led to this hearing. I will, however, highlight what I believe to be key issues that must be considered in this controversy. For the hearing record, I would like to submit the Congressional Research Service document titled, "Census Questions and OMB's Review of the Census Bureau Proposal; A Summary and Brief Analysis." This outstanding CRS product was written by Daniel Melnick, a specialist in American National Government. Mr. Roybal and I are most appreciative of Mr. Melnick for his objective counsel on this complex issue. He is clearly one of the Nation's experts on this subject.

OMB's rejection of the Census Bureau's proposed census questionnaires and sample size has been a concern of mine for some time. On August 24, 1987, I wrote to James Miller III, Director of OMB, and requested that he withdraw the recommended changes and proceed with the census as developed by the Census Bureau

and submitted to Congress in March of 1987. However, on September 16, 1987, OMB, citing its authority under the Paperwork Reduction Act, announced that it had rejected the Census Bureau's 1988 proposed dress rehearsal questionnaires. Subsequently, the bureau modified its questionnaires as OMB recommended and OMB accepted them.

The dress rehearsal questionnaires are an operational dry run of all features to be used in the 1990 census. The dry run is scheduled to take place this spring. Historically, few adjustments to the actual census have been made after the dress rehearsal has taken place. This makes OMB's changes in the rehearsal questionnaires even more significant and places a burden on Congress to act quickly to correct these problems—which will affect the quality of data that is available until the next century, and perhaps well into it.

I am pleased to note that OMB in its written testimony for this hearing has stated: "I would like to assure you that actions taken to date on our part are not fixed in concrete, particularly those related to sample size. We will revisit these decisions without prejudice at the completion of the dress rehearsal and will keep the committees informed of our progress." This is a significant step toward a reversal of OMB's past positions, and, which, it is important to note, positions with which none of the experts agree. Furthermore, OMB states: "First, let me assure you that no final decision will be made regarding the 1990 census forms and sample design until the results of the 1988 dress rehearsal have been studied and discussed by all parties that have a stake in the census." This is good news, and I hope that today's hearing record will establish when the dress rehearsal and its evaluation will be completed.

It is my understanding that the process used to develop the 1990 decennial census as proposed by the Census Bureau was the most extensive, thorough, and professional effort to date. In fact, the Census Bureau held meetings and conferences in all States with diverse groups and organizations and data users to determine the census content. Despite this extensive 3-year process used by the census to develop the questionnaires, OMB after several months of work with no consultation of any significance with experts in the field, intends to cut crucial housing data and data which reveals important information about many groups including the elderly and minorities. Art Young considers the data that will be collected in the 1990 decennial census a quantitative benchmark in our Nation's history. I agree with his description, and I will do my best to stop an administration which has shown little regard for programs that benefit older Americans, minorities, or the poor, from denying those of us who do care the necessary data to make our case.

Let's set the record straight on who does benefit from the data that is gathered by the census, and who would be negatively affected by the OMB proposals. The 1990 census will provide data that will be used by Federal agencies, State and local governments, utility companies, developers, health officials, builders, realtors, mortgage bankers, and many more, including numerous organizations with interests in many fields. It seems to me that the census data is beneficial to almost everyone.

For example, the General Accounting Office (GAO) reported that the housing data are used extensively by local governments. Also, an American Planning Association survey of its members showed widespread use of small area data even for such an activity as locating adult day care centers. In fact, the block data, which would be ruined under the OMB plan, was particularly meaningful to local planning.

I recently received an issue paper from the regional councils of the State of Washington regarding OMB's changes in the census plan. In addition to stating strong opposition to the changes, they also note that regional councils and local governments long have been heavy users of decennial census data, especially at the county, municipality, census tract, and block levels.

Suffice it to say, I believe that our witnesses will demonstrate that the information and data gathered by the census is good for vast numbers of Americans, and that OMB's changes in the census plan are not. The experts the Federal Government has hired to do the census agree with this. Charles Jones, associate director for the decennial census, said in a November 22, 1987 memorandum that, "the content and sample size reductions OMB has proposed will affect negatively the statistical reliability and general utility of census results during the decade of the 1990s."

Mr. Chairman, our witnesses will effectively describe many of the implications that the OMB directives will have on the quantity and quality of data. I would like to include in the hearing record the short staff analysis that was provided to Members. In addition, I would like to discuss several examples of the negative ramifications of OMB's changes in the census plan.

First, the OMB plan deletes three housing-related questions: one, what are the yearly costs of utilities for fuel for this house or apartment?"; two, what kind of

heating equipment is used for heating water?" and; three, "which fuel is used for heating water?"

Utility costs may not seem on the surface to be the most important piece of data to us, but to the Department of Housing and Urban Development (HUD), for instance, it is very important. Without utility cost information, it is very difficult to do accurate housing cost analyses. Gross rent (all rental housing related costs) is calculated in order to do comparisons between all types of rental arrangements and with homeowners. Meeting our national housing goals depends on understanding the cost of housing, yet, without gross rent this becomes exceedingly difficult.

HUD also uses gross data to develop its fair market rent (FMR) program for 2,700 areas in the United States. Without gross rent data, HUD would need to use statistical modeling techniques which have not proven effective. FMRs are important to public housing authorities, older Americans and other low-income individuals, because they are used to calculate the amount of income which low-income residents must pay for subsidized housing. Therefore, many of the housing programs that benefit low-income persons would be hurt by this OMB change.

Second, OMB has moved 7 of the 10 housing questions from the short form to the long form. OMB justifies this action by stating it will reduce the burden on the households that complete the short form. This would convert the entire housing section of the census into a sample survey producing estimates rather than producing actual counts. Data will simply no longer be available on a city block by city block basis or for small rural areas.

An example of the harm this could cause for the elderly relates to moving the questions asking if the household has a telephone to the long form. This question assists local agencies concerned about the disabled, poor, and elderly's ability to communicate during times of emergencies. We know that the lack of a telephone could cause a life-threatening situation for a frail older or disabled person. Communities need to know how many people do not have phones and where they are located. This will not be possible under OMB's plan.

Third, OMB has recommended that the sampling size be reduced from 16 million households (1 in 6) to 10 million households (1 in 9). This is extremely damaging because it weakens the housing and the population census data. With this change, the Census Bureau and local planners, administrators, and the private sector will be unable to obtain data on income living arrangements and other demographic characteristics of subpopulations. These subpopulations include vulnerable subgroups such as the elderly, Blacks, Hispanics and American Indians. The sample sizes will be too small to field statistically reliable results.

At particular risk will be small area data and data on housing conditions of the elderly. This information has been used extensively in the past. The elderly, who constitute approximately one-sixth of the population, are an important subgroup to this committee and its work. As today's testimony will show, dividing the elderly into smaller subgroups by race or age (e.g., "old old") will not be feasible with a sample of only 10 million households.

This is not acceptable to me or my distinguished colleague considering the many important policy decisions that face us in the years ahead as a result of the greying of our population. This hearing should help to set the record straight on these and other related matters. I hope that OMB pays close attention to our concerns and the insights of our expert witnesses.

In conclusion, Mr. Chairman, I again commend you for your work on improving the 1990 census and the quality of data it should produce. I know that we will not give up on these concerns—too much is at risk here. I hope that OMB joins with us and our other witnesses in ensuring that we have the information necessary to meet the many challenges ahead of us as we move into the 21st century.

PREPARED STATEMENT OF REPRESENTATIVE LOUISE M. SLAUGHTER

I would like to commend you, Mr. Chairman, for holding this important hearing today. The Office of Management and Budget's proposed changes to the 1990 census represent a serious threat to the Nation's elderly, minority, disabled, poor and rural populations. These changes threaten the ability of policymakers to interpret and respond to the housing needs of these special populations.

I am concerned that OMB has proposed extensive changes to the 1990 census without having fully examined the implications of these changes. OMB's recent rejection of the 1988 "dress rehearsal questionnaire" does not allow for adequate time for the Census Bureau to review the proposed revisions. OMB's proposed census changes emerged mere months before the scheduled dry run which will effectively lock them in unless Congress acts quickly.

These changes raise the question of the true political motivations behind OMB's actions. By drastically reducing the ability to gather housing data from the 1990 census, policymakers will not be able to accurately gauge the effect of reductions in housing assistance programs during the last 7 years. As a result of OMB's elimination of three utility related questions, comparisons regarding utility expenses will also be impossible. OMB's proposed changes will seriously limit the ability of the Federal Energy Assistance program to serve low income and elderly populations.

In addition, one question OMB is proposing to eliminate provides information to the Department of Housing and Urban Development that is used to calculate "fair market rents." HUD uses fair market rent to determine the amount which elderly and low income individuals must pay for subsidized housing. Where does OMB propose this information will come from if not from the census?

The U.S. Census is the single most important source of data available to local, State, and Federal policymakers, research organizations, planners, academics and public and private interest groups. Because the census is such an important data base, it is critical that it remain shielded from political manipulation.

PREPARED STATEMENT OF REPRESENTATIVE THOMAS J. TAUKE

I commend the chairman for convening this important hearing to continue to examine the 1990 census. As the U.S. Constitution requires, every 10 years we count our country's population. The decennial census gathers essential data upon which many Federal funds are distributed to individual States and localities. Based on census data, State and local planners also target their efforts toward areas which are in need of assistance. During the past year, several serious questions have been raised about the content and distribution ratios of the various census forms. I am hopeful that our witnesses will answer many of these concerns today.

The U.S. Census Bureau constructed the 1988 dress rehearsal census questionnaires in 1987. The initial short and long forms both contained important questions regarding housing and energy. Part of the standard procedure for assembling the dress rehearsal is a review by the Office of Management and Budget (OMB). In its review, the OMB dramatically altered the short form and reduced the sampling size for the long form from 17 to 10 million households. This reduction could compromise the credibility and accuracy of the 1990 census. As a representative of a rural State, I am particularly concerned by the potential lack of data on rural elderly.

According to the Census Bureau, a rural area is defined as an incorporated or unincorporated area with a population under 2,500. The 1980 census long form was sent to 1 in 2 households in rural areas with populations under 2,500. The Census Bureau intended to maintain this sample figure for the dress rehearsal and 1990 census. OMB revised the census proposal to sample sizes of 1 in 2 households for population areas of under 1,000 and 1 in 6 for areas of 1,000 to 2,500, 1 in 10 households in population areas of 2,500 to 6,250 and 1 in 20 households in larger areas.

In previous census reports, the nonrural parts of the country were surveyed by delineating "census tracks" or metropolitan and nonmetropolitan population areas 4,000 to 5,000 people. Under OMB revisions, urban statistical data could be inadequate and nonrepresentative of urban populations. It is my understanding, however, that the Census Bureau has the capability to extrapolate data based on a 20 percent ratio for the larger population areas. Conversely, a 20 percent sampling of sparsely populated areas of the country could produce unreliable and inaccurate data which would make county by county planning virtually impossible.

Additionally, the OMB eliminated several important energy questions regarding home heating. Considering that the role of the Federal Government in funding housing and energy programs have changed significantly during this decade, reliable data on the impact of these policy changes is essential. For example, people who rent housing often do not pay for utility costs. Gross rent for renters may be \$400 per month, while a homeowner may spend \$400 per month in mortgage and \$350 in utilities or a gross monthly housing expenditure of \$750. This type of information should be available for Federal, State, and local governments.

In attempting to improve service delivery and program planning, State and local governments must have reliable statistical data. This is particularly important for rural America. The greying of America is already upon us in rural America. One of the most vulnerable elderly groups are rural older women. Rural older women are most often alone with little access to important services. As more and more young people leave rural communities, the priorities of State and local governments will have to shift toward increased public works, transportation and in-home services for the rural elderly.

The 1990 census will likely document that the over age-65 group, and the over age-85 group in particular, are the fastest growing age groups in my home State of Iowa. State and local senior citizen programs will surely be jeopardized if unreliable statistical data is not available for program planners. The 1988 dress rehearsal and the 1990 census will provide us with critical data. Rather than limit the scope of the specific information which we seek, the census should gather as much information as possible. And I am hopeful that the problems between the OMB and the Census Bureau can be resolved—to the satisfaction of the Congress—in the near future.

PREPARED STATEMENT OF REPRESENTATIVE CONSTANCE A. MORELLA

Mr. Chairman, thank you for calling this joint hearing to assess how proposed changes in the content and sampling methods of the 1990 decennial census will affect the ability of Federal, State, and local officials and the private sector to effectively plan for the housing needs of older Americans.

As the ranking Republican on the Subcommittee on the Census and Population, I have been very concerned with the changes proposed by OMB to the 1990 census. Last fall, I contacted Wendy Gramm, the then Administrator of the Office of Information and Regulatory Affairs, to urge that the original Census Bureau questionnaires and sampling methods be retained. I am very concerned that the proposed changes will result in an incomplete census and will have a negative impact on a number of population groups, such as the elderly, and those officials and planners who must make policy and planning decisions at the Federal, State, and local levels of government.

Mr. Chairman, I look forward to working with members of the Aging Committee, as well as my colleagues on the Census Subcommittee to ensure that complete and reliable information is obtained through the 1990 census.

PREPARED STATEMENT OF REPRESENTATIVE MERVYN M. DYMALLY

Mr. Chairman, thank you for allowing me to submit a statement at your committee hearing, "The 1990 Census and Housing Data for the Elderly; Can We Count on It?"

As Chairman of the Subcommittee on Census and Population, I would like to take this opportunity to share with the members of your committee the status of the 1990 census questionnaire and the role Congress can play in the final planning stages of the decennial census.

Under its authorizing statute, the Bureau of Census is required to submit to Congress the final questionnaire for the decennial census by April 1, 1988, 2 years prior to the actual census.

Congress will then have the opportunity to review the questionnaire and make recommendations to the Census Bureau.

The Office of Management and Budget will also be looking at the questionnaire under the auspices of the Paperwork Reduction Act. Once again, OMB will have the opportunity to issue its opinion on the questionnaire, the process which produced the decision that your committee is now considering.

Many of our colleagues, State and local governments, and census data users are concerned with how the changes ordered by OMB for the 1988 dress rehearsal questionnaire will affect the 1990 census.

This is a legitimate fear because available analyses of the OMB ruling predict a serious loss in the quality of the information collected under these circumstances. For Federal programs which depend on census data for their effectiveness and efficiency, the loss would translate into a burden for policy-makers and beneficiaries, alike.

Of all the subject areas, OMB, decision, for unknown reasons, seems to have targeted the collection of data used for housing programs. One would wonder if this is not yet another attempt by the administration to abolish housing programs which benefit minorities, the poor and the elderly.

Mr. Chairman, you will recall that we, along with some of our colleagues, sent a letter to the Director of OMB urging reconsideration of his agency's decision on the sample issue. Although OMB's response was somewhat vague, it did give me an indication that our point was well taken.

I commend you and your committee for holding this followup hearing. It is important to keep this issue on the top of our agenda because statistics gathered in the upcoming census will help structure our Federal programs for the next decade.

My subcommittee will begin its hearings on the final questionnaire on April 14. It is my intention to restore as much of the data targeted by OMB as possible.

If our recommendations are not accepted, it is likely that legislation will be offered to ensure that specific questions are included on the questionnaire. I hope you and members of your panel will join me in the event that legislation is necessary.

I look forward to the testimony of the witnesses at your hearing. I intend to study your hearing record in preparation for my subcommittee's review of the census questionnaire.

Mr. Chairman, again, I thank you for the opportunity to submit a statement. I am pleased to have been able to join you and your committee in the effort to make the decennial census count for the elderly population of this country.

Chairman ROYBAL. I'm particularly pleased this morning that Deputy Director of the Office of Management and Budget, Mr. Joseph Wright, is here to testify before the committee. Given his experience as President Nixon's Deputy Director of the Census, I'm sure that he is familiar with the census issues and will be able to answer our questions.

I understand that he is accompanied by Mr. MacRae, who is the Acting Director of the Office of Information and Regulatory Affairs at OMB. May I thank you for your appearance today. I understand that your time is very limited and that you must leave soon. So we'll proceed and ask the members of the panel to please come forward and take their respective seats.

Mr. Wright, will you please proceed in any manner that you may desire.

**STATEMENT OF JOSEPH R. WRIGHT, JR., DEPUTY DIRECTOR,
OFFICE OF MANAGEMENT AND BUDGET**

Mr. WRIGHT. Thank you, Mr. Chairman. I have a prepared statement that I would like to submit for the record, with your permission; and I'd just like to make a few opening remarks, if I may.

First of all, we would like to describe how we see the role, as established by the Paperwork Reduction Act of 1980, of the Office of Management and Budget in this entire area.

First, we have the responsibility to review all collections of information by the Federal Government to make sure that they have practical utility and are not unnecessarily burdensome to the respondents. We also have to make sure that they do not duplicate information available elsewhere.

Next we have to assure that the statistics produced and used by the Federal Government are of the highest possible quality. That is our intent as we carry out our responsibilities under the Paperwork Reduction Act, and that is exactly our intent in this case.

During the last summer and fall, we devoted a great deal of time and effort to reviewing the plans for the dress rehearsal for the 1990 census, and I would like to emphasize, Mr. Chairman, that we are talking about the dress rehearsal, which is a test prior to the full census.

This is supposed to be taken next month. We reviewed and analyzed those proposals to make sure that they met the requirements of the Paperwork Reduction Act, and we made certain recommendations to the Department of Commerce on the contents of the short and the long forms and on the design and the size of the long form sample. Again, our purpose was to improve the quality and usefulness of the 1990 census data and the accuracy of the population count.

It is interesting, Mr. Chairman, over the last 10 years we've found in general that the number of questions and the length of the forms have remained about the same. There are a few changes, for sure; but it has remained about the same, almost as if there's been no progress made in the use of administrative records and our ability to obtain census information from administrative sources.

So one of the concerns that we had was, are we unnecessarily duplicating information and, if so, is there a way to obtain that information from other sources? Are we pursuing something unnecessarily great expense not only to the taxpayers but to those people who have to fill out the forms?

When we were working with the Census Bureau in the dress rehearsal review, our position was, let's try it out and have a dress rehearsal as a test. Let's try to reduce the complexity, as if there has been some progress made in the last 10 years—and I believe there has—and if it doesn't work, let's go and make corrections for the full census.

It was interesting, because we found this debate was not really carried out amongst ourselves. This debate was primarily carried out in the press, and in many cases in the Congress, before we really had a chance to come and resolve many of the differences. So I think this hearing is particularly useful, because the dress rehearsal will be next month. I think that all the questions, Mr. Chairman, should get on the table. I think after the dress rehearsal comes up with results, we will find whether or not the Office of Management and Budget was correct in the fact that you can simplify some forms, and there has been some progress made over the last 10 years, or that census was, or that—as probably will be the case—the result will be somewhere in between.

Then what we would recommend from OMB is that you hold another hearing before we go into the final census to figure out what is the best way to obtain this necessary information at the least burden to the respondents. I think then we will have the best resolution of both worlds, and we will meet the requirements of the Paperwork Reduction Act.

I would like to assure the committee that no final decisions on the 1990 census forms and sample design will be made until both the Congress and the Executive Branch have had an opportunity to review and carefully evaluate the results of that dress rehearsal. We will revisit and evaluate these decisions, and we will be more than happy to share all of the information that we get on this important subject with this committee and anybody else, because the census is the largest single paperwork burden on the American public, and I think we should take it seriously.

I am accompanied by Jim MacRae who is the Acting Administrator and Deputy Administrator for OMB's Office of Information and Regulatory Affairs, who will be more than happy to answer any detailed questions you've got, Mr. Chairman. I've got a hearing over on the Senate side on appropriations, but I think it is important to come in and at least explain what our position is in the Director's office in this particular area, and we welcome the fact that you are holding these hearings and look forward to seeing you again after the dress rehearsal.

[The prepared statement of Mr. Wright follows:]

STATEMENT OF
JOSEPH R. WRIGHT, JR.
DEPUTY DIRECTOR
OFFICE OF MANAGEMENT AND BUDGET
before the
HOUSE SELECT COMMITTEE ON AGING
and the
SUBCOMMITTEE ON HOUSING AND CONSUMER INTERESTS
FEBRUARY 24, 1988

Mr. Chairman and Members of the House Select Committee on Aging and the Subcommittee on Housing and Consumer Interests: I am pleased to be here to discuss the rationale for OMB's recommendations on the forms and sample design for the 1990 census and explain why we believe it will result in an improvement in the quality and usefulness of the 1990 census results.

First, let me assure you that no final decisions will be made regarding the 1990 census forms and sample design until the results of the 1988 dress rehearsal have been studied and discussed by all parties that have a stake in the census. While OMB agreed with the Department of Commerce that the dress rehearsal should be conducted according to the plans intended for the 1990 census, we also believe that Congress and the Executive Branch should have an opportunity to evaluate the results of the dress rehearsal and carefully analyze all other relevant information before the 1990 census design is locked in final form. When the results of the dress rehearsal become available and we have reviewed them, we would welcome the opportunity to discuss the issue of sample design again with your committees.

Let me briefly summarize the role the Office of Management and Budget (OMB) has played in the development of the plans for the 1990 census dress rehearsal.

Under the Paperwork Reduction Act of 1980, collections of information by Federal agencies from 10 or more people must be reviewed by OMB to assure that the information to be collected and published will be as useful as possible to the government and the public and that the burden on respondents is held to the minimum practical level. OMB is also responsible under the Paperwork Reduction Act for overseeing and establishing standards for Federal statistical programs, to maintain and improve the quality of government statistics.

On October 28, 1987, OMB completed a lengthy review of plans for the 1990 decennial census dress rehearsal, a prototype of the forms and sample design to be used in the census. The Census Bureau submitted a first proposal for the dress rehearsal on June 17, 1987. After careful analysis, consultations with Federal agencies, and evaluation of almost one thousand comments from members of the public, OMB concluded that the proposal did not meet the practical utility and burden minimization requirements set forth in the Paperwork Reduction Act. OMB therefore disapproved the initial proposal on September 15, 1987. In communicating the disapproval to the Department of Commerce, we recommended three changes in the proposal, which would allow it to meet the requirements of the Paperwork Reduction Act. On September 22, 1987, the Bureau of the Census submitted a revised proposal for the dress rehearsal, which OMB approved on October 28, 1987.

The revised plans for the dress rehearsal differ from the initial plans in three respects:

1. Seven of the ten housing questions initially proposed for the short form will now be asked only on the long form -- that is, instead of sending these questions to all households in the nation, they will be sent to a sample of households. These are questions asking the number of rooms in one's home; whether there are complete plumbing facilities; whether one's house or apartment is part of a condominium; whether one's house is on ten or more acres or has a business or medical office on the property; whether there is a telephone; what monthly rent is paid (for renters); and what is the estimated value of the house or apartment (for owners).

The transfer of seven questions unrelated to the population count will reduce the length and complexity of the short form and eliminate questions that some groups of respondents have indicated they regard as an invasion of privacy. We thus believe it will encourage higher rates of mailback response to the census short form. This rate dropped sharply from 1970 to 1980, and the Census Bureau had been anticipating another sharp drop in 1990. A higher response rate will both reduce the heavy cost of following up nonrespondents and improve the likelihood of an accurate enumeration.

Asking the seven housing questions of a sample of households rather than of all households will not have an adverse impact on the accuracy of the data collected. In our opinion, there is no gain in real accuracy from asking these questions of the entire population, because the error that arises when respondents either fail to answer the questions or provide incorrect or inexact answers (nonsampling error) exceeds the sampling error associated with any sample in the size range contemplated for the 1990 census.

2. A question asking for respondents' home telephone number, initially proposed for the short form, has been eliminated from the census questionnaires. Instead, respondents will be asked on the back of the form for a telephone number where they can be reached for followup purposes. In addition three questions relating to fuel and utility use and costs, initially proposed for the long form, have been eliminated from the census. These are questions asking about fuel used to heat water; type of heating equipment; and annual bills for electricity, gas, water, and oil or other fuels. To enable the Bureau of the Census and the Department of Housing and Urban Development to distinguish those rent payments that include utilities and heating fuels from those that do not, the question on monthly rent has been expanded to gather this information.

The questions on energy and utility costs proposed for the 1990 census produce especially large reporting errors. When questions such as those removed were asked in prior censuses, the results were not published, because the errors were so large that the estimates did not meet the Census Bureau's publication standards.

We have had useful discussions with the Census Bureau and the Departments of Energy and Housing and Urban Development (HUD) concerning data on utilities necessary for HUD's Fair Market Rent Program. We believe that improved data can be collected to replace the questions deleted from the long form and are considering a strategy that would combine data from several sources. For its part, we have asked the Census Bureau to add simple questions necessary to distinguish rents that include utilities from those that do not.

The Energy Information Administration (EIA) has solved the problem of inaccurate reporting of utility costs by collecting actual billing data covering sample housing units from utility companies. EIA also collects detailed electricity costs for every community with a population over 2,500. Similar data from the American Housing Survey are less accurate but can be used in conjunction with the EIA data to improve estimates for small areas.

Information from the 1990 census, combined with the very accurate measures of utility costs developed by the Department of Energy, should permit the publication of accurate, comprehensive utility cost estimates. Since these costs are a very significant component of housing costs for the elderly, data available after the 1990 census should be a significant contribution to policy analysis concerning the housing costs of senior citizens.

3. The design of the long-form sample has been revised. The initial sample design proposal was to sample one in six households nationwide, a plan that would have resulted in

very small samples for rural and other sparsely populated areas and very large samples for areas with high population concentration, such as central cities. This plan would have required a total sample of 16 million households. Under a revised plan to be tested in the dress rehearsal, the Bureau of the Census will vary the sampling rate among sampling areas, so as to have approximately equal sample sizes and sampling precision in all such areas. More than one in six households -- perhaps one in two -- will be sampled in rural areas and small government jurisdictions. In areas of very heavy population concentration, fewer than one in six households -- perhaps one in twenty -- will receive the long form.

Large sample sizes do not always lead to accurate estimates for subpopulations. The initially proposed sample of 16 million households would have been the largest sample in U.S. history, but the fixed rate design would have allocated this sample so inefficiently that results might have been inadequate in less densely populated areas. In fact, the sampling error in small rural areas would have risen to a level five times the error of central city tracts. This would have occurred because the fixed rate design would have forced less densely populated areas to make do with smaller sample sizes. The new variable rate design solves this problem by ensuring comparable sample sizes, and therefore comparable sampling errors, in all tracts throughout the nation.

Answers to Committee Questions

In the letter inviting me to testify today, the Committee and the Subcommittee asked specifically for the following information:

Before finalizing the proposed changes in the census forms and reductions in the sampling size of the long form, what factors will be taken into consideration when determining their impact on the ability of the Census Bureau, Federal Agencies and local planners to cross-tabulate housing data across smaller subgroups of age, race, ethnicity, disability status, poverty populations and other groups?

We believe that before making any final decisions on the content and design of the decennial census, Congress and the Executive Branch should have an opportunity to study the results of the dress rehearsal. In particular we should examine unit and item nonresponse rates, failed edit rates, and imputation rates for the general population as well as for smaller subgroups of age, race, ethnicity, disability status, and income level. Since the logistics of any large population census are so complex, it is also important to look into Census Bureau's ability during the

dress rehearsal to find, hire, and train adequate numbers of temporary employees and the ability of the Bureau to complete the enumeration in a timely and effective manner.

It is important to realize that there is nothing to be gained in being able to crosstabulate inaccurate data. One of OMB's major concerns is that the quality of the data collected be high enough to permit reliable analyses of smaller subgroups. The primary factor OMB will consider when suggesting or finalizing any changes is the impact of those changes on the accuracy of the data first the accuracy of the population count and second the accuracy of the demographic data derived from the short and long forms.

We will also consider response burden, not only because it is part of OMB's mandate under the Paperwork Reduction Act to assure that it is held to the minimum practical level, but more important, because it is a major factor affecting the quality of response and the accuracy of census data.

What was the rationale for OMB's proposal to limit the sample size of the long questionnaire form to 10 million housing units?

Our primary objective was to ensure a quality enumeration by keeping the census workload and respondent paperwork burden at a manageable level. We are aware that some people feel that the long form sample size should be increased in order to keep sampling errors in urban areas at historical levels. Yet giving millions more people longer forms does very little to increase the quality of the census and it may have very adverse effects. William Edward Deming, a world renowned statistician and pioneer in the modern science of quality control, explains:

The overall usefulness and reliability of a survey may actually be enhanced by cutting down on the size of sample and using the money so saved to hire better interviewers and to provide better training and supervision in the field, thus trimming the biases of interviewing, response and nonresponse more than enough to counterbalance the increased sampling error.

Deming's message is simple -- concentrate on quality, not quantity. Concentrating on quality means studying all the possible problems that occur in such a huge undertaking and not focusing on the narrow issue of statistical sampling error.

We are particularly concerned that there will not be enough competent employees available to complete the work generated by a larger sample size. In 1980, the Census Bureau had tremendous difficulties hiring enumerators. Two weeks before Census Day, only 27.5 percent of the projected census takers needed had been hired in Census's Dallas region, which includes Texas, Louisiana, Mississippi, and Arkansas. Despite emergency pleas, hiring

targets were not reached around the country. Even after over half the forms had been returned, some local offices in New Jersey, New York, and Texas had only hired 25 percent of the needed workers. If the Census Bureau is placed in a desperate hiring situation by increasing the workload, it is likely to be forced to accept employees that do not meet its minimum standards. Errors caused or left uncorrected by a marginal or understaffed workforce are a serious problem, especially since the extent of the errors is never known. To avoid this problem, the enormous decennial workload should be reduced in any way it can without compromising the accuracy of the enumeration.

What is the impact of the proposed changes in content and sample size on the reports which the Census Bureau issues?

OMB does not determine what is included in Census Bureau reports so we cannot answer this question definitively. However, as far as we know, there should be no impact on the content of the reports. Crucial data on age, race, sex, marital status, and ethnicity -- the most often-used classification variables for tabulating socioeconomic data -- will still be obtained from all households. Questions on the number of rooms in the household, complete plumbing facilities, whether the house or apartment is part of a condominium and some others have been moved to the long form but data will still be available for these items at the tract level. Three questions relating to fuel and utility costs and use have been eliminated but, as stated in my summary of our revisions, much more accurate information can be obtained through other means.

What is the basis for OMB's assumption that "nonsampling errors" will decrease with a reduction in sample size?

Nonsampling error should decrease with a reduction in sample size because it is more easily controlled when the workload is reduced. This argument is best explained in the Deming quote in the answer to your second question.

One way to decrease nonsampling errors is to increase follow up efforts. In 1980, 45 percent of the final census records or persons, including both short and long form respondents, had one or more missing data items. If responses can't be obtained for missing items, the Census Bureau uses a procedure it calls allocation to artificially create those items using information from the records of other individuals. For some items, a sizeable percentage of census data was artificially created. For example the Bureau of the Census reported that on 8 percent of personal records, "1975 residence" was artificially created.

Unemployment experienced in 1979 was an artificially created data item on 15.9 percent of all personal records. All or some portion of household income was artificially created on 16.8 percent of all household records. These figures are troubling because the extent of the statistical error introduced using the allocation process is not known.

Yet the issue of nonsampling error is not only one of sample size. Certain types of nonsampling error are inherent in the survey process and occur no matter what the sample size is. An example may clarify the relationship between sampling and nonsampling errors. Take, for instance, the question to determine the value of a home. If we considered only sampling error, we could design a sample that would permit us to make a statistical statement such as, "We can estimate the average value of homes within \$2,000 with 95 percent confidence." But sampling error does not give a true picture of the total error. How accurately would the average person, call her Cindy Washington, be able to estimate the value of her home? If Ms. Washington is not thinking of selling her home at the time, she probably would not be able to guess the market value within a \$2,000 range. If the neighborhood in which she lives is changing rapidly, the value she reports would depend on when she filled out the form and it would certainly change by the time the Census Bureau finished tabulating its results.

Worse still, if she is like many other Americans and doesn't want to provide this information to the government, her answer would be artificially created by a Census Bureau computer. Under these circumstances the estimate is unlikely to be accurate within \$2,000.

The Census Bureau recognizes these uncertainties in the way the home value question is presented. If Cindy Washington's best guess is \$105,000 she would check a box on the census form marked \$100,000-125,000. When the Census Bureau receives the form, it then estimates that the value of Ms. Washington's home is about \$112,500 plus or minus \$12,500 (11 percent). This error of plus or minus 11 percent is present whether the question is asked of all households or a small sample. In this situation if we doubled or even tripled the sampling error by reducing the sample size it would not matter, because the sampling error would be so heavily outweighed by other sources of error.

In general, what are the implications of the current plans for the census on the information that will be available into the 21st century concerning older Americans?

Let me state emphatically that in no way will older Americans be shortchanged by the revisions described earlier. On the contrary, they will benefit, as will all citizens, from the improvements made. We believe the revised plan will redress disparities between the quality of the census data available for

urban and rural areas, lead to more accurate data on household utility and fuel costs, reduce nonsampling error, and free resources to allow for a more accurate population count.

Did OMB seek a legal opinion with respect to its ability to modify the Census Bureau's design concerning the collection of housing data? In particular, on what legal basis did OMB determine that the statutory language of the Housing Act of 1949, as amended, is insufficient to meet the standard set forth in 44 U.S.C. 3504(a), which prohibits OMB from exercising its paperwork reduction authority if a collection of information is specifically required by statute?

Questions concerning the scope and effect of the Paperwork Reduction Act arose soon after the law was enacted and have been thoroughly reviewed by OMB counsel. A mandate to collect data does not imply that an agency is free to adopt an inefficient design or to impose unnecessary reporting burden on respondents. According to provisions the Congress placed in the Paperwork Reduction Act, an agency's proposal to collect information must be approved by OMB. To justify such approval, the sponsor agency must balance the need for the information and the practical utility of its proposal against the burden on respondents and cost involved. That is, even if the information is being collected pursuant to a statutory requirements, OMB is still obligated to ensure that the agency collects the information in the least burdensome way practicable and that methods of collection are consistent with governmentwide information and statistical policies.

The 1949 amendment to Title 13, which required a census of housing, was subsequently amended several times. The requirement for a "housing census" was completely eliminated in 1976 when the Secretary of Commerce was directed to use the statistical method known as "sampling" wherever feasible except "for the determination of population for purposes of apportionment of Representatives in Congress among the several States" (Section 195 of Title 13).

Mr. Chairman and Members of the House Select Committee on Aging and the Subcommittee on Housing and Consumer Interests. I would like to assure you that actions taken to date on our part are not fixed in concrete, particularly those related to sample size. We will revisit these decisions without prejudice at the completion of the dress rehearsal and will keep the committees informed of our progress.

Chairman ROYBAL. Thank you, Mr. Wright. I have just two very quick questions that I'd like to ask you personally. The first is, how much money has OMB's cut saved from the 10 year cost of the decennial census? I think you made a point of the fact that there would be savings by cutting back in the samples. Well, what are the savings that you're talking about?

Mr. WRIGHT. My understanding, Mr. Chairman, and I would like to have the opportunity to go and confirm this with our budget people, is we are not talking about savings of Federal dollars here. That is not the exercise that we're going through. We're talking about savings of the paperwork burden on respondents. But I would like to go back and just check that answer.

Chairman ROYBAL. We've heard from numerous groups and experts about the problems that you're talking about now, about the cuts and so forth. Could you please tell us which organizations support your proposals? Do you actually have broad support, or is this something that OMB is doing on their own?

Mr. WRIGHT. On the technical aspect, I would appreciate it if Mr. MacRae could handle this, because he's been involved directly.

Chairman ROYBAL. All right. I really want to know whether this is something that OMB has decided to do or whether you actually have broad support and, if not, why are you proceeding the way you are.

Mr. MACRAE. Mr. Chairman, if I could respond to that. Under the Paperwork Reduction Act we are required to examine any information in a collection request, which the census is, to see that it has practical utility, but there were other indications that there was need to examine the 1990 census carefully.

The GAO has suggested that a shorter short form needed to be tested. Internal census research has found that a number of groups were offended by some of the questions, some of the housing questions that were on the short form and that we suggested be moved to the long form.

So it was not just us carrying out our responsibility, as we must, but it was also this indication from other parties, some concerns about certain questions and concern also that the burden that's imposed by either the short or long form be kept to a minimum.

Chairman ROYBAL. Can you tell the committee what were the groups that were offended by these questions?

Mr. MACRAE. Well, a number of minority groups have suggested that the questions that are asked about the number of rooms in the house could be used then to determine the number of inhabitants of a particular abode, and may be used by someone to determine that there was overcrowding and that, therefore, you might have to reduce the number of persons in the house. So there's a sensitivity on that question.

Chairman ROYBAL. Boy, that's really farfetched, isn't it?

Mr. MACRAE. Well, I'm not sure, Mr. Chairman. Those are personal questions—number of bathrooms, things like that. They are obviously important to know. On the other hand, one doesn't want to be in the situation where people won't answer because they are offended by the question.

Chairman ROYBAL. No, but shouldn't we know our status with regard to housing in this country?

Mr. MACRAE. We have a number of other surveys, Mr. Chairman, besides the census where we do also gain information on the status of housing, conducted by the Census Bureau and conducted by other bodies. You are absolutely right; of course, we should know, but what we don't want, I'm sure you agree, Mr. Chairman, is the situation where people don't want to answer because they may be offended by the way the question is phrased.

Chairman ROYBAL. I would like to pursue this, but I understand you have a statement to make yet. Is that correct?

Mr. WRIGHT. No, Mr. Chairman. We submitted it for the record.

Chairman ROYBAL. All right. I am worried about the time that you have to be leaving. As soon as that time does come, just feel free to leave.

Mr. WRIGHT. OK. Mr. MacRae will stay for the entire hearing.

Ms. MORELLA. Before you leave, I am the ranking minority member of the Census and Population Subcommittee, Post Office and Civil Service. I have a packet here, about 61 letters that I have received from organizations and individuals saying, please don't take those questions out of the sample, but I haven't gotten one that said take them out because of an invasion of privacy or because of overcount or whatever. Now maybe those people aren't being vocal but, on the other hand, I can't help but be impressed by these groups and individuals who say we need this data for a number of other reasons and are really concerned if it is omitted.

I'm wondering, number one, under the Paperwork Reduction Act, what does it say, just reduce as much as you can? Is there a criteria that you look at that makes you say, these questions should be taken out?

Second, how are you going to assess the validity of the sample on the basis of the omission of those questions? Do you have a mindset in advance that you think you can get this data from something else? For instance, how can you get data on the number of telephones, et cetera?

Mr. MACRAE. The answer is that in some cases we can get the data elsewhere. With regard to, for example, the estimates of heating costs, one of the things the Census Bureau has found is that people often overestimate their heating costs. If you ask in April, what are your annual heating costs, for example, for gas or electricity, many of them think of the last month, which might have been a cold month.

By the way, this is Dorothy Tella, who is head of our Statistical Office within OMB. I had asked her to join us here.

On the heating costs question, people then, therefore, take the month of March or the month of February and multiply it by 12. Census Bureau research has found that there's an overestimation.

Now the Energy Information Agency within the Department of Energy also does, we think, a much better survey of heating costs. They ask people, may we have permission to go to your utility company and get the actual billing, and people grant their permission. Then, of course, you have actual hard data.

It's not that people try to be misleading, but it's just a matter that collecting those data through that mechanism provides more accurate data and gives us a better picture of heating costs across the country.

You mentioned the fact that you have received no letters saying, please reduce. We have a few letters in our file. One of the things that concerns us when we carry out the Paperwork Act is that increasingly we are seeing a resistance on the part of the public to complete long, detailed questionnaires. We saw it most recently in the reaction to the very lengthy first W-4, and there were hollers and screams all over the place. In fact, we were asked why OMB let that first form go out.

Ms. MORELLA. That wasn't length. It was obfuscation.

Mr. MACRAE. Well, it was length and complexity.

So we think we have a responsibility. Our authorizing committees in both Senate and House have urged us to do our duty, that sometimes the public is silent and that we have to make sure that they have an opportunity to be heard; and where we think something is duplicative or where we think that we can reduce the burden and get a better response as a result, we think that is what we should do pursuant to the Paperwork Reduction Act.

Ms. MORELLA. My concern is that in trying to get the data that we didn't ask, it ends up taking more time and energy to pull together from the different sources when you would be able to do it from one questionnaire.

Incidentally, I think my utility companies overestimate when I'm not there when they're reading.

Mr. MACRAE. Well, it's supposed to be accurate billing; but you're right.

Chairman ROYBAL. The time of the gentlelady has expired. We are going to proceed now in the regular order. We're going to ask Mr. Young and the others to testify, and then come back, Mr. MacRae, to you and to the young lady with you. Mr. Young, would you please proceed in any manner which you may desire.

STATEMENT OF ARTHUR F. YOUNG, FORMER CHIEF, HOUSING DIVISION, U.S. CENSUS BUREAU

Mr. YOUNG. Mr. Chairman, I appreciate this opportunity to testify, and I would like to submit my written testimony for the record and then summarize my comments.

Chairman ROYBAL. All right. Without objection, it will be the order.

Mr. YOUNG. First, I'd just like to clarify what OMB did change. They changed the 1988 dress rehearsal of the 1990 census, and the dress rehearsal was to be a precursor for 1990, as much like it as possible. So the changes are really changes in the 1990 census.

The plans the Census Bureau submitted had been developed after 4 years of the most thorough and professional work I have seen in my 35 years at the bureau. This proposal had less housing content than 1980 and was the briefest housing census since 1950. The changes made by OMB were to drop three questions entirely from the housing census. They were: The cost of utilities; type of heating equipment; and water heating fuel used.

To move seven questions from the 100 percent questionnaire asked at every housing unit to the sample questionnaire. These dealt with the presence of plumbing, the number of rooms, rent paid, value for homeowners, condominium status, and telephones.

They also recommended that the sample size be cut from 17.7 million housing units to 10 million.

The rationale for these changes was not to save money, but to improve data quality and to reduce respondent burden. I feel their rationale is seriously flawed in terms of improving quality. In fact, it will probably lower the quality of sample data, and that the Census Bureau should comment on this. They are the experts and have the experience.

The sample cut would result in about 7.5 million fewer long forms being completed, which is not insignificant, at a savings of roughly 30 minutes per questionnaire, but when viewed as a once in a decade event and evaluated in terms of what completing these forms means to the usefulness of the data, the 7.5 million long form questionnaires appear to be very worthwhile to collect.

The primary purpose of the Decennial Census is to update our population count for reapportionment and redistricting at the Federal, State and local levels, but the Nation has long recognized the need for additional information and questions have been added to the census since the early 1800s.

The OMB changes have little effect on data for big areas such as the Nation as a whole, States or large metropolitan areas; but they disregard the broad and pervasive uses of housing data at the local level of cities and counties and the uses of sample and small area data made by business and industries.

The data user will lose in two ways. First, small area data. The housing data for blocks, both urban and rural, will be practically eliminated. The housing data for census tracts or their rural equivalents, areas of roughly 3,000 to 5,000 population, will have crippling sampling errors. The local user's ability to tie data to the ground will be lost or greatly blurred.

The second loss will be of small group data, data on the characteristics of subgroups of the population or of the housing stock, such as the elderly, minorities, farm households, poverty households, one parent households, housing that lacks plumbing or is crowded, low rent or low value housing, will either have substantial increases in sampling error or will not be available at the block level.

The OMB cut will make the 1990 data on rental housing costs different from all other censuses and surveys, and eliminate the cost data for homeowners. Thus, meaningful comparisons between 1980 and 1990 housing costs will not be able to be made, and it will be impossible to assess the impact of Reaganomics on the economics of American housing.

The OMB cuts will leave the Nation, after the 1990 census, with a housing data base inadequate for sound decisionmaking at the local level. As many housing activities have been moved from the Federal to State and local governments, this may well delay and frustrate the solution of housing problems in the 1990s.

The coming decade will find the Nation looking at questions on housing affordability, homeownership, housing for the elderly, the infirm, the poor, and in rural areas, energy shortages or high costs, water and air pollution, daycare centers, housing discrimination, growth or no growth policies, and probably many others, some of which have not risen above the horizon.

These subjects warrant good, reliable data for small areas, so the problems can be identified, discussed, analyzed and solutions planned and evaluated. We are entering the new age of information. This is no time to dismember our socio-economic data base.

The situation we are in actually reminds me of a prank my children played on my wife. When they made their school lunches, they carefully took the peanut butter from the center of the jar, finally leaving nothing but a very thin layer on the inside surface. Then, in one day, they emptied the last of the jar and complained that she never had enough peanut butter in the house. The image of that jar on the shelf is exactly what the housing census will be for our local users. It will look like a full census, but it will be nothing but a hollow shell.

If the Surgeon General had purview over the census, he should put a warning on the cover of each sample report: "Caution: The use of these data for small areas may be dangerous to your analysis."

Thank you.

[The prepared statement of Mr. Young follows:]

COMMENTS ON THE OFFICE OF MANAGEMENT
AND BUDGET'S CHANGES TO THE 1990 DECENNIAL CENSUS

TESTIMONY BEFORE A JOINT HEARING OF
THE HOUSE SELECT COMMITTEE ON AGING AND
THE SUBCOMMITTEE ON HOUSING AND CONSUMER INTERESTS

February 24, 1988

Prepared By
Arthur F. Young
Formerly - Chief Housing Division
U.S. Census Bureau
5911 John Adams Drive
Camp Springs, MD 20748
(301) 899-7987

The Office of Management and Budget directed the Bureau of the Census in the fall of 1987 to make substantial changes in its plans for the 1988 dress rehearsal of the 1990 Decennial Census. As the dress rehearsal was to be as much like the 1990 Census as possible, these directives are of great importance to all those who will use the 1990 data. In essence the Census Bureau was instructed to:

1. Drop three questions from the Census completely. These were:
 - A The cost of utilities
 - B Type of heating equipment
 - C Fuel used for water heating

2. Move seven questions from those planned to be asked at every housing unit to those asked at a sample of housing units. These were:
 - A Number of rooms
 - B Presence of complete plumbing facilities
 - C The screener question for rent and value
 - D Rent paid by renters and whether meals are included in rent
 - E Value of single family homes and condominiums
 - F Condominium status
 - G Presence of telephone in the unit

3. Cut the sample size to 10 million questionnaires, which is less than half the sample that would have been enumerated if the 1980 sampling plan were to be used in 1990 and a drop from the 17 to 18 million questionnaires from what the Census Bureau had planned to collect.

Why was this done? It is hard to say. It was not done for budgetary reasons, as the monetary savings are trivial in the perspective of the total decennial cost. OMB indicates they believe these changes will improve response rates and data quality and reduce respondent burden. The Census Bureau, in reply to OMB, has stated that based on past experience improvements in response rates would be extremely small or non-existent and that, in fact, data quality would be adversely affected. The reduction in sample size would mean that about 7-1/2 million fewer "long form" questionnaires would be filled at a savings to the public of about 30 minutes per questionnaire. This reduction occurs only once in ten years and would involve a small fraction of the Nation's households. The savings in respondent burden seems small compared to the havoc it would create in the Nation's statistical base, a base that will be used not only throughout the 1990's, but as a quantitative benchmark in our Nation's history.

Before I discuss the impact of the OMB directives on the 1990 census results, it should be pointed out that the Census Bureau began actively planning the content of the 1990 census in the spring of 1984. The Bureau held meetings and conferences in all states and with a great variety of groups and data users including a Federal Agency Council chaired by OMB to determine what questions should be asked. In my 35 years at the Bureau which covered planning the 1960, 1970, 1980 and 1990 Censuses, the efforts expended to determine the content of the 1990 Census were the most extensive, thorough, and professional. This three-year program is described in a Census publication entitled, "The Content Development Process for the 1990 Census of Population and Housing" which clearly shows that the content determinations made by the Bureau's experienced professionals were done carefully and reflect documented data needs.

As a result of this planning program some of the questions asked in the 1980 Housing Census were dropped from the 1990 plans. These were: 1) the number of housing units at this address; 2) access to living quarters; 3) number of stories in the structure and presence of elevator; and 4) fuel used for cooking.

Two questions were combined to shorten the questionnaire and inquiries were added dealing with the unique out-of-pocket expenses of mobile home and condominium occupants, and whether or not rent included meals. Before the original dress rehearsal questionnaire was submitted to OMB for clearance, the Bureau's executive staff decided to drop two additional questions: air conditioning and number of bathrooms. Thus, the proposed 1990 Housing Census content was less than 1980 and, in fact, was the briefest since 1950.

The Impact of the OMB Decisions

The directive to drop the question on utility costs will be a serious, if not fatal, blow to the analysis of housing costs. Beginning with the first housing census in 1940, a concept has been used called "gross rent." Gross rent is the sum of the rent paid to the landlord (contract rent) plus what the tenant spends on utilities. Thus, "gross rent" permits comparison between all types of rental arrangements. For instance, a tenant in an apartment house may pay rent which includes all utilities (gas, electricity, and water) and heat. In this case, contract rent equals gross rent. Another family may rent a single family house and pays rent to the owner but also pays the electric, gas, and water bills. Here, the gross rent would be the sum of the rent plus the cost of utilities. Gross rent thus allows a true comparison of the out-of-pocket expenses paid for shelter by these two families. There are, of course, many other rental arrangements where the tenant pays for some but not all utilities, and in all instances "gross rent" permits meaningful comparison and analysis across all rental units. In the 1980 Census this concept was

extended to homeowner units where mortgage payments, taxes, insurance, and utility costs were added to produce data on homeowner shelter costs, or the out-of-pocket expenses for homeowners that could be compared to gross rent for renters. This 1980 Census innovation was applauded by data users and in the content planning process many people urged that the homeowner shelter cost data be carried over to the 1990 Census.

Gross rent and homeowner shelter cost are also studied in relation to household income. These data show what percent of a household's income is spent for shelter and how this varies between income levels, between owners and renters, between the young and the old, between different geographical areas and even between different neighborhoods in the same city. These are the data that are needed to study our Nation's growing housing affordability problem. Since 1970, housing costs have risen faster than income, people are now spending a higher percentage of their income on shelter than ever before.

These trends have accelerated in the 80's with the median percent of income spent on rent reaching new highs and the high cost of owning a home reducing the percentage of homeownership for younger Americans from 41.7% to 36.7%. The problem of housing affordability, particularly for people with low, moderate, or fixed incomes, has become critical in the 1980's. If we are to meet our national housing goals we will need to have the best data possible on the cost of housing. By taking the utility cost data out of the 1990 Census we make comparisons with the 1980 data impossible, ending long-term trend analysis from older censuses. The deletion of the utility cost question also leaves housing program planners at the federal, state and local level with a fatally flawed data base on housing costs that will not show the current problems or provide the facts needed to arrive at much-needed solutions.

The gross rent data are also used by HUD in its Fair Market Rent program. The removal of the utility cost question from the 1990 Census will force HUD to use statistical modeling techniques or imputation to arrive at gross rent for the 2,700 fair market rent areas in the U.S. I have no doubt that such a procedure is eventually possible; however, it requires careful planning, extensive testing, and evaluation to determine the proper data inputs and the accuracy of the results. I believe it is too late in the decade to integrate a new and complex set of procedures into the basic decennial census operations and that such a program would be quite costly. To produce gross rent and homeowner shelter cost data on a timely basis for all geographic areas, large and small, urban and rural at a minimal cost, the question on utility costs should be restored to the 1990 Census questionnaire.

The question on heating equipment, which OMB eliminated, is also an important question. Historically, it shows how the Nation's housing has progressed from hand-fed coal and wood furnaces to automatic central heat and is now beginning to use heat pumps and solar heat. But, more importantly, it shows local housing and health officials how much of the housing stock uses antiquated or potentially dangerous heating equipment, possibly posing a threat to the health and safety of the occupants. This is a problem in rural America where stoves, fireplaces, and onvented heaters are used. The heating equipment data, when compared to previous censuses, also shows how the nation has reacted to the energy crisis by retrofitting furnaces or changing equipment and provides the information at the local level which may be needed if the nation is faced with a critical fuel shortage. Last, but not least, if statistical modeling is to be used to estimate utility costs, the type of heating equipment is an important element in this process.

The third question dropped by OMB, concerning water heating fuel, while not as crucial as the first two, is also important. The original 1990 content as proposed by the Housing Division at the Census Bureau contained questions on heating equipment and heating fuels, water heating fuels, air conditioning, and the cost of utilities. This family of questions was designed to provide basic data on residential energy consumption. Local officials are concerned with energy consumption - particularly when demand exceeds supply and there are brown outs or fuel shortages. However, the responsibility for having an adequate supply, at moderate cost, of electricity, gas, fuel oil, and water, for a growing and shifting population falls on the shoulders of local utility company officials. Data on residential energy consuming equipment and energy costs that can be studied in relation to the characteristics of the housing are essential to planning for the growth and efficient use of our utility infrastructure. The integrated data collected in the Decennial Census cannot be collected by local companies because of the cost and complexities. The Census data are collected at one time and with uniform procedures in all 50 states. This consistency, accuracy, and timeliness is essential for the accurate projections of future utility needs. As can be seen, the "family" of energy questions has been badly depleted. This will greatly reduce the usefulness of the Census for utility companies in planning for the future and incomplete and inaccurate data may well increase utility costs and create inconveniences.

More specifically, the water heating fuel question is important in warmer parts of the country where more energy is used to heat water than to heat the home. It's also useful for energy planning because many homes use a different source of energy to heat water than the one used to heat the home and, finally, if utility costs are to be modeled or imputed, the fuel used to heat water is an important variable.

OMB directed that seven questions listed previously be moved from the group asked at every housing unit to those asked at a sample or small fraction of the nation's housing units.

This directive creates a very basic change in housing data. The result of this change is that in 1990 almost the entire housing census will no longer be a census but a sample survey producing estimates rather than counts. This means that there will be no more housing characteristics data, city block by city block or for very small rural areas. The smallest geographic areas for publishing housing characteristics would be the Census tracts or the rural equivalent, Block Numbering Areas (BNA), areas with 4,000 to 5,000 population or approximately 1,500 housing units. Cities and counties could no longer assemble block housing characteristics data into areas that they needed for study or for grant applications. This is like taking bricks away from a mason and saying you must now build with stone blocks 2 feet by 4 feet by 8 feet.

It also means that TIGER, a computer mapping and geo-coding system created for the 1990 Census, which identifies every city block and rural land area in the entire nation coast to coast, and would have permitted for the first time the same fine grain geographical identification for rural areas that has been available to urban areas for decades - cannot be utilized to produce rural block housing characteristics data because such data will not be collected. Thus, just when rural America was to obtain housing statistical equity with urban America, the opportunity is lost.

The move of the questions on plumbing and on number of rooms to the sample will greatly diminish the usefulness of these data to identify substandard housing. The rooms question is used in conjunction with the household population counts to produce data on over-crowding. The plumbing question shows how many housing units lack complete

private plumbing facilities. These are the traditional indicators of sub-standard housing - but sub-standard housing clusters, and there are greater differences in housing quality between blocks than between census tracts.

Therefore, the resulting sample or census tract data on housing deficiencies will be greatly weakened for four reasons:

- 1) They are not as geographically specific - because tracts contain many blocks (20 to 100); it will not be possible to accurately locate where the problem areas are.
- 2) The data will be subject to substantial sampling error. Thus, it will not be possible to tell with confidence whether one tract has more deficiencies than another except in extreme situations.
- 3) The differences in housing quality between the blocks within a tract will be averaged out and appear as tract summaries and this, combined with sampling error, will make it very difficult to determine differences in the level of housing deficiencies between tracts.
- 4) The ability to measure housing quality for sub-groups within the tract such as the elderly, minorities, one-parent households, renters, owners, or multi-unit structures or the differences between sub-groups will be almost totally obscured by a cloud of sampling error.

The same problems exist for rural areas and with the great dispersion of housing in rural area the loss of 100% data on plumbing and crowding will be even more critical.

Moving the three questions on rent and value to the sample will have a disastrous impact on local users of housing data and will also adversely affect all housing sample tabulations. The 100% data on rent and value produced at the block level in 1980 were

used as micro level indicators of wealth and poverty. They were the only socio-economic data available at this geographic level and were published well ahead of the sample income data. Moving rent and value to the sample will lose this geographic specificity and delay their publication for at least a year.

These items are also used to measure trends in property values and the effect of environmental factors, social, economic and physical and other changes on rent and value. Again - if these items are moved to the sample the ability to use them for sub-groups of the population or housing stock is either lost or greatly diminished.

In 1980, the Census Bureau used the 100% rent and value data to improve the quality of all housing sample data by a process known as "raking". Briefly, this process made sure that the rent and value distributions in the sample tabulations agreed with the 100% distributions. As many housing characteristics are positively correlated with rent or value, this improved all housing sample data. Moving rent and value to the sample in 1990 will eliminate this valuable technique and in comparison to 1980 increase the sampling errors on the housing items.

The block by block rent and value data are used by other survey takers both in private industry and in government. In designing their samples, they often use block data and stratify their design by rent and value and, thus, are able to reduce sample sizes and cost. Dropping the rent and value questions down to the sample will negate this use and result in increased research costs and respondent burden throughout the decade of the 1990's.

The question on condominium status was asked of all households in 1980 because condominiums are relatively rare and tend to cluster. These two facts are still true and

make the data on condominium status subject to large sampling errors if it is collected in the sample. Moreover, for those city officials and urban data users who wish to study the shifts between 1980 and 1990 of rental property to condominium status and the corresponding changes in housing costs, the sample information will give only the broadest geographic picture and will be of little assistance in solving or studying local problems.

The inquiry on telephones was included on the 100% questionnaire to meet the need of those local agencies who are concerned with the elderly, the infirm, and the poor and their ability to communicate in times of emergency. Lack of a telephone can be a life-threatening situation for these people and information on how many households lack phones and their location and characteristics are important. The Census Bureau needs the telephone number of each household to conduct follow-up calls for missing or contradictory replies and if the telephone question does not appear as a 100% data item it will be asked on the back of every questionnaire for follow-up purposes and as a sample question. It seems more efficient to ask it once as was proposed by the Census Bureau.

The third OMB directive is to reduce the sample to 10 million questionnaires. This is probably the most damaging of all, for it weakens both the Population and Housing Censuses.

In 1980 every sixth housing unit was in the sample except for places of 2,500 population or less, where every other housing unit was sampled. In 1970 a 1 out of 5 sample was used across the nation and in 1960 the sample was 1 out of 4. Thus, as time has passed, the sample gets smaller and the sampling errors get larger. Data for the Nation as a whole, entire states, or large metropolitan areas are quite accurate from these samples, but problems arise with data quality when data for small areas or small

population groups are used. The housing data are more adversely affected than population data because there are roughly one-third the number of housing units as there are people and sampling error is primarily related to the number of cases in the sample - not the size of the universe being sampled or the sampling fraction, that is, the fewer cases in the sample, the higher the error. The OMB directive also indicated that a varying sample fraction be used so that sampling errors would roughly be the same for very small places (under 1000 population) and census tracts and BNA's of varying size. What this plan boils down to is that the sampling error for most of the census tracts, BNA's, or smaller counties and communities for the housing sample items would be about 25% on a 10% characteristic. For example, if a Census report said about 10% of the housing in a tract was overcrowded, that should be interpreted as: the chances are 2 out of 3 that the true level of overcrowding is between 7.5% and 12.5%; and that there is one chance in three that the true level of overcrowding is outside these limits. The Bureau currently uses more stringent confidence limits and, if these were applied, the published 10% rate of overcrowding should be interpreted as the chances are 9 out of 10 that the true level lies between 6.0% and 14.0% and that there is one chance in ten that the true level is outside these limits. As most tracts have a rate of overcrowding that is within the 6.0% to 14.0% range it becomes impossible to determine differences between tracts or to rank them from most to least overcrowded. Similar problems occur with plumbing data, but they are worse, because lacking plumbing is a 2% occurrence and the relative sample error on smaller groups is higher. Another problem arises with sample data on infrequent items when the sample size is small and that is the "zero report". The published data for many tracts on lacking plumbing may be zero but this may or may not be true and confidence limits have to be applied to the zero report - thus, every zero report may have to be interpreted as: there are 9 chances out of 10 the true value lies between 0 and 1.7%. These data may be more confusing than useful and would be poor indicators of the presence or absence of plumbing deficiencies.

The reduction in sample size to 10 million questionnaires would result in housing tract, BNA and small place and county data with sampling errors so high that rational decision making and planning at the local level would be almost impossible or done at tremendous risk. The sample size should be restored to, at least, the 17.8 million cases recommended by the Census Bureau.

The OMB directives for the 1990 census will do great damages to the small area and small place data published by the Bureau and virtually eliminate the housing block statistics program. Both the population and housing data will be hurt by the reduction in sample size but the housing data will be wounded even more by the reduction in content and the move of the 100% items to the sample. Data, both population and housing, for small groups such as the elderly, minorities, poverty households, the disabled, and the farm population, will be weakened and their usefulness reduced. For the people who must resolve their problems, the local officials, the 1990 sample data will be a great disappointment and even misleading.

The persons who will be hurt the most by these changes are in local government, such as city and county planners, education administrators, public health officials, transportation planners, housing authority administrators and officials who work with the elderly, the disabled, and the poor. Private industry, the building materials manufacturers, builders, realtors, appraisers, mortgage bankers and utility companies will all suffer from the impact of a diminished data base that will make planning and decisionmaking risky and difficult. In the long run, however, it will be the American public that suffers since good statistics promote full employment, good business, and healthy industries, producing better products and better services more quickly and at lower costs. Good data help governments at all levels to recognize existing problems and foresee future problems and plan efficient solutions. The 1990 census should be restored

Chairman ROYBAL. Congressman Smith, will you please proceed and introduce your guest.

Mr. SMITH. Thank you, Mr. Chairman. First of all, I'd like to commend you for your initiative in calling this hearing today to discuss the 1990 census, proposed changes in the census data collection process and the potential impact of these changes on our elderly population.

As you are quite aware, Mr. Chairman, OMB has suggested that the Census Bureau make several changes in both the questionnaire and some sampling techniques used to collect the 1990 census data. Today the Subcommittee on Housing and Consumer Interests and the full committee is focusing its concern on the proposed changes in the sampling size targeted to receive the long form questionnaire, and on the omission of certain important questions from the short form.

Because the information collected by our national census is considered in countless public policy decisions which affect our entire population, it is essential that we ensure that the information collected is both reliable and valid. Concerns have been raised regarding the effect OMB's proposal may have on the planning of housing facilities for the aged. Clearly, the shifting or deletion of certain key questions and inadequate sampling size may yield information which underestimates the real housing needs of our Nation's elderly.

Today, to address this important issue, I have the distinct honor, the very special honor, to welcome and to introduce to you and to members of the committee the Honorable Art Holland. Mr. Holland is the Mayor of New Jersey's capital city, the city of Trenton, the largest municipality in the district that I represent, and Vice President of the U.S. Conference of Mayors.

Mr. Holland's experience in the areas of public administration, regional and urban planning and research analysis is quite extensive. Throughout his career, he has served on several boards and commissions, including Chairman of the Subcommittee on Civil Rights for the Conference of Mayors. He is currently the member of the Advisory Council, National League of Cities and the Greater Mercer Comprehensive Planning Council, just to name a few.

In the past he has served as Chairman of the Delaware Valley Regional Planning Commission, the Cochairman of the Labor Management Relations Task Force, the National League of Cities and President of the Mercer County League of Municipalities.

It is my great honor to welcome and to introduce to the committee Mayor Art Holland, Mayor of Trenton.

STATEMENT OF THE HONORABLE ARTHUR J. HOLLAND, MAYOR, TRENTON, NJ; AND, VICE PRESIDENT, U.S. CONFERENCE OF MAYORS

Mr. HOLLAND. Thank you, Congressman.

Chairman ROYBAL. Mayor Holland, please proceed in any manner which you desire.

Mr. HOLLAND. Mr. Chairman and the committee, my name is Art Holland. I am the Mayor of Trenton, New Jersey. I'm also Vice

President of the United States Conference of Mayors, and I am appearing before this committee today representing both.

I appreciate the efforts of this committee in examining the impacts of proposed changes in the 1990 census questionnaire on the elderly. The Decennial Census is no stranger to controversy. It seems every 10 years there is much ado over the content of the upcoming census. This time, however, there is a large and ominous difference.

The Office of Management and Budget is proposing fundamental and far reaching changes in the coverage of the census by reducing the sample size, on the one hand, and on the other reorienting the content of the questionnaire.

The effect of these proposed changes on the accuracy and reliability of the data collected is being seriously questioned by those who both use and trust this data. I would also note that, aside from these changes, the Department of Commerce announced in October last year that they would not adjust the 1990 census to correct for the undercount of minorities which the Census Bureau acknowledges has, and will, occur.

The adjustment issue is a very serious one, and the United States Conference of Mayors has taken a strong position in favor of utilizing the statistical techniques which currently exist to ensure the most accurate count possible. Although adjustment is not an issue before the subcommittee today, I feel it is an important one which must not be neglected as we near decisions on the 1990 census.

To the matter at hand. The content and sample size issues could have potentially debilitating impacts upon the cities of this Nation as they strive to adequately plan for the future and allocate scarce resources for the betterment of their residents and businesses.

For instance, the OMB proposal to reduce the sample size from 19 million in the 1980 census to 10 million in 1990 was made despite the recommendations of professional statisticians and without specifically requesting input from data users outside.

It is clear, and one need not be a statistician to know, that limiting the sample size to 10 million will decrease the quality of data, especially for numerically small populations such as American Indians, Hispanics and the elderly. For the Nation's cities, it is projected that using a sampling fraction of 1 in 20 will increase error levels by at least 100 percent.

The potential loss in quality of block by block data is overwhelming. The city of Trenton worked hard with the very able United States Bureau of the Census to provide an accurate and complete 1980 census. We cooperated with the complete count program and the pre and post census local review programs to encourage and ensure the accurate completion of the 100 count forms, and the survey forms, which were mailed to 1 unit out of every 6.

The city employs this data to target its community development block grant funds, its housing program funds, and its economic development monies to needy persons. The city depends on the detailed tabulations from the decennial census as its primary source of information on the block level.

On the issue of content, OMB has recommended that most of the housing questions on the short form be moved to the long form. Also several long form questions on utilities are to be eliminated.

If these recommendations are followed, the loss of these 100 count questions will substantially reduce the amount of housing data on a block basis, causing great harm to cities' ability to allocate their resources.

This type of housing information on a block level is used to analyze housing characteristics to prepare the housing element of the master plan and to target neighborhood eligibility for Federal, State and local assistance. This type of detailed information is used to pinpoint areas in need of existing programs, and is crucial for the development of future programs.

OMB asserts that much of this data is available from alternative sources. However, alternate sources prepare estimates, not actual counts, of data which cannot be standardized. The Census Bureau is virtually the only source of data which is standardized nationally, easily accessible, widely known and consistently gathered with a reputation for reliability.

Census data provide the baseline, the denominator, by which all other sources, which are typically available at intervals more frequent than once every 10 years, can be used throughout the decade.

In closing, the United States Conference of Mayors stands ready to work with this committee and the administration to ensure that the 1990 census data reflect the most accurate and reliable data available. In our estimation, the proposals recommended by the Office of Management and Budget must be seriously debated and analyzed.

The importance of this data, not only from a city perspective but also from a national perspective, cannot be overstated. I look forward to working with you, Mr. Chairman, and with members of this committee in ensuring that all of our citizens not only count but are counted.

Thank you.

Chairman ROYBAL. Thank you, Mayor. The Chair now recognizes Ms. Turner, the Senior Research Associate for the Urban Institute, to speak on behalf of the Housing Statistics Users Group.

Will you please proceed, Ms. Turner.

STATEMENT OF MARGERY AUSTIN TURNER, SENIOR RESEARCH ASSOCIATE, THE URBAN INSTITUTE, ON BEHALF OF THE HOUSING STATISTICS USERS GROUP

Ms. TURNER. Thank you. Good morning, Mr. Chairman. I'm Margery Turner. I'm appearing here today in place of Raymond Struyk, who is currently in Indonesia on a 3 month assignment. Both Mr. Struyk and I are Senior Research Associates at The Urban Institute where our work focuses on the analysis of housing problems and housing policy issues. In particular, we are concerned with the housing needs of the most vulnerable groups in society, including elderly Americans, minority groups and those who are poor.

We've submitted a written statement for the record, and I'm prepared to give a brief summary of it this morning.

Chairman ROYBAL. Without objection, it will be ordered.

Ms. TURNER. The changes that OMB has recommended will seriously undermine efforts to analyze housing problems and to plan for housing absolutions. The deleterious effect of the proposed content and sampling changes will reinforce one another, thereby crippling housing analysis, particularly at the small area level. More specifically, the seven critical housing questions will no longer be available in the block statistics, so that analysis of most housing problems and policy issues simply cannot be done at all at the neighborhood level.

In addition, the proposed cut in the long form sampling rate means that we can't be certain that housing data will continue to be available even at the census track level. Confidentiality requirements will result in the suppression of data when the number of observations gets too small; and this is likely to be an especially severe problem when it comes to the housing circumstances of small subgroups of the population such as the elderly and minorities.

Finally, the deletion of the three heating and utility questions from the long form will make it impossible to measure total housing costs at any level, because utility costs are such an important component of total housing spending.

Taken together, OMB's proposal seriously undermines the capability of analysts and planners to document housing conditions and trends at the neighborhood level at a time when homelessness is on the rise and housing is becoming unaffordable for an increasing share of poor and working class Americans. Such a proposal is capricious and irresponsible.

I'd like to give a couple of concrete examples of the kind of planning for the housing needs of elderly Americans that would be hampered by OMB's proposed changes.

The first example involves local home repair programs. Many American cities operate home repair programs that help elderly homeowners keep their housing in good condition. These programs directly improve housing for the elderly who participate, and they also enhance and stabilize overall neighborhood conditions. But to make these programs work, it's often necessary to speak with the homeowners individually to explain the opportunity that's being offered and to allay possible misgivings about participating in a government program.

To keep the cost of this kind of extensive outreach under control, they need to be targeted to small geographic areas where the program is really needed most. The census block data has been extraordinarily useful to identifying these neighborhoods, since they tell us where elderly people are living, how many are homeowners, and what their range of house values is. In addition, the block data give us a count of the units that lack complete plumbing, which is a very useful shorthand measure of housing deficiencies.

Under the OMB proposal, only the presence of elderly persons and the split between owners and renters would be available at the block level. Local planners would not be able to figure out which neighborhoods in their cities needed home repair assistance, and they would not be able to target their outreach to elderly households in these neighborhoods.

The proposed OMB changes will also make it harder for the private sector to respond effectively to changing housing needs. In recent years a number of new housing options such as small group homes, continuing care communities and congregate housing facilities, have become popular with the elderly. Private providers are actually beginning to respond to this demand and to provide these kinds of housing options, but again detailed analysis of neighborhood conditions is critical for a private firm to select a site to build such a facility.

Census block data report the number of elderly people in a neighborhood, their range of house values and rent, and the presence of existing condominiums and congregate facilities. This information can help a private market analyst effectively choose potential locations for new housing solutions.

Again, under the OMB proposal information on house values and rents would not be available at the block level, and the information on condos and congregate housing which would be obtained only on a sample basis might not be reliable even at the town and city levels, because the incidence of this kind of housing is so low.

These are just two examples of the kind of small area analysis performed regularly by local planners in both the public and the private sectors.

It's been claimed that these types of analyses are done only infrequently, the implication being that the cost of including these housing questions in the short form can't be justified on the basis of a few exotic examples. This claim is simply wrong.

An April 1987 GAO report which follows up on an earlier report that was cited by OMB confirms that the small area data are used frequently and extensively at the local level.

Let me turn now to the question of the utility questions that OMB proposes to eliminate altogether from the census.

The data on utility costs are absolutely essential for measuring the share of income being devoted to housing. Without these questions, it would be impossible to document the existence or severity of housing affordability problems for the majority of cities and towns in the Nation. And, obviously, no small area analysis of housing cost problems would be possible.

The past decade has witnessed sharp increases in housing costs and affordability problems, reaching crisis levels in some neighborhoods. Under these circumstances, when reliable information is most needed as the basis for workable solutions, OMB's proposal is, frankly, irresponsible.

In summary, I strongly oppose all OMB's proposed changes to the 1990 census, because they will cripple public and private efforts to understand and remedy the housing problems confronting America's most vulnerable groups, including the elderly, minorities, and the poor. From the perspective of data users, OMB's action at this late date in the planning for the 1990 census is clearly harmful to the future of our national housing policy.

Thank you again for the opportunity to present my views.

Chairman ROYBAL. Thank you, Ms. Turner.

[The prepared statement of Mr. Struyk follows:]

Implications for Planning for the Elderly's Housing
of OMB's Proposals for the 1990 Census

by

Raymond J. Struyk

Testimony Presented by
Margery Austin Turner

Presented at the Joint Hearings of the
House Select Committee on Aging
and the
Subcommittee on Housing and Consumer Interests

February 24, 1988

Mr. Struyk is a Senior Research Associate at The Urban Institute. The views presented herein are his own and not necessarily those of the Institute or its sponsors.

Because Mr. Struyk is out of the country on assignment, Ms. Turner, also a Senior Research Associate at the Urban Institute is presenting his testimony.

My name is Raymond Struyk. I am a Senior Research Associate at The Urban Institute, where my primary area of research concerns the housing problems of elderly Americans. I am also a member of the Housing Statistics Users Group, which consists of individuals interested in facilitating the flow of information between governmental producers of data on housing and interested users, including city planners, public interest groups, and research organizations.

I appreciate the opportunity to comment on the effects of the modifications to the 1990 decennial census as proposed by the Office of Management and Budget (OMB) in its letter of September 16, 1987. Because of the interests of this committee, I will focus my remarks on the potential impacts of the suggested changes on the ability of planners at the local level to define the housing needs of the elderly and design programs to meet these needs.

As you know, OMB has suggested major changes both to the content of the so-called short form items which are asked of 100 percent of households and to the sampling rate for the so-called long form. In particular, OMB suggested shifting seven housing questions from the short form to the long form, deleting three questions on heating equipment and utility payments from the long form questionnaire, and cutting the long form sample from about 17.7 million households to 10 million households. I understand that in November OMB modified its

position on the utilities questions to allow an abbreviated question on utility payments, but only for renters.

For program planning at the small area level, the damage caused by the content and sampling changes will reinforce each other thereby producing very deleterious effects. First, the seven housing items will no longer be available in the "block statistics." So analysis of many issues at the block level will simply not be possible. Second, even at the census tract level, because of the very large cut in the long form sampling rate, we cannot be certain that the housing data will continue to be available. Because of census confidentiality requirements, the Census Bureau will have to suppress data where the number of observations in a given "cell" is small. This will be an especially severe problem for reporting certain data items, including such items as the housing attributes of the elderly and all data reported separately for blacks and hispanics.

In summary, I believe that shifting the housing questions to the long form would be a very serious mistake because it would cripple much of the small area planning that cities must be able to do. Deletion or modification of the three heating and utility questions is also clearly wrong because it will make it impossible to identify true housing costs. The effects of the proposed change in the sampling rates for the long form will further undermine small area planning by sharply cutting the information available.

Analysis with the Small Area Data

I would now like to give a couple of concrete examples of planning for housing of elderly Americans that would be effected adversely by OMB's proposed changes. In these examples I will concentrate on the effects of the loss of information from the 100 percent enumeration that would result from deleting the seven housing questions.

Example 1: Home Repair Programs. Many American cities are now operating home repair programs which assist elderly homeowners, often those with low incomes, to keep their housing in good condition. The programs result in better housing for the elderly and improved neighborhood conditions which are often important in stabilizing inner city areas. Studies of such programs have found that to be successful in attracting elderly homeowners to participate it is necessary to speak individually to the homeowners to explain the program and allay possible fears about strangers coming to their homes to make repairs. To keep program cost under control it is necessary to target these outreach efforts to small geographic areas where repairs are most likely to be needed.

The census block data have been extraordinarily useful for this purpose, since they identify where elderly persons are living, the distribution of households between owners and renters, and the distribution of house values in the

neighborhood. These latter data are useful because homes with lower market values point to housing more likely to be in need of repair. Additionally, the census block data indicate how many units lack full plumbing facilities--a very useful shorthand measure of condition of the housing stock. Based on these data, neighborhoods with concentrations of elderly and homeowners can be identified as "high payoff" areas to bring into the program first; later, after word has spread informally to areas with fewer elderly homeowners, areas more costly to canvass can be added to the program.

Under the OMB proposal none of these data items except the presence of elderly persons and the split between owners and renters would be available in the block level data. Instead, planners will have to rely on data for the much larger and more heterogeneous census tracts.

Example 2: Market Analysis for Special Housing Arrangements. As this committee is well aware, a number of new housing types are becoming popular with the elderly. These include such options as small group homes, continuing care retirement communities, and congregate housing facilities. While in many cases these facilities are associated with state and local government efforts to provide additional options combining housing with support services in ways that meet the variety of needs and desires of the elderly, often private providers are also entering the market. We also know that the elderly place a very high premium on being able to remain in

their own neighborhood, close to their friends and church. Housing facilities that may be perfectly attractive on an objective basis can have problems renting up, if they are not well located in terms of a substantial elderly population of the right income level. Softness in some markets for Section 202 housing is a sharp reminder of this fact.

Therefore, small area analysis is critical to proper siting of such facilities. Several items in the Census block data can be very helpful in this regard: the number of elderly present and the range of house values and rents. The latter are good indicators of the income and ability to pay for a new type of housing in the neighborhood in the absence of income data. Combined these items help the market analyst target potential sites for new housing solutions efficiently. Beyond these data, the 100 percent items on condominiums and congregate housing (some meals included in the rent paid) are also important in helping judge the overall market. Because the incidence of condo and congregate units is very low, gathering them on a sample basis is especially risky in terms of reliability.

Under the OMB proposal the information on house values and rents will not be available at the block level. Moreover, information on condos and congregate units will be obtained on a sample basis only, thereby undermining their reliability at the town and city level.

Example 3: Identifying Housing Needs. Besides the

housing programs just discussed, planners require information on the distribution of housing needs in their communities on a fine geographic basis for many other analyses. In 1980 one could identify overcrowded and deficient units (as indicated by lack of plumbing) from the published block data reports. Use of these data was recommended in a recent planning document prepared by the U.S. Conference of Mayors, Assessing Elderly Housing: A Planning Guide for Mayors and Local Officials. This type of analysis will simply not be possible if the OMB proposals are adopted, because the plumbing and number of rooms questions will not appear on the short-form. Hence, even rough analyses of housing needs on small area basis will necessitate special, locally financed surveys.

In addition to looking at housing conditions in 1990, the loss of the housing data items proposed for elimination by OMB will destroy the possibility of doing effective trend analysis for small areas. If there is one thing that we have learned from studies of neighborhood dynamics, it is that change must be monitored closely. Trends in house values and rents, shifts in the homeownership rate, crowding and the related problem of exclusive use of plumbing facilities are important indicators of a neighborhood's health. The block statistics are critical to identifying troubled neighborhoods that merit more intense observation by local planners. If the seven housing questions are shifted to the long form, the only trend that one can compute for 1980 to 1990 for small areas will be shifts in the

homeownership rate.

Use of the Small Area Data

It has been claimed that the types of analysis just described are done only infrequently, the implication being that the cost of including the housing questions on the short form cannot be justified on the basis of a few exotic analyses. This claim is simply wrong. After the General Accounting Office recommended dropping the housing items from the short form (GAO/GGD-866-74BR, May 5, 1986), Congressman Dymally asked GAO to undertake an analysis of the actual use of these data. In its follow-up report, GAO reported that indeed these data are used frequently and extensively by local governments (GAO/GGD-87-56BR, April 1987). OMB misused these studies in its letter suggesting shifting the housing questions to the long form, in which only the first of the two GAO reports was cited.

Beyond the GAO report, there is additional evidence from a survey of its members undertaken by the American Planning Association (APA). The survey results show widespread use of the small area data for such diverse activities as housing occupancy code enforcement and locating public facilities such as adult day care centers. Additionally, survey respondents noted that many tracts on fringes of urban areas are so varied internally that only the block data provide meaningful information for planning purposes. (The results are summarized

in a letter from the APA to Congressman Garcia, dated October 24, 1986, available from Nancy Willis at the APA.)

Dropping the Utility Questions

OMB has proposed dropping or reducing three housing questions from the long form: two on the type of heating equipment used and the fuel used for heating would be dropped, and a four part question on the household's payments for utilities would be dropped for homeowners and for renters only inquire as to whether they paid separately for various utilities but not ask about actual expenditures. Information on the type of heating equipment has long served as a useful measure of housing quality, with unvented systems--such as kerosene burning space heaters--being a clear indicator of lower quality conditions in most parts of the country.

On the other hand, the data on utilities' cost have been important for measuring total share of income being devoted to housing. Without these data, it will be impossible to compute the standard indicators of affordability problems for the majority of cities and towns in this country, i.e., any place outside the 66 areas covered by the American Housing Survey (AHS). Obviously, no small area analysis would be possible. In addition, HUD would lose the "benchmarks" it has obtained from the census in the past for setting the Fair Market Rents (outside of areas covered by the AHS) for the Section 8 Existing and housing voucher programs. HUD would also lose the use of

measures of the share of households with excessive housing expenditures in formulas allocating program funds; the Rental Rehabilitation Program is one program using this factor in its allocation formula.

True, there have been some reliability problems with these questions, which the Census Bureau is hoping to mitigate with a change in their wording. Moreover, in the past the Census Bureau has used the 100 percent short form data on contract rents in a procedure that improved its estimates of gross rents, i.e., contract rents plus utilities. In any event, the census data are very likely to be much more accurate for small areas than housing cost data obtained through imputation procedures.

Shifting the contract rent question to the long form and dropping or modifying the utilities question as proposed by OMB would very seriously undermine the quality and usefulness of the rent data. OMB's proposal seems especially ill-timed, since the share of income devoted to housing has been rising consistently over the last several years, and indeed has reached crisis proportions for some types of households in some neighborhoods.

Cutting the Long Form Sample

Finally, I want to make a couple of observations about the proposal to cut the sample size for the long form. The most critical issue for small area analysis is the point at which data will have to be suppressed even at the census tract level because of confidentiality requirements. In 1980 the rule for

suppressing the data was that there had to be at least 10 household or 30 person (weighted) observations available for the item to be reported. So, for example, to report contract rents for a tract, at least 10 renters would have to be in the tract. The OMB recommendation would change the average sampling rate from about 17.7 to 10 million households. Obviously, with the smaller samples, the cut off for suppression would have to be raised if the user is to place equivalent confidence in the 1990 figures as he did in the 1980 data. So perhaps in our example 20 renters would have to be present for any data to be reported.

Especially at risk of suppression are the separate data published for blacks and hispanics at the tract level and the separate data on housing attributes of the elderly which were published in 1980 for tracts (table H-7). The later have been widely used by those dealing with elderly housing issues at the local level.

I should note that the Housing Statistics Users Group commissioned a study of the impact of the revised long form sampling rates by Harold Nisselson of Westat, Inc. on data reliability. This paper was completed in December 1987 and I believe has been supplied to the Committee. This analysis, as well as the Census Bureau's internal analysis, indicates reliability problems would be seriously exacerbated by cutting the sample size as recommended by OMB.

In summary, I am opposed to all of the proposed OMB changes in the 1990 decennial census because of their implications for the ability to do small area planning for meeting the housing needs of the elderly in addition to their more general adverse effects. From the perspective of a data user, OMB's action at this late stage in the planning for the 1990 census seems capricious and mistaken. Thank you.

Chairman ROYBAL. The Chair now recognizes Ms. Becker.

**STATEMENT OF PATRICIA C. BECKER, PLANNING DEPARTMENT,
CITY OF DETROIT, MI**

Ms. BECKER. Thank you for the opportunity to appear before you this morning. I have submitted for the record a document entitled "The Office of Management and Budget's Changes to the 1990 Census: A Critical Commentary," written in cooperation with the Council of Professional Associations on Federal Statistics and the Housing Statistics Users Group. It reviews, in some detail, the harmful nature of the changes being imposed.

[See Appendix IV, p. 121 for material submitted by Ms. Becker.]

Ms. BECKER. I will highlight them here and provide some examples of specific effects on programs designed to serve the elderly. My focus will be the impact on data for small areas, that essence of the census data base that is so important to planning and decision-making at the local level.

As we know, OMB has ordered changes in three major categories: moving most of the short form housing questions to the long form; deleting some long form items; and cutting the number of sample housing units by 40 percent. These changes are not independent of one another. Rather, they operate together to hurt the data base collectively even more than the measure of each taken by itself.

Sampling errors, as we know, get larger as the number of observations gets smaller. The problem is especially critical when the number of observations is small to begin with, say, under 500. A decrease in the sampling fraction is not a major problem when looking at large populations such as States and major metropolitan areas. The trouble comes when trying to use the data for small areas, census tracts or small groups of tracts within a city, small rural counties, individual communities. Yet this is the level at which most planning for government activities takes place.

The problem is compounded when we want to use the census data base to help us plan programs for demographic subgroups. The elderly, who constitute about one-sixth of the total population, are such a group. If it is then desirable to divide the group further, by race, for example, or by age, the "young old" and "old old," we end up with an even smaller number of observations on which to base our conclusions.

Let me turn now to some specific examples of data use in planning programs for the elderly. The Detroit Area Agency on Aging, as required by the Older Americans Act, prepares an Area Plan for each 3 years of its operation. This agency serves the city of Detroit along with eight suburban communities; collectively, about 225,000 people aged 60 and older lived here in 1980. Their needs varied widely, since some of the suburban communities are among the most affluent in the Nation, while some subcommunities in Detroit are very poor.

To determine relative need, the agency applies a formula which includes three factors. Thirty percent of the weight is given to the aged population in poverty. About one-third of the agency's social service budget is allocated to the in-home services program. The

ranking of need that emerges from application of the formula determines the amount of money to be spent on in-home services in each of the 59 communities and subcommunities in the agency's service area.

One of the major in-home services provided under this program is home maintenance. In the Detroit area many senior citizens prefer to stay in their own paid-for homes as long as possible. Often they are the first generation of homeowners in their families, and owning property marks a real economic achievement.

At the same time, with limited retirement incomes and reduced physical capacity, assistance with routine home maintenance chores becomes a necessary service to maintain both quality of life for the residents and the structure itself in good condition.

Under OMB's restriction of a 10 million sample nationwide, almost all of the Detroit area communities and subcommunities will be sampled at a rate of 1 in 10 rather than 1 in 6. Error levels on the poverty data will rise by an average of 40 percent. Significant misallocation of the limited resources for in home services could be the result.

Another activity currently underway in Michigan is a demonstration program called "Let's Go." The idea here is to provide curb to curb, or door to door, if necessary, transportation service for the elderly. Priority is given to trips for medical purposes.

Planning for this program requires measurement of need at a geographic level appropriate for service delivery. In Detroit, that would be an area of about a quarter million people. In rural areas, the program would be organized by county, and service delivery planned for considerably smaller population groups.

The program planners need to know how many elderly people there are, how many have no automobile available, and their income and poverty levels. Again, with a reduced sample, the error levels in the required tabulations will be so high that significantly wrong service allocation decisions could be made.

Another program for the elderly is Retirement Service Center Housing, a 221(d)4 congregate housing program. HUD area offices, State housing development authorities and private developers, along with the consultants who assist them, all have to make decisions and recommendations based on an assessment of need levels for this form of housing. At 1980 sampling rates, a total population base of about 200,000 is needed to provide enough observations of elderly households to analyze need and project demand.

With the mandated cut in the sample, the total population level would have to go up to about 350,000 before reasonably reliable data would be available. Only 5 of Michigan's 83 counties are this size. We should be working to improve the data base for planning these types of programs, rather than harming it.

An important point to remember for all uses of census data is that, once published, census data take on a life of their own. The frequencies observed in the sample questionnaires are arithmetically expanded to represent the total population. The actual number of observations is buried in the appendix, and few data users pay any attention to errors. Most operate on the assumption that the published numbers are correct.

For this reason, it is very important that data producers, both in the Census Bureau and outside, be "watchdogs" on this issue, and maintain strict standards for acceptable publication. If this is done responsibly, some tabulations that were available in the 1980 census should not be prepared for 1990.

Almost forgotten in the debate over sample size is the question of moving the 100 percent housing items to the sample. As indicated in my written paper, to eliminate these questions from the short form while, at the same time, collecting them only from a smaller sample, amounts to a "double whammy."

Rent and value are our only measures of socio-economic status at the block level. The items on complete plumbing and number of rooms provide the only clues to housing quality at the block level. Condominium status is an integral part of the tenure/value relationship. The question regarding inclusion of meals in the rent is essential to planning for congregate housing, yet must be tied to individual facilities at the block level in order to be interpreted properly.

Groups of blocks such as voting precincts and small neighborhoods can be studied only by aggregating data at the block level. The sample data for block groups and small communities, previously available in summary tape format, will not be reliable on a 1 in 10 sample. Thus, analysis for these small areas will depend on 100 percent items. Many uses of the census data base, taken for granted by users for decades, will be rendered impossible if the short form housing data are not available.

OMB has argued recently that sampling error is already very small in an efficiently allocated sample of 10 million households. No statistical evidence is presented to back up this contention. It has also stated that the sample must be cut in order to maintain quality, because there will be an inadequate workforce availability to conduct the necessary followup for nonresponse and failed edits.

While certainly there are nonsampling errors which must be considered, the plain statistical fact is that fewer cases mean higher errors, regardless of anything else. The plain fact on the workforce availability argument is that, in most parts of the country, there are a great many unemployed persons who can be trained to work on the census. The plain fact is that when data are to be used to plan and make decisions in small geographic areas and for small demographic and housing subgroups, the difference between a nationwide sample of 1 in 6 and 1 in 10 is very significant indeed.

The Bureau of the Census has spent several years planning the 1990 census. Users throughout government and the private sector were consulted in a variety of forums. Tradeoffs were made between data needs, respondent burden and cost. The result was embodied in the package submitted to OMB for clearance in June of last year.

It seems unreasonable that all of this work should be turned around by a small group of people with considerably less experience and expertise in the matter. With a modification in implementation of a variable sampling plan, we need to go back to where we were 8 months ago. We need a good 1990 census, useful for all the purposes to which the data are put. If OMB has its way, that will not be the result.

Chairman ROYBAL. Thank you, Ms. Becker. Mr. MacRae, I'm going to start off the questioning and then ask each member of the committee to take time also to question each and every one of you, if they so desire. But I think that the case that has been built against your intent to reduce the sampling is quite clear.

For example, Mr. Young has stated that the proposed 1990 housing census content was less than 1980. Well, we know that, but then it goes on to say that it was the briefest since 1950. In other words, what you are attempting to do, I believe, is to go back to 1950; but this is 1988, and we're talking about the census of 1990. Going backwards is not my idea of progress.

Mayor Holland said the content and sample size issue would have a potentially debilitating impact upon the cities of this Nation. This comes from the mayor of a city, an individual who is expert in the functioning of a municipal government, and who understands what the census could mean if not taken correctly.

Ms. Turner said this: "I believe that shifting the housing questions to the long form would be a very serious mistake, because it would cripple much of the small area planning that cities must be able to do."

In other words, I believe from that testimony, or what I get from that, is that cities would suffer the consequences.

Ms. Becker said, moving the 100 percent housing questions to the sample is a serious mistake, and then goes on to explain why.

So my question to you is this. What was the rationale for OMB's proposal to limit the sample size of the long questionnaire's form to 10 million housing units? Why the reduction?

Mr. MACRAE. Mr. Chairman, I would like to ask Ms. Tella to respond to parts of this.

Chairman ROYBAL. Ms. Tella, would you please answer the question?

Ms. TELLA. Mr. Chairman, the question is, what was our rationale?

Chairman ROYBAL. Yes.

Ms. TELLA. If I could back up just a second and explain exactly what we did, because some strange numbers have been floating around in the past few minutes.

Chairman ROYBAL. Yes, but there must be a reason for having done it, and that's what we want to know.

Ms. TELLA. Yes. The initial proposal of the Bureau of the Census was to sample 1 in 6 households across the country, that is, give 1 out of every 6 households across the country—in every sampling area of the country—the long form. This would have resulted in a total national sample of roughly 16 million households. Not 17½, not 19, but 16.

The Office of Management and Budget recommended that, rather than fielding this fixed rate sample of 16 million, the bureau instead design and dress rehearse a variable rate sample, that is, a sample in which the sampling fraction would differ among sampling areas, so as to give samples of approximately equal size and precision for all sampling areas across the country, whether they be central city sampling areas, rural sampling areas, small local jurisdictions.

We further recommended that this variable-rate sample be no larger than 10 million households. The rationale was the following: A variable rate sample is a great deal more efficient than a fixed rate sample.

Chairman ROYBAL. Why is it more efficient? Everyone seems to disagree with that. Will you explain, why would it be more efficient?

Ms. TELLA. I don't think, Mr. Chairman, there is any disagreement that a variable rate sample is more efficient.

Chairman ROYBAL. All right. You tell us.

Ms. TELLA. Because when you calculate sampling error, you find that samples of approximately the same size in all sampling areas will give you approximately equal levels of precision, that is, sampling error. The fixed rate sample would have given you very small samples in the least densely populated sampling areas, that is, small local jurisdictions and rural tracts.

In many cases, we believed that a 1 in 6 sample for that type of area would not be large enough to enable meaningful data to be published for those areas.

On the other hand, it appeared to us not to be necessary to sample as many as 1 in 6 households in very densely populated sampling areas, that is, central cities; because there are a whole lot of people concentrated there. They tend to be fairly homogeneous. That is, the households and housing units tend to be more similar in these areas than they are in sparsely populated, rural areas.

If one has a sample of fixed size to allocate in order to get the most precise estimates across the country, the most efficient way to allocate that sample is through the sort of variable rate sample that we recommended to the Census Bureau.

I might add that the bureau was quite ready to field a variable rate sample. That was not an area of dispute at all between the Census Bureau and OMB. The issue being raised here is, should the variable rate sample be limited to a maximum size of 10 million households?

Our argument is yes. The variable rate 10 million household sample will give greater precision, lower sampling error for rural areas and small local jurisdictions than would the design of the Census Bureau initially proposed.

There will be an increase in sampling error for urban sampling. There is no denying that. Someone mentioned here earlier that the sampling error would be doubled. It's important to realize that when 1 percent goes up to 2 percent, that's a doubling. Our view is that the sampling error already is very low, that even doubled for urban areas, the sampling error is smaller than nonsampling error.

The Mayor made the statement that sample surveys only give you estimates, whereas the census gives you an accurate count. Ideally, this is so, but one has to be aware that there is a great deal of error in census data that arises not from sampling—the fact that we're only asking questions from 1 in 6 or 1 in 20 people—but because these people don't answer some questions, or they don't understand the questions and they give an incorrect answer, or the question may be asked in a range—for example, "what is the value of your house," and you check a range.

These are all sources of error that has nothing to do with the size of the sample.

Chairman ROYBAL. Well, Ms. Tella, what I'm really concerned about is the fact that you're actually not asking the specific important questions. The intent is to leave out at least four important questions. The number of housing units at this address is one of them, the access to the living quarters, the number of storage in the structure and presence of an elevator, and the fuel used for cooking.

It is my understanding that fuel utilities, for example, are part of the rental cost and are subject matters that I believe should be included in the census. They always have been. Why leave them out now?

Ms. TELLA. Three questions, only three questions were eliminated from the census altogether—three questions relating to household energy use and cost, utility costs, that have been asked in past censuses. The reason that OMB recommended that they not be asked in the census in 1990 is that when the utility cost questions have been asked in the past, there has been a very large bias. The Census Bureau itself looked at the accuracy of the response to this question and found that there was a very large bias, so that the data were not accurate.

Chairman ROYBAL. Well, if you don't get the response that you want, you then don't want to ask the question. Is that it? I don't understand what you're saying, Ms. Tella. Perhaps it will be a little clearer if we ask Ms. Becker to respond to some of the things you said about the sample size reduction and so forth. Let's get into that for just a moment.

Ms. TELLA. As Mr. Wright's testimony indicates, OMB has been working closely with the Department of Energy and the Department of Housing and Urban Development which would like to have that energy cost data, in an effort to find a way, another way, to get HUD more accurate data for their purposes.

It seems to us that there's no virtue whatsoever in producing very inaccurate data. What HUD needs is accurate data on household utility costs, and we are working very hard to find a way to get HUD that data.

Mr. HOLLAND. Mr. Chairman, it was I who made the statement that, with regard to the increase in the error being 100 percent. That's based on opinions of researchers and statisticians who have carefully looked at this issue but it just so happens that before I entered government, for 4 years I worked for a research corporation as a field supervisor and as a research analyst, and then served as Associate Director of Princeton Research Service, both market and opinion research firms. The sample is critical, obviously, to accurate analysis and, certainly, with something as important as a decennial census, you cannot talk about decreasing samples.

I agree that a variable approach is more efficient when it can validly be used, but you increase the sample. Also, it's important to note that, while in the more densely homogeneous areas, there's less likely to be error. The fact is that across this country, especially in the Northeast, a lot of gentrification has taken place, and for the first time in decades the mix of the central cities is in flux. I

think we can't, therefore, take the traditional view with regard to the central city universe.

With regard to the interviews, if there's a bias, then, obviously, you've got to improve the interviewing technique. Testing the questionnaire and training interviewers is as critical as is the percentage of error and all the equally important components.

You talked about some of these questions not being so critical. What's more important than energy? The Nation just went through a crisis, and we want to make sure we don't go through another one. In the central cities, one of the crucial programs is the winterization program.

So I see those questions as even more important.

Chairman ROYBAL. Thank you, Mayor. I'd like to hear from Ms. Becker with regard to the sample size.

Ms. BECKER. I think the point that OMB is not recognizing is that the data are used for small areas for tracts, for communities of 10-15,000 population. That's where the planning gets done, and that's where we need accurate samples.

They are claiming that nonsampling errors are larger than sampling errors. That may be true when we're talking about data at the State level and up, but not when you're talking about data from the small areas, because sampling errors increase exponentially. Rather than remaining relatively constant in proportion to the total response. So when we get down to fewer cases, the sampling errors greatly exceed the nonsampling errors, and it's unreasonable to think that we're going to have data that we can use.

Experience tells you that in the kind of work that I do all the time where I look at tabulations, detailed tabulations for the city of Detroit, and I look at the tables, you can see bad data in the tables. You can see where there are not enough cases, and you do not use that level of detail in planning.

Now what's going to happen is that planning will suffer with this overall sample of 1 in 10. A great many more tabulations are going to be bad, are going to be unusable, unreliable, and will not have the data that we need to do the planning to allocate scarce resources, the money that we have to spend.

Chairman ROYBAL. Mr. Young, what about sample size? What is your opinion?

Mr. YOUNG. Mr. Roybal, let me try to explain some of the problems that I see in this. If we look at a problem in American housing of overcrowding, something that may occur nationwide in about 10 percent of the homes, one of the things that a city or metropolitan area wants to do is to pick out the census tracts—those are the chunks of land of about 3,000 to 5,000 population—where there is the most overcrowding, so that they can look at housing needs, housing code enforcement, and all the related problems that beset a city government in looking for housing solutions.

When you take the 1980 data, you can rank, not the tracts which may consist of 30, 40, 50 blocks or up to 100 blocks but you can take the individual blocks from the 1980 data and rank them from the most crowded to the least; and that ranking is 100 percent data subject to no sampling errors. Basically, it is as accurate as a count.

What we will be faced with in 1990, if these OMB cuts go through, is to look, not at block data, but at tract data. The 10 percent item will have a sampling error of about 25 percent, which means that there are two chances out of three, if I look at a published 10 percent number, that the truth is someplace between 7.5 percent and 12.5 percent. If you use the confidence limits that the bureau currently uses in all its current surveys, 90 percent, you must say that there are 9 chances out of 10 that the true value lies between 6 and 14 percent.

Now, if you look at all the tracts in cities, most of the overcrowding is within that range. What you're faced with is that you can't tell which tract is more overcrowded than the next except in the most extreme cases. You are now unable to rank the parts of your city in terms of this problem.

The plumbing situation gets worse, as does any analysis where low rent or low value housing is concerned. The ability to rank areas in the city, to try to focus, to pinpoint where you want to do your housing programs is lost. The geographic specificity that we had in 1980 is no longer with us. In 1990 we will get a blurred sort of homogenized number.

One of the other important things that you have to remember is that housing problems like overcrowding and a lack of plumbing occur in concentrated clusters, usually in blocks or individual buildings. When you look at the data for a whole tract, they are averaged out, and this hurts the ability to distinguish between tracts.

Taking the housing items off the 100 percent, and decreasing the sample is a critical loss that really wipes out the usefulness of the housing data for intraurban analysis and planning.

Chairman ROYBAL. Thank you, Mr. Young. The Chair will now recognize the Chairman of the Subcommittee on Housing and Consumer Interests who is the Cochair of this hearing with me. It is with a great deal of pleasure that I now yield time to Mr. Bonker.

Chairman BONKER. Thank you. Mr. Chairman, I want to commend you for cosponsoring these timely hearings so we can get a better sense of what OMB is up to with respect to the upcoming census.

I'm sorry that Mr. Wright is no longer here to respond to the questions we have, but I can appreciate that the people he has left are fully capable of rationalizing what OMB is up to. Indeed, I'd like to lead off with that question.

It seems to me that OMB has enough to do these days without getting into the census. On what basis are you dipping into census data and census questions, and all that goes into that very extensive, detailed process? I'm sure you can cite an authority. What is it, the Paperwork Reduction Act?

Mr. MACRAE. That's correct, sir.

Chairman BONKER. So your main objective here is to reduce paperwork, not to get into policy considerations?

Mr. MACRAE. Well, the Paperwork Act asks that we not only look at reduction of paperwork but at the quality of the data that's collected. So it's not just a mindless "let's whack the paperwork down;" we're also interested, as is the Census Bureau and I'm sure everyone else here, in the quality of the data.

Chairman BONKER. Well, that's an adequate response, but we all know that OMB is out there with an axe to cut up everything that they can. And here where you have the experts in the government on the census, you're coming in and, I think, attempting to compromise their work by rewriting questions and trying to narrow the focus of the census. It's disturbing that we even have to have this hearing; that we have to go through this. I mean, I've got other things to do than having to spend time on this whole question of the census.

Mr. MACRAE. Mr. Chairman, we also have other things to do, but we do feel we have a responsibility under the Paperwork Act, and we have had long conversations with the Census Bureau. The initial proposal was 16 million households for the long form. We discussed with them this whole question, and they thought it was an excellent idea, for a variable-rate sample.

There is continuing discussion and debate on whether we should go to 10 million households, 16 million households. 17.7 is the figure they are now suggesting, and we've asked for further analysis within that range.

Chairman BONKER. Seems to me you could save a lot more paperwork just by staying out of it.

Mr. MACRAE. Well, that might be, Mr. Chairman, but we do have a responsibility under the Paperwork Act, and we can't absolve ourselves of that by just staying out of it.

Chairman BONKER. Do you have any idea how many manhours OMB has put into this matter?

Mr. MACRAE. Probably a fair number. In responding to what you were asking, why are you doing this, we tried to explain it. I would also like to emphasize that we are at the dress rehearsal stage, and the law provides that the Census Bureau inform the Congress in April of this year, and whenever they ask, of what it plans to do with regard to content of the 1990 census itself.

We are awaiting—and we've asked the Census Bureau to move as quickly as possible—the results of the dress rehearsal. We believe that, when we have those in hand, we, the Congress and, as Mr. Wright said, others, can make an informed choice of what should be in the 1990 census.

Chairman BONKER. Well, since you brought up the dress rehearsal, now when do you expect it to be completed?

Mr. MACRAE. We don't have a firm fix yet from the Census Bureau. They are launching the dress rehearsal in March. When they will have the results of the analysis I'm not sure.

Chairman BONKER. Would you say that it would be anytime before June?

Mr. MACRAE. I doubt it will be that soon. After all, they will have just conducted it in March. It's going to take a while.

Chairman BONKER. Well, our understanding is that the Census Bureau will not have the data into the computers until August. Is that your understanding?

Mr. MACRAE. They have not said to us when they will have the information in the computers.

Chairman BONKER. Well, we have a document from the Census Bureau that shows that the information that you will consider

before making any final decision regarding the census will not be available until late in 1988.

Mr. MACRAE. 1988 or 1989?

Chairman BONKER. 1988.

Mr. MACRAE. When in 1988?

Chairman BONKER. Late.

Mr. MACRAE. Well, we obviously can't consider anything until we have something in hand.

Chairman BONKER. That's the whole point, you know, whether or not you would be prematurely making determinations before that data is in the computer and we have the information.

Mr. MACRAE. Absolutely not. We would not.

Chairman BONKER. Mr. Chairman, I wonder if we can hold the record open so I can submit additional questions to OMB in writing.

Chairman ROYBAL. The record will remain open for an additional 2 weeks. Questions can be submitted in writing. I'd like to request that the answers be submitted to the committee before the end of the 2 week period.

Mr. MACRAE. We will so comply, Mr. Chairman.

Chairman ROYBAL. Thank you.

Chairman BONKER. I thank the Chairman and have no further questions.

Chairman ROYBAL. Ms. Bentley.

Ms. BENTLEY. Thank you, Mr. Chairman. I, too, want to commend you for having this hearing, and I have a statement that has been sent to be included in the record.

Chairman ROYBAL. Without objection, it will be the order.

Ms. BENTLEY. I'd like to ask OMB, before notifying the Census Bureau about the transfer of the questions from the 100 percent questionnaire to the sample form and deleting the three utility questions and changing the size and structure of the sample population, what type of public hearings did you hold?

Mr. MACRAE. We held no public hearings.

Ms. BENTLEY. Did you meet with data users?

Ms. TELLA. We had a number of meetings with—

Ms. BENTLEY. Would you put the microphone on so we can hear you, please.

Ms. TELLA. During the period when the dress rehearsal was under review at the Office of Management and Budget, from, mid-June to mid-September, we had a number of meetings with Federal agencies who are users of census data, who use census data for the administration of their programs, to make sure we had a firm fix on what they could not do without, what they wanted, what they needed, and so forth. We did not have meetings with, as I recall, members of the public. Nobody indicated—

Ms. BENTLEY. You did not have meetings with members of the public.

Ms. TELLA. I was not present at any. I'm not aware that anyone wanted to meet with us.

Ms. BENTLEY. Well, did anyone know about it?

Ms. TELLA. Yes. They did know about it.

Ms. BENTLEY. They do now.

Ms. TELLA. Agencies are required by law to put a notice in the Federal Register at the time that they submit any paperwork to OMB for review. So that notice was given. Further, in the course of our review we put a notice in the Federal Register indicating the type of issues that we were concerned with, the type of questions we were raising. We did get quite an influx of mail from members of the public.

Ms. BENTLEY. Mr. Chairman, I'd like to have a copy of that notice in the Federal Register included in the record so we can see exactly what the wording was, because I would presume that maybe a lot of people didn't know what was going on.

Chairman ROYBAL. Would you please submit it for the record.

Mr. MACRAE. Yes, sir.

Chairman ROYBAL. Thank you. Without objection, it will be ordered.

[The Federal Register notice follows:]

federal register

**Tuesday
August 25, 1987**

Part IV

**Office of
Management and
Budget**

**Review of the "Dress Rehearsal" for the
1990 Census of Population and Housing;
Notice**

OFFICE OF MANAGEMENT AND BUDGET

Review of the "Dress Rehearsal" for the 1990 Census of Population and Housing

AGENCY: Office of Management and Budget.

ACTION: Notice containing information on the status of the review under the Paperwork Reduction Act of the 1990 Census Dress Rehearsal.

SUMMARY: The Office of Management and Budget (OMB) is currently reviewing, under the Paperwork Reduction Act, the "Dress Rehearsal" for the 1990 Census of Population and Housing. Since the review period began on June 17, 1987, OMB has received several hundred letters from members of the public concerning the review and the content of the 1990 Census. Both in response to the large number of people who have submitted comments already and to assist others who may wish to do so before the end of the review period, OMB is publishing the following information about the review process and the current status of the Dress Rehearsal review.

DATES: The review period for the 1990 Census Dress Rehearsal will end September 15, 1987. Public comments on the Dress Rehearsal will be welcomed up to that date.

ADDRESS: Comments on the 1990 Census Dress Rehearsal should be made in writing and sent to: Donald R. Arbuckle, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Donald R. Arbuckle or Francine Picoult, Office of Information and Regulatory Affairs, Office of Management and Budget. Telephone number: (202) 395-3740.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget (OMB) is currently reviewing, under the Paperwork Reduction Act of 1980, the "Dress Rehearsal" for the 1990 Census of Population and Housing, a prototype of the questionnaires and design to be used in the 1990 Census. In recent weeks, OMB has received several hundred letters concerning the census. All the letters have been read and will become part of the public record of the Dress Rehearsal review.

Under the Paperwork Reduction Act of 1980, all collections of information from 10 or more people must be reviewed by OMB to assure that the information to be collected and published will be as useful as possible

to the government and the public and that the burden of respondents is held to the minimum practical level. OMB is also responsible under the Paperwork Reduction Act for overseeing and establishing standards for Federal statistical programs, to maintain and improve the quality of government statistics. OMB's information collection reviews for statistical surveys such as the decennial census focus not only on burden but also on quality issues.

OMB may take up to 90 days for its reviews, and during the review period the public is invited to comment on any aspect of the information collection under review. In the case of the Dress Rehearsal for the 1990 Census, the OMB review period began on June 17th and will end on September 15th. OMB will welcome public comments until the end of the review period. *OMB has as yet made no decisions or recommendations concerning the Dress Rehearsal, nor will any final decisions be made until mid-September.*

In reviewing all proposed information collections, OMB is responsible for assuring that the agency sponsoring the collection has provided adequate demonstration that the data to be collected have substantial, practical uses and that no more burden than necessary is placed on those who must provide the data, be they individuals, businesses, or State and local governments. For statistical data collections, OMB is further responsible for assuring that the data collected and published are sufficiently reliable to meet the major requirements of government and public users. To fulfill these responsibilities, OMB frequently must ask sponsor agencies—such as the Bureau of the Census, in the case of the 1990 Census Dress Rehearsal—for additional justification of their data collection plans. In the role of reviewer, it is OMB's responsibility to ask questions and make sure that there are adequate answers for the public record.

Some Questions OMB is Raising in its Review of the 1990 Census Dress Rehearsal

The 1990 Census Dress Rehearsal, which OMB is currently reviewing, is a prototype of the forms and design to be used in the 1990 Census. The Bureau of the Census is proposing to administer a "short form" questionnaire containing 17 questions to every household in the country (about 96 million households) and to ask an additional 44 questions, on a "long form," of a nationwide sample of 1 in 8 (about 16 million) households.

Having reviewed the materials submitted by the Bureau of the Census

to justify the proposal, OMB has raised a number of questions about the content and design, to determine that the data to be collected in the census will be reliable and of the greatest possible use and that respondent burden has been reduced to the minimum level practicable and appropriate. OMB would particularly welcome public comments directed to these questions.

1. Are there substantial uses for all the data to be collected?

There are some items on the questionnaire for which OMB has asked for more information concerning substantial use. For example,

• **Question H20—How many bedrooms do you have?**

The justification states that this information, to be collected on the long form, "provides an important assessment of the amount of available living and sleeping space" and that it is used in calculations of "fair market rentals." However, question H3 asks total number of rooms. OMB is inquiring whether both items are needed in the census.

• **Question H7—Do you have a telephone in this house or apartment? (If yes, enter phone number.**

This question is being proposed for the short form. OMB has questioned the need to ask every household whether it has a telephone, but has particularly questioned the need for, and propriety of, requiring people, under penalty of law, to give their home telephone number. If the Bureau of the Census wishes to use telephone numbers for follow-up, could respondents be asked to provide that information on the back of the forms [where they are asked to give the name and address of the person who filled out the form]?

2. Is the decennial census the best source of certain data?

In certain cases, OMB has asked for a stronger demonstration that the decennial census is an appropriate vehicle for collecting reliable, analytically-useful information. For example,

• The long form proposed for the census contains seven questions concerning energy use and costs:

H15—Which fuel is used most for heating this house or apartment?

H16—What kind of heating equipment is used most to heat this house or apartment?

H17—What fuel is used most for heating the water in this house or apartment?

H18-d—What are the yearly costs of utilities and fuels for this house or apartment? If you have been here less than 1 year, estimate the yearly cost.

IFour-part question, asked separately for electricity, gas, water, and "oil, coal, kerosene, wood, etc.")

The Energy Information Administration (EIA) has a statistical program dealing with residential energy use and costs. When the EIA program began in the late 1970s, cost questions such as those proposed for the 1990 Census were rejected as unreliable. This judgment was based in part on the experience in an earlier census where such questions produced results that were 25 to 50 percent higher than actual energy costs. This kind of reporting bias cannot be reduced by increasing sample size—the error persists in a complete census or a sample of any size and is so large that it dwarfs the effect of sampling error, even in a sample covering only a fraction of 1 percent of all households.

EIA dealt with this problem by getting the permission of randomly selected households to go directly to their energy suppliers for accurate records of energy use and costs. EIA also found that more specific questions were needed to describe electric heaters used to supplement an oil furnace, for example. Based on its experience, EIA reported that the only 1990 Census question necessary for this use was question H15 ("Which fuel is used most for heating this house or apartment?"), to be used for benchmarking the more complete and accurate sample surveys conducted by EIA to measure energy consumption and costs. In the past, for a modest charge, EIA has augmented its surveys to meet the needs of other agencies for accurate energy information.

* The proposed 1990 Census long form contains two questions on water source and sewage disposal:

H12—Do you get your water from—
A public system such as a city water department or private company?

An individual drilled well?
An individual dug well?
Some other source such as a spring, creek, river, cistern, etc.?

H13—Is this building connected with a public sewer?

The Census Bureau's supporting statement indicates that the principal uses of this information are in planning various rural development and assistance programs. Inasmuch as the coverage of public water and sewer systems is known from other sources than the census (local government and utility company records, which might be able to serve local planning needs), and the principal use of census data is to determine the circumstances of households that are not served by public systems, OMB is asking whether a

survey targeted at rural areas might be a better vehicle for collecting these data.

3. *Is it necessary to ask some of the questions of such large numbers of households (98 million for the short-form questions, 76 million for the long form)?*

In 1973, Congress inserted into Title 13 (the Census Code) a new section [Section 185] specifically authorizing the Census Bureau to use statistical sampling whenever feasible in all areas of the census except the actual count of the population. OMB would like to make sure that optimum use is made of sampling, both so that respondent burden is minimized and so that, for any given burden, a greater amount of useful information can be gathered in the census.

* *Short-form housing questions.* The proposed short form includes 10 housing questions. In 1966, GAO studied the uses of these 100-percent data, questioned the need for collecting them from all households (rather than a sample), and recommended that the Census Bureau test a short form that included only four housing questions.

OMB too is questioning the need for asking the following housing questions on the 100-percent (short) form:

H3—How many rooms do you have in this house or apartment?

H4—Do you have complete plumbing facilities in this house or apartment?

H5—Is this house or apartment part of a condominium?

H6—Is this house on ten or more acres? Is there a business or a medical office on this property?

H7—Do you have a telephone in this house or apartment?

H8—Is this house or apartment—

Owned with a mortgage or loan?

Owned free and clear?

Rented for cash rent?

Occupied without payment of cash rent?

H9—(For owners) What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale?

H10—(For renters) What is the monthly rent? Does the monthly rent include any meals?

In the case of the last two questions (H9 and H10), which are to be answered by checking ranges representing approximate dollar values, a 100-percent count has no advantage in accuracy over a much smaller sample.

* *Sample size for the long form.* OMB is concerned that the proposed 16 million-household sample may be larger than necessary for collecting much of the long-form data.

Some of the questions to be used in the 1990 Census are known to produce

large errors because households cannot accurately estimate, or do not wish to report, the answer. In these cases, the bias dwarfs any error introduced by sampling, even at very modest sample sizes. The error is inherent in the question and is not reduced by asking the question of millions of additional households. Questions calling for estimates of dollar values or specific costs are likely to provide no more accuracy averaged across 16 million households than over a sample of 100,000 or less.

The principal justification given for many of the 1 in 6 sample questions is that data are needed for very small areas for planning purposes. However, there are some cases where similar data are available locally. OMB is questioning whether these data could not adequately serve planning purposes. For example, information on real estate transactions, including the price for which houses have recently sold, is available from locally-available records, as is information on real estate tax assessments (question H23 on the proposed long form).

For some other long-form questions, OMB is asking for more information indicating that data for small areas are actually needed and used. Examples of such questions are:

H24—What was the annual payment for fire, hazard, and flood insurance on this property?

H25a—Do you have a mortgage, deed of trust, contract to purchase, or similar debt on this property?

H25b—How much is your regular monthly mortgage payment on this property?

H25c—Does your regular monthly mortgage payment include payments for real estate taxes on this property?

H25d—Does your regular monthly mortgage payment include payments for fire, hazard, or flood insurance on this property?

H26a—Do you have a second or junior mortgage or a home equity loan on this property?

H26b—How much is your regular monthly payment on all second or junior mortgages and all home equity loans?

H27—(For condominium owners) What is the monthly condominium fee?

H28—(For mobile home owners) What was the total cost for personal property taxes, site rent, registration fees, and license fees on this mobile home and its site last year? Exclude real estate taxes.

4. *Is the response burden of the census fairly distributed?*

The proposed long form with 83 questions (as compared with the short form's 17) imposes a lopsided burden on

those households that receive the long form. OMB has asked the Census Bureau to consider the possibility of dividing the long-form questions into two or more questionnaires, so as to distribute the burden more equitably.

5. Is the length of the proposed questionnaire, particularly the long form, likely to have any adverse effect on the quality of response?

OMB's concern about questionnaire length and content relates not just to burden but, even more important, to the

accuracy of the census count and the reliability of the demographic data that are collected in the census. The high rates of "failed edits" in the 1970 and 1980 censuses (the percentage of returned forms that did not meet the Census Bureau's edit criteria and therefore had to be followed up) suggest that in the recent past respondents have experienced substantial problems filling out forms completely and accurately. For example, in 1980 45 percent of the long forms that were mailed back were

so incomplete or otherwise deficient that a follow-up was required. Before approving plans for the 1990 census, OMB would like to be sure that careful attention has been paid to all aspects of data collection that could affect the quality of response.

Authority: 44 U.S.C. 3504.

Woody L. Gramm,
Administrator for Information and Regulatory Affairs.

[FR Doc. 87-18574 Filed 8-24-87; 8:45 am]
BILLING CODE 4110-01-01

Ms. BENTLEY. How will local communities know where to locate police and fire stations, health clinics and any number of other facilities when block level data no longer will be available?

Ms. TELLA. Block level data will be available for all the data collected on the short form. The basic population data that are collected on the short form will be there for every single person in the population. So you will know down to the block—down to the smallest unit for which the Census Bureau publishes data—how many people are there, what age they are, what sex they are, what race they are, what ethnic background.

Ms. BENTLEY. Age?

Ms. TELLA. Yes.

Ms. BENTLEY. So we will be able to determine where senior citizen centers and Section 202 housing should be located from that?

Ms. TELLA. Absolutely. You will know by block the elderly populations.

Ms. BENTLEY. Are we going to have any block on the census, tract level data on income and housing costs, so that we can anticipate the potential for homelessness? Or how are we going to anticipate the homelessness in the 1990s?

Ms. TELLA. We at OMB are unable to tell you exactly what data the Census Bureau is going to publish for what small units. I'm not sure that question can be answered in general terms. It probably depends on what small area you're talking about, what subpopulation you are interested in, what characteristics about that subpopulation you're interested in, and also what disclosure control method the Census Bureau decides to use in publishing data from the 1990 census sample.

Ms. BENTLEY. Mr. Chairman, I, too, would like to submit some written questions, and I do want to say that I agree with Chairman Bonker that I think this is one time that OMB has got themselves in a thing it shouldn't be into. Thank you.

Chairman ROYBAL. Thank you, Ms. Bentley.

I would like to go back again to my original question, and that is your justification for this, OMB's justification, number one, for being involved in it. I think I can understand the fact that you do oversee the Census Bureau; but why the reductions that are being contemplated in view of the fact that no one seems to agree with you? How can you justify it?

Mr. MACRAE. That's an interesting question, Mr. Chairman. I guess our response is that in trying to do our job, and we've probably said this ad nauseum, under the Paperwork Act, we believe that the questions we've raised and the debate that we have engendered are appropriate to determine what is the best possible and most efficient census form that can be developed and employed in 1990.

We don't think, for example—that moving questions from the short form to the long form is a bad step. We happen to believe that that will help the response rate. People looking at a long form which the Census Bureau says will take 45 minutes to complete—I must say I would be most surprised if people could complete it in 45 minutes. But we are concerned that people respond and respond as accurately as possible and it's for that reason we have recommended shortening the short form. We want to make sure that we

count the people out there. That's first and foremost the purpose of the census it seems to me—the count. That's what the Constitution envisioned. Over the years we've added other questions, but we need to count the people. We need to know their age, their sex, their race, and we want to make sure at the very least that we do that.

There are many other questions one could add, many useful questions. There are questions that have been considered, and because of space have been dropped, which would be very useful to have—for example, about the extent to which people have health insurance.

There are questions about our Indian population that have been considered and dropped. Now we weren't the ones to drop this question. These, in many cases, were questions that were dropped by the Census Bureau or others.

So we're trying to balance, making sure we count all heads and making sure we get a good count. First of all, we want an accurate count. Then, obviously, we want to add these other questions. That's what we've been trying to do.

Chairman ROYBAL. Well, I tried to follow you very closely, and have also read the statement that was made by Mr. Wright, and I thought what you were going to do is justify your position based on a very famous professor, William Edward Deming. Now I know Mr. Deming. I have sat in on one of his lectures. So I asked my staff to contact Mr. Deming to determine whether he had been properly cited on this matter and Professor Deming said this. "Any quotation that I made regarding smaller sample sizes does not apply to the census at all, as the census is engaged constantly in sample surveys. It is a model for the whole world."

Mr. Wright has said that OMB's rationale is that Dr. Deming took the position that a smaller sample is preferred. Now Dr. Deming was in fact very surprised to learn that this remark was being misinterpreted by OMB to support a reduction in the census sample size.

I read this into the record, because it is in the record already in the testimony made by Mr. Wright. In checking with Dr. Deming, he tells us that he was not consulted on this matter and is not being properly cited.

Again going into this matter of trying to understand OMB's rationale. You know very well, Mr. MacRae, that OMB does in fact come before my Appropriations Subcommittee on the Treasury to justify their budget. They've been coming before that subcommittee for the last 18 years that I've been a member of that subcommittee. I don't remember one time, including last year and the year before, that we ever discussed this particular activity.

We did go into the matter of the reduction in paperwork and so forth, but not that you were going to go into the census. The question asked by Mr. Bonker concerning what are you doing in that particular arena, I think, is well taken, particularly in view of the fact that what you are proposing is something that everyone opposes.

Experts on the other side are telling the committee, this is not the way to go. Are these people wrong, or are you wrong? Or let's put it the other way, are you the only one that is right?

Mr. MACRAE. I'm not so fortunate, Mr. Chairman, to be in that position. No, I don't think that they are wrong, and I don't think we are wrong.

Chairman ROYBAL. That's quite an answer.

Mr. MACRAE. Because I think that the discussion and debate is appropriate so we can get the best quality product. And one of the things we have before us is a means of testing our hypothesis in the dress rehearsal. We believe that the results of that dress rehearsal, which we will review and the Census Bureau will review and the Congress can review, will give us guidance as to what are the appropriate questions, and what is the appropriate size of the sample.

You mentioned that over the 18 years that you have served on our committee on appropriations this issue has not come up. The reason in part is that it only comes up every 10 years.

The second thing is, when the census dress rehearsal came up, we went to our authorizing committees and briefed the staff of the authorizing committees as to what we would do, and we said do you believe it's appropriate for us under the Paperwork Reduction Act to conduct a review of the census in the same fashion as our review of any other request for clearance under the paperwork act, and they said, absolutely.

Well, Mr. Chairman, we were not acting improperly.

Chairman ROYBAL. Well, Mr. MacRae, I realize that you have the authority to do it, but my question is, don't you take into consideration the expert advice of experts in the field?

Mr. MACRAE. We do, Mr. Chairman, and we will as we review the dress rehearsal.

Chairman ROYBAL. Yes, but you're still cutting out questions. You still want to reduce it to the point where testimony this morning has indicated that cities will suffer the consequences.

Mr. MACRAE. On the question of cutting out some of the questions altogether, Mr. Chairman, particularly the questions on utility costs, we are seeking to find—we believe we will obtain—much more accurate data through the efforts of the Department of Energy and HUD in conducting a different and more targeted survey to ascertain these costs. We are not just trying to obtain data. We are trying to obtain more accurate data, targeted data, than has been obtained in previous responses to those questions.

Chairman ROYBAL. Now, Mr. MacRae, I want to try to take this from another angle now and ask Ms. Turner this question, and then maybe be able to come closer to the response that Mr. MacRae has given.

Ms. Turner, does the housing statistics users group have a position concerning what the overall content and sampling size of the decennial census should consist of?

Ms. TURNER. I think that there's widespread agreement with the census's original proposal in this regard. As has been stated, the census is the envy of the world in terms of data collection and statistical capability. And while the kinds of substitute data sources that OMB is suggesting may be available and may suffice for a State or large metropolitan area, we really have to rely on the census and their sampling expertise and their 100 percent survey

to reach down to the small neighborhood level and collect absolutely essential data there.

Chairman ROYBAL. You, of course, are arguing that it should be larger.

Ms. TURNER. Yes. I agree that we only get this opportunity once every 10 years to gather national data on critical questions involving the well being of the population, that sacrificing sample size is clearly a mistake, and moving essential questions from the 100 percent to the sample is another serious mistake, and the two mistakes interact with one another to reduce the overall reliability of what you can do with this data at the neighborhood level.

Chairman ROYBAL. All right, Ms. Becker, do you agree with that?

Ms. BECKER. Yes, absolutely.

Chairman ROYBAL. Mr. Young?

Mr. YOUNG. Absolutely. I would like permission to add one thing that is disturbing me greatly about this morning's testimony. I'm no longer with the bureau, but I remember the 1960 census, the 1970 census and the 1980 census. Timing is crucial in the preparatory work. The amount, the number of questionnaires that have to be printed is staggering. I would suggest strongly that you ask the Census Bureau to review its timetable for printing, for assembling, for addressing and distributing the questionnaires to the Post Office in view of this OMB testimony that until there are results from the dress rehearsal that can be analyzed they cannot make content and sampling plan decisions for the decennial census.

I think if you wait that long, you are going to put the decennial census in one terrible bind in terms of time. In fact, I don't think the Census Bureau would be able to perform if they couldn't have decisions on census content until late in 1988 or early 1989.

There is just one other thing on the utility cost data that I'd like to point out that has perhaps been left unsaid. The survey that HUD and the Department of Energy are working on is the Residential Energy Consumption Survey, a total of 5,000 households in the United States, about 1,700 renters, of which about half are in scope of the HUD definitions used for their fair market rent program.

In other words, 800 to 900 rental properties are going to be studied to try to determine if it is possible, first to develop fair market rents or gross rents for 2,700 areas used by HUD in that program, and finally whether those 800 to 900 cases can be used to impute or model utility costs for each individual household in the Nation.

Chairman ROYBAL. Again I sit here puzzled over OMB's intent, in view of the fact that there's so much disagreement on the part of experts. I would like to at least try to understand OMB's position. In answer to the question of whether or not there would be savings, Mr. Wright's answer was that OMB's proposals will not be saving Federal dollars. Rather, the intent of the proposals is that they will be saving our citizens' time. That's in the record as justification for this action.

What do you think of that, Mr. MacRae?

Mr. MACRAE. The answer is there was none of this designed to save dollars, and—

Chairman ROYBAL. Well, isn't the purpose of the Paper Reduction Act to save dollars?

Mr. MACRAE. No.

Chairman ROYBAL. What is the purpose of it?

Mr. MACRAE. The purpose of the Paperwork Reduction Act is to ensure the burden imposed on the public, the American public—

Chairman ROYBAL. But it also saves dollars, does it not in making things more efficient?

Mr. MACRAE. It could save dollars in the sense that, first of all, your time is freed up. You don't have to spend as much time filling out forms. Obviously, you can use your time in a different fashion, but that is really not what we had looked at in terms of this whole exercise or any of our exercises with the paperwork act.

The second thing under the act is the whole question of quality of data, and the act is very clear on that. We are to ensure that the data is of the highest quality. Now Mr. Young and others have raised questions about the actions we've taken here, or that we've suggested be done first and be tested, but I will come back to the point that we do believe the things we have raised should be tested. We are hoping that they will be tested, and we will have some results in a timely fashion. How much time the Census Bureau has or needs, I can't answer. They should actually respond to that.

We stand ready to move and analyze whatever information and data we can have made available to us. We also expect Congress to make its views known, as the act intends—that the Congress is repeatedly and constantly kept up to date.

Chairman ROYBAL. All right, Mr. MacRae, I'd like to ask you this question. Once you complete your so-called dress rehearsal, and pending the receipt of the results from the dress rehearsal, will OMB then be in a position to recommend to the Census Bureau that it should continue to plan for the possibility that a full census will be conducted with a sample of 16 million housing units and all of the housing questions on the 100 percent form?

Mr. MACRAE. We will respond to a request from the Census Bureau for clearance of the final form and content and so forth whenever it is submitted to us. They have to come back with the final form. They have to submit the final form to OMB for clearance. We will respond in a timely fashion. In fact, we must. We can't take anymore time than 90 days to review the form. The clock starts when they submit the final census form, and it's a 90 day clock, and we have to respond.

Chairman ROYBAL. Supposing then that the recommendation would be that you go to a larger size. Would you then do that?

Mr. MACRAE. We will look at all the information we have available at that time and make an assessment, and if the assessment is that that is in fact warranted and we should do it, then we will—

Chairman ROYBAL. All right. Before you do all of this then, you will definitely examine all possibilities. In other words, you're telling the committee that there is a possibility that when you conduct this dress rehearsal that you might change to the larger form?

Mr. MACRAE. To a larger census size? Absolutely. We're not foreclosing that. The dress rehearsal was one approach, and we said let's assume it's a 10 million sample size.

Chairman ROYBAL. It seems to me that the testimony presented before the committee this morning is clearly on the other side.

They do not agree with the smaller sample. So that message then has been delivered.

Mr. MACRAE. We have certainly heard that.

Chairman ROYBAL. Now the question is, will OMB consider, I would use this term, the advice that's been given OMB by experts in the field?

Mr. MACRAE. Yes, sir.

Chairman ROYBAL. So the possibility is that, in considering these options, you may in fact conduct the sampling as indicated by the other members of the panel?

Mr. MACRAE. There is certainly that possibility, and we will give the statements from the experts here and statements we receive from other experts consideration.

Chairman ROYBAL. What we're going to try to do, Mr. MacRae, is to get in a condensed form the position taken by Mr. Young, Mayor Holland, Ms. Turner and Ms. Becker and then submit it to OMB as the position taken by this committee. After that is done, we would like to have you tear it apart and tell the members of this committee why we are wrong or, if you happen to agree, also tell us that. Will that be satisfactory?

Mr. MACRAE. We will certainly comply with it, sir. The only thing I would ask is, it may take a couple of days to respond in that fashion, and we would ask a reasonable amount of time to respond. I don't know if you want to extend the time for keeping the record open, as a result.

Chairman ROYBAL. Well, we would like to, first of all, have you know what the position of the committee is, and I think you can well guess what it is now.

Mr. MACRAE. Yes, sir.

Chairman ROYBAL. And then look at the entire situation from the standpoint of OMB's entrance into this matter, and how OMB can do the best job possible. I'm sure you're interested in that.

Mr. MACRAE. Absolutely.

Chairman ROYBAL. And it could very well be that what you have been proposing is your temporary position and that you may be changing your strategy in the days to come.

On the other hand, that may not be the case at all. What I'd like to do is summarize our position, hand it over to you, and then tell us what your position is.

Mr. MACRAE. We will respond, sir.

Chairman ROYBAL. What I would like to do now is ask anyone else on the panel if they wish to make a closing statement.

In view of the fact that no one has indicated that a closing statement is to be made, I'd like to thank the members of the panel for a very interesting discussion. I want to be sure to let you know that I've learned a great deal. I'm not an expert in this field. In

fact, I've never been involved in the matter of census and all these fancy phrases that I heard today. I learned a great deal, but I sincerely hope that the end result is that fairness will be applied and that whatever is done takes into consideration the best interests of the people that are involved, not the reduction of paperwork and all these other things that sometimes we deal with, forgetting the fact that the people will suffer the consequence of our inability to get the information we want.

May I thank each and every one of you for your presence this morning. The hearing is adjourned.

[Whereupon, at 11:32 a.m., the hearing was adjourned.]

APPENDIX



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

SEP 16 1987

Honorable Katherine M. Bulow
Assistant Secretary for Administration
Department of Commerce
Washington, D.C. 20230

Dear Kay:

On June 17, 1987, the Bureau of the Census submitted its dress rehearsal for the 1990 census to the Office of Management and Budget (OMB) for review under the Paperwork Reduction Act of 1980. As I informed the Department on Tuesday, September 15, 1987, we have concluded our review and are unable to approve the proposed dress rehearsal, as submitted. I have discussed our concerns with Departmental officials, and appreciate their cooperation with our Paperwork Reduction Act review. This letter is to elaborate upon our discussion.

Under the Paperwork Reduction Act (the Act), Federal agencies that propose to collect statistical and other information are required to submit their proposals to OMB and to demonstrate to OMB and the public that the utility of each question and the needs to which it responds justify the cost and burden involved. OMB is required to review and either approve or disapprove each proposal based on criteria set forth in the Act. Specifically, before approving any collection of information, OMB is required to determine that the information has practical utility and that the collecting agency has reduced "to the extent practicable and appropriate the burden on persons who will provide the information."

The Paperwork Reduction Act also makes OMB responsible for establishing and overseeing standards for Federal statistical programs, in order to maintain and improve the quality of government statistics. OMB's information collection reviews for statistical surveys such as the decennial census focus not only on burden but also on quality issues. Regarding general purpose statistics, practical utility is defined as the actual, not the theoretical or potential, usefulness of information to agencies and the public, taking into account its accuracy, adequacy, and reliability, and the agency's ability to process the information in a useful and timely fashion.

Our review of the proposed dress rehearsal included numerous discussions with Census Bureau staff and a careful analysis of material submitted by the Bureau and comments to our public docket. For the reasons indicated below, and in accordance with the Act and 5 CFR 1320.12, we are disapproving the proposal as submitted by the Census Bureau. The questionnaires and sampling design submitted for review do not meet the criteria of practical utility and minimization of burden established by the Act.

However, we believe that Census can improve the proposed dress rehearsal so that it meets the criteria of the Act. OMB is well aware of the schedule the Census Bureau must meet in order to conduct a useful dress rehearsal and a successful census in 1990, and urges the Bureau to consider our proposed changes expeditiously. Upon resubmission of a modified proposal, OMB will conduct its review quickly, while providing an adequate opportunity for public comment.

Below, we describe in detail the reasons for our action and how the dress rehearsal can be modified to meet the standards of the Act.

Background

The Bureau estimates that the 1990 census will cost \$2.6 billion to carry out and will impose a paperwork burden of approximately 32 million hours on respondents. These levels of public expenditure and burden alone mean that the 1990 census must meet a high standard for both quality and utility. But more important, the 1990 census must be able to meet its basic Constitutionally-required purpose of counting the population of the Nation. These fundamental data are necessary to apportion congressional districts among the States and are also used to determine the allocation of billions of Federal dollars. If the Census Bureau does not accurately count the population, congressional representation may be inaccurate and Federal dollars may be inequitably distributed.

Any effort to ensure an accurate count must address the risk that people will not mail in or answer correctly a questionnaire that they consider too long or that contains questions that they consider intrusive or inappropriate. During the 1980 census, the Bureau experienced significant difficulties in getting complete and accurate response. Court cases are still pending, in fact, that contest the Census Bureau's count. We believe that Census must take significant steps to improve response rates and the quality of the data collected.

The Census Bureau has proposed a "short" form that consists of 17 questions (7 questions on each individual in the household and 10 housing questions) that are to be answered by each household in the United States. The "long" form, with 44 additional questions and many additional subparts, is to be sent to a sample of 1 in 6 households. The questionnaires are first mailed to each

respondent. A response rate of about 78 percent is expected. Census Bureau employees in the field then call or visit the households that did not return their forms in an attempt to collect information on everyone in the country.

The forms that are returned are then checked to identify those that are filled out incorrectly or incompletely. The Bureau will first try to call respondents to correct the errors discovered; if this fails, an enumerator may visit the respondent.

In the 1980 census, about 20 percent of the short forms and 45 percent of the long forms "failed edit," and required follow-up. These figures appear to understate the actual proportion of questionnaires with errors, since accuracy standards had to be relaxed to permit the existing workforce to handle the large number of errors.

Response Rates

In 1975, Congress inserted into Title 13 of the United States Code (the Census Code) a new section (Section 195) specifically authorizing the Census Bureau to use statistical sampling whenever feasible in all areas of the census except the actual population count. This action recognized developments that had already taken place within the Census Bureau. Ironically, since this statute was passed, the statistical portions of the census design have not taken advantage of the potential for improvement in statistical design offered by the statute. The 1970 design used three different forms, each with a different length and sampling rate. In 1980, two forms were used, but the sampling rate for the long form was varied to match the population densities of the areas surveyed. For 1990, the Bureau has proposed a single long form, using a sample with a constant rate of 1 in 6 households.

During the same period, response rates have steadily declined. In 1970, the response to mailed questionnaires was 88 percent for the short form and 83 percent for the long and very long forms combined. In 1980, the mail response for the short form dropped to 82 percent. The Bureau has recently projected a mail response rate of 78 percent for 1990. We are concerned about this trend. There is some indication from recent research that the public is more concerned about privacy, less sanguine about surveys, and more suspicious of government than it was in 1970. But in its proposed dress rehearsal the Bureau has not reduced the burden or the number of sensitive questions as a means of improving response.

We believe that the length of the questionnaires and the sensitivity of some questions may contribute to respondent resistance. Some research has indicated that a questionnaire similar to the one under review was found to be complicated and "overwhelming" by respondents, while an alternative was described as simple and "easy to answer." It has also shown that some

minority groups were offended by questions they considered an "invasion of privacy" and unrelated to a "population count." Many of these individuals could see no rationale for the extraneous questions unless the answers were to be turned over to welfare agencies or other authorities, and thus scoffed at assurances of confidentiality. (See References 1, 2, 3, and 4.) This research strongly suggests that counting the population in large cities is complicated by suspicions engendered by questions not related to the population count.

Another consequence of high rates of nonresponse and edit failure is the enormous workforce of enumerators required to visit millions of households and collect information in person. For the 1990 census, the Bureau estimates that over 300,000 enumerators will be needed. The cost of such a workforce makes up a large part of the budget for the census. The problems of adequately training and managing such a workforce are significant. Taking steps to increase the response rate for the census would reduce the number of enumerators needed and allow those employed to focus more on counting and collecting data on those groups traditionally the most difficult to enumerate.

The basic strategy underlying a mail-out census is sound--it is best to let the population enumerate itself as much as possible. Some respondent errors are inevitable, but the census short form must be as simple and as inoffensive as possible to minimize error. It is important to remember that the primary purpose of the census is to provide an accurate count of the population of the Nation.

The decennial census also provides a unique opportunity for a large sample study to provide reliable estimates of population characteristics that are used by many programs at all levels of government. These data are used by public officials and by both public and private researchers. It is important for these data to be accurate in order to have practical utility. It is also important that the sample size and design do not compromise the primary objective of the census--obtaining an accurate population count.

Improvements to be Made

In order to assure a successful 1990 census, the Census Bureau should make a number of changes aimed at improving response. Although there are many such possibilities for improving the content and design, we believe Census should focus on three areas where substantial improvements can be made in time for a realistic dress rehearsal in 1988.

1. Ask selected housing questions only on the long form.

We believe 7 of the 10 housing questions proposed should be asked only on the long form. These questions are the following:

- H3:** How many rooms do you have in this house or apartment? Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms.
- H4:** Do you have complete plumbing facilities in this house or apartment; that is, 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower?
- H5:** Is this house or apartment part of a condominium?
- H6a:** Is this house on ten or more acres?
- b:** Is there a business (such as a store or barber shop) or a medical office on this property?
- H7:** Do you have a telephone in this house or apartment?
- H9:** Answer only if you OWN OR ARE BUYING this house or apartment--
What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale?
- H10a:** Answer only if you PAY RENT for this house or apartment--
What is the monthly rent?
- b:** Does the monthly rent include any meals?

In addition, the telephone number itself (H7) should be asked on the back of the long or short form.

The long form sample will generally be adequate to meet the accuracy requirements for these data. The Department of Housing and Urban Development commented on such a modification in correspondence to our public docket, indicating that the Department does not need these questions asked of 100 percent of households for purposes of Federal housing programs. Furthermore, we have received comments in our public docket describing needs for these data; however, most commenters expressed concern about outright deletion of these items from the census. Based on these descriptions of user needs, we do not object to retaining these questions on the long form. Undoubtedly there are data users who would like to retain these questions on the short form in order to collect data from 100 percent of households. However, careful sampling methods should alleviate most of these user concerns. In order to assure that the 1990 census fulfills its primary function of enumerating the population, it is necessary to balance some user requests against the potential improvement in response for the short form.

This idea is not a new one. The General Accounting Office (GAO) has repeatedly suggested removing housing questions from the short form. In a May 1986 report focusing on the short form, the GAO concluded that the 1990 short form:

should be shorter and simpler than the 1980 short form.... The decennial short form questionnaire should be limited to the basic population and housing questions needed to obtain an accurate population count. The 1980 short form contained household questions extraneous to the population count. (Reference 5, p. 1)

GAO found that needs for housing data from 100 percent of the households "have not been fully substantiated and evaluated before being included on the Census questionnaire," and that, furthermore, the Bureau had developed little information on the respondent burden and the literacy skills required to complete the questionnaire. (Reference 5, p. 25) The report further stated:

that the housing questions increase the complexity of the questionnaire and tend to discourage response. In addition, a shorter form may provide the Bureau with cost-saving options for its data automation decisions. In our opinion, the Bureau is missing a chance to send a more user-friendly, and easier-to-complete form to U.S. households which may increase the mail back rate. (Reference 5, p. 26)

2. Improve the sample design for the long form.

The short form will be sent to 100 percent of the Nation's households, and is most important for the Constitutionally-required enumeration. The long form, proposed by the Bureau to go to a sample of 1 in 6 (or a total of 16 million) households, contains a greater array of questions, including ones that respondents may consider more sensitive than those on the short form. We have concerns about the burden imposed by and accuracy of the data that are collected on the long form, and believe that the response rate can be improved and the burden on respondents reduced significantly. Such changes can be implemented, in part, by changing the sampling design from the proposed sample of 1 in 6 households. We discussed with Census staff, for example, a simple matrix sample design which had the potential to reduce burden, increase response rate, and improve statistical reliability. Given time constraints, however, we do not believe such a change can be developed in time for use in the dress rehearsal.

There are other sample designs that we believe will reduce the nonresponse and the error rates experienced in 1980. (For example, see Reference 6.) The Bureau should consider, for example, a variable rate sample, which would reduce the overall

burden of the long form and thus help reduce the number of nonresponses and edit failures. In the past, this has been done; sampling rates have been varied in rural, suburban, and urban areas. This approach permits a high sampling rate to be used in less densely populated areas where it is needed, with a much lower rate for more highly populated areas where densities are typically 500 times greater. A sampling rate as low as 1 in 20 would provide precise estimates down to the level of individual blocks in central cities. Such a sampling rate in urban areas would also assure that 95 percent of these hard-to-count households would receive the simple, nonsensitive short form. This approach should reduce nonresponse and response errors in urban areas where they have been most significant.

3. Delete several questions.

Among the 44 additional questions included on the long form are questions that produce better data than others. That is, for some questions, errors in response are substantial. It has been found, for example, that many people answer incorrectly questions about how much their utility bills have been. The Department of Energy's Energy Information Administration realized this some time ago and now conducts a different type of survey to collect more accurate data on energy costs. People may consider other questions sensitive and may either refuse to answer or give inaccurate responses--the questions on rent and income, for example. In these cases and others like them, such response error may dwarf sampling error. Thus, only increased costs and inaccurate data are gained by a large sample of heavily biased responses.

With this in mind, we suggest that Census delete from the long form questions H16, H17, and H18. Census test results reported in 1979 showed that utility cost questions, in particular, produced responses that were exaggerated by about 50 percent. (See References 7 and 8.) These results came too late to remove the questions from the 1980 Census. The 1986 National Content Test showed that rewording the utility cost question reduced the bias by only 10 percentage points. Since the census form was already too long to assure reasonable error rates, inclusion on the 1990 Census of the biased utility questions meant that important questions on health insurance recommended by the Federal Agency Council had to be dropped.

There is no magic number of appropriate census questions that should be asked on the long or short forms, but each additional question raises the risk of nonresponse and errors. The Census Bureau's working principle in constructing the proposed questionnaires was to keep the length approximately the same as the 1980 Census. More work should be done to ensure that the response and error rates are better than in 1980. This can be done for the short form by removing questions, and leaving them only in the long form. For the long form, considering response

error as well as random error provides a more useful criterion for determining content, and will clearly eliminate some questions from this lengthy questionnaire.

Resolution of Problems

In recent meetings with officials and senior staff of the Department of Commerce and Census Bureau, we discussed the problems and suggested modifications described above. We believe that these problems can be resolved quickly and that the dress rehearsal can proceed without delay. Our suggested modifications to bring the dress rehearsal into conformance with the principles of the Paperwork Reduction Act are summarized below:

1) Questions H3, H4, H5, H6, H7, H9, and H10 should be removed from the short form but retained on the long form, provided that a block for a contact telephone number is placed on the back cover of both short and long forms in lieu of the home telephone number requested in question H7.

2) a) The proposed sampling fraction of 1 in 6 can be maintained for the least populated census tracts, but can be reduced to produce samples of approximately the same size and precision for more heavily populated census tracts.

b) Alternatively, the sampling fraction may be varied further to improve efficiency with a maximum sampling rate not exceeding 1 in 2 for any jurisdiction or census tract and with a national sample size that does not exceed 10 million households.

3) Questions H16, H17, and H18 should be removed from the long form.

Revised questionnaires and sampling specifications for the three Dress Rehearsal sites should be submitted for review as soon as possible to permit the dress rehearsal to go forward on schedule. OMB will review such a resubmission expeditiously, and will include in such a review an opportunity for the public to comment.

We look forward to working with you and your staff in improving the quality of the 1990 census.

Sincerely,

Wendy L. Gram
Wendy L. Gram
Administrator for Information
and Regulatory Affairs

Enclosures

cc: Robert Ortner
John G. Keane
Katherine M. Bulow

References

1. 1985 Census of Tampa, Florida--Focus Group--Final Report. Market Dynamics, Inc., Submitted to the Bureau of the Census, April 17, 1985.
2. Final Report on Results of Four Focus Groups in East Central Mississippi About Responding to the Census. Riva, Inc., by Naomi R. Handerson and Greg Gay, For the U.S. Bureau of the Census, December, 1985.
3. Report on Observation of Census Focus Groups Held before the 1986 Test Censuses. 1986 Test Census--Preliminary Research and Evaluation Memorandum No. 8. Carolee Bush, U.S. Bureau of the Census, May 1, 1986.
4. Outreach Focus Group Reports from the 1986 Test Census of Central Los Angeles County, California. 1986 Test Census--Preliminary Research and Evaluation Memorandum No. 18. Michael E. Freeman, U.S. Bureau of the Census, undated.
5. Decennial Census--Issues Related to Questionnaire Development. United States General Accounting Office. GAO/GGD-86-748R. May 1986.
6. Decennial Census. 1990 Decennial Census--Decision Memorandum No. 11. William P. Butz, U.S. Bureau of the Census, July 17, 1986.
7. Accuracy of Reports of Average Monthly Utility Costs (Gas and Electricity) for Owner and Renter Households. Results Memorandum No. 14. 1976 Census of Travis County, Texas. Peter J. Fronczek, U.S. Bureau of the Census, March 18, 1977.
8. Accuracy of Reports of Utility Costs for Occupied Households. Results Memorandum No. 37. 1977 Census of Oakland, California. David A. Koona, U.S. Bureau of the Census, July 20, 1979.



UNITED STATES DEPARTMENT OF COMMERCE
 Bureau of the Census
 Washington, D.C. 20233
 OFFICE OF THE DIRECTOR

NOV 27 1987

MEMORANDUM FOR C. Louis Kincannon
 Deputy Director

From: Charles D. Jones *CJ*
 Associate Director for Decennial Census

Subject: Implications of the Dress Rehearsal Clearance

This is additional information about the September 16 letter from the Office of Management and Budget (OMB) concerning the Census Bureau's June 17 request for clearance of questionnaires for the 1988 Dress Rehearsal. I am forwarding information on the implications of the guidance OMB provided for the design and content of the 1990 census. The content and sample size reductions OMB has proposed will affect negatively the statistical reliability and general utility of the census results during the decade of the 1990s.

We believe that variable rate sampling should be used in the dress rehearsal and 1990 census. We do not agree, however, with the sample size limitation of 10 million housing units for the census. The decrease in sample size will reduce data quality for 85 percent of households, for more than 50 percent of the design areas (governmental units, census tracts, and block numbering areas), and for population subgroups, such as American Indians, Asians and Pacific Islanders, Hispanics, Blacks, and the elderly.

We propose a sample size of approximately 17.8 million housing units for the 1990 census. This sample would incorporate the following features. (The coefficients of variations, or CVs, and probabilities discussed here refer to a 10-percent population characteristic. Data for housing characteristics would have similar relationships although with larger CVs.)

- Variable rate sampling (see Attachment 2).
- Equal CV for each design area. Each design area would have a CV of about 10 percent (see Attachment 2).
- Maintain or improve the statistical precision of the 1980 census for 60 percent of the housing units and 77 percent of the design areas (see Attachment 2).
- For large census tracts (2,500 or more housing units), strike a compromise between the relatively good precision of the 1980 census (with a CV of about 7 percent) and the significant increase in sampling error over previous censuses (a 15-percent CV) suggested by the sampling plan received from the OMB. These tracts contain about a third of the population and comprise 13 percent of the design areas (see Attachment 2).

- For each design area, provide a chance of about 2-in-3 that a sample estimate will be within 1 percentage point of the actual value. Under the OMB sampling plan, the chance of this happening would be about 1-in-2. That is, about half of the areas would have a sample estimate more than 1 percentage point away from the actual value (see Attachment 2).
- Reduce the estimated average response time per housing unit in the 1990 census by about 13 percent, relative to the comparable figure before the 1980 census. This reduction is a result of sample design change and reduction in content (see Attachment 1).
- Be responsive, in our opinion, to the needs of census data users across the Nation (see Attachment 3).

I am enclosing four reports with this memorandum. The first of these summarizes the Census Bureau's reaction to various points conveyed in the OMB's September 16 letter; it also has a comparison of the estimated response burden calculations for 1980 and 1990. The second report is an evaluation of alternative sampling plans, including the plan proposed by the OMB, for the 1990 census. The third report is an assessment of the data quality implications of the OMB sampling plan. The fourth report documents comments about the content issues raised in the OMB's September 16 letter.

Attachments

cc: W. Butz	(DIR)	J. Thompson	(STSD)
P. Bounpane		R. Griffin	
P. Heelen		H. Woltman	
S. Courtland	(PPDO)	S. Miskura	(DPLD)
F. Ruth	(CAO)	P. Berman	
M. McKey	(OMSD)	R. Brown	
J. Briner		J. Dinwiddie	
P. Schneider	(PDP)	R. Bair	
P. Fulton		A. Paez	
N. McKenney		P. Lichtman-Panzer	
A. Young	(HOUS)	D. Dwyer	
L. Norry			
C. Young			

Observations Concerning the September 16, 1987 Reply
by the Office of Management and Budget to the Census
Bureau's Initial Request to Clear Questionnaires for
the 1988 Dress Rehearsal

- Sample design and size (summary), p. 1
- Mail return rates, p. 2
- Failed-edit operations, p. 3
- Population coverage, p. 4
- Response burden, 1980 and 1990, p. 6

Bureau of the Census

October 1987

Sample size and design

The Office of Management and Budget (OMB) stated that it wants to improve the quality of results from the 1990 census. But the proposed reduction in the size of the sample demonstrably and substantially contradicts this objective. If adopted, the OMB sample size limitation of 10 million housing units clearly will decrease the quality of data, especially for numerically small populations (such as American Indians, Hispanics, and the elderly), as well as for most data publication areas and the vast majority of the population.

In response to concerns about respondent burden and dollar cost, the Census Bureau has reduced the sample sizes in the last three censuses and, as a result, there have been marginal decreases in precision of the sample estimates. As the sample size dropped, the coefficient of variation on a 10-percent characteristic for tracts of 1,000 to 2,500 housing units, which contain half of the population, has crept up from 8 percent (1960) to 9 percent (1970) to 10 percent (1980). A much more dramatic increase in error would occur for 1990 under the OMB plan. For example, in census tracts having 1,000 to 2,500 housing units, a 10-percent coefficient of variation for 1980 would become 14 percent in 1990, an increase far greater than those for the last three censuses. In other terms, the sampling error for 1990 data would increase by 40 percent over the 1980 levels. For larger census tracts (above 2,500 housing units), the results of the OMB decision are even more damaging: the error would be double that of the 1980 results. The detrimental effects on data quality for this one-third of our population and 13 percent of our design areas would be dramatic.

The OMB plan has considerable appeal with respect to the precision of estimates for sparsely populated places. It would maintain the 1980 precision levels for places with fewer than 1,000 inhabitants, where only 3 percent of our Nation's population lives. The Census Bureau supports this objective and has incorporated it into the alternative 1990 census sampling plan (see Attachment 2).

The OMB letter also suggests that reducing the sample size will reduce nonsampling error and, thus, the total error in the data. Neither data nor statistical theory support this contention. For example, some components of nonsampling error associated with sample data are independent of the sample size and, thus, would not be affected by a reduced (or increased) sample size.

This can be seen in two ways. First, almost every model used to express the total error in an estimate produced from a survey, such as the 1990 census sample, expresses the error as the sum of a sampling error component and two or more components due to respondent and other errors (such as enumerator error). These error models clearly demonstrate that the nonsampling errors are independent of the sampling errors. Second, the Census Bureau conducted an enumerator variance study that indicated that the level of enumerator error in the 1970 census data was the same or slightly higher than in 1960. In 1970, the enumerator assignment size was about one-half that in 1960, suggesting that for a fixed number of enumerators, reducing the enumerator follow-up work load (and, as a result, the sample size) does not necessarily guarantee a reduction in the enumerator error component.

Mail return rates

The OMB letter contends that reducing the number of households that receive the sample questionnaire (or long form) would improve the mail return rate and reduce the number of field enumerators needed to visit nonresponding households. We share the OMB objective of a higher mail return rate, but the Census Bureau knows from evidence and experience that reducing the number of units that receive the long form to the OMB limit of 10 million would have a trivial effect on the mail return rate.

There has been relatively little difference between the mail return rates of census short-form and long-form recipients in an actual census. In the 1980 census, the overall mail return rate for short-forms was only 1.5 percentage points higher than that for long-forms. The OMB points out that the mail return rates are lower among selected population subgroups residing in metropolitan areas. Even in these areas, however, there is little difference between the rates by type of form. In 1980, the short-form mail return rate for large metropolitan areas was 2.5 percentage points higher than the long-form rate. In some of our test censuses, we have observed wider differences between the mail return rates of short-form and long-form respondents, but these test census results are not supported by actual census results.

Based on this experience, the Census Bureau concludes that reducing the sample size would have a trivial effect on the overall mail return rate in 1990. Applying the 1980 mail return rates by form type to the sample design proposed by the OMB for 1990, the Census Bureau estimates an increase in the overall mail return rate of 0.1 of 1 percent for the 1990 questionnaires. The estimated effect is so small that there would be no reduction in the number of enumerators needed in 1990.

In a similar vein, the OMB decision to reduce the number of questions on the dress rehearsal short form appears to be based on the assumption that this would increase the mail return rate for the form. Our comparison (summarized above) of long and short forms that have much greater differences in their relative length than OMB proposes for the 1990 forms suggests that the mail return rates are almost unrelated to the length and content of the questionnaires. The OMB assumption is at best speculative--clearly not a sound basis for making radical changes in the content of the decennial census.

Failed-edit operations

While it is true (as stated in the OMB letter) that some 20 percent of short forms and 45 percent of long forms "failed edit" in 1980, most of these did not require field follow-up by enumerators. In centralized offices, the failed-edit operation comprised three separate phases--office edit, office telephone contact, and enumerator follow-up. In decentralized offices, the office telephone contact phase was not used in 1980, although enumerators were allowed to use their personal telephones.

Data from the 1985 test censuses clearly show (Table A) that the large majority of failed edit questionnaires are completed by office staff using either the clerical or telephone contact procedures. Also, the Census Bureau experience demonstrates a greater success at hiring and retaining a temporary staff for office rather than for field operations. The OMB letter states that the Census Bureau will be needing more than 300,000 enumerators in 1990; this is incorrect. This figure is an estimate of the total peak-period work force for staffing the regional and district offices, including many jobs other than enumerators. For 1990, we plan to implement the office telephone contact phase of the failed-edit operation for all of our field offices. With this change, we should reduce the number of enumerators required for the field-work phase of the failed-edit operation.

Table A. 1985 test censuses: Percent of failed edit questionnaires completed, by type of operation (Data based on short forms and 100-percent component of long forms)

Site	Clerical operation	Telephone	Field enumerators
Jersey City	51.7	30.9	17.4
Tampa	54.0	32.9	13.1

The field-work phase of the failed-edit operation is conducted after nonresponse follow-up operations and constitutes a far smaller workload. In addition, the failed-edit operation is conducted simultaneously with the vacant-delete and residual nonresponse operations, so that the vast majority of enumerators would be needed even if the failed-edit rate dropped to zero.

Population coverage

A presumption that the length and content of the census questionnaire affects coverage (the completeness of population counts) is a principal rationale for the OMB's action. The OMB suggests that maximizing the proportion of respondents asked to complete a census short form contributes to coverage improvement and that, by dropping questions from the short form, coverage of the population would be improved even further.

The OMB based its arguments largely on results of a few focus groups. Focus groups can be useful vehicles for identifying hypotheses that might warrant testing, but--because of the small number of persons participating in these informal discussions, their unrepresentative make ups, and the conditioning influences upon the members by the discussion leader and the process itself--they provide no basis for changing a statistical program, much less for making radical changes in the decennial census.

The Census Bureau finds no statistical evidence to support the OMB contention of the existence of a relationship between questionnaire length and coverage. In the 1940 census, no forms were handed out, and all data were gathered by enumerators who asked the questions and recorded the answers in a book. Similarly in 1950, forms were not given to respondents, and enumerators recorded replies in a book. The 1960 census was the first in which forms were handed out to respondents. In two-stage areas (the majority of the population), short forms were sent to every housing unit. When the short forms were picked up, if the unit was in sample, a long-form questionnaire was administered to the occupants. In the 1970 and 1980 censuses, either a short form or a long form was sent to each housing unit in the mail-census areas. The three earlier censuses (in which long forms were not distributed) had worse overall and Black population coverage than the two more recent censuses, in which respondents knew the content and length of the self-administered questionnaires (Table B). Because of other procedural differences among these censuses, these results are confounded. They certainly do not, however, support the OMB contention.

Table B. Population coverage of censuses, 1940-1980
(Percent of population covered)

Census	Population	
	Total	Black
1940	94.4	89.7
1950	95.6	90.4
1960	96.7	91.7
1970	97.1	92.0
1980*	98.6	94.1

* The estimated population included approximately 3 million undocumented residents.

The OMB contention and the focus group reports suggest interesting hypotheses that should be tested before the year 2000 census. However, the potential loss in quantity and quality of data for 1990 is great, without any evidence that coverage improvements will result.

APPENDIX II

**"THE 1990 CENSUS AND HOUSING DATA FOR THE ELDERLY:
CAN WE COUNT ON IT?"**

**Joint Hearing of the
House Select Committee on Aging
and the
Subcommittee on Housing and Consumer Interests
Wednesday, February 24, 1988
Room 311 Cannon HOB
9:30 - 11:30 AM**

Hearing Purpose

The purpose of the hearing is to examine in greater depth concerns raised at an October 20, 1987, hearing of the Select Committee on Aging which revealed that the proposed deletion of several housing and energy-related questions from the short form of the 1990 decennial census, as well as a substantially reduced sample size for the census long form, has serious implications for the ability of federal, state and local officials and the private sector to plan for the housing and service needs of older Americans.

Background Summary

On September 16, 1987, the Office of Management and Budget (OMB) - citing its authority under the Paperwork Reduction Act - rejected the Census Bureau's proposed census questionnaires. These questionnaires (known as the Dress Rehearsal) are an operational dry run of all the features which will be used in the actual 1990 census. The Dress Rehearsal is scheduled to be tested during the Spring of 1988. In the past, only marginal adjustments to the actual census have been made after the Dress Rehearsal is undertaken. (For more detailed information, see enclosed CRS report: "Census Questions and OMB's Review of the Census Bureau Proposal: A Summary and Brief Analysis").

In general, OMB proposed that the Census Bureau: 1) move virtually all of the housing questions from the form which goes to all households to the form which goes to a much smaller sampling of households; 2) reduce the number of households which receive the long form from 16 million to 10 million; and 3) eliminate completely three housing questions related to utilities. (See p. 3 for more specific details of census changes).

At an October 20, 1987 hearing of the Select Committee on Aging ("Flanning for an Aging America: the Void in Reliable Data"), testimony from the Census Bureau and other experts indicated that the proposed changes in the housing questions, as well as the reductions in the sample size of the census long form, will make it extremely difficult - if not impossible - for many localities to obtain adequate data suitable for planning for the housing needs of smaller population subgroups, such as the elderly.

On October 28, 1987, Dr. Wendy Gramm, Administrator for Information and Regulatory Affairs at OMB, notified the Department of Commerce and the Census Bureau that the census forms for the Dress Rehearsal are final as OMB proposed - virtually all of the housing questions are to be moved from the short to the long form; the long form sample size is to be reduced from 16 million (one in six households) to 10 million (one in nine households); and two of the utility questions are to be eliminated completely. The third utility question - which is key to determining Fair Market Rents for a given area - was significantly changed. (Copy of the October 28 letter is attached).

These changes are being implemented by OMB despite an analysis by the Census Bureau which indicates that there are serious problems associated with the reduction in sample size for the census long form. (Copy attached).

BACKGROUND ON OMB'S PROPOSED CHANGES TO 1990 DECENNIAL CENSUS

In a September 16, 1987 letter from the Office of Management and Budget (OMB) to the Census Bureau, OMB rejected the Census Bureau's questionnaire and sample design for the 1988 Dress Rehearsal. Citing its authority under the Paperwork Reduction Act, OMB provided to the Census Bureau the following specific changes in the questionnaire and sample design:

- 0 Delete three housing-related questions from the census long form, including: 1) "What are the yearly costs of utilities for fuel for this house or apartment?" 2) "What kind of heating equipment is used for heating water?" and 3) "Which fuel is used for heating water?"

- **Implications of Deletions:**

- o With the elimination or proposed alteration of the question on annual utility costs, there is serious question whether federal, state or local officials will be able to calculate "gross rent", an item used extensively in housing cost analyses, including the establishment of Fair Market Rents (FMRs). The FMR is used by the Department of Housing and Urban Development to determine the amount of income which the elderly and other low income individuals must pay for subsidized housing.
- o OMB will likely argue that they have devised an alternative model for estimating utility costs, but there is serious doubt whether this model works and how costs for homeowners and metropolitan areas would be obtained. This change would also prohibit any cost comparisons between the 1980 and 1990 data so that it would not be possible to analyze the affect of housing policies during the Reagan administration.
- o By taking the utility cost data out of the 1990 Census, it will make comparisons with the 1980 data impossible, ending long-term trend analyses from previous censuses.
- o This further complicates the ability of policy planners to obtain data which reveal what percent of a household's income is spent for shelter and how this varies between income levels, between owners and renters, between the young and the old, and even between different neighborhoods in the same city.
- o The question on heating equipment provides local housing and health officials with information concerning how much of the housing stock uses outdated or potentially dangerous heating equipment. This can be a particular problem in rural America where stoves, fireplaces, and unvented heaters are used.

- 0 Move seven of the ten housing questions from the short to the long form, including:

"How many rooms do you have in this house or apartment?"
 "Do you have complete plumbing facilities in this house or apartment?"
 "Is this house or apartment part of a condominium?"
 "Is this house on ten or more acres? Is there a business office on this property?"
 "Do you have a telephone in this house or apartment?"
 "What is the value of this property; ie, how much do you think this house would sell for if it were for sale?"
 "What is the monthly rent?" "Does the monthly rent include any meals?"

- **Implications of Proposed Shifting of Questions:**

- o The overall result of these changes is that, starting in 1990, almost the entire housing census will no longer be a census, but instead will be a sample survey producing estimates rather than counts. This means that there will no longer be housing characteristics data available on a city block basis or for very small rural areas. Cities and counties could no longer assemble block data into areas that they need for planning or for grant applications.

- o The Census Bureau has just completed a very detailed computer mapping system which identifies every city block and rural land area in the nation. This system could not now be utilized to produce rural block housing characteristics data because such data would not be collected. Thus, just as rural America was about to obtain statistical equity with urban American, the opportunity would be lost.
 - o Questions such as: the number of rooms in the unit; whether the monthly rent includes meals; and whether there is a telephone in the house or apartment are particularly important in terms of local planning for the needs of the elderly.
 - o Many of these questions have historically been used to document the locations of substandard housing. It will now be very difficult, and in some cases impossible, for local officials to pinpoint exactly in which neighborhoods housing problems for the elderly are most prevalent.
 - o Shifts the majority of the housing questions from the short form, which reach 100% of American households, to the long form, which is proposed to reach only 1 in 9 households. By reducing the sample size which receives these housing questions, it will not be possible to get detailed, reliable local data on the particular needs of small population groups such as the elderly.
- 0 Reduce the sample size of the census long form from the 16 million (one in six households) which the Census Bureau proposed for 1990 to 10 million (one in nine households). In 1980, the sample size was 19 million.

- Implications of Reductions in Sample Size:

- o The Census Bureau and local planners will be unable to obtain detailed data on the income, living arrangements and demographic characteristics of subpopulations of the elderly and many other vulnerable subgroups because sample sizes will be too small to yield statistically reliable results.
 - o The lack of specific local data will be extremely costly for local agencies or the private sector. Either much larger samplings will have to be run to analyze what census data are available, or localities will have to implement their own small surveys. Few local agencies have the resources to undertake detailed surveys. Such surveys would also lack standardization with other data.
 - o OMB may argue that the sample size reduction was needed to reduce follow-up and the need for substitutions. However, procedures used for "allocation of nonresponse" is less accurate for a small sample than for a larger sample, so this argument is not statistically valid.
- 0 Vary sample sizes of the long form: OMB proposed, for example, a higher sampling rate than the current 1-in-6 in rural areas, but a much smaller sampling rate, as low as 1-in-20, for urban areas where population densities are much higher.

- Implications of Varying Sample Size by Population Density

- o Many of the urban areas which are proposed for reductions in sampling rates have historically had the lowest overall response rates to the decennial census. Cutting back on sample sizes in these areas will likely compound the problem of getting incomplete and inaccurate data.

Overview of Issues to be Addressed:

- 0 Although the decennial census is not scheduled to be taken until April 1, 1990, a major dress rehearsal which tests the census instrument will be held in the Spring of 1988. Historically, the questions, methodology and assumptions used in the dress rehearsal closely correspond to the content used in the decennial census. Consequently, if Congress determines that there are problems with the proposed changes in the census questions and sample size they must be addressed within the next few months or the quality of the data could be affected until the end of this century.
- 0 The hearing will examine how the shifting of virtually all the housing and energy-related questions from the short form of the 1990 census (which goes to 100% of the households) to the long form (which would go to less than one of every nine households), will affect the ability of local officials and planners to obtain statistically reliable housing data on smaller subgroups of the population, such as the elderly.
- 0 More specific information will be obtained concerning what factors were taken into consideration by OMB with regard to the ability of the Census Bureau, Federal agencies and local planners to cross-tabulate housing data across smaller subgroups of age, race, ethnicity, disability status and other subpopulations. OMB imposed these changes to the dress rehearsal very late in the process - despite an extensive three year process used by the Census Bureau in developing the questionnaires and, in some instances, over the objections of federal agencies and local officials which depend on the quality of the data.
- 0 One major issue raised at an October 20 hearing of the Aging Committee was the concern that the proposed reduction in sample size of the census long forms from 16 million (one in six households) to 10 million (less than one in nine households) will make it extremely difficult, if not impossible, to obtain detailed local data on the income, living arrangements and demographic characteristics of elderly individuals because the sample sizes will be too small to yield statistically reliable results.
- 0 One question OMB proposed to eliminate concerns annual utility costs. This information is used to calculate "gross rent", an item used extensively in housing cost analyses, including the establishment of Fair Market Rents (FMRs). The FMR is used by the Department of Housing and Urban Development to determine the amount which the elderly and low income individuals pay for subsidized housing. This not only raises questions about how this information will now be obtained, but it also brings into question the nature of OMB's decisionmaking process. When were opinions solicited from other agencies which rely heavily on census data for planning and policy decisions, and what was the nature of these opinions?
- 0 Also to be examined are the implications of the proposal to vary the sample size taken in urban and rural areas. A sampling rate of one in two would be used in some rural areas, but a much smaller sampling rate, as low as one in twenty would be used in urban areas where population densities are higher.
- 0 Despite all these changes which have been proposed, OMB has not argued that they would save any money for the 1990 census. The proposed budget (\$2.6 billion) is the same as before OMB's changes were proposed.

APPENDIX III

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CRS REPORT FOR CONGRESS

GENSUS QUESTIONS AND OMB'S REVIEW OF THE CENSUS BUREAU
PROPOSAL: A SUMMARY AND BRIEF ANALYSIS

Daniel Melnick
Specialist in American National Government
Government Division

and
Alexander Lurie
Senior Research Assistant
Government Division



Updated January 13, 1988

CONGRESSIONAL
RESEARCH
SERVICE
THE BROADWAY
OFFICE

ABSTRACT

This updated report of CRS Report 87-812 GOV reviews recent developments regarding the content and procedures for the 1990 Census including OMB's scrutiny of the need for information for various subjects.

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SUMMARY

By law, the Office of Management and Budget (OMB) is required to approve every form used by the Federal Government to collect information from the public. Under this authority it reviews proposed census questionnaires.

The decennial census is the largest single survey conducted by the Federal Government. As such, its questionnaire receives the highest level of consideration and scrutiny, including extensive field testing and consultation with Federal agencies, States and local governments and the public as well as Congress. In the past, the final test [known as the Dress Rehearsal] has been an operational dry run incorporating all features of the questionnaire and procedures used in the actual census. Only marginal subsequent adjustments are envisioned as being necessary after the Dress Rehearsal.

On September 16, 1987, OMB announced that it had decided to reject the Census Bureau's 1988 proposed Dress Rehearsal questionnaire. At the same time, OMB asked the Bureau to modify its request and return it for expeditious handling.

Specifically OMB asked the Bureau to:

- move most of the housing questions to the sample form;
- reduce the number of households that receive the long form from 16 million to 10 million by adopting a variable sampling rate; and
- eliminate three housing questions related to utilities from the form.

On October 28, 1987 OMB approved the Census Bureau's modified Dress Rehearsal questionnaire that complied with all of OMB's objections except for a compromise on one of the utility questions.

This report summarizes the events leading up to this development and the outcome and its possible implications.

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CENSUS QUESTIONS AND OMB'S REVIEW OF THE CENSUS BUREAU
PROPOSAL: A SUMMARY AND BRIEF ANALYSIS

BACKGROUND OF THE DISPUTE

On June 17, 1987, under the terms of the Paperwork Reduction Act, the Census Bureau sent OMB its proposal for the questionnaire to be used during the 1988 Dress Rehearsal for the 1990 census. It is expected that whatever questionnaire is used for this activity will contain most of the questions to be used during the 1990 census.

The Bureau's proposal was the culmination of a review process that began in 1983 [see Appendix 1: The Census Chronology] and involved consultation with Federal agencies, including OMB, and the public.

On July 24, 1987, OMB informed the Census Bureau that it was concerned about the justification for a substantial number of questions. This expression of concern has a timing consequence because to meet the Dress Rehearsal schedule the questionnaire must be sent to the printer by October 16, 1987; but, OMB approval is required before this can occur.

In July, OMB questioned the need for including about 60 percent of the housing subjects. It asked why all but one of those it was willing to approve could not be placed on the sample form. OMB also questioned the need for collecting information about unemployment, commuting, fertility and mobility.

Proponents of these items cited the losses that would result from eliminating them. For example, they argued that if unemployment data were not collected on the decennial, BLS would not be able to report the local area unemployment rates for many areas smaller than counties.

Proponents of the housing items said that they are widely used by the housing industry and also form the basis of other statistical series. For example, they are used to select samples employed to determine the Consumer Price Index, which is a key indicator used to increase or decrease some Government benefits and some salaries in the private sector.

OVERLAP BETWEEN THE DRESS REHEARSAL AND THE CENSUS

Shortly after being informed that OMB was questioning a large number of subjects, the Census Bureau issued a statement in which it said that although the review concerned the Dress Rehearsal questionnaire, "[b]oth the OMB and Census Bureau regard [its] content . . . as a preview" of the questions to be used in 1990. "Therefore, the questionnaire changes proposed by OMB . . . would apply to the 1990 census as well."

While there have been exceptions in the past (most notably, the addition of the Hispanic identification question in the 1970 census) generally over the decades all of the questions appearing on the actual census have been included in the Dress Rehearsal. The questionnaire to be used in the actual census will be printed during the fall of 1989, allowing minor changes up to the spring of 1989. However, other preparations (including computer programming for the tabulations) will begin December 1987 making changes increasingly problematic after then.

On December 22, 1987, Representatives Dymally, Roybal, Matsui, Garcia, Mfume, and Bonker wrote to the Director of OMB that they were "concerned about the potential impact of changes on the census". They asked OMB "not to close the door on the final plans for the 1990 census sampling and questionnaire until

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Congress has had a chance to review" the report required to be filed by the Census Bureau on April 1, 1988.

AUTHORITY FOR OMB'S ACTIONS

OMB's authority to review census questionnaires is long standing. It can be traced to the Bureau of Efficiency in the 1920's and was first put into law in the Federal Reports Act of 1942. It is currently contained in the Paperwork Reduction Act of 1980, which was reauthorized as a part of the Continuing Appropriations Resolutions enacted October 18 and 30, 1986 (P.L. 99-500 and P.L. 99-591; 100 Stat. 3341--p. 335 et seq.). Under this Act, agencies which use questionnaires to request information from the public are required to obtain prior approval from OMB. This provision is administered by OMB's Office of Information and Regulatory Affairs [OIRA.]

OMB officials argue that the Paperwork Reduction Act provides a congressional mandate to reduce the public's burden in responding to the census and that in order to fulfill this congressional mandate, OIRA is required to consider reducing the number of questions on the census form. They contend that the lower than expected public response to the mail census during the pre-tests indicates that the form is too long and cumbersome.

CONGRESSIONAL REVIEW OF CENSUS QUESTIONNAIRE

Additionally, the Census questionnaire is subject to the congressional review procedures established in Title 13. Under 13 USC 141, the Secretary of Commerce is required to inform Congress about the proposed subjects to be included on the census form by April 1, 1987 and the proposed questions by April 1, 1988. The first report relating to the subjects was filed with both

the House Census Subcommittee and the Senate Federal Services Subcommittee on March 27, 1987. These subcommittees held a joint hearing on May 14, 1987, which was followed by an additional House hearing on May 19, 1987.

At these hearings the Census Bureau was asked to explain the reasons for including each subject on the census questionnaire. Of interest, in terms of subsequent OMB concerns about housing questions on the census form, is that the subcommittees invited the Department of Housing and Urban Development to testify on the housing items, but it declined.

OMB REVIEW OF THE DRESS REHEARSAL QUESTIONNAIRE

The Bureau submitted its proposal for the Dress Rehearsal questionnaire on June 17, 1987. OMB raised concerns about approving the form on July 24, 1987.

PUBLIC AND CONGRESSIONAL REACTION TO OMB'S CONCERNS

On August 7, 1987, the Joint Economic Committee (JEC) held a hearing to review the implications of OMB's possible actions. At that hearing, Dr. Wendy Gramm, Administrator of the OMB's Office of Information and Regulatory Affairs, was closely questioned about OMB's concerns about the census questionnaire. Dr. Gramm replied that OMB had not made any final determination about the questionnaire but was carefully considering various courses of action including altering the questionnaire and changing the sampling plan.

Subsequent to the hearing, OMB received more than 600 letters relating to the proposed changes. On August 25, 1987 it issued a notice in the Federal Register setting forth the grounds that it would use to make its decision. OMB said it was considering the need for including a wide range of subjects on the decennial census. It asked if users knew of alternative available information

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that was either more accurate than census data or could be used as a substitute. It raised the possibility that legitimate users could be satisfied if an alternative and reduced sampling scheme were used to collect most of the information originally planned for the census. As well, it reported OMB was considering using alternative government samples or moving items from the 100% form to the sample. It stressed the requirement to limit the public's burden in responding to the census form.¹

IMPLICATIONS OF OMB'S ACTIONS

On September 16, 1987, OMB sent a letter to the Department of Commerce in which it detailed the steps the Census Bureau would be required to take before approval could be granted.

Questions Eliminated

Generally OMB pulled back from any plan to cut large numbers of subjects from the census form. Instead, it made marginal changes in the content but emphasized reductions both in the short form and the number of people who receive the long form. OMB's actions can be seen as a response to the public reaction following the JEC hearing in August.

In an attempt at blunting any further criticism, the Commerce Department's reply to OMB's letter said, "The public will have ample opportunity to comment on changes you have directed in content before we submit a final questionnaire to Congress on April 1, 1988."

¹ Review of the "Dress Rehearsal" for the 1990 Census of Population and Housing; Notice. Federal Register, Part IV, August 25, 1987: 32114-32118.

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This is of interest because it differs from the position taken by the Census Bureau and OMB in July when they said that very few changes could be made after the Dress Rehearsal.

The three questions slated for elimination relate to energy use and cost. The most important of these asks for the cost of utilities. This question is required to calculate total housing costs. Its elimination would make it more difficult to ascertain regional biases based on differences in weather. The Department of Housing and Urban Development appealed to OMB for the inclusion of this item because it believed that eliminating it would make it difficult to produce accurate estimates of fair market rents as required by the Federal Housing Act of 1937 as amended.

Sample Changes

OMB's instructions leave the sample design to the Census Bureau but limit the total sample to 10 million households rather than the 16 million proposed. They also require that no jurisdiction or census tract have a sampling rate of greater than 50% and sampling rates be lower in high density population areas to improve efficiency. Census Bureau analyses show that to comply with OMB's guidelines for the 1988 Dress Rehearsal, the following sample rates will be used: a sample rate of 1 out of 2 housing units (HUs--a house, apartment, group of rooms, or a single room occupied as a separate living quarter or if vacant, it can be used as a living quarter) in governmental units (GUs--any incorporated place that has previously received some type of revenue sharing) with fewer than 1000 inhabitants; 1 in 6 for GUs having populations between 1000 and 2500 and for census tracts and block numbering areas (BNAs--zones that are specified for the purpose of grouping blocks where census tracts have not

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been defined) with between 1 and 1000 HUs; 1 in 10 for census tracts and BNAs with between 1,000 and 2,500 HUs; and, a 1 in 20 rate for census tracts and BNAs with 2,500 or more HUs.

However, Census Bureau officials believe that data quality will suffer under OMB's restrictions, particularly as it relates to minority groups. On December 10, 1987 the Bureau issued a proposal for the 1990 Census calling for an overall 1 in 6 sample, with the succeeding variable sample rates; 2 in 3 for GUs with fewer than 1000 persons, 1 in 3 for GUs having between 1000 and 2500 persons and for census tracts and BNAs with fewer than 1000 HUs, 1 in 6 for census tracts and BNAs having between 1000 and 2500 HUs, 1 in 10 for census tracts and BNAs between 2500 and 3500 HUs, and 1 in 12 for census tracts and BNAs with 3500 or more HUs.

Those interested in data for rural areas have welcomed the increased sample for them, but city officials are concerned that the new sampling procedure will provide them with less information. OMB says that the reduced central city sample will free resources that are needed to improve the accuracy of the central city population count.

One problem will be that limiting the sample size will make it difficult to provide data that do not coincide with census tracts. For example, it will make it more difficult to tabulate the number of children in poverty by school districts as required by the Elementary and Secondary Education Act.

Opponents also contend that operational considerations might make this procedure difficult to implement. They say that if local census offices were required to manage several sampling rates, it could add confusion to an already complicated process.

Moving Items From The 100 Percent Census To The Sample

By moving items from the form received by all of the households to those received by a sample, the Administration has reduced the detailed data that will be available. This will limit the statistics available about:

- small towns, rural areas, city neighborhoods, and voting precincts; as well as
- small groups in the population--such as families in Baltimore headed by Hispanic women with five children.

For example, because the rent questions will now be on the sample form, it will be harder to estimate the rent paid by households in small areas and rare groups according to the size of their living quarters.

THE FINAL OMB APPROVED DRESS REHEARSAL QUESTIONNAIRE

The final Dress Rehearsal questionnaire reflects almost all of OMB's objections to the Census Bureau's proposal. First, the Bureau shifted all questions in point from the 100 percent census to the sample. Second, the Bureau will use OMB's request of a 1 in 10 (total sample of 10 million) as variable sample as opposed to a 1 in 6 (total sample of 16 million) variable sample. Finally, the Bureau will eliminate all three utility questions but a question on whether or not utilities are included in the rent will be added to the rent question on the sample.

The Census Bureau continues to argue for the 1 in 6 sample for the 1990 Census. In a report sent to Dorothy Tella, Chief Statistician of the Office of Management and Budget, on December 10, 1987, the Census Bureau outlines a series of arguments on why census data quality will suffer from the OMB requested 1 in 10 sample for the 1990 Census.

DETAILED ANALYSIS OF IMPACT ON THE CENSUS QUESTIONNAIRE

The following paragraphs provide a detailed list of the subjects originally considered for inclusion on the Census questionnaire together with a review of the impact of the OMB action. Beginning with the items included in the Census Bureau's proposal of April 1, 1987, we indicate those that will be retained, moved, or eliminated in accordance with OMB's views.

The Bureau's Proposal

- A. 100% population questions are asked about each person included in every household in the Nation as well as persons not living in households. Six subjects are proposed in this category. All of these were included in the 1980 census:
1. **Name:** The name of each person will be included on the form but generally not captured in the computerized record. The main purpose of this item is to help keep track of who is being included in the household. It also makes it possible to check the count during follow-up activities and the evaluation. NOT CHANGED
 2. **Household relationship:** Respondents are asked to provide the relationship between the first person listed (generally themselves) and the other people living in the household. This information is used to keep track of the people being counted and is also the basis for analyses that show the condition of families. Because the census form includes all of the people living in a household--even if they are not related--this item is the only way of providing information about families. NOT CHANGED
 3. **Sex:** This item is also considered to be an important part of the identity of persons. It is used in many census analyses. NOT CHANGED
 4. **Race:** The Bureau largely relies upon respondents to identify their race (including white, black, American Indian and several Asian nationalities) and those of the persons living in the household. Enumerators are instructed to accept the information as provided by respondents. This item is used in the enforcement of civil rights laws. For example, the number of persons in the labor force who are members of different race groups is an important factor in establishing goals for affirmative action. When the States draw district lines for congressional and State legislative seats, they must take race

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into account to be sure that they do not violate provisions of the Voting Rights Act. Information about the economic and social progress of persons who are members of different racial groups is closely watched by various interests. This information is also used in evaluating the census. NOT CHANGED

5. **Age:** Age is also one of the factors used in determining the completeness of the count. It is vital for tracing the differences between young and old people and is used, for example, in projections of the resources required for the social security system. NOT CHANGED
6. **Marital status:** The respondent is asked if (s)he is married, separated, divorced, widowed or never married. In 1980, the census only recognized marriages that occurred after age 15. During the editing of the returns anyone under age 15 who indicated a marital status other than "never married" was changed to "never married." NOT CHANGED
7. **Hispanic origin:** The Spanish Census Act (PL 94-311) provided a congressional mandate for the collection of this information. It is used for affirmative action and civil rights enforcement. NOT CHANGED
8. **100% housing questions** are asked about each housing unit and household in the Nation. Eight subjects are proposed in this category. Two of them are new [the rest were included in the 1980 census].
 1. **Number of units in structure:** Respondents are asked to report the number of housing units in the building. This subject provides information about the density of housing. It is used by local governments in determining and monitoring zoning regulations. It is also important in assessing the need for mass transit and roads. NOT CHANGED
 2. **Number of rooms in the unit:** In combination with the number of persons in the housing unit, this subject provides information about overcrowding which is defined as a housing unit with more than one person per room. The extent of crowding is a measure of the need for housing and is used in the allocation of funds for housing. SHIFTED TO SAMPLE
 3. **Tenure:** Respondents are asked to indicate if they own or rent their residence and whether it is a part of a condominium. This information is used in the analysis of the housing market to separate the owners, renters, and types of owned housing. It is important in designing the sampling plan for the survey that results in the Consumer Price Index (CPI) because the cost of rent is a major part of the CPI. According to the Bureau of Labor Statistics, indexing provisions built into various provisions of Federal law mean that a change of 1 percent in the CPI has a \$4.6 billion impact on the Federal budget. These data

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are also used in setting housing costs for members of the armed forces. NOT CHANGED

4. **Value of the home or monthly rent:** Provides detailed data about the relationship of what people spend for rent or mortgage payments and their income and other characteristics. Used to set the amounts of money people receive as rent subsidies under HUD's fair market rent program. SHIFTED TO THE SAMPLE AND ADDED A QUESTION ON UTILITY PAYMENTS
 5. **Vacancy characteristics:** The follow-up enumerators of the Census Bureau will compile information about vacant housing. This information helps account for housing and is a part of efforts to count each person. The item is also used to identify places where there is a surplus and shortage of housing. HUD uses it to plan and implement Federal programs that aid housing. For example, FHA considers the prevailing vacancy rate when it decides whether to participate in loans to builders. NOT CHANGED
 6. **Plumbing:** Respondents are asked whether their housing unit has indoor plumbing. This is regarded as a measure of housing quality. Lack of indoor plumbing indicates sub-standard and unhealthy housing conditions. In 1980, about 2.5 percent of the Nation's housing did not have plumbing. However, these units were not evenly distributed over the Nation but concentrated in certain localities. For example, the last census found that in 11 percent of all U.S. counties 10 percent or more of their housing lacked plumbing. This subject can be used to highlight neighborhoods where housing is a problem. SHIFTED TO THE SAMPLE
 7. **Telephone:** Including this question saves money in the follow-up of the census because it makes it possible for the Bureau to use the phone to call people rather than send out an enumerator. While the Bureau will report on the number of housing units that have telephones, the telephone number will not be recorded in the Bureau's computer's. PRESENCE OF A TELEPHONE WILL BE SHIFTED TO THE SAMPLE, BUT THE TELEPHONE NUMBER FOR FOLLOW-UP WILL BE REQUESTED FROM EACH HOUSEHOLD.
 8. **Congregate housing:** Respondents will be asked to indicate if their rent includes meals. In the National Content Test less than 1 percent answered yes to this item. However, the Bureau may argue that without this subject, its rent statistics would be inflated. SHIFTED TO THE SAMPLE
- C. **Sample population questions** are asked about every person living in households selected for the sample (about 20 percent of the households) as well as a sample of the persons who do not live in households. Ten subjects are proposed for inclusion in 1990.
1. **Education-enrollment and attainment:** The enrollment question provides detailed information on the number and characteristics

of young persons who are attending and have dropped out of school. Attainment shows the number of years of schooling that each person has completed. This information is used by private companies in deciding where to locate plants and other employment centers as well as in their marketing strategy. NOT CHANGED

2. **Place of birth, citizenship, year of entry:** This information is used wherever policies require information about citizenship and the number of aliens. It is used in planning immigration policies. It is also used in studies of the pool of persons who are eligible to vote in elections. NOT CHANGED
3. **Ancestry:** This question was added in 1980 to provide information about groups not covered by the race and Spanish origin questions on the 100% form. It could be used by any group that wants to assert a need for special consideration under the equal opportunity laws. NOT CHANGED
4. **Language spoken at home:** Identifies the population that has a difficult time with the English language. It could be used to identify those persons who require foreign language assistance in voting or other matters as well as to analyze the need for special education programs that are aimed at people who do not speak English. NOT CHANGED
5. **Migration:** Basic indicator of population movement. Used as a basis for checking the Bureau's estimates of population between the census and to understand the reasons for movements and also to assist in predicting future growth. The information might also be used to construct samples of people who have moved in the last five (5) years. For example, anyone wanting to estimate the number of farmers who have left family farming in the last five years might start with the responses to this question. NOT CHANGED
6. **Disability:** Respondents are asked to identify individuals who cannot work or travel because of disabilities. It is used to estimate the number of people who could benefit from special programs regarding rehabilitation services, vocational education and anti-discrimination activities. Veterans Administration uses it to determine where to locate medical facilities for veterans. NOT CHANGED
7. **Fertility:** Each woman is asked to indicate the number of children she has borne. This item describes the child bearing characteristics of the population. It provides a profile of the levels of fertility of different groups in the greatest degree of detail and insight on population growth differentials among groups. NOT CHANGED
8. **Veteran status:** This item counts the number of persons who have served in the active armed forces or national guard. The

Veterans Administration uses the data as a base line for the veteran population projections for planning purposes. For example, it is used to help plan where to put hospitals and other medical facilities as well as outreach and employment programs for veterans. NOT CHANGED

9. **Employment and unemployment:** Provides geographic detail for information that is regularly collected on the Current Population Survey. This information is used by BLS as a part of estimates of employment and unemployment for areas that are smaller than an entire labor market. Where other currently collected information is not available BLS uses the census data together with other information to provide the best possible estimates for some areas. For example, Cook County, Ill. is disaggregated from Chicago using various sources including decennial census data. This subject also provides detail for very rare groups. The Department of Labor and Commerce use the resulting estimates to allocate funds under the Job Training Partnership Act. NOT CHANGED
 10. **Occupation, industry and class of worker:** This information describes the work done by persons. It is used to evaluate the work force. For example, in analyses of affirmative action it is used to determine the supply of persons in different occupational groups. It is used to project the supply of persons in highly skilled occupations. State and local governments use it to determine the need for vocational education. NOT CHANGED
 11. **Place of work and commuting:** These are the bench mark data for local transportation planning. Data are used to identify the need for mass transit and roads and are used for determining the number of passengers likely to use those facilities. Respondents are asked where each person living in the household works, how each gets there and what time each leaves for work. Used to identify transportation problems that need to be solved. FEMA uses the information summarized at the work place to plan for the evacuation of the day time population if this was ever necessary. These data are also used as a part of the identification of metropolitan areas and labor market areas. NOT CHANGED
 12. **Income in 1989 and work experience:** For this subject the Bureau collects various sources of money income. This subject is the basis for statements about the number of people living below the poverty line. Various programs (such as Title I of the Elementary and Secondary Education Act) require its use in funds allocation. NOT CHANGED
- D. **Sample housing questions** are asked about the households and housing units that are included in the sample. Two subjects are proposed for inclusion in 1990.

1. **Heating equipment and fuels:** Used to calculate the amount of energy used by households and assess the need for and planning for energy assistance allocations. It is also used in anticipating the future requirements of the Nation for energy and tracking where these requirements are greatest. **THREE OF FOUR QUESTIONS DELETED**
2. **Source of water and method of sewage disposal:** Identifies areas that have housing that may be hazardous to the safety of the occupants. Identifies places where new housing could not be built until emplacement of a water system. **NOT CHANGED**
3. **Autos, light trucks and vans:** Used in transportation policy planning. Department of Transportation uses it to determine the likely amount of traffic generated by a household. This is a part of its calculation of the need for highways. **NOT CHANGED**
4. **Kitchen facilities:** If a kitchen is not included in the housing unit, that unit is less suitable for low-income occupancy. This subject makes it possible to characterize areas with regard to the housing quality. **NOT CHANGED**
5. **Year structure built:** This question relates to housing quality and for some Federal grant programs. Data gathered are informative about housing related infrastructure (such as water and sewer lines that may have been put in a long time ago). **NOT CHANGED**
6. **Year moved into residence:** This makes it possible to characterize neighborhoods with regard to their stability. Newly developed areas can be identified as well as older changing ones. **NOT CHANGED**
7. **Number of bedrooms:** The average rents charged for housing units in different areas are classified by the number of bedrooms. This is used to establish fair market rent prices. Data are used with regard to rent subsidies for low-income families. **NOT CHANGED**
8. **Farm residence:** Data identify farm households. This subject allows the Census Bureau to prepare extensive analyses of the characteristics of people who live on farms. **NOT CHANGED**
9. **Housing quality:** A new subject for 1990, that would measure housing quality by asking if there are holes in the floor and how many times the heating equipment broke down during the past year. **DELETED PRIOR TO SUBMISSION TO OMB OF DRESS REHEARSAL PROPOSAL**
10. **Shelter costs including utilities:** These ask questions for total out-of-pocket expense for housing as opposed to just the mortgage payment or rent. This makes it possible to estimate the percent of income that is spent on housing. FHA and VA as well as mortgage lenders examine these data when they set standards for mortgage eligibility. **UTILITIES' PORTION ELIMINATED**

APPENDIX 1: CHRONOLOGY OF CONSIDERATION OF THE CONTENT FOR THE 1990 CENSUS

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APPENDIX 1: CHRONOLOGY OF CONSIDERATION OF THE CONTENT FOR THE 1990 CENSUS

Date	Activity
Apr. 1, 1980	Census Day 1980.
Dec. 31, 1980	Census Bureau reported apportionment results from the 1980 census.
Apr. 1, 1981	Figures reported to State legislatures for redistricting purposes.
1981-1985	Reports of the results from the 1980 census issued by the Census Bureau.
1982-1985	Census Bureau staff evaluated the results of the 1980 census to help decide on improvements needed for the 1990 census.
1983	Census Bureau assembled core staff to begin working on the 1990 census plan.
1984-1985	Census Bureau conducted 65 public meetings in every State and the District of Columbia to obtain suggestions and advise regarding the questions that should be included on the census form.
1984-1985	The Census Bureau conducted pre-tests in Jersey City, New Jersey and Tampa, Florida in the spring of 1985. OMB approved the forms on September 28, 1984 and did not raise objections to the items.
1984-1985	The Census Bureau organized 10 Federal interagency working groups consisting of expert representatives from Federal agencies. These groups reviewed the subjects and made recommendations as to questions that should be incorporated. Subjects covered were: housing, general demographics, race and ethnicity, American Indians and Alaskan Natives, the institutional population, education, health and disability, transportation, labor force and occupation, and income and poverty. The Bureau's proposed questionnaire reflects the views of these working groups. Contrary to the practice since 1940, OMB refrained from participating in these detailed discussions.
Nov. 1984	OMB convened a Federal Agency Council on the 1980 census consisting of policy officials who reportedly took a broader view of census issues and did not consider the specific justifications for items. This body has not yet issued a report.

APPENDIX 1: CHRONOLOGY OF CONSIDERATION OF THE CONTENT FOR THE 1990 CENSUS
--Continued

Date	Activity
1985-1986	Census Bureau conducted the National Content Test, a sample survey test of the items it was considering including on the census form. OMB reviewed this form and approved it for use on September 30, 1985. The test occurred during the spring of 1986. Results were reported to OMB in January 1987.
1985-1986	The Census Bureau conducted pre-tests in Meridian Mississippi and Los Angeles, California during the spring of 1986. OMB reviewed the questionnaires for these tests and approved them on August, 16 1985.
1987	Pre-test held in North Dakota.
Apr. 1, 1987	Census Bureau reported to Congress on the subjects to be included in the 1990 census questionnaire. Their report indicated that they would include all of the subjects that were included in their proposed Dress Rehearsal questionnaire. OMB approved the report to Congress.
May 14, 1987	The House Census Subcommittee and the Senate Federal Services Subcommittee held joint hearings to review the census content. Dr. Gramm testified; said OMB would carefully review the Dress Rehearsal questionnaire but did not give any indication of what position OMB/OIRA might take.
June 16, 1987	Census Bureau submitted the Dress Rehearsal questionnaire to OMB for approval.
July 1987	Office for the Dress Rehearsal opened in St Louis, Missouri.
July 24, 1987	OMB raised questions about the need for 30% of the subjects on the questionnaire.
Aug. 7, 1987	Deadline for the Census Bureau to respond to the OMB proposal for cuts in the questionnaire.
Sept. 15, 1987	Public comments on the proposed action required by this date.
Sept. 15, 1987	OMB rejected the Census Bureau's proposed questionnaire for the Dress Rehearsal and required that they drop three questions, move others from the 100% census to the sample form and reduce the size of the sample from 16 million to 10 million respondents.

APPENDIX 1: CHRONOLOGY OF CONSIDERATION OF THE CONTENT FOR THE 1990 CENSUS
--Continued

Date	Activity
Sept. 22, 1987	The Census Bureau submitted a revised proposal for the 1988 Dress Rehearsal questionnaire that reflected all of OMB's objections except for a compromise on a question on utilities.
Oct. 28, 1987	OMB approved the modified 1988 Dress Rehearsal form as required by the Paperwork Reduction Act.
Dec. 10, 1987	The Census Bureau sent a issue paper to OMB advocating the use of a 1 in 6 sample for the long form in the 1990 Census to improve census data quality.
Dec. 1987	Census Bureau staff beginning preparations for the tabulation and publication of the reports from the 1990 Census. This work will proceed on the assumption that no further changes will be made in the subjects included on the 100% and sample questionnaires.
Jan. 1988	President's FY89 budget request will likely contain request for funds for the bulk of the preparations for the 1990 census.
Spring and Summer, 1989	Congressional consideration of the Appropriations request for the preparations for the 1990 census.
May 1988	Pre-list, the first operation required for the decennial census begins.
Mar. 20 1988	Dress Rehearsal census day [to be conducted in St. Louis, Missouri].
Apr. 1, 1988	Census Bureau reports to Congress on the exact wording of 1990 census questionnaire.
June 1988	Census Bureau deadline for submitting 1990 Questionnaire to OMB for formal clearance.
Oct. 1988	Bids begin for the printing of the 1990 Questionnaire.
Jan. 1989	President's FY90 budget request contains most of the funds needed for the operations of the 1990 census.
Mar.-Apr. 1989	First local census offices open for checking address lists.
Fall 1989	Most census district offices open and begin work.
Sept. 1989	OMB clearance of the final census forms required by this date.

APPENDIX 1: CHRONOLOGY OF CONSIDERATION OF THE CONTENT FOR THE 1990 CENSUS
--Continued

Date	Activity
Oct. 1989	Label tapes submitted to vendors for the printing, labeling, and assembly of the mailing packages. Questionnaires are printed at that time.
Nov. 1989	Pre-census local review.
Jan. 1990	Census Bureau reviews and re-canvases areas where local review has discovered possible problems.
Mar. 23, 1990	Census questionnaires delivered to householders.
Apr. 1, 1990	Census Day.
Apr. 2, 1990	Start capturing data for the computer.
Apr. 26, 1990	Beginning of follow-up operations.
June 28, 1990	Start of field follow-up to fill in information not provided in the public's mailed responses.
Dec. 31, 1990	Census Bureau transmits population count by State and new apportionment of the House of Representatives.
Apr. 1, 1991	Census Bureau required to provide the States with detailed returns including block level counts by race and Hispanic origin for use in designating new Congressional and State Legislative Districts.
July 1, 1991	Reference date of the first intercensal population estimates required to be produced under 13 USC 181.
1991-1993	Census Bureau will issue reports on the results of the content of the census.
1992	Most data from the census is available for use by statisticians working for State and local governments
1993	New statistical procedures are implemented that use 1990 census data as a base.

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APPENDIX IV

THE OFFICE OF MANAGEMENT AND BUDGET'S
CHANGES TO THE 1990 CENSUS

A CRITICAL COMMENTARY

written by

PATRICIA C. BECKER

DETROIT REGIONAL CENSUS ADVISORY COUNCIL

in cooperation with the

COUNCIL OF PROFESSIONAL ASSOCIATIONS
ON FEDERAL STATISTICS

TASK FORCE ON THE DECENNIAL CENSUS

and the

HOUSING STATISTICS USERS GROUP

FEBRUARY 1988

THE OFFICE OF MANAGEMENT AND BUDGET'S
CHANGES TO THE 1990 CENSUS

A CRITICAL COMMENTARY

Introduction

The Decennial Census is, historically, the premier data collection activity undertaken in this country. Constitutionally mandated to provide population counts for the apportionment of Congress, the Census also collects a wide variety of information about the people and housing of the nation. It is a tool used to allocate human, financial and material resources. In public and private sector alike, census data make an essential contribution to understanding, planning, and decision making.

In July of 1987, operating under the Paperwork Reduction Act, the Office of Management and Budget indicated that it was considering substantial cutbacks in the scope (content and sample size) of the 1990 Census. In September, after hearing from hundreds of users, OMB agreed that many of the content items proposed for elimination should remain. At the same time, however, a major reduction in sample size was mandated, from 16.7 million to 10 million households. In general, OMB has made these decisions against the recommendations of professional statisticians within the Census Bureau and without specifically requesting input from data users outside.

If the OMB plan goes forth, the 1990 Census will be a damaged product, much reduced in usefulness as a tool for the nation's activities in all those applications which use data beyond the basic population count.

Background

The decennial census is designed to provide information about a wide variety of population and housing characteristics. The questions are divided into two groups. A few basic items are collected for each person and household. These are called the short form or 100% questions. The remainder of the questions are asked only of a sample of the households (and the people living in them)--these are referred to as the long form or sample questions.

The size of the sample has been steadily reduced since the concept of sampling was first introduced in 1940. Until 1960 the long form was used in one out of four households (referred to as 1-in-4 or 25%). The 1970 sampling plan of 1-in-5, or 20%, was to be maintained in 1980; this was later changed to 1-in-6 with a larger sample (1-in-2) in very small communities, in order to provide adequate data on income for revenue sharing formula funds distribution.

Prior to the OMB actions of the past few months, the Census Bureau had announced plans for a 1-in-6 sample across the board for 1990, since the revenue sharing program has ended. This would have provided long form information for about 16.7 million households. OMB has

called for an overall sample of no more than 10 million households, with a variable sampling fraction.

The purpose of varying the sampling fraction, by size of geographic area, is to "even out" the error levels. Sampling errors are tied primarily to the number of cases in the group being analyzed; in the Census, the long form questionnaires are the cases. The "groups" used most often in working with census data are geographic areas, although the issue regarding sample size applies equally to demographic groups such as blacks, Hispanics, and the elderly.

OMB's Reasons and the Census Bureau's Response

The Office of Management and Budget's intervention in issues of 1990 census methodology is based on its Paperwork Reduction Act authority. The administrative unit involved is the Office of Information and Regulatory Affairs (OIRA). Wendy Gramm, OIRA Director, testified in an August 1987 Congressional hearing that issues of cost or budget are not primary factors. In a September 16, 1987 letter, OMB stated that it wants to "improve the quality of the 1990 census." This can be accomplished, in its view, by reducing the sample, especially in central cities where "nonresponse and response errors have been the most significant," and by reducing the number of questions on the short form.

The Bureau of the Census has acceded to OMB's conditions of clearance in order to proceed with the 1988 Dress Rehearsal census. It appears that OMB intends to impose these same conditions for the 1990 census itself.

OMB is misguided, however well-intentioned its reasons may appear to be. In December, the Census Bureau sent a letter report to OMB, accompanied by several attachments (hereafter referred to as the December Report). These materials show clearly that the result of implementing OMB's plan will be to make the census worse, not better. Following are several excerpts from the December Report's Attachment 1. (Underlining added for emphasis.)

If adopted, the OMB sample size limitation of 10 million households clearly will decrease the quality of data, especially for numerically small populations (such as American Indians, Hispanics and the elderly), as well as for most data publication areas and the vast majority of the population.

The OMB letter (of September 16) also suggests that reducing the sample size will reduce nonsampling error and, thus, the total error in the data. Neither data nor statistical theory support this contention.

The OMB letter contends that reducing the number of households that receive the sample questionnaire (or long form) would improve the mail return rate and reduce the number of field enumerators needed to visit nonresponding households. We share the OMB objective of a higher mail return rate, but the Census Bureau knows from evidence and experience that reducing the

number of units that receive the long form to the OMB limit of 10 million would have a trivial effect on the mail return rate.

In a similar vein, the OMB decision to reduce the number of questions on the...short form appears to be based on the assumption that this would increase the mail return rate for the form. Our comparison...suggests that the mail return rates are almost unrelated to the length and content of the questionnaires. The OMB assumption is at best speculative--clearly not a sound basis for making radical changes in the content of the decennial census.

The December Report goes on to provide substantial supporting evidence for all of the positions summarized above.

The Bureau of the Census does support changing the sampling plan from a fixed rate to a variable rate design. However, a sample of approximately 17.8 million households will be required in order to maintain error levels, for all geographic areas, at a point no worse than those provided in 1980. Attachment 2 of the December Report outlines the design and includes illustrative levels of relative error (measured in coefficients of variation, or "CV"), for the various alternatives. Table 1 provides a summary of this material.

If the constraint to a national sample size of 10 million is carried out for 1990, using the variable sampling plan outlined by the Census Bureau in response, the following will be true:

- * Even with the plan to concentrate the sample in small communities (under 1,000 population), there will still be a very significant data problem in rural areas. Places between 1,000 and 2,500 population will see their error levels more than double over 1980 levels; other rural communities will maintain the same high error rates as they had in 1980.
- * Half the nation's housing is located in census tracts or block numbering areas (tracts/BNAs) with between 1,000 and 2,500 housing units in communities of more than 5,000 population. At a sampling fraction of 1-in-10, error levels in these geographic areas will increase by 40 percent as compared to 1980.
- * Over one-third of the housing is in the tracts/BNAs with 2,500 housing units or more; most of these have between 2,500 and 3,000 units. At a sampling fraction of 1-in-20, error levels will increase by at least 100 percent.

OMB contends that urban tracts, where there are more likely to be at least 2,500 housing units, are more "homogeneous" than rural areas. In fact, census tracts are statistical areas drawn largely by local committees under Census Bureau guidelines. One of the more important criteria is continuity--a desire to avoid wholesale changes of the tract boundaries from one census to another. This works against any presumed homogeneity of urban tracts and, at best, does little to guarantee it.

This is especially true in smaller communities where neighborhoods are small and several may need to be combined into one census tract. In fact, that is a major reason for the popularity of block group delineation and use of block group data among planners.

OMB, in its September 16 letter, required content changes in two areas. First, most of the housing questions on the short form were moved to the long form. Second, a few long form questions were eliminated.

Moving the 100% housing questions to the sample is a serious mistake. To understand how much of a problem this OMB requirement creates, we must consider how information is delivered for geographic areas from the short and the long forms. The smallest level of census geography is the block. In cities, a block is land, typically a few acres, and is usually surrounded by streets. In rural areas, blocks may be several square miles and are defined by roads and other natural features, such as rivers and streams.

Prior to 1990, block data have been tabulated and published only in urbanized areas (or where local governments paid for the data). The upcoming census will provide block data for the entire nation for the first time. Block-level data have at least three major uses: (1) reapportionment and redistricting, (2) sampling frames for surveys subsequent to the census, and (3) validation of the census to the user. The first purpose is well understood; the second and third may be less so.

Because blocks typically have small numbers of housing units (most are under 100), only 100% or short form data are provided at the block level. This is also true for areas aggregated from block level public data files; a prime example here is the voting precinct. If the rent/value items are on the long form instead of the short form, there will be no rent/value data at the block level. This is the only socioeconomic measure available at the small geographic level.

In addition, there is a special problem with two of the questions to be moved: condominium status and "does the monthly rent include any meals", a new item designed to identify congregate housing for the elderly. Housing units in these categories come in "geographic bunches." That is, a block either has none or it has a lot of units that are condominiums or are congregate apartments. For this reason, a primary value of these items is to validate the census itself to the user, by helping to demonstrate that the data do, indeed, belong in the geographic place into which they have been tabulated. Having condominium and congregate items on the sample will render them useless for this purpose and an important use of the census in local planning work will be eliminated.

The questions soliciting information on the number of rooms and the complete plumbing facilities are the only items on the census which address the important issue of housing quality and provide a measure of substandard housing. Over the years, both lack of plumbing and overcrowding have become less of an issue in urban areas. In the rural

parts of the nation, however, a much higher proportion of the housing stock fails to meet minimal standards.

At the same time, because rural areas are small in population and housing count, error levels on sample items will be very high. This will be largely true even with a 1-in-2 sample in the governmental units under 1,000 population. Most of the rural housing stock is in unincorporated areas where the sample will be, at best, 1-in-6 under the OMB-ordered plan. We might label this a "double whammy", in which the rural areas lose both because the important housing items are no longer on the short form and because the sampling errors are high.

OMB ordered eliminated the questions regarding heating equipment, water heating fuel, and yearly costs of utilities and fuels. This has been justified, by OMB, on the grounds that the data are available elsewhere. While the Energy Information Agency (EIA) does collect data on a monthly basis, and with more accuracy because of its methodology, these data cannot be made available for small areas. Even areas as large as 100,000 population cannot be analyzed in the EIA data set. Further, the question on heating equipment elicits data on the absence of central heating, an important housing quality measure in many parts of the country. This, too, has an especially serious impact on evaluation of rural housing.

This illustrates an important point which applies to much of the variety of information collected in the Census. While other data sources (federal, state and/or local) may provide the same type of information, they fail on one or both of two major criteria: (1) the data are not available for small areas, and/or (2) the data are not available consistently for all areas in the country. The Census provides the baseline, the denominator, by which the other sources (which are typically available at intervals more frequent than once in ten years) can be used throughout the decade.

Impact of the Limited Sample Size on Data Products and User Needs

If the OMB's order to constrain the national sample size of 10 million households for the 1990 census, it will be extremely difficult--we could say, impossible--to provide sample data for the geographic and demographic groups for which detail is needed. Some examples follow:

Block Groups. These geographic units are aggregations of blocks but are smaller than census tracts and block numbering areas. In 1980, sample data were provided for block groups in summary tape format (STF 3A). Even at 1980 sampling rates, many individual block groups were too small for sample data to be fully reliable. Without a 100% measure such as rent and value to validate them, and at the proposed reduced sampling fractions, the relative error levels for block groups will be so high that, arguably, these files should not be prepared.

One of the major uses of block group statistics has been to implement portions of the Community Development Block Grant program in the Department of Housing and Urban Development. HUD prepared 1980 tabulations for all block groups showing the percentage of population that

was under the "low-moderate" income cutoff. Only areas with at least 5% in this category are eligible for "area benefit" block grant expenditures. If these sample data are not available by block group, or carry error levels so high that they cannot be supported statistically, continuation of this program will result in misallocation of these local development funds.

Neighborhoods. A popular data delivery program in 1980, planned for continuation and expansion in 1990, was the aggregation of census data to user-defined areas such as neighborhoods. In most communities, where such areas are often smaller than census tracts, the error levels will be unacceptably high and the program will be severely restricted.

Minority Groups. Because, in most areas, minority groups have relatively small numbers, the reduction in overall census sample will harm the data for these groups in both large and small geographic areas. The data will be so flawed, in most cases, that the publication program for minority group data should be curtailed. Minority group tabulations in the census tract report would be unreliable and detailed summary tape file records would be useful only when there were at least 5,000 people of the group in the geographic area under consideration.

The problem for minority group data has been exacerbated by the Census Bureau's decision to group together the several ethnic groups known as "Asian and Pacific Islander" into one question on the short form. Respondents will be asked to write in the specific group (e.g. Japanese, Chinese, Filipino), but this information will be coded only for long form questionnaires. Thus, information on the characteristics of the different Asian ethnic groups at the tract/BNA level will be very unreliable.

Elderly. Similarly, data for the elderly will be harmed because they constitute another kind of minority group. On the average, elderly are only about 10 to 15 percent of the population of a geographic area. Much of the data currently used to plan programs for the aged, under the Older Americans Act, will be unreliable at the geographic detail required for implementation of the programs.

Attachment 3 of the December Report to OMB outlines these and other implications in greater detail.

Conclusion

The material presented above should make clear that the changes proposed by the Office of Management and Budget for the 1988 Dress Rehearsal and, by implication, the 1990 census, are detrimental to virtually all the purposes for which the census is conducted beyond the population count. If they hold, the 1990 Census will be a damaged product.

What can be done about it?

The Paperwork Reduction Act mandates that the clearance process allow for public comment. However, the time available for review and clearance often makes substantial interaction difficult. The result is

that OMB appears to act in a unilateral fashion, superimposing its view on proposals made by experts from the Bureau of the Census and elsewhere.

Discussion among expert census data users in the weeks since the December Report was issued has led to agreement on some issues and debate on others. What is very clear, however, is that restoration of the full sample, to a level of at least 16.7 million nationwide, is necessary to meet data needs across the nation with no inequities.

The variable sampling rate idea has merit, but a large sample is needed to do it right, along a design such as that proposed by the Bureau of the Census in its December Report. It must be sufficient to provide useful data for housing as well as population characteristics in both urban and rural areas. Among census experts, there is consensus that a sample size of 10 million households will have a serious and long-lasting negative effect on the usefulness of the 1990 census.

The introduction to Attachment 3 of the December Report states:

The foremost criteria which guided the selection of questions to be included in the 1990 census were (1) that the questions must provide data with a broadly demonstrated societal need or data that are needed to administer Federal, state or local government programs, and (2) that those data must be needed for relatively small areas--local governments and small statistical areas--or numerically small population groups. The fundamental objective of the sample design for the Nation's decennial census should therefore be to attempt to ensure adequate reliability for sample estimates for the geographic areas and population groups for which sample data are needed. The national sample size constraint of 10 million households mandated by the Office of Management and Budget makes realization of this objective extremely difficult.

What, indeed, is the purpose of doing the Census as we know it, of collecting more than the basic population count, if the data are not useful for the purposes stated?

We must find a way to turn this around.

Table 1

Type and Size of Area	Sampling Rate			Expected CV for a 10% Housing Item		
	1980	OMB Vari- able	Census Vari- able	1980	OMB Vari- able	Census Vari- able
GOVERNMENTAL UNIT (population size)						
Under 1,000	1/2	1/2	2/3	23.9	23.9	16.8
1,000 to 2,500	1/2	1/6	1/3	11.9	26.6	16.9
CENSUS TRACT/BNA: (housing unit count)						
Under 1,000	1/6	1/6	1/3	24.9	24.9	15.8
1,000 to 2,500	1/6	1/10	1/6	16.4	22.1	16.4
2,500 to 3,500	1/6	1/20	1/10	12.2	23.9	16.4
3,500 or more	1/6	1/20	1/12	11.3	22.1	16.9

The Coefficient of Variation places the sampling error in context by expressing it as a percent of the estimate itself. The data user can then decide if the estimate from the sample is sufficiently precise for the intended purpose. The lower the CV, the more precision in the estimate.

For example, a CV of 23.9 means that the estimate can vary about 24 percent due to sampling error. Since these CV's have been calculated for a ten percent characteristic, this means that a reported incidence of, say, 10% of the households without complete plumbing facilities, may range in fact from 7.6 to 12.4 percent for the geographic area and/or demographic group under consideration.

Bear in mind that when the CV would be, say, 23.9 for a census tract between 2,500 and 3,500 housing units, it would be considerably higher for a demographic subgroup within the tract, such as blacks, Hispanics, or the elderly.

References

September 16, 1987

Letter from Wendy Gramm, Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget, to Kay Bulow, Assistant Secretary for Administration, Department of Commerce. This eight page document outlines OMB's conditions of clearance for the 1988 Dress Rehearsal.

October 28, 1987

Letter from Gramm to Bulow, completing the clearance process for the Dress Rehearsal with further comments on the sampling frame issue.

December 10, 1987

Letter from Charles D. Jones, Associate Director, Bureau of the Census, to Dorothy Tella, Chief Statistician, OMB. Several documents were transmitted with the letter, as delineated below; collectively, they constitute what is referred to in this commentary as the December Report.

December 8, 1987

Memorandum for C. Louis Kincannon, Deputy Director, Bureau of the Census, from Charles D. Jones, Subject: Census Bureau's Response to the OMB's October 28, 1987 Letter.

November 27, 1987

Memorandum for Kincannon from Jones, Subject: Implications of the Dress Rehearsal Clearance. The memorandum covered four reports, as follows:

Attachment 1

Observations Concerning the September 16, 1987 Reply by the Office of Management and Budget to the Census Bureau's Initial Request to Clear Questionnaires for the 1988 Dress Rehearsal

Attachment 2

Evaluation of Alternative 1990 Census Sampling Plans. This is the document that outlines the Census Bureau's variable sampling rate proposal for a total of 17.8 million households.

Attachment 3

Implications of the Proposed 1990 Census Sample Design for the Reliability of Sample Data

Attachment 4

Content Issues Concerning the September 18, 1987 Reply by the Office of Management and Budget to the Census Bureau's Request to Clear Questionnaires for the 1988 Dress Rehearsal

APPENDIX V

March 14, 1988

The Honorable Edward Roybal
 Chairman
 House Select Committee on Aging
 712 House Office Building Annex I
 Washington, D.C. 20515

The Honorable Don Bonker
 Chairman
 House Select Committee on Aging
 Subcommittee on Housing and Consumer Interests
 717 House Office Building Annex I
 Washington, D.C. 20515

Re: OMB's Changes to the 1990 Census

Dear Chairman Roybal and Chairman Bonker:

OMB Watch is submitting this letter for the record of the joint hearing held on February 24 by the Select Committee on Aging and its Subcommittee on Housing and Consumer Interests, "The 1990 Census: Can We Count on It?" OMB Watch is a nonprofit, nonpartisan research and advocacy group that monitors executive branch activities, particularly those involving the White House Office of Management and Budget (OMB).

We commend the Committee and Subcommittee for conducting a well-focused inquiry into OMB's changes to the "Dress Rehearsal" for the 1990 Census. The expert witnesses at the hearing presented important testimony about the staggering loss of data that will result. To complement their testimony and your committees' work, we would like to add to the record our observations on the OMB paperwork review process and how it proceeded in this case.

As you know, OMB reviewed the Dress Rehearsal under the authority of the Paperwork Reduction Act. Passed in 1980, the Act created the Office of Information and Regulatory Affairs (OIRA) within OMB to review all federal agency information collection activities affecting 10 or more people. According to the Act, OIRA should base its paperwork decisions on whether the information to be collected is "necessary for the proper performance of the functions of the agency, including whether the information will have practical utility." (44 U.S.C. 3504(c)(2))

Despite the Act's language and despite what OMB would have people believe, the paperwork review process is far from an objective management tool for reducing government paperwork. Rather, it has become a powerful -- and largely unaccountable -- political weapon that OMB uses to dictate the substance of what federal agencies do. Couching its decisions with language in the Act as a shield, OMB has used its paperwork powers to advance political goals (such as deregulation and federalism), thwart the collection of important

2001 O STREET NORTHWEST,
 WASHINGTON, D.C. 20036
 TELEPHONE: (202) 659-1711

OMB WATCH

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civil rights information, and reduce the amount of workplace health and safety information employers must give their employees -- just to name a few.

On several occasions, including before your joint hearing, OIRA officials explained that they changed the Census forms because they did not "meet the criteria of practical utility and minimization of burden established by the [Paperwork Reduction] Act." (Gramm letter, page 2.) What OMB didn't say is that politics also motivated its decision.

While "practical utility" is among the review criteria listed in the Act, politics, of course, is not. Yet politics also motivated this decision. It's no secret that housing is a sensitive issue for this Administration. It has promoted massive budget cuts in subsidized housing programs, rejected other information collection activities regarding the quality of housing in the United States, and taken other steps to reduce federal obligations to provide low-income housing. The message is clear: The less information the Census collects about housing and Americans' housing needs that aren't currently being met, the better.

Like politics, cost-benefit analysis also isn't among the review criteria established in the Act. Yet OMB officials have used it to defend their decisions. Before your committees and in other inquiries, OMB officials have pointed to their statutory mandate to "balance the need for the information and [its] practical utility . . . against the burden on respondents and cost involved." (Testimony of Joseph R. Wright, page 8.)

In reality, there is no such statutory mandate. As Congress realized when it wrote the Act, the value of information is difficult to quantify, and it's often much easier to quantify the costs of collecting information than it is the benefits. Often, too, the people supplying the information aren't the ones who benefit from its collection.

Another problematic aspect of OMB's paperwork review is its lack of public accountability. During its review of the Dress Rehearsal, OMB kept the public in the dark about the substance of its review until Congress intervened.

Although Congress intended the paperwork process to be open and publicly accountable, the truth is that OMB regularly conducts its reviews far from public sight. Had it not been for a few well-placed phone calls from within the Census Bureau last July, the public might never have known what changes OMB had planned for the Dress Rehearsal for the 1990 Census.

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As a result of the public outcry over news of OMB's proposals, the Joint Economic Committee (JEC) held a hearing in August. In testimony at that hearing, then-OIRA Administrator Wendy Gramm made a precedent-setting promise --that the public comment period on the Dress Rehearsal wouldn't end until September 15. Never before had OIRA held a defined public comment period on a paperwork proposal, and it hasn't since. It seems unlikely it will ever do so again without significant congressional pressure.

OMB didn't, however, hold any public meetings on its proposals, as members of your Committee and Subcommittee pointed out. OIRA officials explained why they hadn't met with members of the public this way: They "weren't sure anyone wanted to meet with us."

It's hard to imagine how OMB could reach that conclusion, considering that no less than 1,000 letters poured in after the comment period was announced. Nonetheless, OMB has been historically disinclined to hold public meetings on paperwork -- unless industry presses for them.

Only three times in the last seven year has OIRA called public meetings about paperwork proposals under consideration. Those meetings focused on the Food and Drug Administration's Medical Device Reporting Rule and the Occupational Safety and Health Administration's Hazard Communication Standard, two regulations industry has lobbied heavily against because of their "overly burdensome paperwork requirements."

In public, OMB officials repeatedly referred to their "public review" of the Dress Rehearsal; in private, their actions belied their claims to public accountability and made a mockery of the notice-and-comment process. They reduced the public comment period to a meaningless exercise, ironically, in excess paperwork. OMB's ultimate decision on the Dress Rehearsal is fundamentally at odds with the public record.

In the time since your joint hearing, OMB Watch has gone through the 1,000 letters OMB received about its proposed changes to the Dress Rehearsal. Fewer than 10 support the OMB position. Obviously, OMB did not base its decision on the public record.

In her September letter informing the Census Bureau of OMB's decision, Gramm admitted as much. She easily dismissed most of the public comments this way:

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"[We have received comments in our public docket describing needs for these [housing] data; however, most commenters expressed concern about outright deletion of these [housing] items from the census. Based on these descriptions of user needs, we do not object to retaining these questions on the long form." (Gramm letter to Katherine Bulow, September 16, 1987, page 5.)

Our search showed that, of a random sample of letters opposing the OMB action, 15 percent specifically expressed opposition to moving the housing questions from the short form to the long form. Still, the absence of comment on that particular issue shouldn't constitute affirmation of OMB's position, especially considering the fact that the possibility of shifting the questions from the short to the long form was shrouded in the prospect of eliminating them altogether.

Unfortunately, OMB's conduct during the Dress Rehearsal review is typical. Because Congress doesn't have the resources or time to investigate every instance of OMB paperwork abuse in every area of federal endeavor on a case-by-case basis, OMB Watch recommends that it should use this Census example at least to:

- Re-examine and refine the criteria by which OIRA makes its paperwork decisions. For example, with information collections like the Census, for which Congress reviews the questions, is a second OMB review also necessary? In other cases, Congress should more specifically define the review criteria, as well as affirm or deny the validity of cost-benefit analysis to evaluate information collection activities.
- Allow judicial review of OMB paperwork decisions. During the debate over OMB's review of the Dress Rehearsal, many people involved have questioned whether the requirements of the Paperwork Reduction Act take precedence over the mandate for a census of housing and population contained in the Housing Act of 1949. The question remains unanswered. Were OMB paperwork decisions subject to judicial review, the courts could decide.
- Require that OMB set a defined public comment period for paperwork proposals, like the regulatory notice-and-comment process required by the Administrative Procedure Act. While one goal of the Paperwork Reduction Act is greater public scrutiny over the paperwork process, the

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Act really does little to put in place the mechanisms to bring that about.

Again, we commend you for undertaking this review of OMB's involvement in the Dress Rehearsal for the 1990 Census. We also thank you for the opportunity to express our perspective on this important matter.

If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Gwen Rubinstein

Gwen Rubinstein
Senior Program Associate

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