

# CENSUS 2000: THE CHALLENGE OF THE COUNT

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HEARING  
BEFORE THE  
COMMITTEE ON  
GOVERNMENT REFORM  
AND OVERSIGHT  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED FOURTH CONGRESS  
SECOND SESSION

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JUNE 6, 1996

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# CENSUS 2000: THE CHALLENGE OF THE COUNT

THURSDAY, JUNE 6, 1996

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT,  
*Washington, DC.*

The committee met, pursuant to notice, at 9:05 a.m., in room 2154, Rayburn House Office Building, Hon. William F. Clinger (chairman of the committee) presiding.

Present: Representatives Clinger, Hastert, Morella, Ros-Lehtinen, Horn, Mica, McIntosh, Chrysler, Gutknecht, Shadegg, Bass, Collins of Illinois, Condit, Peterson, Maloney, Barrett, Collins of Michigan, Green, and Meek. Also present: Representative Petri.

Staff present: James Clarke, staff director; Judy Blanchard, deputy staff director; Kevin Sabo, general counsel; Jonathan Yates, associate general counsel; Judith McCoy, chief clerk; Jane Cobb, professional staff member; Edmund Amorosi, director of communications; Teresa Austin, assistant clerk; Cissy Mittleman, staff assistant; Ronald Stroman, minority deputy staff director; David McMillen, Liza Mientus, minority professional staff members; Eddie Arnold, public affairs officer; and Jean Gosa, minority staff assistant.

Mr. CLINGER. The Committee on Government Reform and Oversight will come to order.

Last October 25, 1995, Congressman Bill Zeliff, chairman of our Subcommittee on National Security, International Affairs, and Criminal Justice, held an oversight hearing to examine testimony from Census Bureau officials regarding their plans for conducting the 2000 Decennial Census. At that hearing the Bureau announced a number of new initiatives, including the use of statistical sampling to adjust the census figures.

Then, on February 29, 1996, I chaired a hearing to gather testimony from Members of Congress and outside experts regarding the Bureau's planned methodology. That hearing revealed to committee members a number of concerns, particularly about the plans for sampling and statistical adjustment.

In calling this hearing today, it is my intention to bring these issues and concerns full circle with the Census Bureau officials. They have been in contact with my staff and the minority staff numerous times in the past year and have demonstrated a great deal of patience as we try and grapple with the technical complexities of their plans for conducting the next decennial census.

I want to thank the officials of the Bureau for their time and patience with us. And though I may be skeptical of the tack the Bu-

reau is taking with some activities, I would like to indicate my utmost respect for the monumentally difficult task that arises before them every 10 years.

At the February 29 hearing, we heard testimony from Members of Congress, economists, demographers, and statisticians in order to receive expert analysis about the Bureau's new ideas for taking the year 2000 census. The observation those witnesses gave the committee revealed a number of concerns, mainly with regard to sampling and statistical adjustment.

Committee members from both sides of the aisle expressed their discomfort with this approach, and the Bureau has stated that their statistical methodology will produce a one-number census and will eliminate the controversy and litigation that surrounded the 1990 planned-but-aborted adjustment. I am afraid that this may be wishful thinking.

I fear that the same questions and problems that dogged adjustment in 1990 will dog it in the year 2000 and that we might end up with the reverse repeat of what happened in 1990. That is, that the Census Bureau will incorporate statistical adjustments into a one-number census, people of all political stripes will cry "foul," and years of costly litigation will ensue.

And what if the courts decide that statistical adjustment should not have occurred? Will the Bureau be able to separate these statistical numbers from the data gathered using physical evidence, or will we be faced with a \$4 billion stake?

In my examination of Census Bureau materials, hearing transcripts, court filings, and legal opinions, there seem to be four consistent themes around which the adjustment issue turns. These themes or problem areas include, first, legality; second, public confidence and participation; third, accuracy; and, fourth, technical capability.

The adjustment methods ran headlong into these issues in 1990, and to date I do not think Congress has been persuaded that the Census Bureau has overcome them with regard to 2000. Let me briefly touch on these four problem areas.

First, legality. Legal provisions that concern the use of statistical adjustment are found in both the U.S. Constitution as well as in Federal statute. Article 1, section 2, as amended by the 14th amendment, provides that representatives shall be apportioned among the several States according to their respective numbers, to be determined by the means of an "actual enumeration" conducted decennially.

Title XIII, section 195 of the United States Code reads: "Except for the determination of population for purposes of apportionment of representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as sampling in carrying out the provisions of this title." Interpretations vary on both the Constitution and title XIII.

Second, public confidence and participation. The statistical method to be employed for adjusting the census is called "sampling." Sampling means that not every housing unit will be visited, raising issues of equity, reliability, variability, and accuracy. Concern

about these problems may undermine public confidence and give people more reason not to respond to the initial mail-out form.

I think the former Census Bureau director, Bruce Chapman, defined this slippery slope very well. During his testimony last February, he said, and I quote: "Maybe instead this"—meaning sampling—"will be seen as one more way that the Government is trying to pull a fast one on the people; and if there is growing public cynicism as a result, I think what you will see is a further fallout of the regular response to the census. If that happens, then you will have a demand for more sampling to make up the difference and so on until we finally have a demand that the census, for both economic reasons or financial reasons and statistical reasons, be conducted entirely as a sample. We will be basing the hard data, or rather, the samples and surveys for the rest of the Government on an enumeration that itself is not enumeration anymore in the old sense but a sample."

Third, accuracy. An adjustment based on sampling could raise the level of accuracy for a numeric count at the national level, in other words, the total number of people. However, in rural areas, such as I represent, and difficult-to-enumerate geographic and political levels, the degree of data accuracy actually goes down. The problem is the smaller the size of the sample, the larger the sampling error.

Further, sampling does not allow for knowing definitively the individual attributes of the population it is imputing into an area. In particular, sampling does not allow for knowing where the people missed actually live, so the accuracy of the population distribution becomes inferior.

For congressional redistricting and for local area decisions that involve smaller areas, the relative accuracy of the population count for blocks and aggregations of blocks is extremely important. There remains the problem that the quality of data will be compromised using sampling techniques to adjust the census numbers.

And, fourth, technical capability. When Senator Kohl testified at our February hearing, he reminded us of a huge problem that arose with the 1990 adjustment. He stated at the hearing that, and I am quoting: "In retrospect, we were extremely fortunate that we did not adjust the 1990 census. Several months after the contentious decision in July 1991, the Census Bureau discovered an error in the adjustment procedures that significantly reduced the undercount."

Ken Wachter, an expert statistician, echoed this concern. He recalled that, and I am quoting, "If Secretary Mosbacher had decided to use these statistically adjusted numbers as 1990's census counts, a seat in the House of Representatives would have been shifted from Pennsylvania [ours] to Arizona by an error in the computer program. It affected a million people in the count.

"It remained undiscovered for months after the Secretary's decision, buried under layer upon layer of complications in the statistical procedures. A system which permits an error in a computer program to decide the apportionment of Congress is not desirable."

The Bureau plans not just one, but two very complex sampling procedures for the year 2000 census. Can we be assured that the system for these procedures in 2000 will be free from errors? How

will we know it is error free? Our Founding Fathers vested ultimate responsibility for conducting the census with the Congress; and, therefore, I believe it is incumbent upon Members of the Congress to be absolutely certain of our comfort level in each of these critical areas before committing to this serious departure from traditional methods of census taking.

I want to thank again the Bureau officials for their patience and for their presence here today as we work through this very complex and very difficult issue. I thank you both for being here, and I am now delighted to recognize the gentlelady from Illinois, the ranking member of the committee, Mrs. Collins.

Mrs. COLLINS of Illinois. Thank you, Mr. Chairman. I also want to thank you for calling this hearing today, and I would like to welcome Dr. Riche and Dr. Ehrlich. Each of you has a most difficult job, which has been made even more difficult by misguided attempts to dismantle the Commerce Department, so I congratulate each of you for staying the course in these most difficult times.

The Constitutional promise of one person, one vote can only be realized by a census that counts all our citizens. When specific classes of people are excluded from the census, it undermines the legitimacy of our democracy. Unfortunately, the recent history of the census indicates that the undercount of racial minorities is increasing. Without a census that counts all the residents of this country, we cannot build a political system that fairly represents each and every individual.

It is that assurance of fair and equitable representation that has so many people concerned about the plans for the 2000 census. According to Census Bureau research, the 1990 census failed to count almost 2 million African-Americans. For the first time in 50 years, the differential between the African-American undercount and the white undercount went up. This situation just has to be corrected.

However, at the December 1995 meeting of the African-American Advisory Council to the Census Bureau, Mrs. Barbara Sabo, president of University Research Corp. and Center for Human Services and a member of the Advisory Council, said that the Census Bureau has put more emphasis on reducing the cost of the census than on reducing the differential undercount.

Now, she is not alone in that perception, and that is one of the reasons why we are here today. Representative Carrie Meek has expressed her concerns about the plans for the 2000 census by introducing H.R. 3558. I am a cosponsor of that bill, and I strongly support her in her concerns about the fairness of the next census. The Census Bureau's plan would count 90 percent of the population in each county. After that, the Census Bureau would go to 1 out of every 10 households and use that sample to estimate the rest of the population.

Now, that leaves many of us who are very concerned about that. We know that minority populations are concentrated in small neighborhoods, and getting to 90 percent at the county level could result in a count of only 50 to 60 percent of the minorities. That is just not good enough; and not only that, it is not fair.

What is more, the Census Bureau's plan gives little assurance that the process would be fair. It appears to provide an incentive for managers to fill their 90 percent quota with easy-to-count

households and leave the rest for the sample. For over a year now, the Census Bureau's own African-American Advisory Council has been telling it that the plans for sampling were a problem for minorities. The Census Bureau chose to go forward without any change.

The challenge for the Census Bureau is to convince the stakeholders in this process that their plan is fair and reasonable, and that the management expertise is there to carry out their plan. They have not made that case. The perception is that they have spent their energy looking to save money while ignoring the differential undercount.

The American people need to be assured, first, that the plan for the 2000 census is fair. Then, it is our responsibility to make sure that those plans can be carried out competently. Both those ingredients are necessary. Perhaps our hearing today will move us toward resolving these issues, and creating a climate where we can work together to make the 2000 census the best we have ever known. Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. CLINGER. I thank the gentlelady very much for those very perceptive comments. I would now ask the gentleman from Minnesota if he has any opening statement.

Mr. PETERSON. I have another hearing, so I appreciate your accommodating me. It seems like every day we have two of these going on at the same time. Without objection, I have a statement I would like entered in the record, and I would just like to make a couple of points because I am not going to be able to be here probably to ask these questions. But my district has, I think, some of the problem areas more than any other probably in the country.

We have the most colleges and college students in my district in the whole United States. We have three Indian reservations, and we have migrant workers. And I think all of these are problem areas, and I hope—I have been reviewing your information a little bit—that you apparently are not going to use statistical sampling on the Indian reservations, from what I understand, and that is probably wise. But I see you were looking at possibly using tribal rolls, and I guess I would just advise you—and maybe you already know this—that in one of my reservations the people move back and forth between the reservation and the Twin Cities all the time. I see you are nodding your head, so you are evidently aware of that, and I just hope that you understand that phenomenon. You have a difficult task, and I am glad to see that you are aware of those problems.

And also there is a problem of college students in this one part of my district, which is one of the fastest growing areas in America, and we have got all these college kids, and we also have people coming in looking for jobs, trying to maybe take a little bit of college and catch on somehow or another. These people are also moving in and out, and I am not sure how you get this completely accurate, but I am not one of those that is quite as skeptical of the statistical approach maybe as some others. I think that it probably has some merits, and some of these problems, I think, are harder to deal with—well, I am not sure that we can ever get it exactly accurate.

So I just wanted to make those points. Mr. Chairman, if we could put the rest of my statement in the record.

Mr. CLINGER. Without objection, it will be made part of the record in full.

Mr. PETERSON. I appreciate you calling the hearing and wish I could stay for the whole thing. Thank you.

[The prepared statement of Hon. Collin Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN  
CONGRESS FROM THE STATE OF MINNESOTA

Thank you, Mr. Chairman, for having this hearing today to determine how we can best conduct our national census in the year 2000.

My district, the 7th of Minnesota, is mostly rural, but the southern portion of the district, the St. Cloud area, is close to the Twin Cities. That means my constituents have both urban and rural issues to focus on.

For my rural constituents, I'm concerned about the plan to sample to count the last 10% of the population. Sampling isn't accurate in rural areas, because the smaller the size of the sample, the larger the sampling error.

I've assigned one of my district staff members to work full time on economic development to bring businesses into the district to create jobs and strengthen our economy.

Since sampling doesn't give a true picture of where people live, how can local government officials in my district make the best-informed decisions when they request funds for local government programs?

Then there's the issue of the final census numbers. I know the Census Bureau tries to account for everyone we've missed by taking an additional sample survey to adjust the final census count.

These final census numbers are critical because they affect how much money each school district receives under Title I of the Elementary and Secondary Education Act; how much highway money we receive; the amount of our Medicaid matching funds and how much money we receive for crime prevention and control.

In St. Cloud, the urban corridor of my district, the final census numbers determine whether it is considered a metropolitan statistical area. This is critical to my constituents in St. Cloud because it determines the amount of categorical grants this city will receive.

I'm asking all of my colleagues to think about the critical decisions we need to make here regarding sampling and adjustments.

How the census is taken will determine how much money we each will see coming into our districts to fund vital programs.

I understand the Census Bureau wants to sample the last 10% of the population to cut costs in this era of downsizing. I always support a prudent budget.

But because the census numbers are so important, we must make sure we allocate adequate funds to make the census as accurate as possible.

For all of these reasons, I look forward to hearing the merits of Mrs. Meek's plan to change the census-taking procedures, and I also look forward to hearing how the Bureau of the Census plans to improve its procedures from 1990.

Then we must decide which plan to approve. We owe this careful consideration to our constituents.

Thank you, Mr. Chairman.

Mr. CLINGER. Thank you, Mr. Peterson. Does the gentleman from California have any opening statement?

Mr. HORN. No.

Mr. CLINGER. The young lady from Florida, I would hope would have an opening statement.

Mrs. MEEK. Thank you very much, Chairman Clinger. I would first of all like to thank you for keeping your word. You said that we would have another hearing and we would get clearer on this subject. I ask unanimous consent, Mr. Chairman, to have my full statement inserted in the record.

Mr. CLINGER. Without objection, so ordered.

Mrs. MEEK. I further commend you for the leadership in continuing this series of hearings on the 2000 census. It is important for

four major reasons and perhaps more. No. 1, it will determine the size of each State's congressional delegation.

No. 2, it determines the number of electoral college votes each State has.

No. 3, within each State it will be used to draw the boundaries of congressional districts and State and local districts.

No. 4, census data are used to help distribute more than \$115 billion in Federal grants and also additional sums that individual State governments send to local governments.

And I want to also thank Dr. Ehrlich and Dr. Riche for being here this morning. I understand the kind of pressure you are under to get a fair and strong count this time. Many of us who have been around a long time, we know all the frailties of the census; but I do feel that you will use your best effort to make this one a successful one and see that everyone is counted.

I hope Mr. Chairman, that we will build on the record of these hearings and begin on the process of marking up a bill. I know from the last hearing that members have strongly held and different views on some aspects of the census, but at a minimum, this committee under your leadership should enact those provisions that are not controversial among the members so that both the Census Bureau and the Appropriations Committee can know what the parameters are.

This Congress naturally, as other Congresses, is endowed by the Constitution to be sure that we monitor and try our very best to have a good census taken. My colleague and ranking member, Mrs. Collins, has mentioned in her testimony some very evident findings regarding some of the weaknesses of the other census.

It is a common goal that it be accurate, in terms of the total count and its count of different groups. It is also important that the census be perceived as being accurate, in that a perception of being inaccurate merely leads to a distrust of the process.

I have talked privately with Secretary of Commerce Kantor, Dr. Ehrlich, and Dr. Riche, and I believe they all share these goals. However, the 1990 census did not completely achieve these goals. The Census Bureau itself admits that it is less successful at counting African-Americans and other minorities than it is in counting whites.

It estimates that the 1990 census failed to count 5.7 percent of blacks as compared to not counting 1.3 percent of other Americans. This fact of differential undercounting feeds the perception of unfairness and that in turn needs to unnecessary litigation.

Less than 3 months ago the Supreme Court unanimously upheld a decision of the Secretary of Commerce to not use a sample to adjust the 1990 census. Some now fear that the current law prohibits the Census Bureau from doing the type of sampling that the Bureau proposed in February.

These fears are based in part on three facts. First, in 1980, the Census Bureau publicly argued that both the Constitution and the statute prohibited it from using sampling. Second, in 1980, the Congressional Research Service concluded that the Constitution permitted the use of sampling in the census if the sampling makes the count more accurate. But CRS went on to conclude that section 195 of title XIII prohibits the use of sampling for purposes of ap-

portionment of representatives among the States, even if sampling makes the count more accurate.

Finally, in its March 1996 decision, the Supreme Court said that it was not deciding whether either the current statute or the Constitution permits the Census Bureau to use sampling as an alternative to direct enumeration.

You can see by now that certainly I favor enumeration because I feel that it is going to be more accurate for minority groups. I also feel—and my views are a little bit different from those of the Bureau—that you can get a better and a more serious count if we were to use census tracts instead of counties, as the present plan calls for. We feel that if you use the census tract, you will come to a better count; and the Bureau is thinking about that and reviewing that in terms of their methodology.

The Census Bureau pretty much relies on the 1994 decision by the Department of Justice that it now has the legal authority to engage in sampling. No one is quite clear as to whether they have that authority or not. Thus, not surprisingly, lawyers and everyone else are divided on this particular legal issue.

So we run the risk by trying to save \$500 million by using countywide sampling, the entire 2000 census will be declared illegal. In that event, Congress might have to appropriate another \$4 billion in order to repeat the 2000 census without using countywide sampling.

So last week I introduced a bipartisan bill, H.R. 3558. The bill tries to reduce the undercut of African-Americans and other minorities. It also seeks to reduce the risk that the year 2000 census, as now planned by the Bureau, will be declared by a Federal court to be illegal. This bipartisan bill has 42 other members as original cosponsors, and it has two related parts.

One part removes the legal barriers to the Census Bureau's hiring low-income people as temporary census enumerators. As I will discuss later during the questioning period, 2 years ago the Census Bureau recognized that many neighborhood people would not take these temporary jobs because it might jeopardize their benefits from such programs as food stamps, Medicaid, and public housing. The Bureau's 1994 draft bill was not forwarded to Congress by the administration. Section 4 of my bill solves the problem that the Bureau identified 2 years ago.

Section 3 of my bill addresses the more complex and controversial issue of sampling. The bill prohibits countywide sampling for nonresponse but permits sampling at the census-tract level, and the census tract has between 2,500 and 8,000 people. At the February 29 meeting that the chairman called, members were divided on the use of sampling for the 2000 census. There are press reports that the chairman of the Appropriations Subcommittee fears that the Federal courts may throw out the 2000 census if the Bureau goes ahead with its plans to use countywide sampling.

Section 3 of my bill eliminates some of this legal uncertainty which I have addressed by clarifying the statutory power of the Census Bureau. We cannot, of course, deal directly with the legal question of whether the Constitution permits sampling, but section 2 of article 1 of the Constitution does provide that the census shall be done in such a manner as Congress shall by law direct.

I will discuss the sampling issue in more detail during my time for questions. Let me just say now that for over a year the Census Bureau has worked very hard discussing with its advisory groups the use of countywide sampling as an alternative to attempting a complete, direct enumeration. I have drafted my bill in close collaboration with the African-American Census Advisory Committee. I request unanimous consent, Mr. Chairman, to put in the record a letter from Kermitt Waddell, chairman of the African-American Advisory Committee, endorsing my bill.

Mr. CLINGER. Without objection, so ordered.

[The information referred to follows:]

NAACP COMMUNITY DEVELOPMENT  
RESOURCE CENTER,  
Atlanta, GA, June 3, 1996.

Congresswoman CARRIE P. MEEK,  
404 Cannon House Office Building,  
Washington, DC.

DEAR REPRESENTATIVE MEEK: Please consider this letter as a formal endorsement of H.R. 3558. I have further been informed that this bill has as cosponsors 42 other elected official among which are Watts and Clayton of North Carolina.

Please further know that as Chairperson of the African American Advisory Committee to the US Census Bureau our mission is to explore, examine, and recommend to the Census Bureau those things that might ought be done in order to obtain a more complete count for the 2000 decennial.

If we as a committee can be of service to you in this regard, please don't hesitate to contact my office at 704-525-6800.

I remain . . .

Respectfully yours,

KERMITT N. WADDELL,  
*Chairman,*  
US Census Bureau Advisory Committee,  
African American Population.

Mrs. MEEK. More than a year ago, that committee told the Census Bureau that it would be better to sample in smaller geographic areas than a county. They repeated their concerns at a December 1995 meeting. They believe that the Bureau's plan for countywide sampling will exacerbate the undercount of African-Americans and other minorities.

I also ask unanimous consent to insert in the record an excerpt from the December 1995 meeting of the advisory committee dealing with this issue.

Mr. CLINGER. Without objection, so ordered.

[The information referred to follows:]

**Joint Meeting of the Census Advisory Committee on the  
African American, American Indian and Alaska Native,  
Asian and Pacific Islander, and Hispanic Populations**

At the Doubletree Hotel, Washington, DC, December 11-13, 1995

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## COMMITTEE CONCURRENT SESSIONS

### Committee Concurrent Sessions (AA)

Dr. Okotie-Eboh asked the discussants designated for the topical sessions to review their prepared comments for the Committee. She asked the members to provide additional input as necessary to the discussants. They were also asked to provide feedback to the Committee on the topical sessions attended.

On the effect of sampling and estimation on the African American community, Dr. Hill acknowledged that census 2000 would include a combination of 100-percent enumeration and sampling. Sampling poses a bigger problem of missing minority populations than enumeration does. To reach certain population groups, the Census Bureau will have to oversample. Regarding the response-rate threshold, where will the enumeration end and the sampling begin? The threshold will apply to county units; African Americans reside in subcounty areas. Reducing the threshold from 90 percent to 70 percent would result in a 45- or 50-percent threshold for the African American community.

Dr. Hill noted that presenters kept saying that census 2000 would mark the first time that the Bureau would use sampling to obtain data during nonresponse followup, but the agency kept omitting its use of imputation as a method for completing census forms. In 1970, the Bureau imputed data for 5 million people; in 1980, 3 million; and in 1990, 1.6 million.

For census 2000, he said that the agency will sample for nonresponse, then it will calculate estimates based on the sample. One cannot assume that targeting a sample will yield 100 percent of the sample; a response rate always occurs. Imputing means filling in missing data. He contended that the Bureau has used imputation consistently in recent years, but the Bureau presenters and background papers never mentioned that imputation would take place in the next census.

He asserted that census 2000 will include at least 5 million imputed people. He suggested that the Bureau should analyze the accuracy of imputation. Imputation supplies data for people whom enumeration misses and it works fast.

Dr. Hill said that a variation of imputation called "allocation" provides data for missing characteristics, such as age, sex, race, or income. The Bureau has used this procedure historically and will have to use it even more for census 2000 in order to send results to the President on time.

He stressed an interest in knowing the margin of error that imputation will have for minority groups. He suspected imputation would not reduce the differential undercount. He said that he had not seen evidence that the Bureau would do extra outreach activities in minority communities; distributing paper advertisements will not suffice.

Ms. Sabol supported Dr. Hill's comments. She visualized a disproportionate underrepresentation of African Americans whether the Bureau uses a 90-percent or a 70-percent response-rate threshold.

Dr. Okotie-Eboh said she would prefer a threshold based on city rather than county populations. Ms. Sabol said that this Committee had recommended a 90-percent cutoff for cities in May. Dr. Jackson saw the threshold as a compositional issue and would like it based on each major population group. Dr. Jones and Mr. Johnson said the agency should consider setting the threshold for the lowest possible geographic level.

On reengineering the census, Ms. Sabol said the Bureau placed more emphasis on reducing the cost of the census than on reducing the differential undercount. She felt that the Committee needed more information on the agency's plans for spending the money allocated to these activities. The reengineering process has to achieve a balance between cost and the differential undercount.

Ms. Moohn said that the Committee members had received the reengineering document and an alternative document a while ago. She did not know of another alternative document that existed.

Mrs. MEEK. At least one witness at this committee's February 29 hearing, Steve Murdoch, said the same thing as the advisory committee. But despite their concerns, the Bureau went ahead on February 28 and announced it would use countywide sampling as an alternative to attempting to do a complete enumeration.

Finally, Mr. Chairman, I want to comment on the claim that Congress should not micromanage the census because it is so technical. First, if Congress does not do it, the Federal courts may end up micromanaging the whole year 2000 census. Second, I introduced my bill only after the Bureau went ahead almost a year after the concerns of the African-American Advisory Committee were disclosed.

Finally, if our committee, the Government Reform and Oversight Committee, does not act, I have a feeling the Appropriations Committee may act in order to be sure that the 2000 census is not declared by a Federal court to be illegal.

And, Mr. Chairman, I look forward to the comments of my colleagues and to the testimony of our witnesses. I have great respect for the Census Bureau, but I am certainly looking out for the fact that no one should have an undercount, any particular group in this census. Thank you very much, Mr. Chairman.

[The prepared statement of Hon. Carrie P. Meek follows:]

PREPARED STATEMENT OF HON. CARRIE P. MEEK, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF FLORIDA

I ask unanimous consent to have my full statement inserted in the record.

Mr. Chairman, I commend you for your leadership in continuing this series of oversight hearings on the 2000 Census.

The 2000 Census is important for four major reasons: (1) it will determine the size of each State's Congressional delegation; (2) it determines the number of electoral college votes each State has; (3) within each State it will be used to draw the boundaries of Congressional districts and state and local districts; and (4) Census data are used to help distribute more than \$115 billion in Federal grants and also additional sums that individual State governments send to local governments.

I hope that by the end of this hearing you will agree with me, Mr. Chairman, that it is time to build on the record of these hearings and to begin the process of marking up a bill. I know from the last hearing that Members have strongly held and differing views on some aspects of the 2000 census. But at a minimum, this Committee, under your leadership, should enact those provisions that are not controversial among the Members so that both the Census Bureau and the Appropriations Committee can know what the parameters are.

We all have, Mr. Chairman, the common goal of ensuring that the 2000 census is accurate in terms of both its total count and its count of different groups. It is also important that the census be perceived as being accurate. I have talked privately with Secretary of Commerce Kantor, Dr. Ehrlich, and Dr. Riche, and I believe they all share these goals.

However, the 1990 Census did not completely achieve these goals. The Census Bureau itself admits that it is less successful at counting African Americans and other minorities than it is in counting whites. The Census Bureau estimates that the 1990 census failed to count 5.7 percent of Blacks, as compared to not counting 1.3 percent of other Americans. This fact of differential undercounting feeds the perception of unfairness, and that, in turn, leads to litigation.

Less than three months ago the Supreme Court unanimously upheld the decision of the Secretary of Commerce to not use a sample to adjust the 1990 census.

Some now fear that the current law prohibits the Census Bureau from doing the type of sampling that the Bureau proposed in February. These fears are based, at least in part, on three facts. First, in 1980 the Census Bureau publicly argued that both the Constitution and the statute prohibited it from using sampling. Second, in 1980 the Congressional Research Service concluded that the Constitution permitted the use of sampling in the census if the sampling makes the count more accurate. But CRS went on to conclude that section 195 of Title 13 prohibits the use of sampling for purposes of apportionment of Representatives among the States even if

sampling makes the count more accurate. Finally, in its March 1996 decision the Supreme Court said that it was not deciding whether either the current statute or the Constitution permits the Census Bureau to use sampling as an alternative to direct enumeration.

On the other hand, the Census Bureau relies on a 1994 opinion by the Department of Justice opinion that it now has the legal authority to engage in sampling. Thus, not surprisingly, lawyers are divided on the legal issue.

So we run the risk that—by trying to save \$500 million by using county-wide sampling—the entire 2000 census will be declared illegal. In that event, Congress might have to appropriate another \$4 billion in order to repeat the 2000 census without using county-wide sampling.

So last week I introduced a bipartisan bill, H.R. 3558. The bill tries to reduce the undercount of African Americans and other minorities. It also seeks to reduce the risk that the 2000 census—as now planned by the Bureau—will be declared by a Federal court to be illegal.

This bipartisan bill has 42 other Members as original cosponsors, and it has two related parts.

One part removes the legal barriers to the Census Bureau's hiring low income people as temporary census enumerators. As I will discuss later in more detail during my time for questions, two years ago the Census Bureau recognized that many neighborhood people will not take these temporary jobs because it might jeopardize their benefits from such programs as Food Stamps, Medicaid, and public housing. The Bureau's 1994 draft bill was not forwarded to Congress by the Administration. Section 4 of my bill solves the problem that the Bureau identified two years ago.

Section 3 of my bill addresses the more complex and controversial issue of sampling. The bill prohibits county-wide sampling for non-response, but permits sampling at the census tract level. A census tract has between 2,500 and 8,000 people.

At the February 29 hearing of this Committee, Members were divided on the use of sampling for the 2000 Census. There are press reports that the Chairman of the Appropriations Subcommittee fears that the Federal courts may throw out the 2000 Census if the Bureau goes ahead with its current plan to use county-wide sampling.

Section 3 of my bill eliminates some of this legal uncertainty by clarifying the statutory power of the Census Bureau. We cannot, of course, directly deal with the legal question of whether the Constitution permits sampling, but Section 2 of Article 1 of the Constitution does provide that the census shall be done "in such manner" as Congress "shall by law direct."

I will discuss the sampling issue in more detail during my time for questions. Let me just say now that for over a year the Census Bureau has been discussing with its advisory groups the use of county-wide sampling as an alternative to attempting a complete direct enumeration. I have drafted my bill in close collaboration with the African American Census Advisory Committee.

I request unanimous consent to put in the record a letter from Kermit Waddell, Chairman of the African American Advisory Committee, endorsing my bill.

More than a year ago that Committee told the Census Bureau that it would be better to sample in smaller geographic areas than a county. They repeated their concerns at a meeting in December 1995. They believe that the Bureau's plan for county-wide sampling will exacerbate the undercount of African Americans and other minorities.

I ask unanimous consent to insert in the record an excerpt from the December 1995 meeting of the Advisory Committee dealing with this issue.

At least one witness at this Committee's February 29 hearing, Steve Murdock, said the same thing as the Advisory Committee.

But despite their concerns, the Bureau went ahead on February 28 and announced it would use county-wide sampling as an alternative to attempting do a complete enumeration.

Finally, Mr. Chairman, I want to comment on the claim that Congress should not "micro-manage" the census because it is so technical. First, if Congress doesn't do it, the Federal courts may end up micro-managing the 2000 census. Second, I introduced my bill only after the Bureau ignored for almost a year the concerns of the African American Advisory Committee. Finally, if the Government Reform and Oversight Committee does not act, the Appropriations Committee may act in order to make sure that the 2000 census is not declared by a Federal court to be illegal.

In conclusion, Mr. Chairman, I look forward to the comments of my colleagues and the testimony of our witnesses.

Mr. CLINGER. I thank the gentlelady very much for her very perceptive comments. I know she has made a great study of this matter and is a very valuable member of this committee and in this

area, particularly. Now I am pleased to recognize the gentleman from Florida, Mr. Mica.

Mr. MICA. I thank the chairman. I only have a couple of opening comments. First, I want to thank the chairman for holding this full committee meeting. Our subcommittee heard testimony on February 29 that raised some concerns. The primary concerns then that were raised were the use of the administrative records, the cost of not using sampling techniques, and the transparency of the Bureau's planned methodology.

And this, of course, is a very important undertaking for the Congress and for the Nation. It is also a costly undertaking. It can cost as much as, I understand, \$4.4 billion. Possibly with Mrs. Meek's proposal, I understand it is about \$4 billion, and the department is recommending somewhere—estimating their costs under their proposal of about \$3.9 billion.

But as we look to reform the system and to conduct the census as outlined by the administration's proposal, faster, less costly, more accurate, I think that we do have to take some of these concerns. And I spent most of my life in the minority, and I guess when you get in the majority, you also remember your roots, and I share Mrs. Meek's concern that minorities must not be swept aside in this process in an attempt to provide the census with possibly only cosmetic reform methodology, and changing the methodology does raise some serious questions. Can sampling give us accurate data, or do we sacrifice that accuracy by using a flawed methodology?

So today's hearing is very important because we do need to delve into these questions a little bit more and learn how the Census Bureau plans to tackle the questions that have been raised. So with that, Mr. Chairman, I yield back.

Mr. CLINGER. I thank the gentleman, very much. Does the gentleman from Texas have an opening statement?

Mr. GREEN. Thank you, Mr. Chairman. I do not have any prepared remarks, but I think just by looking at the statistics and knowing what we went through after the 1990 census—and I represent a district in Houston that had a great deal of undercount, at least the perception was there. And you cannot have it both ways. If we are going to cut the budget for the census, we are going to have to sample more; but if we were not, then we need to have as accurate—and I think we all share—as accurate as possible.

I would like to limit sampling as much as anyone down to the census tract, and I think my colleague from Florida has a great idea with her bill. Instead of using a larger geographic area, just by looking at the change in the allocations, you can tell where some of us come from. My district in Houston, TX, again, is an inner-city district, 60 percent Hispanic, with a typical great deal of undercount and the loss of not only Federal funds, but also just the accurate count in our own State to be able to utilize it.

And that is why I am glad, Mr. Chairman, you called the hearing today so in the year 2003 we are not doing the same thing that we were doing in 1993 and that we learn that we want everyone counted; but because of cost considerations if we have to sample, let us take it down to the smallest unit we can and get that accurate number so we do not have States like Texas or California or

other States going to Federal court and keeping the census in question. Thank you, Mr. Chairman.

Mr. CLINGER. I thank the gentleman. Does the gentleman from Illinois have any opening statement?

Mr. HASTERT. Thank you, Mr. Chairman. Very quickly, going through one of these censuses before and the resulting reapportionment that happens certainly is of everybody's interest. I think we all want to make sure that the counting is accurate, that nobody is missed in this counting. But, you know, I always go back to the Constitution.

I guess the Constitution is the thing that makes this Government possible, makes this House of Representatives possible, and it is a very simple language. It said enumeration shall be made within 3 years after the first meeting of the Congress, and it goes on and says, until such enumeration shall be made, and it says it should be made every 10 years after.

If you will go back to the dictionary, enumeration basically says "to count, one after another." That is what the Constitution says. And, you know, I have been a study, taken the statistics course and the sampling courses, and you can usually come up with any type of number that you want to, depending on the motive of the sampler. And I just think we need to go back to the Constitution and make sure that we stay as close to the Constitution as possible. Now, that is not always possible, but enumeration means "to count, one after another." And whatever effort we need to go forward and do and what appropriation we need to do is not to guess. The Constitution did not say "to guess"; it says "to enumerate, to count, one after another."

And now if some folks in this body would like to change that and say "a sample," then they ought to change the Constitution, and I would certainly entertain anybody's bill to change the Constitution on how we count. But it is pretty rudimentary. I think the Founding Fathers were pretty plain about it, and I think it is against the Constitution to do it any other way.

Mr. CLINGER. I thank the gentleman. Does the gentlelady from New York have any statement?

Mrs. MALONEY. Thank you, Mr. Chairman; and thank you for holding this hearing. The city of New York has suffered more injustice from the census than any city in the country. Each year we lose millions of dollars in Federal funds because of the undercount in the 1990 census.

We have fought this battle in the courts and lost. I congratulate my colleague, Representative Meek, for taking the lead on this issue. I understand and share her frustration. From the very census to 1990, when the differential undercount went up for the first time since we started measuring the undercount, the census has been unfair to minorities, and we must correct that. It is my hope that these plans the Census Bureau put forth will bring us a 2000 census that is fair and includes every single person in this country.

But today I do not know whether it will or will not bring us closer to that perfect census. Taking a census of over 260 million people and over 120 million households is an awesome task. The staff of the Census Bureau goes from 5,000 to 500,000 and back in a pe-

riod of about 6 months. That is a management challenge that few businesses ever face.

On top of that, those temporary employees must be trained to do a complicated and sometimes dangerous task. That it happens at all is a testimony to the dedication and skill of these Government workers. That it is 98 percent right is really even more amazing.

All of the vital signs of the 1990 census indicate that things are getting worse. The total undercount went up from 1980. The differential between African-American and white undercount was the largest ever. In 1980, a lot of mistakes were made, 14 to 25 million, according to GAO.

We must question whether the size of the task and the quality we expect has exceeded what any organization can do within the limits of what we are willing to spend. The census has put forward a plan that is a bold departure from business as usual. It is a plan that confronts the fiscal realities of this Congress' efforts to balance the budget by 2002. However, the factual basis for many of the decisions remain unclear, many of the details are unknown, and as a result it is too soon to know whether this census will be an improvement or not.

A number of Members of Congress have raised questions about the Census Bureau's plan and whether it will improve, degrade, or have no effect on the undercount of minorities. I hope that in the testimony and discussion we hear today we will begin to get some of these answers on the table. I thank you, Mr. Chairman.

Mr. CLINGER. I thank the gentlelady. Does any other member on the majority side seek recognition? The gentleman from Indiana?

Mr. MCINTOSH. Mr. Chairman, yes. Let me state very briefly, one, that I want to commend Mrs. Meek for looking at the consequences of the current proposal on minorities, and that, in particular, one part of her solution I think makes a lot of sense, and that is to move toward a tract-by-tract counting assessment and to strive to get that 90 percent goal in as small an area as possible.

I, on the other hand, share grave misgivings about the sampling and the use of sampling in general, not necessarily because of the way this Census Bureau or past Census Bureaus might have done it, but because of the precedent it sets for future Census Bureaus and, frankly, the political pressure that would be created to adjust sampling methods to end up with certain political results. And so I have grave reservations about any type of sampling method to do it.

I will explore in the questioning periods whether there have been alternatives that have been thought of perhaps in reducing the number of questions or the burden that is placed on the Bureau to try to get to 100 percent and if there were other ways that we could make sure we have actually counted all of the individuals to make sure we do not undercount minorities or other population centers.

And then, finally, Mr. Chairman, if I could ask unanimous consent to leave the record open for a few days, I would like to submit some legal views that are currently being worked on regarding the question that Representative Hastert raised about the constitutionality.

Mr. CLINGER. Without objection, so ordered.

Mr. MCINTOSH. Thank you.

Mr. CLINGER. Thank you. The gentleman from Wisconsin.

Mr. BARRETT. Thank you, Mr. Chairman. Mr. Chairman, I appreciate your holding this hearing. This is an issue that has a lot of interest in Wisconsin, as we have discussed, because had the adjustment been made to the 1990 census, Wisconsin would have lost a seat. And I certainly applaud efforts to hold down costs in Government, but at the same time I think we have to recognize that the original founders of our country in the Constitution asked us for basically an actual count of the people. And so as we try to move forward—and I applaud Congresswoman Meek's effort—I know that my colleague from Wisconsin, Congressman Petri, has introduced a bill today that would prohibit sampling—I think it is important that we explore all these different proposals and come up with a method that provides the most accurate count in the 2000 census.

So I, again, applaud your efforts in leading this charge. Thank you.

Mr. CLINGER. Thank you, Mr. Barrett. The gentlelady from Maryland, Mrs. Morella.

Mrs. MORELLA. Thank you, Mr. Chairman. I appreciate your calling this hearing to examine the important issues that need to be addressed in Census 2000. Some may find it unbelievable that we are already holding hearings regarding Census 2000, a project that is 4 years away, but, you know, the decennial census is a major undertaking. The Constitution directs us to count everyone living in the United States, which is a number close to 260 million people.

Furthermore, the Census Bureau has planned some significant changes. The 1990 census was not as accurate nor as efficient as it should have been, leaving an undercount of certain populations and costly legal battles. It is critical that we learn from any mistakes that were made in 1990 to achieve a more accurate and complete census in the year 2000.

The census called for by the Constitution is as critical an exercise in democracy today as it has always been. The results will serve as the basis for making many decisions in our Government, ranging from reapportioning congressional districts to Voting Rights Act enforcement to deciding how Federal funds are distributed in a fair and equitable manner.

The distribution of funds takes on an even more importance at this time of budgetary constraint, and so for this reason accuracy is critical.

The Census Bureau has outlined many changes they plan to implement. I support their efforts to simplify the census by creating user-friendly forms and increasing citizens' opportunities to respond. I also applaud their efforts to build partnerships with the Postal Service and with State, local, and tribal governments. And, as the chair of the Technology Subcommittee, I certainly agree with the Census Bureau that Census 2000 must take advantage of the most up-to-date technology available to improve accuracy and speed.

At the heart of today's hearing, however, is the issue of sampling. The Census Bureau indicates its sampling will both save money and increase accuracy. It is clear that sampling will save money,

up to \$900 million. I do have some concerns, however, with the plan that has been outlined and with some possible negative ramifications of sampling and adjustment.

The legality of sampling remains unclear, and we certainly do not want this census to result in a string of costly lawsuits. We must ensure that we encourage public participation, not erode it, as some suggest that sampling might do.

Question: Might sampling further exacerbate the undercount of certain segments of our population? Sampling may reduce the accuracy of data in rural and difficult-to-enumerate areas, we believe.

I look forward to hearing from our witnesses today, Dr. Everett Ehrlich, Under Secretary of Commerce for Economic Affairs; and Dr. Martha Farnsworth Riche, Director of the Bureau of the Census. I hope they will elaborate on what went wrong in 1990, how to remedy these problems in the year 2000.

I hope they also will respond to members' concerns about the sampling and adjustment methods that have been proposed. The panel's insights into controversial issues, such as census sampling techniques and census adjustments, should be particularly valuable to the members of this committee. I look forward to their testimony.

As you know, I have one of the largest concentrations of Federal employees in any congressional district in the country, and these employees include some who will be involved in the data-gathering process and some who will be using the data. I single out these individuals because they have a special interest in knowing that we are going to get it right in the year 2000, and I thank them. And, again, I thank you, Mr. Chairman, for this hearing.

[The prepared statement of Hon. Constance A. Morella follows:]

PREPARED STATEMENT OF HON. CONSTANCE A. MORELLA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. Chairman, Thank you for calling this hearing to examine important issues that need to be addressed in planning Census 2000. Some may find it unbelievable that we have already been holding hearings regarding Census 2000—a project that is four years away. The decennial Census, however, is a major undertaking; the United States Constitution directs us to count EVERYONE living in the United States—a number close to 260 million people. Furthermore, the Census Bureau has planned some significant changes. The 1990 Census was not as accurate nor as efficient as it should have been, leading an undercount of certain populations and costly legal battles. It is critical that we learn from mistakes made in 1990 to achieve a more accurate and complete Census in the year 2000.

The Census, called for by the U.S. Constitution, is as critical an exercise in democracy today as it has always been. The results will serve as the basis for making many decisions in our Government ranging from reapportioning congressional districts to Voting Rights Act enforcement to deciding how federal funds are distributed in a fair and equitable manner. The distribution of funds takes on even more importance at this time of budgetary constraint. For all these reasons, accuracy is critical.

The Census Bureau has outlined many changes they plan to implement in Census 2000. I support their efforts to simplify the Census by creating user-friendly forms and increasing citizens' opportunities to respond. I also applaud their efforts to build partnerships with the U.S. Postal Service and with state, local and tribal governments. And, as the Chair of the Technology Subcommittee, I certainly agree with the Census Bureau that Census 2000 must take advantage of the most up-to-date technology available to improve accuracy and speed.

At the heart of today's hearing, however, is the issue of sampling. The Census Bureau indicates that sampling will both save money and increase accuracy. It is clear that sampling will save money—up to \$900 million. I have some concerns, however, with the plan they have outlined, and with some possible negative ramifications of

sampling and adjustment. The legality of sampling remains unclear, and we certainly do not want this Census to result in a string of costly lawsuits. We must ensure that we encourage public participation, not erode it—as some suggest sampling may do. Might sampling further exacerbate the undercount of certain segments of our population? Sampling may reduce the accuracy of data in rural and difficult-to-enumerate areas.

I look forward to hearing from our witnesses today, Dr. Everett Ehrlich, Undersecretary of Commerce for Economic Affairs, and Dr. Martha Farnsworth Riche, Director of the Bureau of the Census. I hope that they will elaborate on what went wrong in 1990 and how to remedy these problems in the year 2000. I also hope that they respond to Members' concerns about the sampling and adjustment methods proposed. The panel's insights into controversial issues such as census sampling techniques and census adjustments should be particularly valuable to the members of this committee, and I look forward to their testimony.

As you know, I have one of the largest concentrations of Federal employees in any congressional district in the country. These employees include some who will be involved in the data gathering process and some who will be using the data. I single out these individuals because they have a special interest in knowing that we're going to "get it right" in the year 2000, and I thank them. Again, thank you Mr. Chairman.

Mr. CLINGER. I thank the gentlelady very much for those comments. If there are no other members who seek recognition for opening statements, I think we are prepared to proceed with the testimony. I again want to welcome Dr. Ehrlich and Dr. Riche for being here. I think you sense that we all have empathy for the enormous task that you are dealing with and look forward to your testimony.

It is the practice of this committee to swear all witnesses so that no witness is prejudiced. If you have no objection, if you would.

[Witnesses sworn.]

Let the record indicate that the witnesses answered in the affirmative, and, Dr. Ehrlich, if you would like to proceed.

**STATEMENTS OF EVERETT M. EHRLICH, UNDER SECRETARY OF COMMERCE FOR ECONOMIC AFFAIRS, U.S. DEPARTMENT OF COMMERCE; AND MARTHA F. RICHE, DIRECTOR, BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE**

Mr. EHRLICH. Thank you very much, Mr. Chairman. I want to thank the committee for its range of excellent statements, and I want to say how impressed I am upon hearing them as to how much we all agree about.

We agree apparently about several important things. The first, of course, is the competence of the Census Bureau, its objectivity, the absence of a concern about its motivations, the degree of confidence that it brings to its task. I think that the committee understands that the Census Bureau and its sister agency, the Bureau of Economic Analysis, are widely viewed as the leading statistical agencies in the world and that we are privileged to have the product of their work.

I think the second thing that the statements that I have heard demonstrates that we have agreement about is the need to respect the importance of the decennial census, its role in allocating political representation and Federal and other resources. We agree that this is an important task that is deeply embedded in our view of our own democracy.

And the third thing on which I think we now see wide agreement is an understanding that the 1990 decennial failed. Congressman Green made a very important point, and that was we do not want

to look up in 2003 and have a repeat of 1993. The way to prevent that is to not have a repeat of 1990 in the year 2000, and I think we need to look into, in our discussion of what to do in the year 2000, into what happened in 1990 and why the 1990 decennial failed, and I think there are a variety of reasons why we can look back and see shortcomings in the 1990 decennial census.

They have to do with the absence of meaningful partnership and outreach. They have to do with technology backwardness. They have to do with a variety of management concepts that were proven inappropriate. But most importantly, the most important source of failure in the 1990 census was a failure of the strategy itself, that is, the census cost too much, and it attained an unfair and prejudicial result because it relied exclusively, exclusively on a strategy of face-to-face visits. And face-to-visits, so-called "direct enumeration" are obviously important, but relying on them exclusively virtually guarantees that the census will be unfair.

That is because the old way of doing the census essentially holds that we either find you or we forget you. Under the old system, if we cannot find you, then the census makes believe that you are not there, and it therefore fails the constitutional mandate to count every American resident.

As our plan for 2000 makes clear, and as Dr. Riche will describe to you in a moment, we are going to make extraordinary and creative efforts to find everybody in America, but that does not provide a guarantee that we will, and that is the real problem. No matter how hard we try, there are always going to be people who catch the early bus or work the late shift or are moving from one place to another or are college students or who are not home when we knock or who believe, even though it is not true and will never be true, that the census is a front for the INS or the IRS or whom-ever else.

Under the old system, the failed system of 1990, those people would not be counted, period. They are disproportionately young; they are disproportionately low income; they are disproportionately people of color. So we have devised a system that accounts for every person whom we are unable to count. It involves sampling to account for the last increment of nonrespondents and to maintain quality control.

There are people who find this use of sampling in the census controversial. I do not. It builds on the tradition of W. Edwards Deming, the Census Bureau employee who perfected the system of statistical quality control half a century ago and whose thinking revolutionized the global economy in turn.

It is widely endorsed by the vast majority of statisticians, including the National Academy of Sciences. It provides a guarantee that the census will account for every resident of the United States, whether they were home when we came to call or not. And by freeing up resources, it allows us to fund a first-ever program of meaningful outreach and promotion that will increase participation and make the census more accurate and cheaper from the outset.

What strikes me as truly controversial is the alternative: doing the census the old way, the way that has failed. What is controversial is the census that says that if we cannot find you, then we are going to forget you. The Constitution tells us to enumerate the pop-

ulation, that is, to develop an actual estimate of the population at a fixed date for purposes of apportioning the Congress. It does not tell us to include only everybody who is at home or only everybody who has the time to fill out a form or only those people who trust their Government; it says "everybody," and that is what our system will do, once and for all.

Mr. Chairman, you have raised a variety of very important questions about our program that we hope to clear, to discuss, and to inform this committee about in the next several hours. You have raised the question of legality, and as we will show you, the lower courts have been virtually unanimous in their view that statistical methods to complement field work and to build accurately are constitutional. Moreover, the opinions of three attorney generals from the Carter, Bush, and Clinton administrations confirm this interview.

You have raised the issue of confidence in the census, and, frankly, I do not believe that the level of confidence or, adversely, cynicism about the census, will be influenced by the use of sampling. I think it will be influenced by the quality of our democracy, about the faith that people have in their Government, about whether or not the leaders of our Government speak positively about that Government and about the census as a part of it.

I think you have raised questions about accuracy, and I think we will show you that our proposal, in fact, increases accuracy almost across the board, particularly that it produces, after extensive statistical experimentation and simulation using the 1990 data, it produces estimates at the congressional district level that are more statistically robust than would have been obtained without sampling.

And, finally, you raise the issue about our technical capability, and I think that a wide range of the professional community, statisticians across the country, the National Academy of Sciences, view it as being well within our technical capabilities to perform this census.

What concerns me, in terms of our capabilities, is not going to sampling, but rather, not going to sampling. What we have to do is we have to commit the resources and bid away people from other occupations in the economy to go out into the field and try to complete the field in a fair, impartial, and accurate way without the use of sampling for nonrespondents or for quality check.

With all of that said, I would like to turn to my colleague, Dr. Riche. Many of you have heard a lot about our plan for the census in the year 2000. Here is your opportunity to hear about the entire plan in one brief sitting in all of its detail and its many thrusts. So, with your permission, sir, I will turn over to her.

[The prepared statement of Mr. Ehrlich follows:]

PREPARED STATEMENT OF DR. EVERETT M. EHRLICH, UNDER SECRETARY OF  
COMMERCE FOR ECONOMIC AFFAIRS, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Committee:

We appreciate greatly the opportunity to share with you our thinking about the 2000 decennial census and to move together towards a count that is accurate, fair, cost-effective, and that builds faith and trust in the process, rather than division and contention. We believe very strongly that the plan we have put forward starts us on the road to those important goals.

Dr. Riche's statement goes over the four major thrusts of our strategy for Census 2000. But we cannot prepare ourselves to get 2000 right unless we understand why 1990 went wrong.

The 1990 decennial managed to account for 98.4 percent of the population. But it did not meet some basic goals. It was not fair: the people it missed were disproportionately people of color. No wonder it was viewed with mistrust and skepticism. It was not timely: it took too long to get results and the delay contributed to the untenable situation in which two separate estimates of the population were in circulation. No wonder it was divisive. And it plain and simple cost too much. No wonder the Congress is deeply concerned about a repeat of the entire experience.

In my view, there were several reasons for these failures.

First, in 1990, Census tried to do everything itself. But, as I learned quite clearly in my own experience as an executive in the computer industry, it's impossible for any organization to be world class in every activity of concern to it. So, as you will hear from Dr. Riche and as we'll discuss this morning, we have redesigned the process to bring in partners who complement our own skills.

Second, the 1990 Census was technologically backwards. In 2000, we'll enter the Information Age. And that means more than simply using computers to do what we once did with pencil and paper. As Dr. Riche will discuss, the intelligent use of information technology allows us to redesign our forms to make them attractive and easy to complete, to put our forms in stores, churches, and schools without fear of duplicative responses, and to share maps and address data with state and local governments.

Third, the 1990 Census was a closed, insular affair. The 2000 process, in contrast, has been open and transparent. Our advisory bodies have been, and continue to be, sources of good ideas that have improved our thinking and planning. We will share more data with local governments at an earlier stage of the process. And we have benefitted substantially from the work of the National Academy of Sciences, whose report we have largely adopted, and from the reviews of the General Accounting Office and Inspector General, both of whom support our approach.

But the most important source of failure of the 1990 census was a failure of the strategy itself. That is, the census cost too much and obtained an unfair and prejudicial result because it relied exclusively on a strategy of face-to-face visits.

Face-to-face visits—so-called "direct enumeration"—are important. But relying on them exclusively virtually guarantees that the census will be unfair. That's because the old way of doing the census essentially holds that if we can't find you, then we'll forget you: that is, under the 1990 system, if we can't find you, then we make believe that you're not there.

Now, as our plan for 2000 makes clear, we're going to make extraordinary efforts to find everybody in America. But that doesn't provide a guarantee that we will. That's the real problem. No matter how hard we try, there are always going to be people who catch the early bus, or work the late shift, or who aren't home when we knock, or who believe—even though it is not true and will never be true—that the census is a front for the INS, the IRS, or whomever else.

Under the old system, those people would not be counted. Period. They are disproportionately young, they are disproportionately low-income, they are disproportionately people of color. So we have instead devised a system that accounts for every person whom we're unable to count. It involves sampling to account for the last increment of nonrespondents and to maintain quality control.

Some people find this use of sampling in the census controversial. I don't. It builds on the tradition of W. Edwards Deming, the Census Bureau employee who perfected the system of statistical quality control and whose thinking revolutionized the global economy. It is widely endorsed by the vast majority of objective statisticians, including the National Academy of Sciences. It provides a guarantee that the census will account for every resident of the United States, whether they were home when we came to call or not. And by freeing up resources, it allows us to fund a first-ever program of meaningful outreach and promotion that will increase participation and make the census more accurate and cheaper from the outset.

What is truly controversial is the alternative—doing the census the old way, the way that failed. What is truly controversial is a census that says that if we can't find you, then we're going to forget you. The Constitution doesn't tell us only to count everybody who is at home, or everybody who has time to fill out a form, or only those people who trust their government. It says every resident—everybody. That's what our system will do, finally, once and for all.

Mr. Chairman, the Census Bureau has the responsibility to account for every resident of the United States. In 2000, we will finally do exactly that.

Thank you.

Mr. CLINGER. Thank you, Dr. Ehrlich. Dr. Riche, we look forward to hearing, as Dr. Ehrlich has indicated, the full story.

Ms. RICHE. OK. Thank you very much, Mr. Clinger. Thank you also to your staff for their patience in working with us and for addressing an issue that perhaps was not of their choosing, perhaps more detailed than they would like, but they have stuck with it, and I really appreciate it, and we all do at the Census Bureau. And thank you, members of the committee, for coming this morning to discuss with us our census plan.

Before I get to the specifics, I would like to briefly look back again at 1990 and explain how its outcome influenced the plan for 2000. If the 1990 census was a success, it was a dismal one. The Census Bureau counted 98.4 percent of the population, but the undercount was disproportionately borne by racial and ethnic minority groups. It cost the taxpayer a great deal of money, more than twice as much per housing unit as the 1970 census, and it ended up producing two sets of numbers, furthering the divisiveness over the results.

In 1992, reflecting these concerns, the Congress established a panel of experts at the National Academy of Sciences and directed that panel to conduct an independent review of the purposes, techniques, and possible alternatives for the next census and beyond.

In subsequent years, the Congress has continued to direct us toward, I quote, "a cost-effective census design that will produce more accurate results than those from the 1990 census" and that makes, I quote again, "significant changes in the approach to taking the decennial."

With this guidance in mind, we have created a plan for Census 2000 that will be faster, less costly, and more accurate than the 1990 census. Our plan embraces most of the proposals recommended by Congress' National Academy of Sciences panel. They published those recommendations in 1994.

Our plans for the census are built around four fundamental strategies for change: partnership, simplicity, technology, and statistical methods.

Strategy one: Build partnership at every stage of the process. Partnership is the most important part of our plan. The Census Bureau cannot do everything alone. We need to find partners, and, in particular, we need to think in terms of every activity being done by a best-in-class provider.

First, we must form partnerships with State, local, and tribal governments and community groups. These groups know their local conditions and circumstances better than we ever will. They can help us correct our maps and our address list, they can tell us where to put our forms so people will find them, and alert us to other problems that are strictly local in nature.

In contrast with 1990, we will share our address lists and other local information with these governments well before the census and get their input early and often.

The U.S. Postal Service will be our single most important partner. In 1990, we spent too much time and money developing address lists the Post Office had already assembled. This time we will use their lists and avoid the cost duplication.

We will also form partnerships through privatization. We cannot be world class in every stage of a process that we only manage every 10 years. We need to outsource some aspects to organizations that are expert every day. A couple of examples: Facilities management—we are looking to use data processing companies to manage the facilities where forms are translated into digital files. Advertising and promotions are another areas. Use private companies that are in this business every day to manage our efforts to promote the census more visibly and effectively.

Strategy two: Keep it simple. The simpler and easier the decennial is for people to respond to and understand, the more accurate and less costly it will be. We are working on user-friendly forms. In 1990, the forms were designed for computers, not for people. We are working with private designers right now to implement new, user-friendly designs that respect the respondent and that help people understand why they are being asked for the information.

Another example: Multiple contacts will improve response rates. We are learning from the direct-marketing industry. We are recognizing that the census is the Nation's largest direct-mail campaign, probably the world's largest direct-mail campaign. So we are learning from direct marketing that repeated reminders pay big dividends.

We will first contact each address with a letter that alerts the recipient to the census and its benefits, what it means to them.

A few days later, a questionnaire will arrive. We will follow it with a postcard, thanking those who participated and encouraging those who have not to send their form back. And, finally, most addresses that have not responded will receive another questionnaire with another message encouraging them to respond. So that is four contacts right there.

We are also going to have more ways to respond. Again, this is something new. In 1990, many people just did not find the census form in their mailbox. In 2000, census forms will find you. They will be in civic and community centers. They will be at the Post Office and other public places, and we will have a well-publicized, toll-free number, maybe an Internet address that you can use if that is more convenient. So that is two more contacts. That is six contacts right there.

Strategy three: Use technology intelligently. In 2000, the decennial census will truly enter the information age. Digital capture of forms will improve both the actual receipt and the speed. The 1990 census was microfilmed and keypunched. In 2000, we will scan the forms directly into computers using optical character recognition, software that reads handwriting, to go directly from completed forms to computer files ready for tabulation. This eliminates coding errors, and it saves money.

We will use matching software to help us spot duplications. For example, if a husband returns a form in the mail while his wife fills one out over the phone at work, our software will be able to determine that both forms come from the same household, using name-and-address checks and other information on the form.

Strategy four: Use statistical methods. Our fourth and final strategy is final because, in baseball terminology, it is a "cleanup hitter." It is what we must do after we have done everything we

can do to encourage people to respond because our job is to account for all the people, including those that do not respond, and to do it cost effectively.

In 1990, respondents who did not return their forms by mail cost at least six times more to enumerate than those who mailed back their forms. Using field staff to find the most reluctant respondents raised the cost as much as 18 times. Even then, census takers were forced to resort to interviewing neighbors or other last-resort measures when the respondent could not be found.

So the question is not whether to supplement field interviews with estimation, but how to do it cost effectively and accurately. As I have described, we will make an unprecedented attempt involving numerous stages to contact everyone living in the United States in Census 2000. Then we will go to administrative records if we can resolve the many concerns people have about them to find as many nonrespondents as possible before we begin the costly personal interviews.

We plan to use the following national sets of records: IRS, Social Security, Medicare, food stamps, and HUD records on tenants. We are also testing the use of tribal rolls for American Indian reservations.

After we add as many households as we can using administrative records, we will telephone as many of the remaining nonrespondents as we can get telephone numbers for. That is our seventh attempt to contact the household. Only then will we begin the costly personal visits.

Now, of course, all of these activities will cost time and money, so our plan calls for us to continue personal visits until we obtain responses from at least 90 percent of the addresses in each county or, as we are now exploring, each census tract, and then draw a sample of the remaining addresses. That is eight visits to the household before we get to the sampling stage—eight contacts—excuse me—eight separate contacts.

We will then visit the housing units in this sample and use the information we get from them to complete the followup operation.

As a last step to check the quality of our work, we will take a second sample of about 750,000 households. We will want to make sure that some people were not left off the questionnaire or were not counted because they lacked a clear connection with a specific address, like migrant workers, college students, or snowbirds. So, to get even closer to 100 percent of the population, we must draw this large sample and focus our resources on doing the best possible enumeration of it.

We will then combine the results from the quality-control procedure with the results from the mail-in, from administrative records if we use them, from the telephone interviews, and from the other personal interviews, producing a one-number census and eliminating the need for a subsequent adjustment of the decennial count.

With all of these procedures in place, we will have a census that accounts for all of the population, not just those who returned our form or were home when we tried to visit them, fulfilling our constitutional mandate to enumerate the population.

To sum up, the information age and its tools offer us the possibility of meeting the goals we share—a census that is both less costly and more accurate.

Mr. Chairman, I would like to thank you very much for the opportunity to testify today, and I would be happy to answer any questions.

[The prepared statement of Ms. Riche follows:]

PREPARED STATEMENT OF MARTHA FARNSWORTH RICHELLE, DIRECTOR, BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Committee, thank you for the opportunity to appear before you and discuss the Census Bureau's plans for Census 2000. I appreciate the interest of the Committee and look forward to a constructive discussion of the issues. Before I discuss the specifics of our plan, I'd like to look back at the 1990 Census and explain how its outcome influenced the plan for 2000.

If the 1990 census was a success, it was a bleak one. The Census Bureau counted 98.4 percent of the population, but the undercount was disproportionately borne by racial and ethnic minority groups. It cost the taxpayer a great deal of money—more than twice as much per housing unit as the 1970 census. And it ended up producing two sets of numbers, furthering the divisiveness over its result.

In 1992, reflecting these concerns, the Congress established a panel of experts at the National Academy of Sciences, and directed the panel to conduct an independent review of the purposes, techniques, and possible alternatives for the next census and beyond. In subsequent years, the Congress has continued to direct us toward a "cost-effective census design that will produce more accurate results than those from the 1990 census," and that makes "significant changes in the approach to taking the decennial."

With this guidance in mind, we have created a plan for Census 2000 that will be faster, less costly, and more accurate than the 1990 Census. Our plan embraces most of the proposals recommended by Congress' National Academy of Sciences panel, as published in their 1994 report.

Our plans for the census are built around four fundamental strategies for change: partnership, simplicity, technology, and statistical methods.

STRATEGY ONE: BUILD PARTNERSHIP AT EVERY STAGE OF THE PROCESS

Partnership is the most important part of our plan. The Census Bureau can't do everything alone: We need to find partners. In particular, we need to think in terms of every activity being done by a "best in class" provider.

First we must form partnerships with state, local, and tribal governments, and community groups. These groups know their local conditions and circumstances better than the Census Bureau ever will. They can help us correct our maps and address lists, tell us where to put our forms so that people will find them, and alert us to other local problems. In contrast with the 1990 Census, we will share our address lists and other local information with these governments, and get their input—early and often.

The U.S. Postal Service will be our single most important partner. In 1990, we spent too much time and money developing address lists that the Post Office already had assembled. This time, we'll use the Post Office list and avoid the costs of duplication.

We will also form partnerships through privatization. The Census can't be "world class" in every stage of a process that we manage once every ten years. We need to outsource some aspects to organizations that are expert every day. Some examples are:

- Facilities Management: use data processing companies to manage the facilities where forms are translated into digital files.
- Advertising and Promotion: use private companies to manage our efforts to promote the Census more visibly and effectively.
- Human Resources: use private "temporary" and "manpower" firms to hire and train three hundred thousand-plus temporary workers.

STRATEGY TWO: KEEP IT SIMPLE

The simpler and easier the decennial is for people to respond to and understand, the more accurate and less costly it will be. For example:

We are working on user-friendly forms. In 1990, the forms were designed for computer processing, not people. Private designers are working with us to implement

new, "user-friendly" designs that respect the respondent and help people understand why they're being asked for information.

Multiple contacts will improve response rates. The direct marketing industry knows that repeated reminders pay big dividends. Census 2000 will first contact each address with a letter that alerts the recipient to the census and its benefits. A few days later, a questionnaire will arrive. It will be followed by a post card thanking those who have participated and encouraging others to do so. Finally, most addresses that have not responded will receive another questionnaire with a final message encouraging them to respond.

There will also be more ways to respond. In 1990, many people didn't find a census form in their mail box. In 2000, census forms will find you—at civic or community centers, the post office, and other public places. And we'll have a well-publicized toll-free number and, hopefully, Internet address that you can use if that's more convenient.

#### STRATEGY THREE: USE TECHNOLOGY INTELLIGENTLY

In 2000, the decennial census will truly enter the Information Age:

Digital "capture" of forms will improve both accuracy and speed. The 1990 Census was microfilmed and keypunched. In 2000, we will scan the forms directly into computers that use "optical character recognition"—software that reads handwriting—to go directly from completed forms to computer files ready for tabulation. This eliminates coding errors and saves money.

"Matching" software will help us spot duplications. For example, if a husband returns a form in the mail while a wife fills one out over the phone at work, our software will be able to determine that both forms come from the same household—through name and address checks and the use of other information on the form.

#### STRATEGY FOUR: USE STATISTICAL METHODS

Our fourth and final strategy is last because it is, in baseball terminology, the "clean-up hitter." It's what we must do after we have done everything we can do to encourage people to respond—because our job is to account for all the people, including those who don't respond, and to do it cost-effectively.

In 1990, respondents who did not return their forms by mail cost at least six times more to enumerate than those who mailed back their forms. Using field staff to find the most reluctant respondents raised the cost as much as eighteen times. Even then, census takers were forced to resort to interviewing neighbors, or other "last resort" measures when the respondent could not be found. The question is not whether to supplement field interviews with estimation, but how to do it cost-effectively and accurately.

As I have described, we will make an unprecedented attempt, involving numerous stages, to contact everyone living in the United States in Census 2000. Then we will go to administrative records, if we can resolve the many concerns people have about them, to find as many nonrespondents as possible before we begin the costly personal interviews. We plan to use the following national sets of records: IRS, Social Security, Medicare, Food Stamps, and HUD records on tenants. We are also testing the use of tribal rolls for American Indian reservations.

After we add in as many households as we can using administrative records, we will telephone as many of the remaining nonrespondents as we can get telephone numbers for. Only then will we begin the costly personal visits.

Of course all these activities will cost time and money. So our plan calls for us to continue personal visits until we obtain responses from at least 90 percent of addresses in each county—or, we are now exploring, each census tract—and then draw a sample of the remaining addresses. We will then visit the housing units in this sample and use the information we get from them to complete the followup operation.

As a last step, to check the quality of our work, we will take a second sample of about 750,000 households. We will want to make sure that some people weren't left off the questionnaire, or were not counted because they lacked a clear connection with a specific address: like migrant workers, college students, or snow birds. So to get even closer to 100 percent of the population, we must draw this large sample and focus our resources on doing the best possible enumeration of this sample.

We will then combine the results from the quality control procedure with the results from the mail-in, from administrative records, from telephone interviews, and from other personal visits—producing a "one-number census" and eliminating the need for subsequent "adjustment" of the decennial count. With all of these procedures in place, we will have a census that accounts for all of the population, not

just those who returned our form or were home when we tried to visit them, fulfilling our Constitutional mandate to enumerate the population.

To sum up, the Information Age and its tools offer us the possibility of meeting the goals we share with the Congress—a census that is both less costly and more accurate.

Mr. Chairman, I thank you for the opportunity to testify today, and I would be happy to answer any questions.

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## THE 2000 DECENNIAL CENSUS PLAN

"Faster, less costly, and more accurate."

From apportioning the Congress to providing the data used by communities, businesses, and Americans everywhere, the decennial census is the cornerstone of our knowledge about our Nation. The plan for Census 2000 is an outgrowth of widespread dissatisfaction with the 1990 census — which cost too much and accomplished too little.

### Objectives

*The overarching goal of Census 2000 is to be faster, less costly, and more accurate. But Census 2000 must be widely understood and supported if it is to be credible and if it is to improve. The following objectives, therefore, are fundamental to our efforts:*

- To make every effort — from simpler, user-friendly forms design to the design of field operations — to count every household.
- To implement an open process that diverse groups and interests can understand and support.
- To eliminate the "differential undercount" of racial and ethnic groups.
- To produce a "one number census" that is right the first time and that uses as few Americans rather than dividing us as litigants.

### Strategies

*Our plan for Census 2000 is built around four fundamental strategies for change.*

- Strategy One: Build Partnership at Every Stage of the Process

The Census Bureau can't do everything alone. We need to find partners to help us accomplish our objectives. We need to think in terms of every activity being done by a "best in class" provider. This means:

- Partnership with state, local, and tribal governments and community groups. These groups know their local conditions and circumstances better than the Census Bureau ever will. They can help us correct our maps and address lists, tell us where to put our forms so that people will find them, and alert us to other local problems. In contrast with past decennial censuses, we will share our address lists and other local information with these governments, and get their input, early and often.

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- *Partnership with the U.S. Postal Service.* The Census Bureau, in the past has spent too much time and money developing address lists that the Postal Service already has assembled. This time, we'll use the Post Office service list and avoid the costs of duplication.
- *Partnership through privatization.* The Census Bureau can't be "world class" in every stage of a process that we manage once every ten years. We need to outsource some aspects of the process. Some examples are:
  - **Facilities Management:** Use data processing companies to manage the facilities where forms are translated into digital files.
  - **Advertising and Promotion:** Use private companies to manage our efforts to promote Census 2000 more visibly and effectively.
  - **Human Resources:** Use private "temporary" firms to hire and train three hundred thousand-plus temporary workers.
- **Strategy Two: Keep It Simple**

The simpler and easier the decennial census is, the more accurate and less expensive it will be. For example:

- *User-friendly forms.* More powerful computers will allow us to use forms that are easier to read and fill out. Moreover, in a world in which everybody is deluged with "junk mail," we must make the Census 2000 form easy to read, pleasing to look at, and simple to fill out. Private designers are already working with us to implement new, "user-friendly" forms that respect the respondent and that allow people to understand why they're being asked for information.
- *Multiple contacts.* The direct marketing industry has learned that repeated contacts and reminders pay big dividends. So for Census 2000, the first contact with each housing unit will be a letter that alerts the recipient to the census and its benefits. A few days later, the census form will arrive, followed in a few days by a post card thanking those who have participated and encouraging all others to do so. Finally, we'll send another user-friendly questionnaire to most addresses we haven't heard from, with a final message encouraging people to respond.
- *More ways to respond.* In 1990, you had to find your form in the mail. In Census 2000, the form will find you — we'll put our forms at stores and malls, in civic or community centers, in schools, and other places where people go. And we'll have a well-publicized 800-number and Internet address you can use if that's more convenient.

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- Strategy Three: Use Technology Intelligently

In 2000, the decennial census will finally enter the Information Age.

- *Digital "capture" of forms.* The 1990 census was microfilmed and keypunched. In Census 2000, we will scan the forms directly into computers that use "optical character recognition" — software that reads handwriting — to go directly from completed forms to computer files ready for tabulation.
- *"Matching" software.* Sophisticated software will allow us to spot duplicates — for example, a husband returns a form in the mail while a wife fills one out over the phone at work. This ability will allow us to let the form find you — rather than making you find the form.
- *"Point and click" data tabulation.* People who want data will be able to get answers instantly from the Census 2000 data set. "Point and click" computing will allow them to pick the specific information they want instead of thumbing through thick books that may or may not have what they're looking for.

- Strategy Four: Use Statistical Methods

Sampling and statistical estimation are already an integral part of every Census Bureau process: The "long form," once received by every household, is now a one-in-six sample. And in every past decennial census, field enumerators who couldn't find a household commonly used nonscientific estimation techniques, such as interviewing neighbors or taking the average of neighboring houses, to fill in the answers to some questions. The question isn't whether or not to supplement field interviews with estimation — we already do that — the question is how to do so cheaply, scientifically, and accurately. Statisticians agree that incorporating widely accepted scientific statistical methods into Census 2000 will produce a better census at less cost.

Respondents who need to be reminded to complete mail-in census forms cost six times those who do not. Using field staff to find missing respondents raises the cost to as much as eighteen times those of people who respond by mail. And they still often end up guessing the answer if the respondent can't be found.

- Thus, after reaching a target of 90 percent response in each and every census district, we will draw a one-in-ten sample of nonrespondents and use it as a basis for completing the count. This will ensure that Census 2000 is built around a solid core of field results, while reducing the cost and improving the accuracy of the data on the final increment of the population.

- We'll also take a sample of the population — about one-half percent of the total population — and work them hard to get accurate results, then use them as a basis for checking all our results: The results from the mail-in, from the personal visits to housing units, and the visits to the sample of unresponsive housing units. This quality check procedure will lead to a "one-number census" and eliminate the need for subsequent "adjustment" of the decennial count.

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We are on solid Constitutional grounds. Our proposal will withstand all legal challenges. But we are hesitant to sample a larger share of the population because it changes the political and social nature of the census. Guaranteeing that we will obtain a response from our target of 90 percent of the residents in every census district, using improved traditional census-taking methods, will preserve the traditional character of Census 2000.

#### Alternative Sampling Methodologies

All methodologies considered for Census 2000 assume the Census Bureau will continue its long tradition of making an energetic attempt to count every resident of the United States and its Island Territories on Census Day, as well as the military and civilian employees of the Federal Government stationed overseas and their dependents, as was done in the 1990 census. In addition, all methodologies listed (except "A9. Repeat 1990 in 2000" and "The 1990 Census") also assume the Census Bureau will have used the following improved traditional activities, consistent with the four core strategies.

#### Partnerships

- Will have a complete and correct address list developed in partnership with the U.S. Postal Service and with state, local, and tribal governments.
- Will use an integrated marketing strategy (including paid advertising and a grassroots outreach program);
- Will benefit from the use of "administrative records" gathered from partners in other Federal agencies, plus partners in state, local, and tribal governments, to provide answers for some nonresponding addresses and to fill in missing answers on some returned forms;

#### Simplicity

- Will use one of the new, easy to answer forms with the successfully tested message: "Your response is required by law";
- Will include a comprehensive set of questions (the "long" form) that will be asked at one-in-six households;
- Will have Spanish language forms delivered to areas with large numbers of Spanish-speaking residents;
- Will use the successfully tested "multiple mail contacts" strategy (delivery to every address of an "advance notice" letter informing the residents of the benefits of participating and encouraging response, an initial user-friendly form, a "thank you/reminder" post card, and a replacement user-friendly form to most nonresponding addresses);

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#### Technology

- Will offer several alternative reporting opportunities, including Be Counted forms at many convenient locations and in multiple languages, toll-free telephone assistance and reporting, and potentially, Internet reporting.

#### Methods

- Will include a quality check survey to measure completeness and duplication — this will determine where corrections are needed;
- Will include visits by temporary staff to some nonresponding addresses (all nonresponding addresses in the case of methodologies "A8, Repeat 1990 with Selected Improvements," "A9, Repeat 1990 in 2000," and "The 1990 Census").

The remainder of this document explores various alternative methodologies for selecting the sample households temporary staff must visit to "finish the job" in Census 2000 — the strategy of visiting a sample of nonrespondents. It is the magnitude of the "Visits Required" workload that becomes the primary variable between the alternative methodologies listed. The number of visits ultimately required will be dependent on the success of the improved traditional processes, especially our success in encouraging public cooperation.

As noted above, "The Plan for Census 2000" assumes the sample visits to unresponsive households will begin only after the improved traditional processes have found our target of 90 percent of the residents in each census district. It is critical to understand that the Census Bureau would not use any of the alternative methodologies described in the following table (and explained in the footnotes following the table) until it had used all the improved traditional processes described above first.

It also is critical to note that "The Plan for Census 2000" will cost \$3.9 billion, and in return provide a census that virtually eliminates both the total undercount and the differentials in the totals for all components of the population, with a relative accuracy of 1.87 percent even for very small areas, such as many cities, townships, and census tracts. By comparison, alternative "A9, Repeating 1990 in 2000" will cost at least \$5 billion, will require hiring more than twice as many people as "The Plan," and will still miss at least 5 million people, even with the best efforts on the part of everyone involved.

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ALTERNATIVE METHODOLOGIES FOR CENSUS 2000  
COSTS, WORKLOADS, ACCURACIES, AND STAFFING REQUIREMENTS

Total is 118.5 Million Addresses

STAFFING REQUIREMENT

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METHODOLOGY	ESTIMATED COST (billions) <sup>1</sup>	Est. No. of Total Resp. Before Visits (Millions) <sup>2</sup>	Est. No. of Visits Required (Millions) <sup>1</sup>	Final % of Addresses w/ Responses <sup>4</sup>	Measured (Est. No. of People Missed) <sup>5</sup>	Measured Uncertain (Est. Percent Missed) <sup>6</sup>	Est. No. of Last Resort Responses <sup>7</sup>	Suitland Staff Required (Per Year) <sup>8</sup>	Temp. Staff Required (At Peak, for Visits/Proc.) <sup>9</sup>	Temp. Staff Req. Training (To Ensure Peak Level) <sup>10</sup>	Temp. Staff Recruiting Req'd (To Ensure Peak Level) <sup>11</sup>
The Plan for Census 2000 <sup>12</sup> (Truncate at 90% response in each county; sample balance)	\$ 3.9 Census \$ 4.5 USPS \$ 4.1 Temps	87.2	35.8	91.0 %	*	1.86	597,500	820	285,000	580,000	5,100,000
A1. Truncate at 90% <sup>13</sup> (in each census tract; sample the balance)	\$ 4.0 Census \$ 4.7 USPS \$ 4.2 Temps	87.2	35.8	91.0%	*	1.78	597,500	820	300,000	640,000	5,500,000
A2. Truncate at 70% <sup>14</sup> (in each county; sample the balance)	\$ 3.2 Census \$ 3.6 USPS \$ 3.3 Temps	87.2	12.5	79.6 %	*	2.05	987,500	820	190,000	365,000	4,200,000
A3. Truncate at 70% <sup>15</sup> (in each census tract; hold Accuracy equal to The Plan)	\$ 3.3 Census \$ 3.6 USPS \$ 3.4 Temps	87.2	13.2	79.9%	*	1.86	987,500	820	195,000	370,000	4,250,000
A4. Truncate after Second Mail-Back (Hold Workload equal to A2)	\$ 3.3 Census \$ 3.5 USPS \$ 3.4 Temps	87.2	12.5	79.6 %	*	1.94	987,500	820	190,000	365,000	4,200,000
A5. Truncate after Second Mail-Back (Hold Accuracy equal to The Plan)	\$ 3.3 Census \$ 3.6 USPS \$ 3.4 Temps	87.2	13.2	79.9 %	*	1.86	987,500	820	195,000	370,000	4,250,000
A6. Knock on Every Non-Response Door Once <sup>16</sup> (After second mail-back; assume 60% completion)	\$ 4.2 Census \$ 4.9 USPS \$ 4.3 Temps	87.2	37.0	91.6 %	*	1.85	987,500	820	335,000	735,000	6,125,000
A7. Knock on Every Non-Response Door Once <sup>17</sup> (After second mail-back; assume 40% completion)	\$ 4.1 Census \$ 4.8 USPS \$ 4.2 Temps	87.2	39.8	87.5 %	*	1.85	987,500	820	315,000	690,000	5,925,000
A8. Repeat 1990 with <sup>18</sup> Selected Improvements (No nonresponse sampling; do quality check)	\$ 4.4 Census \$ 5.2 USPS \$ 4.5 Temps	87.2	54.3	100 %	*	0.75	5,925,000	820	365,000	815,000	6,575,000
A9. Repeat 1990 in 2000 <sup>19</sup> (No improvements; no sampling)	\$ 5.0 Census	81.7	87.6	100 %	5,000,000	N/A	5,925,000	875	700,000	1,590,000	12,515,000
The 1990 Census <sup>20</sup>	\$ 2.6 Census	65.0	64.2	100 %	4,000,000	N/A	3,750,000	875	300,000	550,000	3,900,000

\* Number of people missed is too small to measure.

Column deleted per comments at March 18, 1996 meeting.

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- 1/ The "Estimated Cost" listed for each methodology (except "The 1990 Census") is based on the cumulative total of "current year" dollars for each year in the cycle for Census 2000. ("The 1990 Census" total shows the cumulative total of "then current year" dollars for each year in the 1990 census cycle.) The estimates for years from 1997 through 2003 apply the Congressional Budget Office implicit price deflators to arrive at the total. The top line in each "trio" shows the cost if the Census Bureau recruits/hires/retains temporary staff; the second line shows the cost using U. S. Postal Service (USPS) letter carriers to perform the temporary data collection work; the third line shows the cost for using staff from "temporary" services to perform the data collection work.
- 2/ All methodologies listed (except "A9. Repeat 1990 in 2000" and "The 1990 Census") assume a "Total Responses, Before Visits" of 73.5 percent (yielding 87.2 million completed responses, on a nationwide basis). This rate includes a "mail-back response" of 66.9 percent (on a nationwide basis) using user-friendly forms, multiple mail contacts, and the "mandatory response" message. It also includes completed Be Counted forms, completed telephone responses (and Internet responses, if offered), vacant housing units identified by the U.S. Postal Service, and "indirect" responses gleaned from processing administrative records. (The figure for "The 1990 Census" shows the actual number of mail-back responses — no other response option was provided in the 1990 census — and the figure for "A9. Repeat 1990 in 2000" assumes a continued decline in public cooperation and no use of the improved methods or forms developed for Census 2000.)
- 3/ The "Est. No. of Visits Required" figure listed for each methodology is the total number of visits the temporary field staff must make to gather responses from initially nonresponsive households. Many households require multiple visits to gather a completed interview.
- 4/ The "Final % of Addresses w/Responses" figure listed for each methodology (except "The 1990 Census") is the number of "Mailed-Back Responses" plus the number of responses gathered from "Visits Required" addresses, divided by the "Total Addresses." ("The 1990 Census" figure shows the actual workload at that time.)
- 5/ For all new methodologies listed (that is, excluding "The 1990 Census" and "A9. Repeat 1990 in 2000"), the number of people missed will be so small as to not be measurable, and all components of the population will be included at the same rate; this is the benefit of the "one number census" strategy planned for Census 2000. Both "1990 census" methodologies that do not include the new statistical techniques needed to provide an accurate population figure will continue to miss a significant number of individuals, and will continue to miss various components of the population at differential rates.
- 6/ For all new methodologies listed (that is, excluding "The 1990 Census" and "A9. Repeat 1990 in 2000"), the figures show the level of uncertainty associated with the expected Census 2000 total for areas with a population of 4,000 such as many smaller cities and most census tracts. The percentages shown translate to a relative accuracy of plus or minus 70 to 85 people for an area with that population. These "pluses" and "minuses" mostly "balance out" when aggregated to more populous areas, such as many cities and counties and all states and congressional districts. Both "1990 census" methodologies that do not include the new statistical techniques needed to provide a complete enumeration do not

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include activities that permit measuring the uncertainty associated with the official totals; however, the General Accounting Office documented 14.1 million erroneous enumerations in the 1990 census and several evaluation studies documented various types of bias in the official totals.

- 7/ ~~The use of Last Resort Interviews~~ are interviews that take place during the closing stages of the decennial census operation. They are designed to obtain interviews for households that do not mail back a census form or respond using any other method provided. After making a reasonable attempt to contact such households, the Census Bureau implements unscientific "last resort" procedures (for example, asking a neighbor) to obtain minimal information. The data that results from these interviews is of demonstrably lower quality than the data that results from interviews that are completed more easily. The steadily declining level of public cooperation led to an estimate of 5 percent of all households (nationwide) requiring last resort procedures in Census 2000. (In "The 1990 Census," this number was 3.5 percent, 3,250,000 households). In addition, the Research Panel of the National Academy of Sciences concluded, "... nonsampling errors . . . are already substantial for the census with the poorest quality response -- no one should assume that the data produced by the present (1990) system are highly accurate . . . ."
- 8/ The "Suitland-Staff Required" number shown for each methodology (except "The 1990 Census") is an average of the number of individuals estimated to be in Suitland working on Census 2000 in each year of the Census 2010 cycle; the actual number will be somewhat lower in the "middle" years of each cycle and somewhat higher in the years near the end of the cycle. (The number shown for "The 1990 Census" is the average number of those individuals, per year, who actually worked on the 1990 census.)
- 9/ The "Temporary Staff Required" number shown for each methodology (except "The 1990 Census") is the estimated number of individuals who must be working a full shift on any given day during the peak weeks when temporary staff in local census offices must make their visits to nonresponding addresses, and when temporary staff in the data capture centers is in process all completed forms. (The number shown for "The 1990 Census" is the average number of individuals who actually worked during the comparable time period.) The number for Census 2000 excludes individuals who are on the rolls, but ill or who cannot work for some other reason on a specific day, and ignores the high turnover in staff characteristic of decennial census operations.
- 10/ To achieve the number of individuals required to meet peak staffing needs, the Census Bureau will need to hire and train the number of individuals shown for each methodology in the "Temp. Staff Req. Training" column. (The number shown for "The 1990 Census" methodology is the actual number of individuals hired and trained for those operations.) This process provides enough staff to fill-in for individuals who are ill or who cannot work for some other reason on a given day, to replace those who quit or who are removed because they are nonproductive, and so forth.
- 11/ The number shown for each methodology (except "The 1990 Census") is the estimated number of individuals the Census Bureau will need to recruit and test to fill the temporary jobs needed to complete Census 2000. (For "The 1990 Census" the number shown is the actual number recruited.) In the 1990 census, the Census Bureau had to recruit five people to find someone willing (and capable) to take each vacant position. Experience in the 1995 Census Test and other special censuses conducted this decade suggest that the Census Bureau likely will need to recruit eight people to find someone willing (and capable) to take each vacant position. A very significant concern for Census 2000 is that the supply of capable candidates who are not already employed, or who are employed and willing to take Census 2000 jobs on a part-time, evening and weekend

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basis, will not be adequate to meet the need. A related concern is that each part-time employee requires the same amount of training and personnel records processing as a full-time employee, thus effectively doubling the cost to recruit, test, and train enough staff.

12/ **The Plan for Census 2000:** Truncate at 90 percent response in each county — Have temporary staff make visits to nonresponding addresses until responses are checked in from our target of 90 percent of the addresses in each county. At that point, cease the full nonresponse followup operation and restrict additional visits to a sample of one address in each ten remaining nonresponding addresses.

- Truncation level based on number of addresses in each county from which the Census Bureau has received a complete form or interview, for which it has compiled an "indirect" response using administrative records sources, or that has been identified as a vacant unit.
- Sampling of the last 10 percent of nonresponding addresses in each county at a rate of one address in ten.
- Assumption: Minimal amount of sampling yields greater acceptance among constituents.

13/ **A1:** Truncate at 90 percent response in each census tract — Have temporary staff make visits to nonresponding addresses until responses are checked in from a target of 90 percent of the addresses in each census tract. At that point, cease the full nonresponse followup operation and restrict additional visits to a sample of one address in each ten remaining nonresponding addresses.

- Truncation level based on number of addresses in each census tract from which the Census Bureau has received a completed form or interview, for which it has compiled an "indirect" response using administrative records sources, or that has been identified as a vacant unit.
- Sampling of the last 10 percent of nonresponding addresses in each census tract at a rate of one address in ten.
- Assumption: Minimal amount of sampling and measurement at the census tract level yields even greater acceptance among constituents, but raises the cost by at least \$100 million.

14/ **A2:** Truncate at 70 percent response in each county — Have temporary staff make visits to nonresponding addresses until responses are checked in from a target of 70 percent of the addresses in each county. At that point, cease the full nonresponse followup operation and restrict additional visits to a sample of one address in each six remaining nonresponding addresses.

- Truncation level based on number of addresses in each county from which the Census Bureau has received a completed form or interview, for which it has compiled an "indirect" response using administrative records sources, or that has been identified as a vacant unit.
- Sampling of the last 30 percent of nonresponding addresses in each county at a rate of one address in six.

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- Assumption: Ceasing the full nonresponse followup operation sooner, and visiting only a sample of the larger number of still nonresponding addresses, could lead to more public skepticism (less public acceptance) about the accuracy of Census 2000, but also will greatly reduce cost.

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A3: Truncate at 70 percent response in each census tract — Have temporary staff make visits to nonresponding addresses until responses are checked in from a target of 70 percent of the addresses in each census tract. At that point, cease the full nonresponse followup operation and restrict additional visits to a sample of remaining nonresponding addresses.

- Truncation level based on number of addresses in each census tract from which the Census Bureau has received a completed form or interview, for which it has compiled an "indirect" response using administrative records sources, or that has been identified as a vacant unit.
- Sampling of the last 30 percent of nonresponding addresses in each census tract, at a rate of one address in six.

- Assumption: Ceasing the full nonresponse followup operation at the 70 percent level (as in A2) and controlling the visits to still nonresponding addresses census tract by census tract, likely will lead to greater public confidence than in A2, will improve the accuracy of the results to the level of "The Plan," and will save nearly as much cost as A2.

16/

A4: Truncate after Second Mail-Back; hold Workload equal to A2 — Have temporary staff make visits to a sample of all initially nonresponding addresses. (This is similar to the methodology used in the 1995 Census Test.)

- Truncation begins immediately when the Second Mail-Back rate dwindles to a level at which few additional responses are likely; about six weeks after mailing the "advance notice" letter.
- Variable sampling rates based on mail response rate, measured at the census tract level, with an average rate of one address in each six remaining nonresponsive addresses; this strategy equalizes accuracy at the census tract level.

- The sample size is controlled to provide a Workload comparable to the "Truncated at 70 Percent" methodology in A2. This approach simplifies field operations, achieves most benefits of reduced costs, and achieves greater accuracy than methodology A2, but provides less accuracy than "The Plan."

17/

A5: Truncate after Second Mail-Back; hold Accuracy equal to "The Plan" — Have temporary staff make visits to a sample of all initially nonresponding addresses. (This is similar to the methodology used in the 1995 Census Test.)

- Truncation begins immediately when the Second Mail-Back rate dwindles to a level at which few additional responses are likely; about six weeks after the "advance notice" letter.

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- Variable sampling rates based on the mail response rate, measured at the census tract level, with an average rate of one address in each six remaining nonresponsive addresses; this strategy equalizes accuracy at the census tract level.
- The sample size is controlled to provide an Accuracy level comparable to "The Plan," benefits from the operational simplicity of methodology A4, and achieves most benefits of the substantial cost reduction in methodology A1.

18/ A6: Knock on every Nonresponse Door Once, after second mail-back — Assume visits by temporary staff result in completed responses at 60 percent of the previously nonresponding addresses.

- After the mail-out/mail-back phase of Census 2000, enumerators will visit every nonresponding address one time, before ceasing the full nonresponse followup operation and limiting additional visits to a sample of an average of one in each six of the remaining nonresponsive addresses. With a goal of holding accuracy equal to "The Plan," this would mean visits to about 2.1 million additional sample addresses.
- Workload and travel requirements increase beyond those in methodologies A1-45
- More completed visits means that temporary staff spends longer at each address (completing the interview), so cost increases compared to methodology A7.
- Assumption: Increases public confidence that the Census Bureau has tried to achieve a complete Census 2000 count by making one visit to each nonresponding address, in addition to the previous multiple mail contacts and other opportunities to respond, before selecting the sample addresses to visit to finish the job.

19/ A7: Knock on every Nonresponse Door Once, after second mail-back — Assume visits by temporary staff will result in completed responses at 40 percent of the previously nonresponding addresses.

- After the mail-out/mail-back phase of Census 2000, enumerators will visit every nonresponding address one time, before ceasing the full nonresponse followup operation and limiting additional visits to a sample of an average of one in each six of the remaining nonresponsive addresses. With a goal of holding accuracy equal to "The Plan," this would mean visits to about 3.1 million additional sample addresses.
- Workload and travel requirements increase beyond those in methodologies A1-45
- Assumption: Increases public confidence that the Census Bureau has tried to achieve a complete Census 2000 count by making one visit to each nonresponding address, in addition to the previous multiple mail contacts and other opportunities to respond, before selecting the sample addresses to visit to finish the job.

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- 20/ A8: Repeat 1990 with Selected Improvements — Use all new methods planned for Census 2000 **except** those involving sampling of nonresponding addresses; that is, make visits to all nonresponding addresses until a completed response is obtained from each (or the "last resort" procedure must be used).
- This design would attempt a 100 percent followup of addresses that do not return a form in the mail-out/mail-back phase of Census 2000 (or that do not provide a telephone/Internet interview, a Be Counted form, or for which indirect response cannot be determined using administrative records sources), increasing cost and workload compared to "The Plan."
  - Assumes use of new user-friendly forms, multiple mail contacts, an integrated marketing campaign, availability of Be Counted forms in multiple languages and at many locations, plus acceptance of interviews over the telephone and the Internet.
  - Assumes use of the quality check survey to produce a "one number census" that is right the first time.
- 21/ A9: Repeat 1990 in 2000 — Use **no** new methods planned for Census 2000 and **no** sampling; that is, make visits to all nonresponding addresses until a completed response is obtained from each (or the "last resort" procedure must be used) and **do not** use the results of the quality check survey to correct any deficiencies identified.
- This is the methodology comparable to repeating all 1990 census processes, with workloads updated to include the same inflation assumptions as all other Census 2000 estimates, and the same "harder to find" labor force assumptions as all other Census 2000 estimates, based on the hiring experiences in the 1995 Census Test and the recent special censuses in Arizona.
  - Because of the greater difficulty experienced in hiring enough qualified staff for these censuses, this estimate updates the earlier \$4.8 billion estimate often cited by the GAO and others to repeat the 1990 census methods in 2000.
- 22/ **None** of the values appearing for this methodology are directly comparable to the values associated with the other methodologies shown in this table because they use 1990 census workloads, 1990 census mail-back response rates and 1990 dollars. Methodology A9 provides information comparable to the other methodologies for Census 2000 in terms of workload, response rates, and cost assumptions.

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Mr. CLINGER. Thank you very much, Dr. Riche. And I am sure I and my colleagues do have a number of questions with regard to what is being proposed here. I think we will now proceed under the 5-minute rule, if I can figure out how to work this machine; and I will lead off.

In an April 5, 1996 document entitled "The Plan for Census 2000," you stated that your proposal for sampling will, and I am quoting, "withstand all legal challenges." As I indicated, I had some concerns about the legality question.

Mr. EHRLICH. Yes.

Mr. CLINGER. And you went on to say: "But we are hesitant to sample a larger share of the population because it changes the political and social nature of the decennial census." Doesn't sampling any percentage of the population change the political and social nature of the decennial census?

Mr. EHRLICH. I understand your question, but it is too late. There is already statistical enhancement. There are already non-enumeration methods in the censuses we have had in the past. For example, in the 1990 census it is widely understood that we did not count 4-odd-million people, perhaps a little more than 4 million people. What is less widely understood is the interviews with 10 million people were fabricated. We interviewed the neighbor, or we took the average of the house on the left or the house on the right. Those are estimation methods as well, and they accounted for around 3½, 4 percent of the population over and above what we call the "undercount." So we have already introduced in the past so-called "last resort techniques" that are less than a complete enumeration.

With regard to the other aspect of your question, as to the problem we have with the alternative referred to as "70-percent truncation," why we did not stop the field work earlier at a lower level of participation and have more sampling. Yes, we referred to the political and social character of the decennial. Were we to truncate, to use the word the statisticians and demographers use, our field work at 70 percent in every county, tract, or wherever, and then sample the remaining 30 percent of the population, we would have face-to-face contacts with less than 3 out of 4 American residents.

I do not know, very frankly, if this Congress would be comfortable, regardless of the level of statistical accuracy, with a census that makes contact with less than 3 out of 4 Americans for the purposes of apportionment and the other various important purposes to which the census is put.

In 1995, we made direct contact with around 94, 95 percent of Americans and undercounted around 1½, 2 percent of them when it was all over. In the plan that we put forward for 2000, we will have direct contact with 91 percent and have an orderly, scientific, and credible procedure for taking us to 100 percent of the total.

Mr. CLINGER. When people learn, and they will, obviously, if this is adopted, that if they do not respond, there is going to be a statistical sampling done which will make it all well again, won't that be a deterrent? Wouldn't that make their willingness to respond or their interest in responding much less since they figure, well, it is not necessary because they are going to do statistical sampling, so I do not have to be in the basket.

Mr. EHRLICH. That is a concern that we share and that we address. I believe that when you get right down to it, the fact that we are taking steps to make the census more fair and more inclusive will increase the confidence and the trust and faith that Americans have in the census. Right now, they see it as remote; they see it as arbitrary; they understand that it is, in essence, prejudicial when it gets to its final result. I think that the census—

Mr. CLINGER. So that is why you think that there has been a declining response rate—

Mr. EHRLICH. I think that is one of the several reasons, and I think that we need to restore our credibility, particularly in those communities that have the lowest response rates, that we need to establish that we are not a front, that we are not up to nefarious purposes, and that it is in the interest of those communities to get an accurate count.

As I said before, I also believe that the reasons why we have seen a secular decline in the response rate over the last generation has to do with larger issues about our society and democracy—its atomization, the balkanizing of media markets, the balkanizing, in some respects, of our culture; the fact that there is less shared public experience in our social thoroughfares than there were when our parents or grandparents were talking the census. Those are really the driving forces behind that decline in the primary participation rate, and I do not think the issue of whether or not there is statistical enhancement of field data at the final stages of work are going to be a major factor in determining that rate in 2000.

Mr. CLINGER. You are planning, as you have indicated, a 10-percent sample of nonrespondents to complete the count, except, as I understand it, you will not use sampling techniques on American Indian reservations, in Alaskan native villages, in the Virgin Islands, or in the Pacific Island territories. Why did you exclude those, or why did you grant a waiver of those, and won't this special treatment be perceived as unfair by other populations? Don't you create kind of a discriminatory impact here that could affect the viability of what you are trying to do?

Ms. RICHE. Well, I think that those are populations that have special problems. A sampling would really be unfair to them. They are quite different from the rest of the country.

Mr. CLINGER. Which is why you are going to do 100 percent?

Ms. RICHE. That is right.

Mr. CLINGER. And you think you can do 100 percent in those instances?

Ms. RICHE. Well, given that we will also be using a sampling in our quality-control check as well, because as I think Dr. Ehrlich has pointed out, we have not gotten to 100 percent ever. There are just people, as he says, who are working the late shift, who are not home, who move around; so there will be sampling in that sense to improve that count as well.

Mr. CLINGER. But I am still not quite sure why you have eliminated these from even an attempt at sampling.

Ms. RICHE. The address lists in those areas, the living arrangements, the way the housing units are, is different enough from the way—the living patterns—let me put it that way—are different enough from the patterns throughout the Nation that it would be

very difficult to do a sample that would have the same effect for those groups, those geographic groups than it would for the rest of the country.

Mr. EHRLICH. For your convenience, sampling is based on a frame of addresses. It is an address-based system. Consider, for example, homeless populations who lack a conventional address. There is no frame within which to sample them. You have to devise an alternative strategy. You need to go, for example, to service providers and to other techniques to identify them individually because you do not have a basis from which to draw a sample. The same goes to the Native American populations that you raise, as well as the issue that Mr. Peterson raised, the fact that many of those populations move on and off of reservations and into conventional addresses and make sampling inappropriate.

Mr. CLINGER. My time has expired. I now recognize the gentlelady from Florida, Mrs. Meek, for 5 minutes.

Mrs. MEEK. Thank you, Mr. Chairman. My first concern to Drs. Ehrlich and Riche has to do with my major concern. Of course, I do want the census taken accurately in every group. I have listened intently as you described your strategy and what you will do. My bottom-line question is: To what extent will this new methodology which you are going to use improve the accuracy of the undercount?

Mr. EHRLICH. I think it is going to improve it dramatically, and let me tell you why.

Mrs. MEEK. Will you tell me to what extent?

Mr. EHRLICH. I think that it will give us an expected—the entire program will give us an expected undercount of zero. The program is designed to solve the problem of the undercount. We have focused almost solely on the issue of sampling, particularly for non-response. Sampling for nonresponse certainly provides us some important insurance with regard to the undercount because if we have what I call a “participation meltdown,” if people are simply so alienated from the Government and from the census that our participation rates crumble, then it provides us with a technique to get some competent field data, statistically accurate field data put together by a date certain and given whatever resources available to us are. But we have to look to the entire strategy that Dr. Riche described to understand how we are going to address the differential undercount.

The strategy is based on acting early and acting decisively to build partnerships with undercounted communities, with State and local governments to exchange address lists with them, to understand where our citizens live, to know where to go, where to find them. The census, however competent, is a remote bureaucracy in Suitland, MD. It does not have the means to navigate the streets of each of America’s neighborhoods. We need partners to do that, and we are aggressively seeking those.

The strategy of having multiple avenues of response is very important. We cannot have a system that relies only on you finding your form. As Dr. Riche said, we need to have a system that allows the form to find you and that allows local governments, community organizations, State governments to tell us where to put forms so that people find them in the course of the social thoroughfare.

Technology also allows us to have a form that is easier to read. Dr. Riche once pointed out to me that demographers have calculated that the average education level required to understand the 1990 census form was 1 year of college. That is frightening, it is shocking, and it is antithetical to where we want to go.

We have brought in outside design consultants who work on mass-marketing campaigns to make our census form look less like a college application or the SAT and more like USA Today or some other kind of a promotion. I think those are all parts of that strategy.

With that done, exchanging lists with State and local governments, working with community groups, finding ourselves ways to build faith and trust and credibility in undercounted communities, we can then go to sampling not just to complete the field data and to find the people who we did not find through direct enumeration, but to adjust for any observed undercount once all the sources of error—errors in response rates, errors in addresses, errors in the way that people responded to the form—are taken into account.

Mrs. MEEK. Thank you, and I would like to just begin my questioning by sort of leading directly into the way you go into enumerating the methodology you would use to get these outreach groups you are talking about.

Do you still agree, Drs. Ehrlich and Riche, with what the Bureau said in April 1994 about the need to find ways to hire as census enumerators persons who are indigenous—I have heard you mention that this morning, so if you can wait a few minutes, I will finish that question—to the neighborhoods being enumerated. If you do, as you have demonstrated by your testimony, do you disagree that in 1994 you felt that it would be easier for the Bureau to recruit low-income persons as enumerators if the income earned would not jeopardize Federal benefits like food stamps, AFDC, public housing, and Medicaid?

Ms. RICHE. Yes. I think we definitely agree with that, and I would also like to say that in anticipation of being able to do that, we are working to simplify enormously the questionnaire that the people we hire would use so we can hire a wider variety of people.

Mrs. MEEK. Well, what are you going to do about HHS's contentious debate regarding the use of these groups?

Ms. RICHE. We are asking for waivers, as we did in 1990, so that people can work for us without jeopardizing their benefits.

Mrs. MEEK. So you are going to ask for temporary waivers.

Ms. RICHE. Uh-huh.

Mrs. MEEK. Mr. Chairman, I ask unanimous consent that these two documents, the Census Bureau summary of its draft bill and the HHS comment on the draft bill, be made a part of this hearing record.

Mr. CLINGER. Without objection, so ordered.

[The information referred to follows.]

#### HIRING EXEMPTIONS

Summary: A bill to amend Title 13 of the United States Code to allow Federal civilian and military retirees; Social Security recipients; those who receive benefits under the Food Stamps program or the Aid for Families with Dependent Children program; and those who receive benefits under other Federal, State, or local pro-

grams financed in whole or in part with Federal funds; to work as temporary census employees without having their annuities, benefits, or assistance reduced.

Background: While the need for temporary decennial census workers may be reduced if follow-up operations are conducted on a sample basis as currently being tested, there would still be a need to hire about 200,000 temporary workers for the 2000 Census. In earlier censuses, there has been an available pool of women who had not entered the workforce and were willing to take temporary positions. The number of women in the workforce has changed dramatically, and this source of qualified temporary census workers is substantially reduced. This circumstance, combined with the need to hire persons indigenous to the neighborhoods being enumerated, has led Census to seek ways of attracting other qualified persons for these positions.

Action Bureau: Census.

Contact(s): Harry Scarr, Census (301) 763-5192.

NPR: No.

Draft Legislation Referred to U.Sec. for Clearance: 10/27/93.

Cleared by U.Sec. & Forwarded to AGC/L&R: 11/16/93.

Forwarded by OGC to OMB for Clearance: 4/28/94.

Comment: While agreeing with the overall objectives, both the Office of Personnel Management (OPM) and the Department of Health and Human Services (HHS) have registered strong objections to the bill. OPM questions the need for legislation and HHS questions the advisability in light of the effect it might have on other programs. This legislative proposal is currently under review within ESA for possible introduction in the 104th Congress.

12/94.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES,  
*Washington, DC, May 19, 1994.*

Note to Jeffrey Weinberg (OMB)

Subject: Commerce draft bill entitled the "Decennial Census Hiring Reform Act of 1993 (sic)"

In accordance with your request, we have reviewed the subject draft bill and have determined section 5 as drafted to be objectionable from the point of view of affected programs that we administer.

Section 5 would exempt the earnings of individuals who work in the upcoming census from being considered for purposes of determining eligibility for, or the amount of benefits under, any federal or federally-assisted program of annuities, benefits, or assistance.

Under this provision, the earnings of census workers would be exempt from consideration in implementing the social security earnings test, making substantial gainful activity (SGA) determinations for social security and supplemental security income (SSI) disability beneficiaries, and making income determinations for purposes of SSI and aid to families with dependent children (AFDC) eligibility.

We understand the intent of the provision is to encourage social security, supplemental security income, and AFDC beneficiaries to work as census takers, and we are sensitive to the fact that their successful recruitment by the Census Bureau would greatly facilitate the next decennial census.

Nevertheless, from the standpoint of cost to the social security trust funds and general fund, and fairness to other program beneficiaries, we must oppose section 5 because it favors individuals in a particular group over others.

Social security and SSI are national programs with generally uniform provisions concerning the treatment of income, regardless of the type of services performed. It would be difficult to justify as fair the exemption of the earnings of census workers from the earnings test, SGA determinations, and income determinations, when no exemption is provided for other occupations or services where workers are in short supply.

Furthermore, such exemptions would establish a precedent that could be even more costly if other groups were given equal treatment. (For example, H.R. 409, introduced by Representative Stearns (R., FL) would exempt public education teachers from the earnings test.)

We are also concerned that section 5 may be inconsistent with the welfare reform initiative now under development.

Notwithstanding our objections to section 5 of the draft bill, we are very sympathetic to the needs of the Census Bureau, and recognize the great importance of a successful decennial census in 2000. To that end, we stand ready to work with the Census Bureau to facilitate the hiring of enumerators in low-income areas. Possibili-

ties include making census enumeration a slot under our proposed work program, and conducting demonstrations under the authority of section 1115 of the Social Security Act to allow States to request waivers for short-term income (as we did in connection with the 1990 census).

SUSAN BURNETT.

Mrs. MEEK. Thank you, Mr. Chairman.

Mr. EHRLICH. Mr. Chairman, in response to concerns raised by Congresswoman Meek and other members of the committee, we have compiled our understanding of the status of waivers at the various different Federal agencies, and we would like to submit those for the record as well.

Mr. CLINGER. That will be made a part of the record as well, without objection.

Mr. EHRLICH. Thank you, sir.

[The information referred to follows:]

Decennial Administrative/Legal Exemptions: Desired Exemptions Requiring Action

Exemptive Statute	Responsible Agency	When Action is Required	Request for administrative exemption received from OPM.	04/03/96
a. Exemption of retired federal and military officers from the mandatory income/taxability offset required under 5 USC, sections 5322, 5344, and 5468	Office of Personnel Management (OPM)	Legislative action: Public Law 101-86, dated August 16, 1989 (repealed by Public Law 101-293, May 17, 1990)	Request for administrative exemption received from OPM.	04/03/96
b. Exemption to allow Public and Indian Housing program recipients to accept temporary employment (earn income) without adversely affecting program or benefit eligibility	Department of Housing and Urban Development (HUD), Public and Indian Housing	HUD granted a legislative exclusion under authority of the Secretary whereby certain income was not included in the definition of "annual income"	Follow-up letter to initial request was sent for response.	05/21/96
c. Exemption on from provisions of 38 USC related to eligibility for non-service connected benefits	Veterans' Administration (VA)	H.R. 1356 introduced; referred to Committee on Veterans' Affairs; no action was taken	Administrative exemption is not appropriate based on discussions with VA; will do follow-up later to VA to discuss legislation.	01/21/95
d. Exemption to allow Aid to Families with Dependent Children (AFDC) program recipients to accept temporary employment (earn income) without adversely affecting program or benefit eligibility	Department of Health and Human Services (HHS)	HHS granted an exemption under their demonstration project authority, effective from March 1 through April 30, 1990	Setting up initial meeting to request an exemption from HHS	
e. Exemption from provisions of 42 USC to exclude disqualifying wages from determination of Social Security benefit entitlement for Public Assistance normally considered excess earnings under the Social Security Act.	Social Security Administration (SSA)	H.R. 4014 to amend P.L. 101-86 approved on March 9, 1990 by the Committee on Post Office and Civil Service; forwarded to Committee on Ways and Means where no further action was taken	Work with SSA on obtaining recipients about the availability of census jobs.	05/14/96
f. Exemption to allow Food Stamp Program recipients to accept temporary employment (earn income) without adversely affecting program or benefit eligibility	Department of Agriculture (USDA)	USDA granted an exemption under their demonstration project authority, effective from March 1 through April 30, 1990	Setting up initial meeting to request an exemption from USDA.	
g. Exemption to allow Food Distribution Program on Indian Reservations (FDPIR) program recipients to accept temporary employment (earn income) without adversely affecting program or benefit eligibility.	Department of Agriculture (USDA)	USDA granted an exemption under their demonstration project authority, effective from March 1 through April 30, 1990	Will set up a meeting in near future.	
h. Exemption to allow (federal) recipients of General Assistance to earn income without affecting the program or benefit eligibility (25 CFR 20.21-.94)	Department of the Interior, Bureau of Indian Affairs (BIA)	BIA granted a legislative exclusion under authority of the Secretary	Will set up a meeting in near future.	
i. Exemption from provisions of Title 29 USC, Sections 205(b)(2), 205(j), and 204(f) relating to the application of the Fair Labor Standards Act (FLSA) and the definition of employment as work "performed or permitted" as the basis for entitlement to overtime payment.	Office of Personnel Management (OPM)	No action taken	After obtaining response from OPM on "f" (Federal/military consultant offset), approach them about an administrative solution	
j. Exemption from provisions of Title 5 USC, Sections 6303 and 6307 relating to eligibility for accrual of annual and sick leave (currently, replace leave accrual with extra pay)	Office of Personnel Management (OPM)	No action taken	After obtaining response from OPM on "i" (Federal/military consultant offset), approach them about an administrative solution	

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Mr. CLINGER. Mrs. Meek, are you yielding back your time?

Mrs. MEEK. I yield back the rest of my time, Mr. Chairman.

Mr. CLINGER. Thank you, gentelady. I am now pleased to recognize the gentleman from Illinois for 5 minutes.

Mr. HASTERT. I thank the chairman. I listened to your testimony, sir, and it said that, first of all, that you said the partnerships are there to correct errors in data, that there are problems with the data, that you also said that the result of this will be zero undercount. Is that correct? Did you say that, "zero undercount"?

Mr. EHRLICH. That is the goal of the program, yes.

Mr. HASTERT. "Zero undercount" means that—

Mr. EHRLICH. Complete accuracy.

Mr. HASTERT. Complete accuracy. So it is not an overcount.

Mr. EHRLICH. Absolutely.

Mr. HASTERT. You said a zero undercount is complete accuracy?

Mr. EHRLICH. Yes, a zero—

Mr. HASTERT. So there is no tolerance for anybody, if the population was 260 million and 3 people, you would not have 2 million, 602 people. How are you sure of that?

Mr. EHRLICH. Through the use of statistical methods—

Mr. HASTERT. Statistical is a best guess. Right?

Mr. EHRLICH. Well,—

Mr. HASTERT. I mean, it is not accounting. Wait a minute. Let me ask you a question.

Mr. EHRLICH. Yes. Go right ahead.

Mr. HASTERT. If you went to the bank and got \$1,000—

Mr. EHRLICH. Uh-huh.

Mr. HASTERT [continuing]. In one-dollar bills, do you just take that, put it in a pocket, and walk away, or would you count it?

Mr. EHRLICH. Well, I would first—

Mr. HASTERT. Would you count it or not?

Mr. EHRLICH. Let us say that—

Mr. HASTERT. No. I am asking you a question: Would you count it or not?

Mr. EHRLICH. I am not sure.

Mr. HASTERT. You are not sure? So you are not sure if you went to a bank and asked for \$1,000 and they gave it to you just in a big bundle, you are not sure if you would count it or not. Is that what you said? You would take that count on faith? You would take that count on faith?

Mr. EHRLICH. Well, if it was a bank that I did business with, yes.

Mr. HASTERT. What?

Mr. EHRLICH. Yes. I would count it, Congressman.

Mr. HASTERT. You would count it. Why? Because you are afraid that there might be an undercount. Right?

Mr. EHRLICH. Right.

Mr. HASTERT. And you are not afraid of an overcount. Right?

Mr. EHRLICH. Exactly.

Mr. HASTERT. So how are we sure that you are not afraid of an overcount here?

Mr. EHRLICH. Because I think—

Mr. HASTERT. You think?

Mr. EHRLICH. Thank you for your graciousness in this regard. The program is designed to produce an accurate answer. An accu-

rate answer means that we get to the actual population and put them in their right place in right geographical—

Mr. HASTERT. You just said, you just said if you had \$1,000 and they gave it to you, you got it out of your account at a bank, that you would count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Mr. EHRLICH. Right.

Mr. HASTERT. That is what you said you would get an accurate answer—

Mr. EHRLICH. Right.

Mr. HASTERT [continuing]. Not to take this much money and say, "If I have this much money and we divide it by that much money, I think that there is \$1,000 there."

Mr. EHRLICH. Yes. But, sir, if the population was as easy to count as a bunch of dollar bills in a paper bag, then that is where we would be. Unfortunately, it is not. Unfortunately, the problem of measuring the population is far more complex, and the people who constitute that population have the right to be counted in a way that dollar bills in a paper bag do not have the right.

Mr. HASTERT. You know, one of our jobs in this Congress is to uphold the Constitution.

Mr. EHRLICH. That is right.

Mr. HASTERT. The Constitution simply says that the Congress shall make sure that there is an enumeration, and it should be made in a decennial, every 10 years. Now, that is what the Constitution says. If you look in the dictionary, "enumeration" says "to count, one after another," one, two, three, much like you would count the \$1,000.

Now, what you are doing—and you say that there are some precedents out there, but what you are doing is changing the Constitution.

Mr. EHRLICH. Well, I disagree entirely. In 1970, when the census first went to use of mail responses, there was a similar kind of debate as to whether or not that constituted enumeration, and the courts found that it did. The phrase "enumeration" is in the Constitution to cement a compromise that was won at the Constitutional Convention as to how the Congress would be reapportioned over time because of disparate population growth rates in the different States. It was agreed there and put into the Constitution that there would be an actual number of the population in every State every 10 years to reflect the shifting composition.

The Constitution also then established a court system to allow us to interpret what is in the Constitution, and those courts have found consistently that the phrase "enumeration" does not limit the Bureau or the Secretary of Commerce to the specific technique that you describe, and that is that the hand of the respondent must be shook face to face. It established that when it allowed mail response, and lower courts have established—

Mr. HASTERT. Let me ask a question, then. When you have a mail response, that is in direct relation to an address, right, a place?

Mr. EHRLICH. Right.

Mr. HASTERT. OK. Sampling really does not, then?

Mr. EHRLICH. No. Sampling, sir, in fact, does have a direct relationship to every address.

Mr. HASTERT. Wait a minute. You were just saying the reason you sample is for people that don't have addresses.

Mr. EHRLICH. That's right. No, no, no. That is not what I said.

Mr. HASTERT. That's what you said.

Mr. EHRLICH. No, it's not what I said.

Mr. HASTERT. You said that, sir.

Mr. EHRLICH. No. In fact, my statement about Native Americans and the homeless was that we couldn't apply sampling to them, because they did not have addresses.

Mr. HASTERT. I think that's what you said.

Mr. EHRLICH. That's what I said. Now, allow me to continue.

When we have 90 percent of the addresses in a county, or a tract, or wherever accounted for—that is, have responses, either by mail or whatever other technique, face to face, phone, whatever—we take the remaining 10 percent of those addresses. We start in the top lefthand corner—

Mr. HASTERT. I understand that. Let me ask you one more question. My time is limited. Yours is not.

Mr. EHRLICH. Excuse me.

Mr. HASTERT. How do you guarantee that—and you said, “I will guarantee that we have to the person an accurate count.” How do you make that, when you start to pick up errors in the census and look at those errors? You say you're going to guarantee that to the person, but yet you say you're not going to undercount. I mean, that's really kind of an arrogant guarantee.

Mr. EHRLICH. No, no. It would be an arrogant guarantee, had I made it. The statement that I made was that the goal of the program and its design is to produce an expected undercount of zero. That is, the right answer the first time.

Mr. HASTERT. So then there will be an overcount?

Mr. EHRLICH. No.

Mr. HASTERT. If it's not to the person, there will be an overcount?

Mr. EHRLICH. Let me—I'm not trying to play games with you.

Mr. HASTERT. My time is up.

Mr. EHRLICH. It is, but let me respond to your question. A negative undercount is an overcount, and negative isn't zero. We have not been asked a question about the overcount. If you want to ask me about the overcount, we'll have an expected overcount of zero, as well. The program is designed to produce the right answer the first time.

Mr. HASTERT. Let me just say that, with that response, I can understand why the people in this country don't trust bureaucrats.

Mr. CLINGER. The Chair now recognizes the gentleman from California, Mr. Condit, for 5 minutes.

Mr. CONDIT. Thank you, Mr. Chairman. I have a couple quick questions. I would like for you to maybe elaborate a little bit on the experience that we have had in the past with the lack of communication between local government and the Census Bureau, the lack of some kind of cohesive partnership. Can you respond to that for me quickly?

Mr. EHRLICH. In the 1990 cycle, the Census Bureau was legally prohibited from sharing its address list with local governments until the last minute before the census. In 1994, we worked and, with the cooperation of the Congress, succeeded in obtaining the

statutory authority to share those lists. It made no sense for the Census Bureau to consider its address lists a secret from State and local governments.

We'll be able, in this decennial cycle, to send our computerized maps—and we have a computer map, and it's on a CD, of every house, every structure, on every block in America with its associated address—send that to State and local governments, 39,000 different jurisdictions, and allow them to correct the errors that they identify.

That error correction process only occurred in the 1990 decennial after the fact, when it was, frankly, too late to make meaningful and extensive corrections on that broad a scale. So we have taken that part of the process and moved it to the front of the cycle, and allowed State and local governments to identify their addresses, their structures, and correct our information about the situation.

Mr. CONDIT. So steps have been taken to correct the problem?

Mr. EHRLICH. In fact, those are being mailed out this year for the first round.

Mr. CONDIT. There are some States, like California and Florida, and a few other States, that are fast-growing States. There is some indication that maybe we didn't count every one, at least in California last time, and it may have caused us to make these people sitting here a little unhappy, and it cost us probably one seat, we believe, in California, congressional seat.

Can you kind of tell me how we correct that, how we keep that from happening this time?

Mr. EHRLICH. I think we correct that by adopting the strategy. That is, working early with State and local governments, with community groups, to develop the participation rate, to build faith and confidence in the census.

We then do it with well-managed technologically sophisticated counting and data processing techniques, and then with the appropriate use of statistical methods to flesh out the data and get to a final number.

I think that, in the final analysis, we have a shared interest in an accurate census that cuts beyond partisan or geographic regional lines. It's an important political ritual in our democracy. It's a basis for the trust and faith that people have in their democracy and their Government.

I think that that is an interest that all States have and, to that extent, all of us have a shared interest in an accurate count.

Mr. CONDIT. Do you agree that, in California, there is—

Mr. EHRLICH. California was undercounted in the 1990 census.

Mr. CONDIT. We lost a congressional seat out of that.

Mr. EHRLICH. Had the adjustment that the Census Bureau produced by the professional staff there been adopted, there would have been one more seat in the California delegation.

Mr. CONDIT. Quickly, California, it's no surprise, you know, that we have a problem with immigration. Can you tell me what steps you take to assure that the people that you count are legal citizens of California and the country?

Mr. EHRLICH. None. The Constitution says to count all residents, and we in fact count all residents. It's the fact that we do that al-

lows us to develop estimates in our society of the nature of the potential illegal immigration problem.

Were we to be mandated to find out about the legality of a resident before they are enumerated, the census would be subject to havoc. There would be widespread mistrust among legal residents who would be concerned they would be misconstrued as being illegal, and there would be the risk of harm done to census enumerators in the field if they were perceived to be agents of the INS.

The Congress, in its wisdom, in 1990, deliberated this issue and chose not to put the burden of identifying legal and illegal residents on the census in the 1990 decennial, and we fervently hope that it won't do so now.

Mr. CONDIT. Is there a possibility of an undercount because people that are illegal just avoid or hide or stay away from the census counters?

Mr. EHRLICH. That well might be the case, but I think that the size of the undercount is larger than the size of the illegal immigration problem, as I understand it.

Mr. CONDIT. If Congress or the courts were to prohibit the use of sampling in the 2000 census, what would be the results in terms of cost, accuracy, diversity?

Mr. EHRLICH. We estimate that, if we were prohibited from using sampling in the forms that we've described, that our costs would increase on the order of \$400 million or thereabouts, and our accuracy would be compromised.

I don't think that the uncertainty in our measures would appreciably change, but the bias would. We would have an undercount. The undercount would be differentially borne by people who are young, who rent, and who are of color.

Mr. CONDIT. Thank you. Thank you, Mr. Chairman.

Mr. CLINGER. I thank the gentleman. The gentleman from New Hampshire, Mr. Bass, is recognized for 5 minutes.

Mr. BASS. Thank you very much, Mr. Chairman. I just have a couple very brief questions.

The population of this country has gone from 200 million to 260 million since 1970 or 1968 or whatever. Why has the cost of the census gone up so much more significantly?

Mr. EHRLICH. The cost of the census per respondent in 1990 dollars went up very dramatically, particularly in 1990, up to 25 1990 dollars per respondent, and it did so because of this fundamental failure of design that I discussed earlier.

That is, participation rates were falling, and yet our only strategy for addressing that was to send people out into the field for repetitive visits in order to find people who were getting harder and harder to find, and doing that requires extra field staff, it requires more offices, it requires hundreds of thousands of temporary workers, becomes a very expensive proposition.

If you mail your form back to us, as I know you will, Congressman, the cost to us of processing it is on the order of \$2 to \$3. If we have to remind you to do so, the cost increases by about a factor of six. If we have to find you repetitively, then the cost increases by a factor of around 18. And that's what drives the process.

Mr. BASS. This apparently was not as great a problem 20 years ago. Is it perhaps because the form is exponentially more com-

plicated and, given the fact that we hear that at least 20 to 25 percent of the population of this country can't pass a reading test, that one of the reasons for reduced participation is that the form is too long and complex and most people can't understand it, so they don't do it?

Ms. RICHE. I think that is why it's very important that we continue our work to have a simpler, easier to fill out, as well as easier to read, form, and one that also has on it information that tells the person what the data means to them, not just in Congress, but what it means for their community.

There is another factor that's been a major change between 1970 and 1990, and that's a tremendous diminution in the proportion of people who are at home. As you know, there has been an enormous change in the proportion of the population that's in the work force. We're at a record high proportion of our population that is out working these days.

But I absolutely take your point about the form, and we're determined to do something about that?

Mr. BASS. It would be interesting to compare those forms. I don't have any overtime. I don't have any further questions, Mr. Chairman.

[The prepared statement of Hon. Charles F. Bass follows:]

PREPARED STATEMENT OF HON. CHARLES F. BASS, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF NEW HAMPSHIRE

Mr. Chairman, thank you for holding this important follow-up hearing on the Census Bureau's plans to conduct the 2000 Census. As the committee has learned over the last nine months, the Census Bureau intends to use sampling techniques in the 2000 Census in order to improve accuracy and reduce costs.

We all appreciate the need to cut costs. The new majority in Congress is particularly sensitive to need to cut waste and inefficiency in government. We have charted a responsible course to balance the budget, and in this effort, every department, agency, and program will continue to be closely scrutinized for potential budgetary savings. The Census Bureau is no exception.

I applaud the Census Bureau's concerns about the growing costs of conducting the decennial census. Indeed, the costs have grown from \$1.1 billion for the 1980 census to \$2.6 billion for the 1990 census, and the 2000 census is projected to cost \$4.8 billion.

Nevertheless, after studying the issue and listening to witness testimony on the matter, I have serious misgivings about the Bureau's plans to incorporate sampling in the census. For several reasons, I am concerned that it will compromise, not improve the accuracy and integrity of the census count.

First, I am not completely satisfied that using sampling is constitutional. Article I of the Constitution requires "actual Enumeration" and Section 2 of the 14th Amendment states that apportioning congressional seats to the States shall be done by "counting the whole number of persons in each State." I recognize that interpretations of the Constitution vary, but it seems relatively clear to me.

Second, I believe using sampling could seriously undermine public confidence and participation in the census. If citizens know that the Federal government will be using sampling to help determine the census count effectively creating "virtual" people—will they even bother to participate?

Finally, I am concerned that, even if sampling techniques help "correct" the total measure of the U.S. population, these techniques will not provide accurate information about the distribution of the population. This information is critical for determining reapportionment of congressional seats and distribution of Federal funds. The use of inaccurate information in these areas could improperly shift political and financial clout from one region to another.

As I understand the Bureau's proposal, they will conduct the census in the normal fashion mailing out forms and going door-to-door—until 90 percent of the population is counted. They then will sample one-tenth of the remaining "hardest-to reach" population and extrapolate that data to determine a final count.

What is unsettling to me is that the "hardest-to-reach" populations are undoubtedly concentrated in rural areas. Because of sparser populations and fewer votes, rural areas are already at a disadvantage relative to suburban and urban centers. This, I fear, will only exacerbate this inequity.

Mr. CLINGER. The gentleman from California, Mr. Horn, is recognized for 5 minutes.

Mr. HORN. Thank you very much. Let me ask you about the double digit year problem. I think you're all familiar with the problem for computers, when we hit the year 2000. Does any of that problem affect the census? The estimated total Federal Government bill is \$30 billion to convert. What are the moneys in the census to convert, if any?

Mr. EHRLICH. The Department of Commerce has a program for all of its agencies for doing that conversion. It's a problem that we share with many other agencies of Government, and we're addressing it at that level.

Mr. HORN. Let me ask the director, what sort of cases and examples can you give me that relate to that problem, whether it has to do with the census or just your regular work?

Ms. RICHE. Mr. Horn, I haven't looked at that issue, because we're looking at the department level, but I would be happy to get you something.

Mr. HORN. So you don't have any estimate of what cost the Bureau of the Census will bear within the Department of Commerce?

Ms. RICHE. Not right now.

Mr. HORN. OK. If you could file that for the record, I would appreciate it.

[The information referred to follows:]

The Commerce Department outlined a five-stage approach for resolving the Year 2000 problem. The Census Bureau is working with the Commerce Year 2000 Working Group and is currently in the stage that specifies raising awareness of the problem. The Bureau's Information Technology area is scheduling technical seminars with vendors to provide census staff a greater understanding of the potential impact of the problem.

Later this summer, the Information Technology area will work with the user community to assess the scope and depth of the Year 2000 problem for them. We are aware that the Bureau will be impacted on the mainframe, minicomputer, and, especially, the personal computer level, but the extent has not yet been ascertained.

The cost of the conversion is not known at this time.

Mr. HORN. Have you had a problem with any of your temporary workers in the past fraudulently making a count and, if so, for what reasons have they done that, and how do you control for that?

Ms. RICHE. We don't have measures of someone's not filling out the census form from accurate information. That isn't, I think, something we've been able to measure. I think that, given that we are asking humans to interview humans, there is a lot of human element involved there.

There is no doubt that, when we get to the end of our time—because our time eventually does run out—there is enormous pressure on people, the census takers, the temporary employees, to finish their work. And we do ask them to ask neighbors, ask the postman, to get any information they can. I would not be surprised if some of them took shortcuts.

Mr. HORN. In other words, if there is a big pit bull dog in the front, they can walk around and say, "How many live in that house," or something like that?

Ms. RICHE. That may well be, and that's one of the reasons that we think—one of the many reasons—that we think that our plan will improve on the old way of doing things.

Mr. HORN. Is there any way that we could use the nine-digit identifier of the ZIP Code and relate that to a specific census tract so that we had a little better experience over time during the decade as to how many people live there? Because I think the delivery of the mail is a pretty good indication.

Ms. RICHE. You mean as we go through the—

Mr. HORN. Yes, as you realign census tracts. And you might want to get on the record how you define a census tract. Could we not maybe get the post office coordinated here so that we have a nine-digit ZIP Code attached to that particular census tract? Have you ever explored cooperation with the post office?

Ms. RICHE. This has been explored fairly widely, because a lot of people would simply like to have the data base by which they could make these connections.

The post office has always said that their business is delivering the mail, and they have problems particularly with large apartment houses or buildings that have many addresses in them that get an individual ZIP Code for that particular point, and that's been the problem with making that connection. People do make crosswalks between the two sets.

[The information referred to follows:]

Census tracts are small, relatively permanent geographic areas within counties, delineated by a committee of local data users. This partnership program between the Census Bureau and local participants began with a few cities in the 1910 census and has grown over time to where the plan for Census 2000 includes nationwide participation. Generally, census tracts have between 2,500 and 8,000 residents, and boundaries that follow visible features. For the 1990 census, local Census Statistical Areas Committees either prepared or revised census tract plans for their communities. The Census Bureau added the locally suggested census tract boundaries and numbers to its automated geographic data base called TIGER (which is an acronym for Topologically Integrated Geographic Encoding and Referencing) and tabulated demographic data for each census tract.

In response to data user comments, the Census Bureau plans to continue working with local officials for Census 2000 and to make suggested improvements. To do this, the Census Bureau plans to issue a Federal Register notice within the next several months that will provide the proposed census tract criteria for Census 2000; the Census Bureau will send a copy to all 1990 participants and other data users for comment before establishing the final criteria.

Mr. HORN. Well, I would urge the collaboration with them. I realize they try to duck some of these things but, frankly, some of it would be in their own interest.

Is there a way to use the postal workers to do the survey, and pay them extra, let's say, once they finish their route? These are the people that know the neighborhood better than anybody.

Ms. RICHE. Yes, Congressman, we have looked at that. That is a very good idea. We've discussed this with the post office at great length. We have concluded that the average cost of a postal worker is about three times the amount that we pay a temporary census taker—that is their wage plus their benefits—and it would drive the cost up considerably.

I think the post office has also told us that they are concerned that this would, the magnitude of the task would interfere with their job, doing their job, which is delivering the mail. But certainly the Postal Service is our front line for conducting the census.

They are delivering the forms, and we're working closely with them.

I might mention that, in exchange for the work they are doing for us on the address lists, we are working with them on their geographic information system, so that goes to the heart of what you suggested earlier.

Mr. HORN. Now, in your presentation, you mentioned the Spanish translation of forms. In the Long Beach schools and the Los Angeles City schools there are 70 languages spoken in the homes of the students in those schools. In the city of Long Beach, there are somewhere between 35,000 and 60,000 Cambodians, where most of the elderly do not speak English.

What are you doing to solve some of those large concentrations? You go to Orange County, Westminster, you've got Vietnamese, and so forth.

Ms. RICHE. Well, we plan to have the census translated into 32 different languages. We would have difficulty identifying precisely where to mail, given a particular form in a particular language, so they'll be concentrated in the locations where different people of different language ability are concentrated.

That's one of the reasons the local partnership with the local government and local groups is going to be so important, because they can tell us where we need to get those forms.

Mr. HORN. One of the things that concerns me is, how did you pick the 32? There's a possible, I think, 200 or 300, when you include Indian dialects or Indian languages.

Ms. RICHE. Well, again, that's why a partnership with groups in the communities from our Minority Advisory Committee and other people on our Census Advisory Committee is very important to guide us in that, and certainly with the 32. But that's what we know of right now.

Mr. HORN. Should the census workers also register unregistered voters, so we could increase the registration level of the potential electorate, and has that been discussed at all?

Ms. RICHE. I think that our concern is that it is very hard, and I think all the comments today have born it out, to do the tasks that we're assigned to do, and we're feeling our job is to do the best thing there that we can.

Mr. CLINGER. The gentleman's time has expired.

Mr. HORN. OK.

Mr. CLINGER. I am now pleased to recognize the gentleman from Indiana, Mr. McIntosh, for 5 minutes.

Mr. MCINTOSH. Thank you, Mr. Chairman. My first question is for Mr. Ehrlich.

Title XIII of the United States Code provides that, except for the determination of population for apportionment purposes, the Secretary shall, where he deems it appropriate, authorize the use of statistical method known as "sampling," in carrying out the provisions of this title.

Does the Department of Commerce or the Census Bureau have an official legal position on the interpretation of this statute?

Mr. EHRLICH. Yes. We have provided to the committee, in its interrogatory to us in the past, a paper giving our view on what the

courts have held and what our view is about the interpretation of that aspect of U.S.C. 13.

Also, we have provided three opinions from three different Justice Departments under three administrations regarding that.

Mr. MCINTOSH. Has the Department and the Department of Justice always had that same interpretation or have there been differences historically?

Mr. EHRLICH. I think our Department might have had different interpretations. The interpretation of the Department of Justice has been fairly consistent.

Mr. MCINTOSH. Because I'm baffled, where it says explicitly in the statute that, except for determination of population for apportionment purposes—

Mr. EHRLICH. If I may, I think the statute refers to the wholesale use of sampling as opposed to sampling that's used to complement a national enumeration. You could not have and we do not propose a sampling census. That is, we'll pick 1 out of every 5 households and go to them and then bootstrap up the answer.

That is the context in which the courts, as I understand it, have interpreted that statute.

Mr. MCINTOSH. But you could, for purposes other than apportionment?

Mr. EHRLICH. Yes. For example, the long form, the so-called long form, that has data about how we commute to work and do we have telephones and what kind of houses we live in is a 1 in 6 sample of the population. The Congress, through its statutory authority, directs the content of the long form and the answers it obtains are obtained through sampling.

Mr. MCINTOSH. Could you check the records for me on whether there were conflicting interpretations of that in the Justice Department?

Mr. EHRLICH. I'd be happy to do so.

[The information referred to follows:]

Attached are copies of three legal opinions from the Justice Department, all of which conclude that sampling may be used in a decennial census. Democratic and Republican administrations alike have concluded that neither the Constitution nor the Census Act precludes sampling, so long as sampling is used to supplement, but not replace, a headcount. Also enclosed are a copy of the Supreme Court's recent decision dealing with the 1990 census litigation, a copy of a document prepared for the Census 2000 Roll Out, held February 28, 1996, and a copy of a letter to Congressman Harold Rogers, Chairman of the Appropriations Subcommittee on Commerce, Justice, State, the Judiciary, and Related Agencies, relating to the possibility of a declaratory judgment regarding the sampling issue.

While the Executive Branch's conclusion that sampling is permissible has been consistent for the last fifteen years, early pronouncements were to the contrary. The Census Bureau first developed sampling techniques that would allow it to adjust a decennial census in connection with the 1980 census. The Bureau determined, however, not to adjust the 1980 census because it concluded that these "first generation" sampling techniques were not sufficiently reliable. A number of cities and other plaintiffs challenged the Census Bureau's decision not to adjust the 1980 census. The Justice Department's Civil Division initially took the position in these lawsuits that sampling was not legally permitted, despite the 1980 opinion (attached) from the Assistant Attorney General for the Office of Legal Counsel concluding that sampling is permitted. As courts began to issue rulings in census cases, they uniformly agreed that the Constitution and the Census Act permit sampling. The Justice Department soon dropped the contention that sampling was not permitted, and has not presented such an argument in any court proceeding since the early 1980's.

Perhaps not surprisingly in light of the Justice Department's position, the Census Bureau stated in 1980 that "Federal Statutes do not permit adjustment for [appor-

tionment] purpose[s] . . ." 45 Fed. Reg. 69366 (1980). Nonetheless, shortly after making this pronouncement, the Bureau commenced plans which would allow it to adjust the 1990 census, consistent with the emerging consensus by the Department of Justice and the courts that sampling is permitted.

In summary, when sampling techniques were first being developed twenty years ago, the initial Government reaction was to conclude that sampling was impermissible; the consistent conclusion by the Executive Branch and the courts over the last fifteen years has been that sampling violates neither the Constitution nor the Census Act.

Six Attachments.

U.S. DEPARTMENT OF JUSTICE,  
Washington, DC, Oct. 7, 1994.

MEMORANDUM FOR THE SOLICITOR GENERAL

From: Walter Dellinger  
Assistant Attorney General  
Re: The Twenty-Second Decennial Census

You have asked, on behalf of the Department of Commerce, for our advice on the questions whether the use of statistically adjusted census figures would be consistent with the Constitution, U.S. Const. art. I, § 2, cl. 3, and with the Census Act, 13 U.S.C. §§ 1-307. The questions arise because the traditional method of taking the census fails to count a significant portion of the population, and in particular disproportionately undercounts identifiable racial and ethnic minorities. In light of these problems, the Department of Commerce is considering the use of statistical adjustments in the twenty-second decennial census (that for the year 2000) before the final count is completed in order to improve the accuracy of that census. The Department of Commerce is also considering the use of sampling to conduct the follow-up on households that did not respond to its initial mailing of questionnaires. Accordingly, it desires to know whether such procedures would be lawful. We conclude that both of the proposed changes in conducting the census would be lawful.

I.

The Constitution "provides the basis for the decennial censuses, but does not specify the details of their administration." Seventeenth Decennial Census, 41 Op. Atty Gen. 31, 32 (1949). Instead, the Constitution vests in Congress the power to conduct an "actual Enumeration . . . in such Manner as they shall by Law direct." U.S. Const. art. I, § 2, cl. 3. Congress's power has in turn been vested in the Bureau of the Census (the "Bureau"), a component of the Department of Commerce. See 13 U.S.C. § 2.

The primary purpose of the decennial census<sup>1</sup> is to provide the basis for Congress's apportionment of seats in the House of Representatives among the States.<sup>2</sup> The census also serves several other legally significant objectives. Historically, the decennial census has been "an enumeration not only of free persons in the States but of free persons in the Territories, and not only an enumeration of persons but the collection of statistics respecting age, sex, and production." *Legal Tender Cases*, 79 U.S. (12 Wall.) 457, 536 (1870).<sup>3</sup> The census today serves an important function in the allocation of federal grants to states based on population. In addition, the census also provides important data for Congress and ultimately for the private sector.<sup>4</sup> *Baldrige v. Shapiro*, 455 U.S. 345, 353 (1982); see generally Note, *Demography and Distrust: Constitutional Issues of the Federal Census*, 94 Harv. L. Rev. 841, 844-45 (1981).

The traditional method for conducting the decennial census "is a headcount rather than an estimation based on sampling." *Tucker v. United States Dep't of Commere*, 958 F.2d. 1411, 1412 (7th Cir.), cert. denied, 113 S. Ct. 407 (1992).<sup>5</sup> The term

<sup>1</sup>There is also a mid-decade census. See 13 U.S.C. § 141(d).

<sup>2</sup>The apportionment of Representatives among the States in turn affects the allocation of Electoral College votes to the States. See U.S. Const. art. II, § 1, cl. 2.

<sup>3</sup>The first statute authorizing a census, "An Act providing for the enumeration of the Inhabitants of the United States" (Mar. 1, 1790), declared that "the marshals of the several districts of the United States" were "authorized and required to cause the number of the inhabitants within their respective districts to be taken," omitting Indians not taxed. 4 National State Papers of the United States, 1789-1817, at 1 (Eileen Daney Carzo ed., 1985). It further placed on "each and every person more than sixteen years of age" the obligation to provide the census-

"headcount" is somewhat misleading, however. "The census . . . is not a headcount in which each and every person residing in the United States on a given date is counted by the Census Bureau. Rather, it is a survey of the population that through the responses of one member of each household attempts to enumerate the entire population." *Carey v. Klutznick*, 508 F. Supp. 420, 426 (S.D.N.Y. 1980), rev'd, 653 F.2d 732 (2d Cir. 1981), cert. denied, 455 U.S. 999 (1982).

In the 1990 census, the Bureau's tabulation had four phases. First, relying on lists compiled by commercial sources and its own fieldwork, the Bureau derived a mailing list of as many households as it could locate. Second was the "mail out/mail back" phase, in which the Bureau mailed out questionnaires to each household on its list, and requested their return by April 1, 1990. (The return rate was 63%.) The third phase was a follow-up in which the Bureau sent out another round of mailings. The fourth phase comprised efforts by census enumerators, in person, to contact non-responding households (or other reliable sources) to obtain the needed information. Following that, the Bureau undertook "coverage improvement programs" designed to reach non-respondents in other ways, including rechecks of all vacant or uninhabitable housing units, recanvassing of selected blocks, an advertising campaign, checks of parolees and probationers, and a local government review. See *City of New York v. United States Dep't of Commerce*,—F.3d—, 1994 WL 423474 (2d Cir. Aug. 8, 1994).<sup>4</sup>

Like earlier censuses, the 1990 census concededly did not count the entire population of the United States.<sup>5</sup> Given the inherent difficulties of census-taking and the existence of financial and time constraints, some degree of inaccuracy in the census count is perhaps inevitable. The Bureau itself believes that "every census has necessarily involved an undercount," *Young v. Klutznick*, 497 F. Supp. 1318, 1327 (E.D. Mich. 1980), rev'd, 652 F.2d 617 (6th Cir. 1981), cert. denied, 455 U.S. 939 (1982), and the courts agree that "a perfectly accurate count of upwards of 250 million people" is simply not "feasible." *City of Detroit v. Franklin*, 4 F.3d at 1377.<sup>6</sup> Far more troubling than the bare existence of an undercount is the fact that the 1990 census perpetuated a pattern, the existence of which has been recognized since 1940, of differentially undercounting African Americans.<sup>7</sup> The 1990 census also differentially undercounted Hispanics: the estimated undercount for that group was 5.2%, as against an estimated undercount of 2.1% for the population at large.<sup>8</sup> The Bureau "specifically acknowledge[d] an undercount in the 1990 census ranging from 1.7 percent of whites to 5.2 percent of Hispanics."<sup>9</sup>

taker "a true account, if required, to the best of his or her knowledge, of all and every person belonging to [the respondent's] family." *Id.* at 3.

<sup>4</sup>The Bureau's efforts to obtain as accurate a count as possible have been found to be "extraordinary. According to one count, the 1990 census is said to be one of the best ever taken in this country because despite our large population, approximately 98 percent of the population was counted." *City of Detroit v. Franklin*, 4 F.3d 1367, 1376 (6th Cir. 1993), cert. denied, 114 S. Ct. 1217 (1994).

<sup>5</sup>The first census in 1790 counted over 3,890,000 people, but fell short of the expected 4,000,000 figure. George Washington thought it "certain" that "our real numbers will exceed, greatly, the official returns of them," and Thomas Jefferson considered the uncounted population "very great." See *Baldrige v. Shapiro*, 455 U.S. at 353 n.8.

<sup>6</sup>See also *Karcher v. Daggett*, 462 U.S. 725, 732 (1983) ("the census data are not perfect, and the well-known restlessness of the American people means that population counts for particular localities are outdated long before they are completed"); *id.* at 772 (White, J., dissenting) ("the census . . . cannot be perfect"); *Gaffney v. Cummings*, 412 U.S. 735, 745 (1973) (decennial census figures "may be as accurate as such immense undertakings can be, but they are inherently less than absolutely accurate.").

<sup>7</sup>In the 1990 census, "Blacks were undercounted by 4.8%, Hispanics by 5.2%, Asian-Pacific Islanders by 3.1%, American Indians by 5.0%, and non-Blacks by 1.7%." *Senate of State of California v. Mosbacher*, 968 F.2d 974, 975 (9th Cir. 1992). "In 1940, 10.3 percent of blacks were missed, compared to 5.1 percent of whites, a gap of 5.2 percentage points. In 1980, 6.2 percent of blacks were missed, compared to 1.3 percent of whites, for a similar disparity of 4.9 percentage points." Samuel Issacharoff & Allan J. Lichtman, *The Census Undercount and Minority Representation: The Constitutional Obligation of the States to Guarantee Equal Representation*: 13 *Rev. Litig.* 1, 8 (1993). See also *Gaffney v. Cummings*, 412 U.S. at 745 n.10.

<sup>8</sup>See Stephen E. Fienberg, *The New York City Adjustment Trial: Witness for the Plaintiffs*, 34 *Jurimetrics J.* 65, 70-71 (1993).

<sup>9</sup>Tucker, 958 F.2d at 1413; see generally Decision of the Secretary of Commerce on Whether a Statistical Adjustment of the 1990 Census of Population and Housing Should Be Made for Coverage Deficiencies Resulting in an Overcount or Undercount of the Population, 56 *Fed. Reg.* 33,582 (1991).

Despite that acknowledgment, the Secretary of Commerce declined in 1991 to adjust the 1990 census figures to correct for the undercounts.<sup>10</sup> The Secretary's decision not to make the adjustment has been the subject of litigation in three circuits, with conflicting results. Compare *Tucker* (plaintiffs had no judicially enforceable rights) and *City of Detroit* (same) with *City of New York* (remanding with instruction that refusal to adjust could not be upheld unless shown to be necessary to a legitimate governmental interest).

The Bureau is currently considering whether to adjust the "raw count" of the next decennial census for the year 2000. Sampling was used in connection with the 1990 census to carry out the "Post-Enumeration Survey" (the "PES") that measured the undercount for that year. See *City of New York*, 1994 WL 423474, at \*7; David A. Freedman, *Adjusting the Census of 1990*, 34 *Jurimetrics J.* 99, 102-03 (1993). In that census, the Bureau tested the accuracy of the count by a PES of some 174,000 households and then matching the questionnaires for households in the PES against the same households in the census (including both mail-backs and non-response follow-ups). The matching process provided the Bureau with data to develop adjusting factors, or "multipliers," to capture the estimated under- or overcount for some 1,392 demographic subgroups. The application of the multipliers to the enumeration data for the subgroups produced the conclusion that 1.6% of the total population had not been counted in the census. For the 2000 census, the Bureau is considering the use of a sample-based adjustment as in 1990, except that it would complete the adjustment before its deadline for reporting State totals to the President.

The Bureau is also considering whether to conduct the non-response follow-up on a sample basis, rather than sending enumerators to each non-responding household. Specifically, it is proposing to contact, by telephone or in person, between 25% and 50% of the households that failed to return the census questionnaire. The results of this sample would then be extrapolated to estimate the whole non-respondent population. The Bureau believes that the use of this procedure would save it between \$300 and \$600 million. At the same time, it advises us that the procedure would also produce greater accuracy than was achieved in the 1990 census.

In the past, the Bureau took the position that it would be legally precluded from adjusting the census for apportionment purposes. See *Census Undercount Adjustment: Basis for Decision*, 45 *Fed. Reg.* 69,366, 69,371-73 (1980). This claim was based on both constitutional and statutory grounds. First, the Bureau has argued that "interpretation of the phrase 'actual enumeration' in Article 1, Section 2, Clause 3 must begin with the words themselves, and that the terms 'census' and 'enumeration' mean nothing more or less than a headcount. [It] say[s] that the use of the modifier 'actual' with the word 'enumeration' can only reinforce the conclusion that the framers of the Constitution intended a headcount, and nothing but a headcount. [It] further rel[ie]s upon the fact that, with the exception of the 1970 census when imputations were performed which added approximately 4.9 million people, the census has been, since 1790, an actual headcount and nothing more." *Young v. Klutznick*, 497 F. Supp. at 1332. The Bureau has also argued in the past that "even if the Constitution does not prohibit an adjustment for apportionment of Representatives, Congress has by statute prohibited such an adjustment." *Id.* at 1334. We consider these issues in turn.

## II.

The Enumeration Clause of the Constitution reads in relevant part as follows:

Representatives . . . shall be apportioned among the several States . . . according to their respective Numbers. . . . The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the

<sup>10</sup> The Secretary's reasoning, as recapitulated by the Seventh Circuit, was that "while adjustment by the best method available would increase the census totals, it would not significantly alter the apportionment of seats in the House of Representatives among the states, in part because there is overcounting as well as undercounting. After the dust settled, Illinois's representation would be unchanged although California and Arizona would pick up a few seats at the expense of Pennsylvania and Wisconsin. Federal grant allocations might not be much affected either. . . . Moreover, any attempt to make a statistical adjustment to the mechanical headcount would, by injecting judgmental factors—and ones of considerable technical complexity to boot, . . .—open the census process to charges of political manipulation. And while a statistical adjustment for the undercount would undoubtedly improve the accuracy of the nationwide census total, there is no consensus among statisticians and demographers that it would make the state and district census totals—the level at which the adjustment would actually affect representation and funding—more accurate."

*Tucker*, 958 F.2d at 1413 (citations omitted); see also *City of New York*, 1994 WL 423474, at \*8-9; *Senate of State of California*, 968 F.2d at 975.

United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.

U.S. Const. art. I, § 2, cl. 3; see also *id.* amend. XIV, § 2 (“Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State. . .”).

The Enumeration Clause was one facet of the “Great Compromise” at the Constitutional Convention, which provided for equal representation of the States in a Senate, and representation of “the People of the several States” in a House of Representatives. U.S. Const. art. I, 2, cl. 1; see generally *Wesberry v. Sanders*, 376 U.S. 1, 10–16 (1964); *Demography and District*, 94 Harv. L. Rev. at 846. Because the Framers “intended that in allocating Congressmen the number assigned to each State should be determined solely by the number of the State’s inhabitants . . . [t]he Constitution embodied Edmund Randolph’s proposal for a periodic census to ensure ‘fair representation of the people.’” *Wesberry*, 376 U.S. at 13–14 (citations omitted).

Before the first decennial census in 1790, no modern Nation had undertaken a census (although all the States of the United States, with some exceptions in the South, had done so). See Hyman Alterman, *Counting People: The Census in History* 164 (1969). Thus, when the Framers were apportioning seats in the first House of Representatives, their decisions were the outcome of “conjecture and political compromise: [they] apparently assigned some of the smaller States a number of Representatives not justified by the size of their populations.” Memorandum to Wendell L. Willkie II, General Counsel, Department of Commerce, from Stuart M. Gerson, Assistant Attorney General, Civil Division at 4 (July 9, 1991) (the “Gerson Memorandum”).<sup>11</sup> The Constitution’s reference to an “actual Enumeration” must be explained by reference to the Framers’ ignorance of the exact size of the population and its distribution among the States: “[w]hen the Constitution speaks of actual enumeration, it speaks of that as opposed to estimates.” *Young v. Klutznick*, 497 F. Supp. at 1332 (emphasis added). Accord Memorandum to Alice Daniel, Assistant Attorney General, Civil Division, from John M. Harmon, Assistant Attorney General, Office of Legal Counsel, re: Pending Litigation Concerning Statistical Adjustment of 1980 Decennial Census Population Data at 2 (Sept. 25, 1980) (the “Harmon Memorandum”) (“the phrase [‘actual Enumeration’] was chosen because an accurate population count was essential once the Convention decided, in the Great Compromise, that representation in the House would be apportioned on the basis of population.”).

The proposal for a periodic enumeration of the population originated, as noted above, with Edmund Randolph, as an incident to the Great Compromise. On July 10, Randolph moved a proposal calling for Congress “to cause a census, and estimate to be taken within one year after its first meeting; and every years thereafter—and that the Legisl[at]ure arrange the Representation accordingly.” James Madison, *Notes of Debates in the Federal Convention of 1787* at 265 (Adrienne Koch ed., 1966). George Mason spoke in favor of the motion on the next day, declaring that “[h]e did not object to the conjectural ratio which was to prevail in the outset; but considered a Revision from time to time according to some permanent & precise standard as essential to [the] fair representation required in the [first] branch.” *Id.* at 266. Later in the debate, Randolph repeated Mason’s point that “the ratio fix[ed] for the [first] meeting [of Congress] was a mere conjecture.” *Id.* at 267. On August 21, Madison repeated that “[t]he last apportionment of Cong[ress], on which the number of Representatives was founded, was conjectural and meant only as a temporary rule till a Census should be established.” *Id.* at 497. Madison also explained in *The Federalist* that the provision in Article I, § 2, cl. 3, for a House of Representatives that would consist of sixty-five members in the First Congress was merely “a temporary regulation,” to be revised when the findings of the census of 1790 became known. *The Federalist* No. 55, at 343 (James Madison) (Clinton Rossiter ed., 1961).<sup>12</sup>

These discussions make it clear that, in requiring an “actual” enumeration, the Framers meant a set of figures that was not a matter of conjecture and compromise, such as the figures they had themselves provisionally assumed. An “actual” enu-

<sup>11</sup> See also Hyman Alterman, *Counting People* at 187–88 (“The Convention had available to it estimates of the white and slave populations in the various states. Mainly on the basis of these estimates the Convention decided how many representatives each state should have until the first census was taken.”).

<sup>12</sup> Article I, § 2, cl. 3 provided that “until such enumeration shall be made,” the States were to have predetermined numbers of Representatives: three for New Hampshire, eight for Massachusetts, one for Rhode Island, five for Connecticut, six for New York, four for New Jersey, eight for Pennsylvania, one for Delaware, six for Maryland, ten for Virginia, five for North Carolina, five for South Carolina and three for Georgia, for a total of sixty-five.

meration would instead be based, as George Mason put it, on "some permanent & precise standard." There is no indication that the Framers insisted that Congress adopt a "headcount" as the sole method for carrying out the enumeration, even if later refinements in the metric of populations would produce more accurate measures.

Furthermore, the Framers left it to Congress to conduct the enumeration "in such Manner as they shall by Law direct." U.S. Const. art. I, § 2, cl. 3. That explicit delegation implies that the Framers were willing to allow for innovation in the choice of measuring techniques; and, not surprisingly, "the Census Bureau's unbroken historical practice really has been to use modern knowledge and scientific techniques to get further and further away from simple headcounting." *Young v. Klutznick*, 497 F. Supp. at 1333.<sup>13</sup> "The result, and not the method, is the important lesson of the historical experience." Harmon Memorandum at 2.

In addition, article I, § 2, cl. 3 was amended by section 2 of the Fourteenth Amendment. Section 2 declares that "Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed." Amend. XIV, § 2. Further, section 5 confers on Congress the "power to enforce, by appropriate legislation, the provisions of this article." *Id.*, Amend. XIV, § 5. Congress's powers under section 5 have been "equated . . . with the broad powers expressed in the Necessary and Proper Clause, U.S. Const., art. I, § 8, cl. 18. 'Correctly viewed, § 5 is a positive grant of legislative power authorizing Congress to exercise its discretion in determining whether and what legislation is needed to secure the guarantees of the Fourteenth Amendment.'" *Fullilove v. Klutznick*, 448 U.S. 448, 476 (1980) (plurality opinion) (quoting *Katzenbach v. Morgan*, 384 U.S. 641, 651 (1966)). It follows that Congress has broad power to determine how to carry out the apportionment called for by section 2, and to conduct the enumeration on which that apportionment is based. See *Massachusetts v. Mosbacher*, 785 F. Supp. 230, 253 (D. Mass.) (three-judge court) ("the exercise of Section 5 powers here in defining the methodology for reapportionment falls squarely within the settled recognition of the competence of Congress as a legislative fact finder"), *rev'd sub nom. Franklin v. Massachusetts*, 112 S. Ct. 2767 (1992). It would be strange indeed to suppose that Congress—or its delegate, the Bureau—lacked the power to authorize a statistical adjustment that would correct the persistent and acknowledged undercounting of African Americans in that enumeration, particularly in view of the fact that the Fourteenth Amendment was primarily intended for the protection of that class. See *Strauder v. West Virginia*, 100 U.S. 303, 306 (1880).

Finally, constitutional plaintiffs injured by the decision to use adjusted census data for apportionment might argue that so sharp a departure from the Bureau's longstanding practices was unjustified.<sup>14</sup> See *Senate of State of California*, 968 F.2d at 978 ("the method by which the Secretary is to do the count . . . is generally expected to be a head count"); see also Seventeenth Decennial Census, 41 Op. Att'y Gen. at 34 (if the Director "has consistently followed the practice in question over a long period of time, and it has not been challenged in the Congress or elsewhere . . . his interpretation ought not to be disturbed except for very weighty reasons").<sup>15</sup> It could be contended that the use of unadjusted "headcounts" almost invariably since the first census of 1790 represents a practical construction of the Enumeration Clause which the Executive, at least absent weighty reasons, may not inverse. See.

<sup>13</sup> "Instead of headcounting people, [the Bureau] uses the mail-out form and the mail-out/mail-back format to enumerate most persons today." *Id.* See also *City of Detroit*, 4 F.3d at 1377 ("[t]he Census Bureau has not undertaken a door-to-door campaign since the 1960 campaign and plaintiffs have presented no evidence indicating that such an effort would lead to any more accurate results").

<sup>14</sup> The Court has held that "[c]onstitutional challenges to apportionment are justiciable." *Franklin*, 112 S. Ct. at 2776. Whether constitutional plaintiffs "have standing to challenge the accuracy of the data" tabulated by the Bureau, and "whether the injury is redressable by the relief sought," *id.* are of course separate issues. We shall assume here that those conditions might be met. The availability of review under the Administrative Procedure Act (the "APA") of the use of adjusted data for reapportionment seems doubtful after *Franklin*, however. The APA permits review only of certain "final" agency actions, 5 U.S.C. § 704. In this case, as in *Franklin*, it would appear that "the final action complained of is that of the President, and the President is not an agency within the meaning of the Act." 112 S. Ct. at 2773. We note that *Franklin's* ruling on the APA represented the view of a bare majority of five Justices (including Justice White), and might not be extended by the present Court.

<sup>15</sup> For analogous reasons, if APA review were available, a change in policy to allow statistical adjustments might be attacked as arbitrary, capricious or abusive of discretion under 5 U.S.C. § 706(2)(A). See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42-45 (1983) (presumption in favor of settled agency practice). We believe that the proposed policy change would survive review under that standard.

e.g., *Smiley v. Holm*, 285 U.S. 355, 369 (1932) (“long and continuous interpretation in the course of official action under the law may aid in removing doubts as to its meaning. This is especially true in the case of constitutional provisions governing the exercise of political rights. . . .”); *The Pocket Veto Case*, 279 U.S. 655, 688–90 (1929). We believe, however, that the change in the Bureau’s policy would be upheld against an attack of this nature if there were adequate proof that statistical adjustments would be feasible and would generate more accurate counts of both the total population and of minorities.

Thus, in *Franklin v. Massachusetts*, the Court upheld the Bureau’s changed policy of allocating overseas government personnel to the several states for residence purposes for the 1990 census. The Court stated (112 S. Ct. at 2778) that

the Secretary of Commerce made a judgment, consonant with, though not dictated by, the text and history of the Constitution, that many federal employees temporarily stationed overseas had retained their ties to the States and could and should be counted toward their States’ representation in Congress. . . . The Secretary’s judgment does not hamper the underlying constitutional goal of equal representation, but, assuming that employees temporarily stationed abroad have indeed retained their ties to their home States, actually promotes equality.

In the present case, the validity of the policy change would turn largely on the evidentiary showing that the use of statistical adjustments will produce a more accurate count of the population than the bare “headcount” data alone. It appears to us that the factual predicate for the change to adjusted figures is adequate. As the Second Circuit pointed out, the district court in *City of New York* found “that the PES-indicated statistical adjustment was feasible; that for most purposes and for most of the population that adjustment would result in a more accurate count than the original census; and that the adjustment would lessen the disproportionate undercounting of minorities.” *City of New York*, 1994 WL 423474, at \*16. Assuming that similar findings would hold true for the next decennial census, then we see no reason why the Bureau, in the exercise of its expertise and discretion, may not alter its past practice and adjust the census figures it obtains through a “headcount.”<sup>16</sup>

Accordingly, we conclude that the Constitution does not preclude the Bureau from employing technically and administratively feasible adjustment techniques to correct undercounting in the next decennial census.

### III.

The Census Act includes two provisions authorizing the use of statistical methods, including “sampling,” in conducting its statutory responsibilities. The first statute, 13 U.S.C. § 141(a), states that

[t]he Secretary shall, in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April of such year, which date shall be known as the “decennial census date”, in such form and content as he may determine, including the use of sampling procedures and special surveys.

The second statute, 13 U.S.C. § 195, authorizes, indeed mandates, the use of sampling, but with a limitation relating to apportionment:

[e]xcept for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as “sampling” in carrying out the provisions of this title.

In the past, the Bureau has taken the position that section 195 prohibits statistical adjustment of census data for purposes of apportionment. The difficulty centered on section 195’s prohibition on the use of “sampling” in determining the size of the population for purposes of apportionment. Since the scope of section 195’s exception is not plain from the language of the statute, we turn to the legislative history of that section.

Congress enacted section 195 in 1957, but in a form that authorized, rather than required, the use of sampling; a 1976 amendment transformed the Secretary’s au-

<sup>16</sup> Moreover, in light of the Bureau’s position that the use of a sample-based follow-up for enumerating non-respondent households would improve the accuracy of the final count while at the same time saving the Bureau upwards of \$300 million, we can see no constitutional objection to the introduction of that procedure.

thorization into the conditional mandate of the current statute.<sup>17</sup> The enacting Congress of 1957 considered section 195 to be merely a change "of an administrative nature" that was "needed for the timely and efficient performance of one of the biggest jobs the Bureau of the Census has ever undertaken." S. Rep. No. 698, 85th Cong., 1st Sess. (1957), reprinted in 1957 U.S.C.C.A.N. 1706, 1707. The proviso gave the Bureau "the authority to use sampling in connection with censuses except for the determination of the population for apportionment purposes." *Id.* at 1708.

What Congress originally meant by "sampling" is not clear. In testimony in support of the 1957 legislation, Robert W. Burgess, the Director of the Bureau of the Census, explained that

[t]he use of sampling procedures would be authorized by the proposed new section 195. It has generally been held that the term "census" implies a complete enumeration. Experience has shown that some of the information which is desired in connection with a census could be secured efficiently through a sample survey which is conducted concurrently with the complete enumeration of other items; that in some instances a portion of the universe to be included might be efficiently covered on a sample rather than a complete enumeration basis and that under some circumstances a sample enumeration or a sample census might be substituted for a full census to the advantage of the Government. This section, in combination with section 193, would give recognition to these facts and provide the necessary authority to the Secretary to permit the use of sampling when he believes that it would be advantageous to do so.

Amendment of Title 13, United States Code, Relating to Census: Hearings on H.R. 7911 Before the House Committee on Post Office and Civil Service, 85th Cong., 1st Sess. at 7-8 (1957).

The Director's testimony suggests that in enacting section 195, Congress intended that the Bureau conduct a "complete enumeration" or a "full census" when determining the size of the population for apportionment purposes, but that the Bureau could use "sampling" in other contexts, where a "sample enumeration" or a "sample census" might be used "to the advantage of the Government." Read in the light of the testimony, the statute's preclusion of "sampling" need not have meant that statistical adjustment of census figures was forbidden: Congress may well have intended only that the decennial census not be a "sample census." Moreover, a "complete enumeration" or "full census" may affirmatively require statistical adjustments of "headcount" data to be made.

Our Office has previously argued that the 1957 legislative history should not be understood to preclude statistical adjustment. Citing the testimony quoted above, we argued that "[s]ampling refers to a representative portion of the whole . . . while adjustment refers to additions to the whole, here the headcount. As we read the Census Act, there is no statutory prohibition of statistical adjustment." Harmon Memorandum at 3 (citation omitted). The Congressional Research Service (the "CRS"), however, reviewed the same testimony and drew a contrary inference:

it appears that when Section 195 was originally enacted, the Department of Commerce took the position that an actual enumeration was required for all decennial census purposes. Section 195 was enacted in order to relieve this restriction for purposes other than apportionment by sanctioning the use of sampling when appropriate. There was no need to mention other forms of estimating population since this section was making an exception to the general requirement of an actual enumeration only for sampling. Therefore, one may conclude that Section 195 was not intended to sanction the use of methods of estimating population other than "sampling," and did not intend to permit the use of this method for purposes of apportionment.

Congressional Research Service, Library of Congress, Legal Considerations in Census Bureau Use of Statistical Projection Techniques to Include Uncounted Individuals For Purposes of Congressional Reapportionment (Mar. 27, 1980), (report prepared for Congressional use), reprinted in Problems with the 1980 Census Count: Joint Hearing Before the Subcomm. on Commerce, Consumer, and Monetary Affairs of the House Comm. on Government Operations, and the Subcomm. on Census and Population of the House Comm., on Post Office and Civil Service, 96th Cong., 2d Sess. 190 (1980) (the "Joint Hearing").

<sup>17</sup> As enacted in 1957, the statute had stated that "[e]xcept for the determination of population for apportionment purposes, the Secretary may, where he deems it appropriate, authorize the use of the statistical method known as 'sampling' in carrying out the provisions of this title." Pub. L. No. 85-207, § 14, 71 Stat. 481, 484 (1957).

The 1976 legislation amending the Census Act, Pub. L. No. 94-521, 90 Stat. 2464, was primarily concerned with the establishment of mid-decade censuses. In carrying forward (and amending) section 195, we believe that Congress meant that while reliance on sampling alone might be appropriate or desirable for mid-decade censuses, it should not be the exclusive procedure for tabulating the population in decennial censuses.<sup>18</sup> So understood, the 1976 re-enactment does not bar the statistical adjustment of the decennial census if such adjustments would improve their accuracy.

This interpretation of the 1976 legislative history is not uncontroverted. See Gerson Memorandum at 11 ("Congress" amendment of Section 195 in 1976 is similarly open to two alternative interpretations."). The CRS, noting that both the Comptroller General and the Bureau had advised Congress in 1976 of ongoing developments in estimating or allocating populations other than sampling, argued that "it would be logically inconsistent for Congress to prohibit sampling for purposes of reapportionment, but at the same time to permit the use of other techniques whose reliability had not yet been determined." Joint Hearing at 187-88. Based on its review of the legislative history, CRS concluded that the use of demographic estimates for purposes of apportionment of Representatives among the States . . . is prohibited by Section 195 of Title 13." *Id.* at 192.<sup>19</sup>

In our judgment, the better view is that the Census Act does not preclude the Bureau from engaging in statistical adjustments of the next set of decennial census figures. See *Franklin*, 112 S. Ct. at 2785 (Stevens, J., joined by Blackmun, Kennedy and Souter, JJ., concurring in part and concurring in judgment) (Census Act "embodies a duty to conduct a census that is accurate and that fairly accounts for the crucial representational rights that depend on the census and the apportionment"). A non-preclusive reading gives due weight to the fact that, when it re-enacted section 195 in 1976, Congress was primarily concerned with instituting mid-decade censuses. Its prohibition on "sampling" in decennial censuses appears to have meant only that while a procedure relying on "sampling" alone might be the most cost-effective means to discover the information sought in a mid-decade census, the Bureau should not rely on "sampling" as its exclusive method of tabulating population figures in the decennial census. The use of sampling techniques in the mid-decade census is "probably a pragmatic necessity in that instance, given the vast mobilization of people and resources needed to conduct an even somewhat accurate head count." *Senate of State of California*, 968 F.2d at 978. Despite the additional costs entailed, however, Congress did not wish the decennial census to consist in "a mere statistical manipulation through the use of sampling and other techniques." *Id.* Nothing in amended section 195 proscribed the use of sampling or other statistical devices in connection with the decennial "headcount," however, if such adjustments would result in a more accurate tabulation.

Furthermore, in adopting the Census Act, Congress "left the actual administration of a great number of necessary details to the judgment and discretion of the Director of the Census." Seventeenth Decennial Census, 41 Op. Att'y Gen. at 33. Standing alone, section 141(a), which authorizes the Director to take the decennial census "in such form and content as he may determine, including the use of sampling procedures and special surveys," would seem to permit statistical adjustments, if in the Director's judgment they would produce greater accuracy. While section 195 undoubtedly makes an exception for the use of sampling in apportionment, that exception can be construed narrowly, as befits Congress's otherwise broad delegation of

<sup>18</sup>The Senate Report stated that the section of the 1976 legislation that modified 13 U.S.C. § 195 "differs from present language which grants the Secretary discretion to use sampling when it is considered appropriate. The section as amended strengthens congressional intent that, whenever possible, sampling shall be used." S. Rep. No. 1256, 94th Cong., 2d Sess. 6 (1976), reprinted in 1976 U.S.C.C.A.N. 5463, 5468.

<sup>19</sup>One further aspect of the 1976 legislative history should be noted. In the 1970 decennial census, the Bureau used "sampling" to add to the national total the figure of almost five million people believed missing from the headcount. The Bureau estimated that it had not contacted some 10.2 million people, or about 5% of the population. Of this 10.2 million not actually counted, 4.9 million were included in the official count by "imputation" and allocated among the States for apportionment of House seats. *Young v. Klutznick*, 497 F. Supp. at 1321; see also Gerson Memorandum at 15 ("[i]n effect, a portion of the population was not tabulated directly in 1970. Instead, the Bureau obtained an estimate of its size from the results of statistical sampling and added that estimate to the total population count."). The district court in *Young* inferred that when Congress amended section 195 in 1976, it was "well aware" of the Bureau's adjustment of the 1970 census data and impliedly consented to that practice. 497 F. Supp. at 1334-35. The court cited no direct evidence, however, that Congress was aware of, and approved, the 1970 census adjustment. See Gerson Memorandum at 15. Moreover, as the Bureau argued, see *Young*, 497 F. Supp. at 1334, the re-enactment of section 195 (with essentially minor changes from 1957) could be interpreted as a ratification of the Bureau's more traditional practice of using only a headcount.

power to the Bureau: the section could be taken to mean that while census figures used for apportionment may not be based on sampling alone, it is permissible to use population samples as one element in a more complex operation by which a prior "headcount" is corrected. Such a reading has in fact generally been adopted by the courts. See *Carey v. Klutznick*, 508 F. Supp. at 415; *Young v. Klutznick*, 497 F. Supp. at 1334-35; see also Gerson Memorandum at 18 ("the weight of existing caselaw" is "that Section 195 does not preclude statistical adjustment").<sup>20</sup>

Moreover, if section 195 were read as preclusive, its constitutionality would be highly suspect. Because (as shown above) a non-preclusive reading is a reasonable one, it should be preferred.

Substantial constitutional issues would arise under both the Enumeration Clause and the Fifth Amendment if section 195 were construed to prevent the Bureau from adjusting census data for apportionment. The Enumeration Clause prescribes that Representatives be apportioned to the several States "according to their respective Numbers," and it can be argued that the Clause is violated if Representatives are apportioned on the basis of a census count that is known to be deficient, but that could be rendered more accurate by feasible adjustments. See *Franklin v. Massachusetts*, 112 S. Ct. at 2778 (Bureau's decision to allocate government personnel stationed abroad to State designated as home of record "does not hamper the underlying constitutional goal of equal representation, but . . . actually promotes equality"); *United States Dep't of Commerce v. Montana*, 112 S. Ct. 1415, 1427 (1992) (Court "might well find" that requirement that Representatives be apportioned by reference to the populations of the several States "embod[ied] the same principle of equality" as found in *Wesberry*); *Carey v. Klutznick*, 508 F. Supp. at 414 (language of Enumeration Clause evinces "an intent that apportionment be based on a census that most accurately reflects the true population of each state"); cf. *Wesberry v. Sanders*, 376 U.S. at 13-14.

Furthermore, "[t]he Fifth Amendment . . . might be thought, by analogy to the decisions invalidating the malapportionment of state legislatures under the equal protection clause, to require the federal government to apportion congressional seats . . . in accordance with an accurate estimate of the number of people in each state." *Tucker*, 958 F.2d at 1414. See e.g., *Reynolds v. Sims*, 377 U.S. 533, 555 (1964) ("the right of suffrage can be denied by a debasement or dilution of the weight of a citizen's vote just as effectively as by wholly prohibiting the free exercise of the franchise"). Thus, the Second Circuit has found that the Bureau's decision not to adjust the 1990 census figures was constitutionally suspect under the Fifth Amendment. "[Both] the nature of the right and the nature of the affected classes are factors that traditionally require that the government's action be given heightened scrutiny: the right to have one's vote counted equally is fundamental and constitutionally protected, and the unadjusted census undercount disproportionately disadvantages certain identifiable minority groups . . . That the goal of precise equality cannot be achieved nationwide . . . does not relieve the federal government of the obligation to make a good-faith effort to achieve voting-power equality 'as nearly as practicable.'" *City of New York*, 1994 WL 423474, at \*16, \*17 (citation omitted).

We need not here consider whether the Second Circuit's view of the merits is correct; nor need we address the issue whether the question the court decided was litigable. Suffice it that there would be substantial constitutional difficulties under both the Enumeration Clause and the Fifth Amendment if section 195 were understood to prohibit the Bureau from making practicable statistical adjustments that would result in a more accurate tally than the traditional headcount. Section 195 should be construed, if "fairly possible," to avoid those difficulties. See, e.g., *Ashwander v. TVA*, 297 U.S. 288, 348 (1936) (Brandeis, J., concurring) (citation omitted). Because a constitutionally unproblematic reading is justified (and has, in fact, been adopted by most courts), it should be adopted.

Accordingly, section 195 does not preclude reliance upon technically feasible statistical adjustments to improve the accuracy of "headcount" data, and specifically to correct the differential undercounting of minority group populations. It also does not prohibit the Bureau from conducting the non-response follow-up on a sample basis, rather than sending enumerators to every non-responding household, where the use of the former technique would improve accuracy while substantially lowering administrative costs.

<sup>20</sup> But see Comment, Lies, Damn Lies and Statistics: Dispelling Some Myths Surrounding the United States Census, 1990 Det. C.L. Rev. 71 (criticizing case law); Gerson Memorandum at 18 ("[w]e can foresee a court deciding that Section 195, on its face, prohibits statistical adjustment").

## CONCLUSION

Neither the Constitution nor the Census Act precludes the Bureau from making the proposed statistical adjustments of "headcount" data in the decennial census for the year 2000.

Sept. 25, 1980.

MEMORANDUM TO ALICE DANIEL

ASSISTANT ATTORNEY GENERAL—CIVIL DIVISION

Re: Pending Litigation Concerning Statistical Adjust of 1980 Decennial Census Population Data

This responds to your memorandum of September 3, 1980, requesting that we advise you of any aspect of the legal position that Civil has taken on behalf of the Commerce Department in the pending census litigation that we believe deserves further consideration. Although we agree with your ultimate conclusion that the Census Bureau is not required to adjust the census figures, we have doubts about two of the principal contentions. As you describe the various defenses in the post-trial brief in *Young, et al. v. Klutznick, et al.*, the points are numbers one and three, namely, that the Constitution prohibits the Census Bureau from using statistical adjustment techniques (even if the Bureau were to determine that adjustment would improve the accuracy of the count) and that the Census Act prevents the Bureau from using adjustment techniques to correct errors and deficiencies in the headcount. On the other hand, we agree that if the Bureau were to determine on the basis of its expertise and in the exercise of its discretion that no techniques are available that would produce a uniformly more accurate census, then its determination not to adjust should be accorded controlling weight. We will explain the reasons for our conclusions.

On the constitutional issue, you have taken the position that the phrase "actual Enumeration" in art. I, §2, cl. 3, means a headcount and that it prohibits adjustment by any statistical techniques. You say that the requirement of an actual enumeration is antagonistic to the concept of estimation, as the result of a statistically adjusted headcount is characterized. But given the Census Bureau's own concession that the headcount is not accurate, we do not find this "plain meaning" approach convincing. It is not easy to see that an inaccurate headcount is less of an estimation and more of an actual enumeration that is a headcount adjusted in some statistically appropriate way to take account of and correct for the inaccuracies in the headcount.

In interpreting the constitutional requirement of an actual enumeration, you also rely on the perceived intent of the Framers, asserted on the basis of the practice in 1790 of taking the census by a headcount and the estimate of Census Director Barabba that there was an estimated 400,000 person undercount in the 1790 census of which the Framers "must have been aware." The historical context leading to the adoption of the census requirement suggests, however, a contrary view of the Framers' intent.

The constitutional debates do not provide a definition of "actual enumeration." Still, it is clear that the phrase was chosen because an accurate population count was essential once the Convention decided, in the Great Compromise, that representation in the House would be apportioned on the basis of population. As the delegates recognized, apportionment by population would be fair only if the population figures were accurate. The goal of accuracy gained added significance because direct taxes were to be similarly apportioned on the basis of population. Madison notes in the *Federalist* No. 54 that these two competing purposes would help keep the States honest, impartial, and accurate in counting their numbers.

You recognize in your brief that the Framers apportioned the first House of Representatives on the basis of "a mere conjecture" of population; the first census would produce the "precise standard" for use in reapportionment. This historical interpretation leads logically to the conclusion that the reason for proposing the census in the first instance must have been to assure as accurate a tabulation as possible. And although the taking of a headcount in 1790 was more accurate than the estimation agreed upon at the Convention, it is not necessarily more accurate than a statistically adjusted headcount in 1980. The result, and not the method, is the important lesson of the historical experience.

Finally, you rely on *Gaffney v. Cummings*, 412 U.S. 735, 745 (1973), with its recognition that the census "may be as accurate as such immense undertakings can

be, but [it is] inherently less than absolutely accurate." *Gaffney* was a state reapportionment case in which the standard for constitutional muster was expressly stated to be less stringent than in the *Wesberry v. Sanders*, 376 U.S. 1 (1969)/Article I Congressional reapportionment cases. The reason for the difference is clear: in the state cases, the plaintiff must prove invidious discrimination under the Fourteenth Amendment, and the burden of proof is substantial dilution of one person's vote. Thus relatively minor census population variations among legislative districts were excused in *Gaffney*. By contrast, *Kirkpatrick v. Preisler*, 394 U.S. 526 (1969), from the *Wesberry* line of cases, would allow no fixed variance as small enough to be considered *de minimis* and to satisfy without further scrutiny the "as nearly as practicable" standard of equal representation. *Gaffney* thus provides no support in these Article I cases for a constitutional tolerance of inaccuracies and undercounts. In sum, the position that the Constitution prohibits any statistical adjustment is not supportable—not as a matter of semantics, Framers' intent, or Supreme Court case law.

On the statutory issue, you have taken the position that 13 U.S.C. § 195 prohibits statistical adjustment. But § 195 by its terms prohibits "sampling," which, according to the legislative history as well as the common understanding of the term, is different from the statistical adjustment that plaintiffs seek. Sampling refers to a representative portion of the whole, see Hearings on H.R. 7911 Before a Subcomm. of the House Comm. on Post Office and Civil Service, 85th Cong., 1st Sess. 7-8 (1957); while adjustment refers to additions to the whole, here the headcount. As we read the Census Act, there is no statutory prohibition of statistical adjustment. The Act prohibits sampling as a substitute for a complete headcount, but it does not preclude a post-count correction of errors.

As you correctly note, however, neither is there a statutory requirement of adjustment. The Census Act merely provides that the Secretary of Commerce shall take the census "in such form and content as he may determine." 13 U.S.C. § 141(a). This point provides the strongest and most legitimate defense in these cases. The statute vests in the agency the discretion to determine the way in which the census shall be taken. The Bureau, of course, is still constrained by the constitutional standard, implicit in the enumeration requirement, of the utmost accuracy fairly achievable. Thus the Bureau could not refuse to adjust merely because it would be time-consuming, inconvenient, or costly (at least if not excessively so). But a reasoned and expert determination that adjustment would not enhance the accuracy of the headcount because of limitations in the techniques themselves should be upheld, as you suggest in your point number 5.

The only difficulty with this approach is that this may not have been the basis in fact for the Bureau's decision not to adjust the headcount totals. The Bureau's refusal to adjust, if reached in the belief that it was constitutionally of statutorily prohibited from doing so, would no more indicate agency discretion than would a determination based solely on the costs or trouble involved. If the Bureau decides to adjust the headcount totals for revenue sharing and other financial allocations, it might indicate its recognition that the headcount was not the most accurate enumeration, its desire to improve the accuracy, and its belief that it possessed the technical know-how to do so. In that case, its refusal to adjust for reapportionment purposes would be difficult to support.

One final note: the issues in these cases, especially the constitutional issues, have taken on added importance in light of the introduction of bills in Congress—by Senator Moynihan and Representative Rosenthal—to require statistical adjustment of the headcount figures. Stuart Eizenstat and Lloyd Cutler have recently requested our views on the constitutionality of these bills. Under the position that you have taken in these cases, the bills would presumably be unconstitutional. We would be pleased to discuss these issues further at your convenience.

JOHN M. HARMON,  
Assistant Attorney General,  
Office of Legal Counsel.

U.S. DEPARTMENT OF COMMERCE,  
Washington, DC, May 24, 1996.

Hon. HAROLD ROGERS,  
*Chairman, Subcommittee on Commerce,  
Justice, State, the Judiciary and Related Agencies,  
Committee on Appropriations,  
House of Representatives,  
Washington, DC.*

DEAR MR. CHAIRMAN: Secretary Kantor and Under Secretary Ehrlich have discussed with me your concern, expressed at recent budget hearings, regarding anticipated lawsuits challenging the 2000 census. You suggested that the Census Bureau consider seeking a declaratory judgment that its plan to use sampling in Census 2000 is permissible. The Department of Commerce very much appreciates your Subcommittee's suggestions and we would like to share with you our views on this important subject.

Regrettably, we do not believe that the Census Bureau can seek a declaratory judgment regarding its plan for Census 2000. The Judicial Code allows the filing of a suit asking for a declaratory judgment only where a party seeks resolution of an "actual controversy", 28 U.S.C. § 2201. This limitation flows from Article III, Section 2, of the Constitution, which grants jurisdiction to federal courts only for cases and controversies.<sup>1</sup> The actual controversy requirement has been interpreted to disallow advisory opinions; a concrete controversy between parties is required. At this time there is no actual controversy regarding Census 2000. The census has not been taken, appropriations have not been made, agency operational plans have not been finalized, and we do not believe that any potential party will suffer harm based on the manner in which Census 2000 will be taken. While a declaratory judgment may be granted prior to the plaintiff suffering an actual injury, a court cannot grant a declaratory judgment unless the record is clear that a specific injury to a known party will occur. For these reasons, we do not believe a declaratory judgment is appropriate. However, we will keep your suggestions in mind should circumstances change.

With respect to the appropriateness of the Census Bureau's plans for 2000, the Census Bureau believes that the introduction of a limited use of sampling will make Census 2000 not only cost effective, but also more accurate. The Bureau plans to use sampling both to account for the final 10 percent of households that do not respond to traditional methods of enumeration, and to ensure a more accurate census through the concurrent Integrated Coverage Measurement survey. We are confident that the use of sampling violates neither the Constitution nor the Census Act.

The Department of Justice shares our view that the Census Bureau's plan to use sampling in Census 2000 is lawful. The Office of Legal Counsel concluded in an October 7, 1994 opinion that both planned uses of sampling (for non-response follow-up and the Integrated Coverage Measurement Survey) are lawful. I have enclosed a copy of this opinion for you. The Census Bureau recently submitted copies of this opinion, and other DOJ opinions that deal with sampling, to the House Committee on Government Reform and Oversight. It is noteworthy that the enclosed Justice Department opinion approved a plan to sample 25-50 percent of non-responding households. The Bureau's current plan calls for sampling to be used only for the final 10 percent of non-responding households.

As you know, the Supreme Court recently resolved the most prominent case challenging the 1990 decennial census. The Court confirmed that the Census Bureau enjoys a substantial degree of discretion in the methods it uses to take the census, but unfortunately the Court did not address either the constitutionality or the legality of sampling.<sup>1</sup> The lower courts that have addressed this issue, however, have all concluded that sampling and adjustment are permitted, so long as they are not used as a substitute for a headcount. I enclose for you a copy of a handout from the February 28, 1996 Census 2000 Rollout which quotes from the lower court cases that address the use of sampling.

The Commerce Department appreciates your suggestions for the 2000 census. I hope that you or your staff will feel free to contact me if you have any further questions about the legal aspects of Census 2000.

Very truly yours,

SUSAN G. ESSERMAN.

<sup>1</sup> *Wisconsin v. City of New York*, 116 S.Ct. 1091 (1996), at 1101. See, fn. 9 ("We do not decide whether the Constitution might prohibit Congress from conducting the type of statistical adjustment considered here.") and fn. 11 ("We do not here decide the precise bounds of the authority delegated to the Secretary through the Census Act.")

## SUPREME COURT DECISION

WISCONSIN, Petitioner,

v.

CITY OF NEW YORK et al.

OKLAHOMA, Petitioner,

v.

CITY OF NEW YORK et al.

DEPARTMENT OF COMMERCE, et al., Petitioners,

v.

CITY OF NEW YORK et al.

Nos. 94-1614, 94-1631 and 94-1985.

Supreme Court of the United States

Argued Jan. 10, 1996.

Decided March 20, 1996.\*

States, cities, citizens' groups, and individual citizens brought action challenging Secretary of Commerce's decision not to statistically adjust 1990 census for differential undercounting. The United States District Court for the Eastern District of New York, Joseph M. McLaughlin, Circuit Judge, dismissed action, 822 F.Supp. 906, and appeal was taken. The Court of Appeals for the Second Circuit, Kearse, Circuit Judge, 34 F.3d 1114, vacated and remanded. On certiorari review, the Supreme Court, Chief Justice Rehnquist, held that: (1) Secretary's decision not to statistically adjust census was not subject to heightened scrutiny, and (2) Secretary's decision not to statistically adjust census was well within constitutional bounds of discretion over conduct of census provided to Federal Government.

Reversed.

## 1. Census ☞ 4

Secretary of Commerce's decision not to statistically adjust 1990 census results to rectify undercounting of minority groups was not subject to heightened scrutiny of "one person-one vote" standard but, rather, Secretary's decision not to adjust results was only required to have reasonable relationship to accomplishment of actual enumeration of population, keeping in mind constitutional purpose of census. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## 2. Census ☞ 7

Congress' conduct of administering census, for purposes of apportioning representatives among states, even more than its decision concerning apportionment, commands far more deference than state districting decision that is capable of being reviewed under relatively rigid mathematical standard. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## 3. Constitutional Law ☞ 213.1(1)

Strict scrutiny of classification affecting protected class is properly invoked only where plaintiff can show intentional discrimination by Government. U.S.C.A. Const. Amend. 14.

## 4. Census ☞ 4

So long as Secretary of Commerce's conduct of administering census is consistent with constitutional language and constitutional goal of equal representation, it is within limits of Constitution. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

\*Together with No. 94-1631, *Oklahoma v. City of New York et al.*, and No. 94-1985, *Department of Commerce et al. v. City of New York et al.*, also on certiorari to the same court.

## 5. Census ↪ 4

Secretary of Commerce's preference for distributive accuracy, rather than numerical accuracy, in conducting decennial census was not inconsistent with constitutional goal of apportioning representatives among states. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## 6. Census ↪ 7

Secretary of Commerce's decision that statistical adjustment of 1990 census results to rectify undercounting of minority groups would have been significant change from traditional method of conducting census and contrary to rebuttable presumption that traditional method was most accurate, was not abuse of discretion, in view of evidence that statistical adjustments in prior census years were of entirely different type than adjustment in this case and took place on dramatically smaller scale, and that requested statistical adjustment would have been first time in history that states' apportionment would have been based upon counts in other states. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## 7. Census ↪ 7

Deference given to Secretary of Commerce's decision that statistical adjustment of 1990 census results to rectify undercounting of minority groups would not improve distributive accuracy was not based on highly technical nature of decision but, rather, deference was based on wide discretion bestowed by Constitution on Congress to conduct census, and by Congress upon Secretary to administer census. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## 8. Census ↪ 7

Secretary of Commerce's decision that statistical adjustment of 1990 census results to rectify undercounting of minority groups would not improve distributive accuracy was supported by reasoning of some of his advisors, and was, therefore, reasonable choice in area where technical experts disagreed. U.S.C.A. Const. Art. 1, § 2, cl. 3; 13 U.S.C.A. § 1 et seq.

## SYLLABUS\*\*

The Constitution's Census Clause vests Congress with the responsibility to conduct an "actual Enumeration" of the American public every 10 years, with the primary purpose of providing a basis for apportioning congressional representation among the States. That responsibility has been delegated to the Secretary of Commerce, who determined that an "actual Enumeration" would best be achieved in the 1990 census by not using a postenumeration survey (PES) statistical adjustment designed to correct an undercount in the initial enumeration. In this action brought by several of the respondents and others, the District Court concluded that the Secretary's decision not to statistically adjust the census violated neither the Constitution nor federal law. In reversing and remanding, the Court of Appeals looked to a line of precedent involving judicial review of intrastate districting decisions, see *Wesberry v. Sanders*, 376 U.S. 1, 84 S.Ct. 526, 11 L.Ed.2d 481, and its progeny, and held, *inter alia*, that a heightened standard of review was required here because the Secretary's decision impacted the fundamental right to have one's vote counted and had a disproportionate impact upon certain identifiable minority racial groups.

Held: Because it was reasonable to conclude that an "actual Enumeration" could best be achieved in the 1990 census without the PES-based statistical adjustment, the Secretary's decision not to use that adjustment was well within the constitutional bounds of discretion over the conduct of the census that is provided to the Federal Government. Pp. 1098-1103.

(a) The Secretary's decision was not subject to heightened scrutiny. In two recent decisions, *Department of Commerce v. Montana*, 503 U.S. 442, 112 S.Ct. 1415, 118 L.Ed.2d 87, and *Franklin v. Massachusetts*, 505 U.S. 788, 112 S.Ct. 2767, 120 L.Ed.2d 636, this Court rejected the application of *Wesberry's* "one person-one vote" standard to Congress, concluding that the Constitution vests Congress with wide discretion over apportionment decisions and the conduct of the census, and that the appropriate standard of review examines a congressional decision to determine whether it is "consistent with the constitutional language and the constitutional goal of equal representation," see *Franklin, supra*, at 804, 112 S.Ct., at 2777. Rather than the strict scrutiny standard applied in *Wesberry* and adopted by the Court of Appeals, the standard established in *Montana* and *Franklin* applies to the Sec-

\*\*The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Lumber Co.*, 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed 499.

retary's decision here. The Constitution's text vests Congress with virtually unlimited discretion in conducting the "actual Enumeration," see Art. I, § 2, cl. 3 (Congress may conduct the census "in such Manner as they shall by Law direct"), and there is no basis for thinking that such discretion is more limited than that text provides. Through the Census Act, 13 U.S.C. § 141(a), Congress has delegated its broad authority over the census to the Secretary. Hence, so long as the Secretary's conduct of the census is "consistent with the constitutional language and the constitutional goal of equal representation," it is within the Constitution's limits. Pp. 1098–1101.

(b) The Secretary's decision conformed to applicable constitutional and statutory provisions. In light of the Constitution's broad grant of authority to Congress, that decision need bear only a reasonable relationship to the accomplishment of an actual enumeration of the population, keeping in mind the census' constitutional purpose of apportioning congressional representation. The Secretary based the decision upon three determinations, each of which is well within the bounds of his constitutional discretion. First, he held that in light of the constitutional purpose, the census' distributive accuracy—*i.e.*, getting most nearly correct the proportions of people in different areas—was more important than its numerical accuracy. A preference for distributive accuracy (even at the expense of some numerical accuracy) is not inconsistent with the constitutional need to determine the apportionment of the Representatives among the States. Second, the Secretary's determination that the unadjusted census data should be considered the most distributively accurate absent a showing to the contrary was based on his well-founded understanding of historical census practice and experience, an important consideration in this context. See, e.g., *Montana, supra*, at 465, 112 S.Ct., at 1429–30. Respondents misplace their reliance on statistical adjustments that were used in the 1970 and 1980 censuses, since those adjustments were of an entirely different type than the one at issue and took place on a dramatically smaller scale, and since a PES-based adjustment would have been the first time in history that the States' apportionment was based upon counts in other States. Third, respondents' contention that this Court should review *de novo* the Secretary's conclusions on this point fundamentally misapprehends the basis for deference to his determination, which arises not from the highly technical nature of his decision, but from the wide discretion bestowed by the Constitution upon Congress, and by Congress upon him. The Secretary's conclusion that the PES-based adjustment would not improve distributive accuracy, which was based on his review of extensive research and the recommendations of some of his advisers, was a reasonable choice in an area where technical experts disagree. Pp. 1101–1103.

34 F.3d 1114 (C.A.2 1994), reversed.

REHNQUIST, C.J., delivered the opinion for a unanimous Court.

On Writs of Certiorari to the United States Court of Appeals for the Second Circuit.

Drew S. Days, III, Washington, DC, for federal petitioners.

James E. Doyle, Attorney General, Madison, WI, for state petitioners.

Robert S. Rifkind, New York City, for respondents.

For U.S. Supreme Court Briefs, see:

1995 WL 656877, 1995 WL 668011, 1995 WL 668005 (Pet. Brief)

1995 WL 731717 (Resp. Brief)

1995 WL 790421, 1995 WL 763725, 1995 WL 763706 (Reply. Brief)

CHIEF JUSTICE REHNQUIST delivered the opinion of the Court.

In conducting the 1990 United States Census, the Secretary of Commerce decided not to use a particular statistical adjustment that had been designed to correct an undercount in the initial enumeration. The Court of Appeals for the Second Circuit held that the Secretary's decision was subject to heightened scrutiny because of its effect on the right of individual respondents to have their vote counted equally. We hold that the Secretary's decision was not subject to heightened scrutiny, and that it conformed to applicable constitutional and statutory provisions.

I

The Constitution requires an "actual Enumeration" of the population every 10 years and vests Congress with the authority to conduct that census "in such Manner as they shall by Law direct."<sup>1</sup> Art. I, § 2, cl. 3. Through the Census Act, 13 U.S.C.

<sup>1</sup>The Census Clause provides in full: "The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct." Art. I, § 2, cl. 3.

§ 1 *et seq.*, Congress has delegated to the Secretary of the Department of Commerce the responsibility to take "a decennial census of the population . . . in such form and content as he may determine . . ." § 141(a). The Secretary is assisted in the performance of that responsibility by the Bureau of the Census and its head, the Director of the Census. See § 2; § 21 ("[The] Director shall perform such duties as may be imposed upon him by law, regulations, or orders of the Secretary").

The Constitution provides that the results of the census shall be used to apportion the Members of the House of Representatives among the States. See Art. I, § 2, cl. 3 ("Representatives . . . shall be apportioned among the several States . . . according to their respective Numbers . . ."); Amdt. XIV, § 2 ("Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State . . ."). Because the Constitution provides that the number of Representatives apportioned to each State determines in part the allocation to each State of votes for the election of the President, the decennial census also affects the allocation of members of the electoral college. See Art. II, § 1, cl. 2 ("Each State shall appoint . . . a Number of Electors, equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress . . ."). Today, census data also have important consequences not delineated in the Constitution: The Federal Government considers census data in dispensing funds through federal programs to the States, and the States use the results in drawing intrastate political districts.

There have been 20 decennial censuses in the history of the United States. Although each was designed with the goal of accomplishing an "actual Enumeration" of the population, no census is recognized as having been wholly successful in achieving that goal.<sup>2</sup> Cf. *Karcher v. Daggett*, 462 U.S. 725, 732, 103 S.Ct. 2653, 2659, 77 L.Ed.2d 133 (1983) (recognizing that "census data are not perfect," and that "population counts for particular localities are outdated long before they are completed"); *Gaffney v. Cummings*, 412 U.S. 735, 745, 93 S.Ct. 2321, 2327, 37 L.Ed.2d 298 (1973) (census data "are inherently less than absolutely accurate"). Despite consistent efforts to improve the quality of the count, errors persist. Persons who should have been counted are not counted at all or are counted at the wrong location; persons who should not have been counted (whether because they died before or were born after the decennial census date, because they were not a citizen of the country, or because they did not exist) are counted; and persons who should have been counted only once are counted twice. It is thought that these errors have resulted in a net "undercount" of the actual American population in every decennial census. In 1970, for instance, the Census Bureau concluded that the census results were 2.7% lower than the actual population.<sup>3</sup> Brief for Respondents 12.

The undercount is not thought to be spread consistently across the population: Some segments of the population are "undercounted" to a greater degree than are others, resulting in a phenomenon termed the "differential undercount." Since at least 1940, the Census Bureau has thought that the undercount affects some racial and ethnic minority groups to a greater extent than it does whites. In 1940, for example, when the undercount for the entire population was 5.4%, the undercount for blacks was estimated at 8.4%, (and the undercount for whites at 5.0%). Brief for Respondents 12. The problem of the differential undercount has persisted even as the census has come to provide a more numerically accurate count of the population. In the 1980 census, for example, the overall undercount was estimated at 1.2%, and the undercount of blacks was estimated at 4.9%. Brief for Respondents 12.

The Census Bureau has recognized the undercount and the differential undercount as significant problems, and in the past has devoted substantial effort toward achieving their reduction. Most recently, in its preparations for the 1990 census, the Bureau initiated an extensive inquiry into various means of overcoming the impact of the undercount and the differential undercount. As part of this effort, the Bureau created two task forces: the Undercount Steering Committee (USC), re-

<sup>2</sup> Indeed, even the first census did not escape criticism. Thomas Jefferson, who oversaw the conduct of that census in 1790 as Secretary of State, was confident that it had significantly undercounted the young Nation's population. See C. Wright, *History and Growth of the United States Census 16-17* (1900).

<sup>3</sup> One might wonder how the Census Bureau is able to determine whether there is an undercount and its size. Specifically: against what standard are the census results measured? After all, if the actual population of the United States is known, then the conduct of the census would seem wholly redundant.

For the most part, we are told, the size of the error in a particular census is determined by comparing the census results not with some definite and established measure of the population, but rather with estimates of the population developed from demographic data. See *Pet.App.* in 94-1614, pp. 168a-168a, 366a-369a. A similar procedure traditionally has been used to determine the size and make-up of the differential undercount, see *infra*.

sponsible for planning undercount research and policy development; and the Undercount Research Staff (URS), which conducted research into various methods of improving the accuracy of the census. In addition, the Bureau consulted with state and local governments and various outside experts and organizations.

Largely as a result of these efforts, the Bureau adopted a wide variety of measures designed to reduce the rate of error in the 1990 enumeration, including an extensive advertising campaign, a more easily completed census questionnaire, and increased use of automation, which among other things facilitated the development of accurate maps and geographic files for the 1990 census. Pet.App. 321a-322a.<sup>4</sup> The Bureau also implemented a number of improvements specifically targeted at eliminating the differential undercount; these included advertising campaigns developed by and directed at traditionally undercounted populations and expanded questionnaire assistance operations for non-English speaking residents. *Id.*, at 321a-322a.

In preparing for the 1990 census, the Bureau and the task forces also looked into the possibility of using large-scale statistical adjustment to compensate for the undercount and differential undercount. Although the Bureau had previously considered that possibility (most recently in 1980), it always had decided instead to rely upon more traditional methodology and the results of the enumeration. See *Cuomo v. Baldrige*, 674 F.Supp. 1089 (S.D.N.Y.1987) (noting that Bureau rejected large-scale statistical adjustment of 1980 census). In 1985, preliminary investigations by the URS suggested that the most promising method of statistical adjustment was the "capture-recapture" or "dual system estimation" approach.

The particular variations of the "dual system estimation" considered by the Bureau are not important for purposes of this opinion, but an example may serve to make the "dual system estimation" more understandable. Imagine that one wanted to use DSE in order to determine the number of pumpkins in a large pumpkin patch. First, one would choose a particular section of the patch as the representative subset to which the "recapture" phase will be applied. Let us assume here that it is a section exactly  $\frac{1}{10}$  the size of the entire patch that is selected. Then, at the next step—the "capture" stage—one would conduct a fairly quick count of the entire patch, making sure to record both the number of pumpkins counted in the entire patch and the number of pumpkins counted in the selected section. Let us imagine that this stage results in a count of 10,000 pumpkins for the entire patch and 1,000 pumpkins for the selected section. Next, at the "recapture" stage, one would perform an exacting count of the number of pumpkins in the selected section. Let us assume that we now count 1,100 pumpkins in that section. By comparing the results of the "capture" phase and the results of the "recapture" phase for the selected section, it is possible to estimate that approximately 100 pumpkins actually in the patch were missed for every 1,000 counted at the "capture" phase. Extrapolating this data to the count for the entire patch, one would conclude that the actual number of pumpkins in the patch is 11,000.

In the context of the census, the initial enumeration of the entire population (the "capture") would be followed by the post-enumeration survey (PES) (the "recapture") of certain representative geographical areas. The Bureau would then compare the results of the PES to the results of the initial enumeration for those areas targeted by the PES, in order to determine a rate of error in those areas for the initial enumeration, (i.e., the rate at which the initial enumeration undercounted people in those areas). That rate of error would be extrapolated to the entire population, and thus would be used to statistically adjust the results of the initial enumeration.

The URS thought that the PES also held some promise for correcting the differential undercount. The PES would be conducted through the use of a system called post-stratification. Thus, each person counted through the PES would be placed into one, and only one, of over 1,000 post-strata defined by five categories: geography; age; sex; status of housing unit (rent v. own); and race (including Hispanic versus non-Hispanic origin).<sup>5</sup> By comparing the post-stratified PES data to the results of the initial enumeration, the Bureau would be able to estimate not only an overall undercount rate, but also an undercount rate for each post-strata. Hence, the statis-

<sup>4</sup>All references to Pet.App. are to the appendix to the petition for certiorari in No. 94-1614 unless otherwise noted.

<sup>5</sup>Examples of post-strata actually used include: female blacks between the ages of 20 and 29 who owned a home in either Detroit or Chicago; non-black non-Hispanic females, age 45-64, living in owned or rented housing in a non-metropolitan area with a population of 10,000 or more in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, or Wyoming; and male Asians or Pacific Islanders, age 65 or above, renting a home in either the Los Angeles-Long Beach area or another central city in a metropolitan area in Alaska, California, Hawaii, Oregon, or Washington.

tical adjustment of the census could reflect differences in the undercount rate for each post-strata.

Through the mid-1980's, the Bureau conducted a series of field tests and statistical studies designed to measure the utility of the PES as a tool for adjusting the census. The Director of the Bureau decided to adopt a PES-based adjustment, and in June 1987, he informed his superiors in the Department of Commerce of that decision. The Secretary of Commerce disagreed with the Director's decision to adjust, however, and in October 1987, the Department of Commerce announced that the 1990 Census would not be statistically adjusted.

In November 1988, several plaintiffs (including a number of the respondents in this case) brought suit in the United States District Court for the Eastern District of New York, arguing that the Secretary's decision against statistical adjustment of the 1990 census was unconstitutional and contrary to federal law. The parties entered into an interim stipulation providing, *inter alia*, that the Secretary would reconsider the possibility of a statistical adjustment.

In July 1991, the Secretary issued his decision not to use the PES to adjust the 1990 census. Pet.App. 135a-415a. The Secretary began by noting that large-scale statistical adjustment of the census through the PES would "abandon a two hundred year tradition of how we actually count people." *Id.*, at 138a. Before taking a "step of that magnitude," he held, it was necessary to be "certain that it would make the census better and the distribution of the population more accurate." *Ibid.* Emphasizing that the primary purpose of the census was to apportion political representation among the States, the Secretary concluded that "the primary criterion for accuracy should be distributive accuracy—that is, getting most nearly correct the proportions of people in different areas." *Id.*, at 146a-147a.

After reviewing the recommendations of his advisors and the voluminous statistical research that had been compiled, the Secretary concluded that although numerical accuracy (at the national level) might be improved through statistical adjustment, he could not be confident that the distributive accuracy of the census—particularly at the state and local level—would be improved by a PES-based adjustment.<sup>6</sup> *Id.*, at 140a-141a, 200a-201a. In particular, the Secretary noted, the adjusted figures became increasingly unreliable as one focused upon smaller and smaller political subdivisions. *Id.*, at 142a.

The Secretary stated that his decision not to adjust was buttressed by a concern that adjustment of the 1990 census might present significant problems in the future. *Id.*, at 143a. Because small changes in adjustment methodology would have a large impact upon apportionment—an impact that could be determined before a particular methodology was chosen—the Secretary found that statistical adjustment of the 1990 census might open the door to political tampering in the future. The Secretary also noted that statistical adjustment might diminish the incentive for state and local political leaders to assist in the conduct of the initial enumeration. See *id.*, at 143a-144a. In conclusion, the Secretary stated that the Bureau would continue its research into the possibility of statistical adjustment of future censuses, and would maintain its efforts to improve the accuracy and inclusiveness of the initial enumeration. *Id.*, at 145a.

The plaintiffs returned to court. The District Court concluded that the Secretary's decision violated neither the Constitution nor federal law. See *New York v. United States Dept. of Commerce*, 822 F.Supp. 906 (E.D.N.Y.1993).

Respondents appealed, arguing that the District Court had adopted the wrong standard of review for their constitutional claim,<sup>7</sup> and the Court of Appeals for the Second Circuit reversed by a divided vote. 34 F.3d 1114 (1994); Pet.App. 1a-40a. The majority looked to a line of precedent involving judicial review of intrastate districting decisions, see, e.g., *Karcher v. Daggett*, 462 U.S. 725, 103 S.Ct. 2653, 77 L.Ed.2d 133 (1983); *Wesberry v. Sanders*, 376 U.S. 1, 84 S.Ct. 526, 11 L.Ed.2d 481 (1964), and found that a heightened standard of review was required here both because the Secretary's decision impacted a fundamental right, viz., the right to have one's vote counted, and because the decision had a disproportionate impact upon certain identifiable minority racial groups. Pet.App. 33a. The court then held that the plaintiffs had shown that the Secretary had failed to make a good-faith effort to achieve equal districts as nearly as possible, *id.*, at 38a, and therefore that the

<sup>6</sup>The distinction between distributive and numerical accuracy becomes clear with an example. Imagine that the Bureau somehow were able to determine definitely that the census had failed to count exactly 10 million people nationwide. If those 10 million "persons" were added to the Nation's total population, and all 10 million were allocated to one particular State, then the numerical accuracy of the census would be improved, but the distributive accuracy would almost certainly be significantly impaired.

<sup>7</sup>Respondents did not appeal the District Court's treatment of their statutory claims.

defendants must bear the burden of proving that population deviations were necessary to achieve some legitimate state goal, *id.*, at 39a–40a. The court remanded for an inquiry into whether the Secretary could show that the decision not to adjust was essential for the achievement of a legitimate governmental objective. *Id.*, at 40a.

The dissenting judge stated that he would have affirmed based upon the decision of the District Court. See *ibid.* He also noted that the majority's decision created a conflict with two other decisions of the Courts of Appeals. See *Detroit v. Franklin*, 4 F.3d 1367 (C.A.6 1993), and *Tucker v. United States Dept. of Commerce*, 958 F.2d 1411 (C.A.7 1992).

Wisconsin, Oklahoma, and the United States each filed a petition for certiorari. We granted those petitions, and consolidated them for argument. 515 U.S. —, 116 S.Ct. 38, 132 L.Ed.2d 919 (1995). We now reverse.

## II

In recent years, we have twice considered constitutional challenges to the conduct of the census. In *Department of Commerce v. Montana*, 503 U.S. 442, 112 S.Ct. 1415, 118 L.Ed.2d 87 (1992), the State of Montana, several state officials, and Montana's Members of Congress brought suit against the Federal Government, challenging as unconstitutional the method used to determine the number of Representatives to which each State is entitled. A majority of a three-judge District Court looked to the principle of equal representation for equal numbers of people that was applied to intrastate districting in *Wesberry v. Sanders*, *supra*, and held it applicable to congressional apportionment of seats among the States. Noting a significant variance between the population of Montana's single district and the population of the "ideal district," the court found that Congress' chosen method of apportionment violated the principle of *Wesberry*, and therefore voided the federal statute providing the method of apportionment.

In an unanimous decision, this Court reversed. We began by revisiting *Wesberry*, a case in which the Court held unconstitutional wide disparities in the population of congressional districts drawn by the State of Georgia. *Montana*, *supra*, at 459–460, 112 S.Ct., at 1426–27. We recognized that the principle of *Wesberry*—"equal representation for equal numbers of people"—had evolved through a line of cases into a strictly enforced requirement that a State "make a good-faith effort to achieve precise mathematical equality" among the populations of congressional districts. See *Montana*, *supra*, at 460, 112 S.Ct., at 1426, quoting *Kirkpatrick v. Preisler*, 394 U.S. 526, 530–531, 89 S.Ct. 1225, 1228–29, 22 L.Ed.2d 519 (1969) (disparities between congressional districts in Missouri held unconstitutional); see also *Karcher v. Daggett*, *supra*, (1% disparity between population of New Jersey districts held unconstitutional). Returning to Montana's challenge to Congress' apportionment decision, we noted that the *Wesberry* line of cases all involved intrastate disparities in the population of voting districts that had resulted from a State's redistricting decisions, whereas Montana had challenged interstate disparities resulting from the actions of Congress. *Montana*, *supra*, at 460, 112 S.Ct., at 1426–27.

We found this difference to be significant beyond the simple fact that Congress was due more deference than the States in this area. *Wesberry* required a State to make "a good-faith effort to achieve precise mathematical equality" in the size of voting districts. *Kirkpatrick*, *supra*, at 530–531, 89 S.Ct., at 1228–29. While this standard could be applied easily to intrastate districting because there was no "theoretical incompatibility entailed in minimizing both the absolute and the relative differences" in the sizes of particular voting districts, we observed that it was not so easily applied to interstate districting decisions where there was a direct trade-off between absolute and relative differences in size. *Montana*, *supra*, at 461–462, 112 S.Ct., at 1427–28. Finding that Montana demanded that we choose between several measures of inequality in order to hold the *Wesberry* standard applicable to congressional apportionment decisions, we concluded that "[n]either mathematical analysis nor constitutional interpretation provide[d] a conclusive answer" upon which to base that choice. *Montana*, *supra*, at 463, 112 S.Ct., at 1429.

We further found that the Constitution itself, by guaranteeing a minimum of one representative for each State, made it virtually impossible in interstate apportionment to achieve the standard imposed by *Wesberry*. *Montana*, *supra*, at 463, 112 S.Ct., at 1429. In conclusion, we recognized the historical pedigree of the challenged method of apportionment, and reemphasized that Congress' "good-faith choice of a method of apportionment of Representatives among the several States 'according to their respective Numbers' commands far more deference than a state districting decision that is capable of being reviewed under a relatively rigid mathematical standard." *Montana*, *supra*, at 464, 112 S.Ct., at 1429.

In *Franklin v. Massachusetts*, 505 U.S. 788, 112 S.Ct. 2767, 120 L.Ed.2d 636 (1992), we reiterated our conclusion that the Constitution vests Congress with wide discretion over apportionment decisions and the conduct of the census. In *Franklin*, the State of Massachusetts and two of its registered voters sued the Federal Government, arguing that the method used by the Secretary to count federal employees serving overseas was (among other things) unconstitutional. Restating the standard of review established by *Montana*, we examined the Secretary's decision in order to determine whether it was "consistent with the constitutional language and the constitutional goal of equal representation." See *Franklin, supra*, at 804, 112 S.Ct., at 2777; *Montana, supra*, at 459, 112 S.Ct., at 1426. After a review of the historical practice in the area, we found that the plaintiffs had not met their burden of proving that a decision contrary to that made by the Secretary would "make representation . . . more equal." *Franklin*, 505 U.S., at 806, 112 S.Ct., at 2778. Concluding that the Secretary's decision reflected a "judgment, consonant with, though not dictated by, the text and history of the Constitution . . ." we held the Secretary's decision to be well within the constitutional limits on his discretion. *Ibid*.

In its decision in this case, the Court of Appeals found that a standard more strict than that established in *Montana* and *Franklin* should apply to the Secretary's decision not to statistically adjust the census. The court looked to equal protection principles distilled from the same line of state redistricting cases relied upon by the plaintiffs in *Montana*, and found that both the nature of the right asserted by respondents—the right to have one's vote counted equally—and the nature of the affected classes—"certain identifiable minority groups"—required that the Secretary's decision be given heightened scrutiny. Pet.App. 33a. The court drew from the District Court's decision "implicit" findings: that the census did not achieve equality of voting power as nearly as practicable; "that for most purposes and for most of the population [the PES-based] adjustment would result in a more accurate count than the original census; and that the adjustment would lessen the disproportionate undercounting of minorities." *Id.*, at 34a.

The court recognized two significant differences between the intrastate districting cases and the instant case: first, that this case involves the federal rather than a state government; and second, that constitutional requirements make it impossible to achieve precise equality in voting power nationwide. *Id.*, at 34a–35a. But it found these differences nondeterminative, deciding that no deference was owed to the Executive Branch on a question of law, and that the "impossibility of achieving precise mathematical equality is no excuse for [the Federal Government] not making [the] mandated good-faith effort." *Id.*, at 35a. The court found that the respondents here had established a prima facie violation of the *Wesberry* standard both by showing that the PES-based adjustment would increase numerical accuracy, and by virtue of the fact that "the differential undercount in the 1990 enumeration was plainly foreseeable and foreseen." Pet.App. 38a–39a. The court held that the Secretary's decision would have to be vacated as unconstitutional unless on remand he could show that the decision not to adjust "(a) furthers a governmental objective that is legitimate, and (b) is essential for the achievement of that objective." *Id.*, at 40a.

[1] We think that the Court of Appeals erred in holding the "one person-one vote" standard of *Wesberry* and its progeny applicable to the case at hand. For several reasons, the "good-faith effort to achieve population equality" required of a State conducting intrastate redistricting does not translate into a requirement that the Federal Government conduct a census that is as accurate as possible. First, we think that the Court of Appeals understated the significance of the two differences that it recognized between state redistricting cases and the instant case. The court failed to recognize that the Secretary's decision was made pursuant to Congress' direct delegation of its broad authority over the census. See Art. I, § 2, cl. 3 (Congress may conduct the census "in such Manner as they shall by Law direct.") The court also undervalued the significance of the fact that the Constitution makes it impossible to achieve population equality among interstate districts. As we have noted before, the Constitution provides that "[t]he number of Representatives shall not exceed one for every 30,000 persons; each State shall have at least one Representative; and district boundaries may not cross state lines." *Montana*, 503 U.S., at 447–448, 112 S.Ct., at 1419.

While a court can easily determine whether a State has made the requisite "good-faith effort" toward population equality through the application of a simple mathematical formula, we see no way in which a court can apply the *Wesberry* standard to the Federal Government's decisions regarding the conduct of the census. The Court of Appeals found that *Wesberry* required the Secretary to conduct a census that "would achieve population equality," which it understood to mean a census that was as accurate as possible. Pet.App. 34a. But in so doing, the court implicitly found that the Constitution prohibited the Secretary from preferring distributive accuracy

to numerical accuracy, and that numerical accuracy—which the court found to be improved by a PES-based adjustment—was constitutionally preferable to distributive accuracy. See *id.*, at 39a (“ . . . the Secretary did not make the required effort to achieve numerical accuracy as nearly as practicable, . . . the burden thus shifted to the Secretary to justify his decision not to adjust. . . .”) As in *Montana*, where we could see no constitutional basis upon which to choose between absolute equality and relative equality, so here can we see no ground for preferring numerical accuracy to distributive accuracy, or for preferring gross accuracy to some particular measure of accuracy. The Constitution itself provides no real instruction on this point, and extrapolation from our intrastate districting cases is equally unhelpful. Quite simply, “[t]he polestar of equal representation does not provide sufficient guidance to allow us to discern a single constitutionally permissible course.” *Montana*, *supra*, at 463, 112 S.Ct., at 1429.

[2, 3] In *Montana*, we held that Congress’ “apparently good-faith choice of a method of apportionment of Representatives among the several States ‘according to their respective numbers’” was not subject to strict scrutiny under *Wesberry*. *Montana*, 503 U.S., at 464, 112 S.Ct., at 1429. With that conclusion in mind, it is difficult to see why or how *Wesberry* would apply to the Federal Government’s conduct of the census—a context even further removed from intrastate districting than is congressional apportionment. Congress’ conduct of the census, even more than its decision concerning apportionment, “commands far more deference than a state districting decision that is capable of being reviewed under a relatively rigid mathematical standard.”<sup>8</sup> *Montana*, *supra*, at 464, 112 S.Ct., at 1429.

[4] Rather than the standard adopted by the Court of Appeals, we think that it is the standard established by this Court in *Montana* and *Franklin* that applies to the Secretary’s decision not to adjust. The text of the Constitution vests Congress with virtually unlimited discretion in conducting the decennial “actual Enumeration,”<sup>9</sup> see Art. I, § 2, cl. 3, and notwithstanding the plethora of lawsuits that inevitably accompany each decennial census,<sup>10</sup> there is no basis for thinking that Congress’ discretion is more limited than the text of the Constitution provides. See also *Baldrige v. Shapiro*, 455 U.S. 345, 361, 102 S.Ct. 1103, 1113, 71 L.Ed.2d 199 (1982) (noting broad scope of Congress’ discretion over census). Through the Census Act, Congress has delegated its broad authority over the census to the Secretary.<sup>11</sup> See 13 U.S.C. § 141(a) (Secretary shall take “a decennial census of [the] population . . . in such form and content as he may determine. . . .”) Hence, so long as the Secretary’s conduct of the census is “consistent with the constitutional language and the constitutional goal of equal representation,” *Franklin*, 505 U.S., at 804, 112 S.Ct., at 2777, it is within the limits of the Constitution. In light of the Constitution’s broad grant of authority to Congress, the Secretary’s decision not to adjust need bear only a reasonable relationship to the accomplishment of an actual enumeration of the population, keeping in mind the constitutional purpose of the census.

<sup>8</sup> Nor do we think that strict scrutiny applies here for some other reason. Strict scrutiny of a classification affecting a protected class is properly invoked only where a plaintiff can show intentional discrimination by the Government. *Washington v. Davis*, 426 U.S. 229, 239–245, 96 S.Ct. 2040, 2047–2050, 48 L.Ed.2d 597 (1976). Respondents here have not argued that the Secretary’s decision not to adjust was based upon an intent to discriminate on the basis of race. Indeed, in light of the Government’s extraordinary efforts to include traditionally undercounted minorities in the 1990 census, see Pet.App. 78a, 321a–322a, we think that respondents here would have had a tough row to hoe had they set out to prove intentional discrimination by the Secretary.

<sup>9</sup> We do not decide whether the Constitution might prohibit Congress from conducting the type of statistical adjustment considered here. See Brief for Wisconsin 40–42.

<sup>10</sup> See, e.g., *Franklin v. Massachusetts*, 505 U.S. 788, 790, 112 S.Ct. 2767, 2770, 120 L.Ed.2d 636 (1992) (“As one season follows another, the decennial census has again generated a number of reapportionment controversies.”); *National Law Center on Homelessness and Poverty v. Brown*, appeal pending, No. 94–5312 (CAD) (argued Oct. 6, 1995) (challenging Census Bureau’s procedures for finding and counting homeless persons); *Carey v. Klutznick*, 637 F.2d 834 (C.A.2 1980) (seeking order directing Census Bureau to adopt certain processes for counting persons); *Borough of Bethel Park v. Stans*, 449 F.2d 575 (C.A.3 1971).

<sup>11</sup> We do not here decide the precise bounds of the authority delegated to the Secretary through the Census Act. First, because no party here has suggested that Congress has, in its delegation of authority over the conduct of the census to the Secretary, constrained the Secretary’s authority to decide not to adjust the census, we assume here that the Secretary’s discretion not to adjust the census is commensurate with that of Congress. See Brief for Petitioner in 94–1614, p. 24 n.19 (stating that “Congress did not enact any . . . legislation . . . to compel . . . statistical adjustment” of the 1990 Census.) Second, although Oklahoma argues that Congress has constrained the Secretary’s discretion to statistically adjust the decennial census, see 13 U.S.C. § 195, we need not decide that question in order to resolve this case.

In 1990, the Census Bureau made an extraordinary effort to conduct an accurate enumeration, and was successful in counting 98.4% of the population. See 58 Fed.Reg. 70 (1993); Brief for Federal Petitioners 28. The Secretary then had to consider whether to adjust the census using statistical data derived from the PES. He based his decision not to adjust the census upon three determinations. First, he held that in light of the constitutional purpose of the census, its distributive accuracy was more important than its numerical accuracy. Second, he determined that the unadjusted census data would be considered the most distributively accurate absent a showing to the contrary. And finally, after reviewing the results of the PES in light of extensive research and the recommendations of his advisors, the Secretary found that the PES-based adjustment would not improve distributive accuracy. Each of these three determinations is well within the bounds of the Secretary's constitutional discretion.

[5] As we have already seen, *supra*, at 1100, the Secretary's decision to focus on distributive accuracy is not inconsistent with the Constitution. Indeed, a preference for distributive accuracy (even at the expense of some numerical accuracy) would seem to follow from the constitutional purpose of the census, viz., to determine the apportionment of the Representatives among the States. Respondents do not dispute this point. See Brief for Respondents 54 ("Distributive accuracy is an appropriate criterion for judging census accuracy because it calls attention to a concern with the uses to which census data are put"). Rather, they challenge the Secretary's first determination by arguing that he improperly "regarded evidence of superior numeric accuracy as 'not relevant' to the determination of distributive accuracy." *Id.*, at 39 (quoting Pet.App. 201a); see also Brief for Respondents 51-54. In support of this argument, respondents note that an enumeration that results in increased numerical accuracy will also result in increased distributive accuracy.

We think that respondents rest too much upon the statement by the Secretary to which they refer. When quoted in full, the statement reads: "[w]hile the preponderance of the evidence leads me to believe that the total population at the national level falls between the census counts and the adjusted figures, that conclusion is not relevant to the determination of distributive accuracy." Pet App. 201a. In his decision, the Secretary found numerical accuracy (in addition to distributive accuracy) to be relevant to his decision whether to adjust. See *id.*, at 157a. Even if the Secretary had chosen to subordinate numerical accuracy, we are not sure why the fact that distributive and numerical accuracy correlate closely in an improved enumeration would require the Secretary to conclude that they correlate also for a PES-based statistical adjustment.

[6] Turning to the Secretary's second determination, we previously have noted, and respondents do not dispute, the importance of historical practice in this area. See *Franklin*, 505 U.S., at 803-806, 112 S.Ct., at 2776-2779 (noting importance of historical experience in conducting the census); cf. *Montana*, 503 U.S., at 465, 112 S.Ct., at 1430 ("To the extent that the potentially divisive and complex issues associated with apportionment can be narrowed by the adoption of both procedural and substantive rules that are consistently applied year after year, the public is well served. . . .") Nevertheless, respondents challenge the Secretary's second determination by arguing that his understanding of historical practice is flawed. According to respondents, the Secretary assumed that the census traditionally was conducted via a simple "headcount," thereby ignoring the fact that statistical adjustment had been used in both the 1970 and 1980 census. See Brief for Respondents 4-5.

We need not tarry long with this argument. The Secretary reasonably recognized that a PES-based statistical adjustment would be a significant change from the traditional method of conducting the census. The statistical adjustments in 1970 and 1980 to which respondents refer were of an entirely different type than the adjustment considered here, and they took place on a dramatically smaller scale. See *Cuomo v. Baldrige*, 674 F.Supp., at 1107 (rejecting argument that Secretary had to conduct PES-like statistical adjustment of 1980 census and finding that "none of [the] adjustments in 1970 were even remotely similar to the types of wholesale adjustments presently suggested. . . .") Moreover, the PES-based adjustment would have been the first time in history that the States' apportionment would have been based upon counts in other States. See Pet.App. 251a-252a. Here, the Secretary's understanding of the traditional method of conducting the census was well-founded, as was his establishment of a rebuttable presumption that the traditional method was the most accurate.

[7] The Secretary ultimately determined that the available evidence "tends to support the superior distributive accuracy of the actual enumeration," *id.*, at 185a, and it is this determination at which respondents direct the brunt of their attack. Respondents contend that the Secretary's review of the evidence is due no deference

from this Court. They argue that the Secretary's decision is not the sort of "highly technical" administrative decision which normally commands judicial deference, and that regardless of its technical complexity, the Secretary's review of the evidence presents a constitutional issue that deserves no deference. Respondents contend that the Secretary's review of the evidence is of dubious validity because the Secretary is admittedly "not a statistician," *id.*, at 139a, and because his conclusion is at odds with that of the Director of the Census. According to respondents, we should carefully comb the Secretary's decision in order to review his conclusions *de novo*.

Respondents' argument fundamentally misapprehends the basis for our deference to the Secretary's determination that the adjusted census results do not provide a more distributively accurate count of the population. Our deference arises not from the highly technical nature of his decision, but rather from the wide discretion bestowed by the Constitution upon Congress, and by Congress upon the Secretary. Regardless of the Secretary's statistical expertise, it is he to whom Congress has delegated its constitutional authority over the census. For that same reason, the mere fact that the Secretary's decision overruled the views of some of his subordinates is by itself of no moment in any judicial review of his decision.

[8] Turning finally to review the Secretary's conclusion that the PES adjustment would not improve distributive accuracy, we need note only that the Secretary's conclusion is supported by the reasoning of some of his advisors, and was therefore a reasonable choice in an area where technical experts disagree. Cf. *Tucker v. United States Dept. of Commerce*, 958 F.2d, at 1418 (Plaintiffs seeking PES-based statistical adjustment "are asking [courts] to take sides in a dispute among statisticians, demographers, and census officials concerning the desirability of making a statistical adjustment to the census headcount"). The Under Secretary of Commerce for Economic Affairs and the Administrator of the Economics and Statistics Administration both voted against adjustment. Pet.App. 59a, 140a. Moreover, even those who recommended in favor of adjustment recognized that their conclusion was not compelled by the evidence: The Director of the Census Bureau, upon whose recommendation the respondents heavily rely, stated in her report to the Secretary that "[a]djustment is an issue about which reasonable men and women and the best statisticians and demographers can disagree." App. 73. And one of the principal statisticians at the Bureau, Dr. Robert E. Fay, "told the Secretary that . . . reasonable statisticians could differ" on the question of adjustment. Pet.App. 91a. Therefore, and because we find the Secretary's two prior determinations as well to be entirely reasonable, we conclude that his decision not to adjust the 1990 census was "consonant with, . . . the text and history of the Constitution. . . ." *Franklin*, 505 U.S., at 806, 112 S.Ct., at 2778.

### III

The Constitution confers upon Congress the responsibility to conduct an "actual Enumeration" of the American public every 10 years, with the primary purpose of providing a basis for apportioning political representation among the States. Here, the Secretary of Commerce, to whom Congress has delegated its constitutional authority over the census, determined that in light of the constitutional purpose of the census, an "actual Enumeration" would best be achieved without the PES-based statistical adjustment of the results of the initial enumeration. We find that conclusion entirely reasonable. Therefore we hold that the Secretary's decision was well within the constitutional bounds of discretion over the conduct of the census provided to the Federal Government. The judgment of the Court of Appeals is

*Reversed.*

U.S. Department of Justice  
Civil Division

Office of the Assistant Attorney General

Washington, D.C. 20530

July 9, 1991

Honorable Wendell M. Willkie II  
General Counsel  
United States Department of Commerce  
Washington, D.C. 20230

Dear Mr. Willkie:

In view of the pendency of the decision of the Secretary of Commerce regarding statistical adjustment to the decennial census enumeration results, we set forth herein our views on the constitutionality and legality of such an adjustment.

These issues are material because they have been raised repeatedly in the New York City adjustment litigation as well as in other cases in which the Civil Division is representing the Department of Commerce.<sup>1</sup> Moreover, Guideline 5, issued on March 15, 1990, provides that "[a]ny adjustment of the 1990 Census may not violate the United States Constitution or Federal statutes." 55 Fed. Reg. 9841 (1990).

We first examine the constitutionality of statistical adjustment. Though the conclusion is not entirely free from doubt, it does appear the Constitution would permit a statistical adjustment if it would contribute to an accurate population count. This conclusion logically implies that if the Secretary were to conclude that the specific adjustment proposed would not discernably improve the accuracy of the headcount results, that both census clause and equal protection concerns would arise.

We next examine the issue of whether statistical adjustment is permissible under the Census Act, 13 U.S.C. §§ 1, et seq. This is a closer legal question than that of constitutional

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<sup>1</sup> The adjustment issue has also been raised in Tucker v. Mosbacher (N.D. Ill.), but that suit was recently dismissed on political question grounds. The adjustment issue is also present in City of Atlanta v. Mosbacher (N.D. Ga.), Mena v. Mosbacher (S.D. Tex.), City of Toccoa v. Commerce (N.D. Ga.), State of Washington v. Commerce (W.D. Wash.), and State of Wisconsin v. Commerce (W.D. Wi.).

preclusion, and we therefore address what we believe are the strongest positions on both sides of it.

In order to highlight the context in which the legal analysis must be considered, we emphasize the fact that the exercise of the Secretary's legal authority to adjust is materially affected by two external factors. The first of these factors presents itself at the threshold, and concerns the reliability of the adjustment data which are the subject of the Secretary's decision. The second factor presents itself at the end part of the decision, and concerns whether the result of employing the data is definitive.

As we have suggested, neither the Constitution nor the statutes are explicit on the question of pure authority to adjust. If in fact the best possible adjustment was nothing more than guesswork, without statistical justification, then even if theoretical constitutional and statutory authority to adjust exists, we do not believe the Secretary constitutionally or legally could exercise it. As will be discussed below, it is evident that the framers of the Constitution were trying to avoid that very problem -- making up population numbers without some method of counting -- when they used the phrase "actual enumeration." The real question, though, is where on a continuum of data possibilities from totally reliable to totally unreliable does any legal authority to adjust that might otherwise exist disappear?

Another contextual factor is the practical effect of the Secretary's decision, no matter what it might be. Under the Constitution the conduct of the census is a responsibility of Congress. For many good and sufficient reasons, Congress delegated the physical act of the enumeration to the executive. Nonetheless, ultimate authority remains in Congress.

To the extent Congress has set out procedures for conducting the census, those procedures require the submission of population counts by December 31 of the census year. That has been done. For actions in July of the year after the census, there is no Congressional guidance as to how their delegated authority is to be used. Though Congress did not in January 1991 take formal legislative steps to dispute the population figures submitted to it by the President, it could have done so. It is even clearer today, in this period after the statutorily-prescribed procedures have run their course, that Congress is not obligated to pass on to the states as the official apportionment, nor use for any other purpose, new figures derived after the Secretary has decided to adjust. Conversely, should the Secretary decide not to adjust, Congress could nonetheless vote to require the states to use adjusted population numbers.

## I. Constitutional Implications of Statistical Adjustment For Congressional Apportionment

Analysis of the constitutionality of adjustment begins with a comparison of the relevant constitutional provisions: Article I, Section 2, as amended by the Fourteenth Amendment. Section 2, provides that "Representatives shall be apportioned among the several States according to their respective numbers" to be determined by means of an "actual Enumeration" conducted decennially. The subsequent reference in Article I, Section 9, to "the Census or Enumeration herein before directed to be taken," demonstrates the Framers' intent that "Enumeration," as used in the prior section, is synonymous with the word "Census."

The following is our analysis of (1) the plain meaning of these synonymous terms and (2) the historical context of their usage, as well as relevant caselaw, to assess whether the Constitution requires solely a headcount for purposes of congressional apportionment, or whether statistical adjustment of census counts is constitutionally permissible.

### A. The "Plain Meaning" of The Terms

The primary meaning of the word "enumeration," at least since 1577, is "[t]he action of ascertaining the number of something; esp. the taking a census of population; a census." III. The Oxford English Dictionary 227 (1933).<sup>2</sup> The relevant dictionary definition of "census," in accepted usage since at least 1769, is: "[a]n official enumeration of the population of a country or district, with various statistics relating to them." II. The Oxford English Dictionary 220 (1933).

Neither definition specifies in what manner a census should be taken, nor how the "number of something" should be ascertained. Thus, the meaning of the terms, alone, provides little, if any, support for a position that the exclusive means of conducting the census is through a headcount. Indeed, the definition's broad scope suggests that alternative methods of ascertaining census numbers could be acceptable.

One might argue that the use of the term "actual" to define "enumeration" in the Constitution suggests a more restricted means of conducting the census. "Actual" connotes "[e]xisting in act or fact," (in accepted usage since at least 1769) and "in action or existence at the time; present, current" (in accepted usage since at least 1642). I. The Oxford English Dictionary 96

<sup>2</sup> The dictionary also provides a more restrictive meaning, *i.e.*, "[t]he action of specifying seriatim, as in a list or catalogue," as a secondary definition of the word.

(1933). One could argue, therefore, that an adjustment is unconstitutional because it may add persons not "existing in fact." However, as discussed below, the term's usage more strongly suggests the Framers' intent that the census be based on the current population, as opposed to taking into account potential population growth. It does not appear to delimit the means by which an accounting of the currently existing population may be determined.

B. The Historical Context of the Actual Enumeration Requirement

The precise manner by which the membership of the House of Representatives was to be apportioned, both initially and subsequently, was the subject of considerable debate by the Framers. See, A. Hamilton, J. Madison, and J. Jay, The Federalist, No. LIV pp. 339-44 (Lodge ed. 1902). The initial congressional apportionment was done by conjecture and political compromise: the Framers apparently assigned some of the smaller states a number of Representatives not justified by the size of their populations.

For example, the first suggested apportionment afforded two representatives for both Georgia and New Hampshire. Georgia's apportionment was sought to be justified only by that state's future expected population growth. A similar argument was later advanced concerning an increase in representation for New Hampshire. See, I. M. Farrand, Records of the Federal Convention of 1787 (Rev. ed. 1966), at 559-61 and 563-66.

By directing the conduct of an "actual Enumeration" for use in subsequent congressional apportionments, the Framers replaced the "conjectural ratio" used in the initial apportionment, with a more "permanent and precise standard." I. M. Farrand, *supra*, at 578. Nothing in the constitutional debates or other historical records, insofar as we are aware, indicates any additional intent on the part of the Framers to restrict for all time -- except by constitutional amendment -- the manner in which the census is conducted. Rather, the thrust of the "actual Enumeration" language appears to be simply that the decennial census should represent an accurate counting of the population "in such manner as [the Congress] shall by Law direct."

An argument could be made that the Framers intended to limit the census to a headcount in order to avoid other methods of enumeration that could more easily be subjected to political manipulation and thereby disturb the Framers' delicately-balanced goals of objectivity, accuracy, equality and repose. However, these objectives are not necessarily better achieved -- under all circumstances, for all time -- by a headcount, as opposed to another enumeration method.

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For example, a headcount might be subjected to political influence in the form of a congressional refusal to appropriate sufficient funds for coverage improvement procedures to assist in reducing persistent undercounts of minorities, or by an overly-restricted local review procedure that ignores significant discrepancies in housing unit counts identified by local governments. On the other hand, Census Bureau statisticians might perform a statistical adjustment in a manner yielding highly accurate results.

In sum, the essence of enumeration, as the term is both generally and constitutionally understood, is more likely found in the accuracy of census taking rather than in the selection of any particular method, i.e., a headcount.

### C. Judicial Reaction To Interpretation of "Census" and "Actual Enumeration"

The constitutionality of statistical adjustment for purposes of congressional apportionment first arose in a litigation context in lawsuits concerning the 1920 decennial census. For example, in Young v. Klutzick, 497 F.Supp. 1318 (E.D. Mich. 1980), the Commerce Department and Census Bureau unsuccessfully argued that the Constitution permits nothing more and nothing less than a headcount to determine the population for purposes of congressional apportionment. Id. at 1322.

In support of their position, the agencies asserted that: (1) the Framers of the Constitution were aware that some people would necessarily be missed by a headcount; (2) a headcount nevertheless provides the requisite certainty for apportionment envisaged by the Framers of the Constitution; (3) the census was originally used as a basis for not only congressional apportionment but also the assessment of "direct Taxes" -- a matter which could not be based on population estimates; and (4) a headcount has been used by census takers for 190 years (with the exception of 1970, when the Bureau used sampling to adjust the population count). Id. at 1322.

The district court strongly rejected the Bureau's constitutional interpretation of the "actual Enumeration" requirement:

It is unthinkable to suggest, that, when the allocation of federal resources and the apportionment of Congressional Representatives rest upon an accurate census count, and when the Census Bureau itself knows that there is an undercount, which heavily disfavors Blacks and minorities, and when a method can be found to correct that undercount, that the words "actual enumeration" in the Constitution prevent an adjustment to

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obtain a more accurate figure than the actual headcount. Even the Census Bureau itself does not believe this, for in 1970 it imputed several million people to the actual headcount of that year.

\* \* \* \* \*

With the modern knowledge and the scientific techniques available to adjust for the known undercount differentials, and to bring about official population counts that are closer to the truth than those derived from the raw, unadjusted headcount, surely the framers of the Constitution would have intended that such an adjustment be made.

Id. at 1333-34.

Indeed, not only did the district court reject the view that the Constitution prohibits statistical adjustment, but it appears to have held that the Constitution affirmatively requires that a statistical adjustment be made when it will result in a more accurate assessment of the population. See, id., at 1332-33.

Similar reasoning was embraced six days later by the district court in Carey v. Klutznick, 508 F. Supp. 404 (S.D.N.Y. 1980). Upon consideration of the historical context of the constitutional provision and further consideration of the plain meaning of "actual" and "enumeration," the district court rejected the Census Bureau's position that they were "empowered only to take a headcount of the population." Id. at 414. Instead, the court concluded that "[w]hen combined, these terms require a count of the population most reflective of the true facts or reality, and thereby supports [sic] the conclusion that apportionment is to be based on census tabulations that most accurately reflect the population of each state." Id.<sup>3</sup>

#### D. Conclusion

We do not believe that the Constitution provides an absolutely conclusive answer to the questions of whether an

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<sup>3</sup> Accepting the view that the Constitution requires either a headcount only or an adjustment would remove any discretion from either Congress or the Executive Branch in conducting the census, regardless of the accuracy of that census. Such a view, however, seems inconsistent with the Constitution's empowering Congress to conduct the census "in such manner as [Congress] shall by law direct."

adjustment is required. The language of the Constitution itself does not address the matter and evidence of the Framers' intent is sparse. As to whether an adjustment is precluded, despite the positions advanced in the 1980 census litigation, we believe the better analysis to be that the Constitution itself does not foreclose this alternative.

Again, nothing in the language of the Constitution or the contemporaneous evidence of the Framers' intent provides unimpeachable guidance on this issue, although the authority granted by the Constitution to Congress to determine the manner in which the "actual Enumeration" is conducted suggests discretion, and, therefore, a range of census measures other than a single option of an actual headcount.<sup>4</sup> Further, judicial experience thus far fails to support the conclusion that an adjustment is prohibited by the Constitution.

As we suggested in the preliminary remarks in this letter, we should not lose sight of the constitutional problems that would arise if the Secretary found, or it was subsequently determined in court, that the adjustment calculations themselves were not technically or statistically verifiable. Under an Administrative Procedure Act review, a decision to adjust using unreliable and unverifiable figures would probably fail under an arbitrary and capricious standard and also could be held otherwise to be in violation of law (i.e., the Constitution and the statutes). Inasmuch as the arbitrary-and-capricious analysis likely would come first in any judicial determination (as it does in the APA itself), it is not unlikely that any constitutional analysis predicated upon data determined by the court to be unreliable would be avoided.

## II. Census Act Provisions Concerning The Use of Statistical Adjustment

In addition to our analysis of the constitutional implications of statistical adjustment, we have also considered the Census Act's two provisions authorizing the Census Bureau to use sampling to conduct the decennial census. See 13 U.S.C. § 141(a), 13 U.S.C. § 195. Although both provisions reflect congressional intent to encourage the use of statistical sampling, we are, of course, concerned with the restriction contained in Section 195 on the use of sampling in connection

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<sup>4</sup> We do not, however, mean to suggest that an actual headcount could necessarily be eliminated entirely in favor of some statistical estimation model. Such an alternative could raise issues over compliances with the requirement for an "actual Enumeration."

with apportionment of the House of Representatives. While a sound argument can be made that Section 195 prohibits statistical adjustment, a contrary argument in favor of adjustment also finds substantial support.

Section 141(a) provides, in pertinent part, that:

[t]he Secretary shall in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April of such year, which date shall be known as the "decennial census date", in such form and content as he may determine, including the use of sampling procedures and special surveys.

Section 195 provides that:

[e]xcept for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as "sampling" in carrying out the provisions of this title.

An argument that adjustment is barred begins with the prohibition found in Section 195, i.e., that Section 195, on its face, prohibits adjustment of decennial census counts for purposes of congressional apportionment. An argument that statistical adjustment is permissible begins with an examination of both Sections 141(a) and 195.

Sections 141(a) and 195 permit the Secretary to use the statistical method of sampling in conducting the census. However, if the authorization to use sampling found in Section 141(a) is considered analogous to Section 195's sampling authorization, key aspects of the sections could be considered redundant. Such an interpretation would be contrary to the basic tenet of statutory construction that an interpretation rendering some of the terms of a statute a nullity should be avoided. See, e.g., Trichilo v. Secretary of Health and Human Services, 823 F.2d 702, 706 (2d Cir. 1987).

To avoid the redundancy problem, an argument could be made that Section 141(a) grants the Secretary broad discretion to determine the form and content of the decennial census and authorizes any number of enumeration methodologies, including the use of sampling, without limitation. Section 195, on the other hand, deals only with the use of sampling and mentions no other methodologies. The proscription in Section 195 against using sampling for apportionment therefore could logically be limited

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to any effort to substitute sampling for a traditional enumeration. That restriction would not prohibit the use of sampling in conjunction with other, more conventional methods of enumeration, as permitted under Section 141(a), for all other purposes for which the decennial census is used. Such an interpretation would give force and effect to both provisions.<sup>5</sup>

We now turn to a discussion of the Act's legislative history, caselaw interpreting Section 195 and the Census Bureau's practices in conducting the decennial census, all of which provide support for the competing interpretations of Section 195's sampling provision.

#### A. Legislative History

Prior to 1957, Congress did not identify any manner in which the decennial enumeration was to be undertaken, nor did it prescribe any enumeration methods. However, Congress did identify a number of items in addition to population to be included in the decennial census. See, e.g., 13 U.S.C. § 141 (1954), 68 Stat. 1019 ("The Secretary shall . . . take a census of the population, agriculture, irrigation, drainage, and unemployment"). In 1957, in an effort to make "the various census activities . . . more uniform, modern, and practicable," see, H.R. 1043, 85th Cong., 1st Sess. at 10, Congress enacted 13 U.S.C. § 195, which provided:

[e]xcept for the determination of population for apportionment purposes, the Secretary may, where he deems it appropriate, authorize the use of the statistical method known as "sampling" in carrying out the provisions of this title.

See Pub. L. 85-207, § 14; 71 Stat. 484 (emphasis supplied). Portions of the legislative history of Section 195, as originally enacted, support the view that it forbade any use of sampling for apportionment purposes, while authorizing the use of sampling for any other purposes under the Census Act for which the Secretary deemed it appropriate.<sup>6</sup>

For example, the report of the House Committee on Post Office and Civil Service states that the purpose behind enactment of Section 195 was to provide the Secretary with the general

<sup>5</sup> This is the approach taken in Carey v. Klutznick, 508 F. Supp. 404, 415 (S.D.N.Y. 1980), discussed *infra* at page 20.

<sup>6</sup> In 1957 Congress also amended 13 U.S.C. § 141 to require a decennial census of "population, unemployment, and housing[.]" See Pub. L. 85-207, § 9; 71 Stat. 483.

authority to employ sampling in carrying out his responsibilities under title 13 because Congress was convinced that "efficient and accurate coverage may be effected through a sample survey." H.R. 1043, 85th Cong., 1st Sess. at 10. Despite that endorsement of the benefits of sampling, Congress was careful to explain that the ban in Section 195 extended to the use of sampling "in connection with apportionment." *Id.* (emphasis added). By describing the prohibition as including sampling undertaken "in connection with apportionment," Congress signaled its intent that the proscription be given a broad application. See, e.g., *Kokusai Kisen Kabushiki Kaisha v. Columbia Stevedoring Co.*, 23 F. Supp. 403, 405 (S.D.N.Y. 1938) ("The Courts have given the phrase 'in connection with' a broad interpretation."); see also, *U.S. v. American Union Transport*, 327 U.S. 437, 441-443 (1946).

Nevertheless, the legislative history for the initial enactment of Section 195 also supports an interpretation permitting adjustment. In a statement explaining the basis for seeking the proposed legislation, the Commerce Department clearly articulated its desire to be able to use sampling in place of a complete enumeration:

some of the information which is desired in connection with a census could be secured efficiently through a sample survey which is conducted concurrently with the complete enumeration of other items: . . . in some instances a portion of the universe to be included might be efficiently covered on a sample rather than a complete enumeration basis and . . . under some circumstances a sample enumeration or a sample census might be substituted for a full census to the advantage of the Government.

Amendment of Title 13, United States Code, Relating to Census: Hearing Before the House Comm. on Post Office and Civil Service, 85th Cong., 1st Sess. 7 (1957) (Statement of Sinclair Weeks, Secretary of Commerce on the Purpose and Need and Sectional Analysis of Proposed Legislation to Amend Certain Sections of Title 13, United States Code, Entitled "Census") (emphasis added).

Congressional reports support the proposition that Congress enacted Section 195 to address the concerns of the Commerce Department in enhancing efficiency in census-taking by substituting sample surveys for a complete enumeration. The Senate Report recognizes that "the proper use of sampling methods can result in substantial economies in census taking." S. Rep. No. 698, 85th Cong., 1st Sess., reprinted in 1957 U.S. Code Cong. & Ad. News 1706, 1708. According to the House Report, Section 195 "permit[s] the utilization of something less than a complete

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enumeration, as implied by the word "census," when efficient and accurate coverage may be effected through a sample survey." H.R. Rep. No. 86-1043, 85th Cong., 1st Sess. (1957), p. 10. (emphasis added). Congressional intent in authorizing the use of sampling under Section 195, therefore, was to permit the Department and the Bureau to use sampling as a substitute for a complete enumeration in certain circumstances. This construction of Section 195, by implication, would limit the proscription against sampling to the confines of that section: where it might be used in place of total enumeration.

Congress' amendment of Section 195 in 1976 is similarly open to two alternative interpretations. The Senate Report states that the amendment "strengthen[ed] congressional intent that, whenever possible, sampling should be used." S. Rep. No. 94-1256, 94th Cong. 2d Sess. 10, reprinted in 1976 U.S. Code Cong. & Ad. News 5463, 5468. However, Section 141(a) was also amended expressly to "encourage the use of sampling and surveys in the taking of the decennial census." S. Rep. No. 94-1256, 94th Cong., 2d Sess. 4, reprinted in 1976 U.S. Code Cong. & Ad. News 5463, 5466. Arguably, by retaining Section 195's sampling prohibition at a time when it authorized the Secretary to utilize sampling in every other operation for which it is feasible, Congress re-emphasized its intent that the Secretary rely solely on a headcount to produce population totals for apportionment.

On the other hand, while Section 195, as enacted, provided that, except for purposes of congressional apportionment, the Secretary "may . . . authorize the use of . . . 'sampling,'" Section 195, as amended, provides that the Secretary "shall . . . authorize the use of . . . 'sampling.'" (emphasis added). The purpose of this amendment is stated in the accompanying Senate Report: "to direct the Secretary of Commerce to use sampling and special surveys in lieu of total enumeration in the collection of statistical data whenever feasible. . . ." S. Rep. No. 94-1256, 94th Cong., 2d Sess. 1, reprinted in 1976 U.S. Code Cong. & Ad. News 5463, 5468 (emphasis added). Arguably, this change in language did not affect the limitation of Section 195's sampling prohibition solely to sampling carried out as a substitute for an actual enumeration.

#### B. Case Law Concerning Adjustment

Presently, the weight of existing case law supports the conclusion that adjustment is permissible under the Act. Three of four district courts that considered Section 195 in litigation concerning the 1980 decennial census concluded that Section 195 permitted adjustment for apportionment purposes.

In City of Philadelphia v. Klutznick, 503 F. Supp. 663 (E.D. Pa. 1980), the court focused on the mandatory language of Section 195, as amended, which "requires the Bureau to use sampling

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whenever feasible, except in determining the population for purposes of apportionment." *Id.*, at 679 (emphasis in original) According to the court, while "the Bureau is not required to make statistical adjustments" for purposes of apportionment, Section 195 does not expressly prohibit the Bureau from doing so. *Id.* The court went on to state that its decision is consistent with the legislative history of the 1976 amendments to Sections 141 and 195 which "suggest[] a congressional intent to increase the use of statistical sampling in the Bureau's operations." *Id.* The Third Circuit affirmed the district court's decision in a brief, unreported opinion. City of Philadelphia v. Klutznick, No. 80-2785, Slip. Op. (4/20/82) (Enclosure).

In a second district court case, Young v. Klutznick, 497 F. Supp. 1318 (E.D. Mich. 1980), the court concluded that Section 195 does not prohibit adjustment for apportionment purposes. In reaching this conclusion, the court examined both Bureau practices in conducting decennial censuses and the Act's legislative intent.

The district court considered the Bureau's sampling activities in carrying out the 1970 decennial census which resulted in the addition of "estimates of missed persons and housing units" to apportionment counts. According to the court, when Congress subsequently amended Section 195 in 1976, "it must be assumed that it was well aware that, in the 1970 census, several devices to impute people that had not been counted were used by the Census Bureau." *Id.*, at 1329. Nevertheless, rather than prohibiting the Bureau's sampling practices, the court noted that:

[t]he amendment to § 195 does nothing more than tighten the language of the prior statute and substitute the word 'shall' for the word 'may.' It also more clearly refers to congressional apportionment rather than simply referring to apportionment. In net effect, the amendment serves to strengthen the Census Bureau's power to use sampling techniques where congressional apportionment is not involved.

*Id.*, at 1334.

In thus ordering the Bureau to devise a statistically defensible means of adjustment, the court stated that its decision was entirely consistent with the statutory prohibition of Section 195:

All that § 195 does is prohibit the use of figures derived solely by statistical techniques. It does not prohibit the use of

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statistics in addition to the more traditional measuring tools to arrive at a more accurate population count.

Id., at 1335.

On appeal in Young, the Sixth Circuit reversed the district court's order on standing and ripeness grounds. Young v. Klutznick, 652 F.2d 617 (6th Cir. 1981). In so doing, the Court of Appeals stated that "[a]lthough the Constitution prohibits subterfuge in adjustment of census figures for purposes of redistricting, it does not constrain adjustment of census figures if thoroughly documented and applied in a systematic manner." Id. at 625. The Court of Appeals' opinion is silent as to whether adjustment is permissible under Section 195, or for purposes of congressional apportionment as opposed to redistricting.

A third district court opinion finding adjustment permissible for apportionment purposes noted "apparently conflicting directives," between the sampling provisions of Sections 141(a) and 195. Carey v. Klutznick, 508 F. Supp. 404, 415 (S.D.N.Y. 1980). The court thus "adopted an interpretation that nullifies neither provision and gives effect and meaning to both." Id. Citing the district court decision in Young v. Klutznick, the court in Carey stated:

that the sole use of sampling procedures has been authorized only for purposes other than tabulating census figures for the purpose of apportionment and that in the area of apportionment where important constitutional rights are at stake, the Census Bureau may utilize sampling procedures but only in addition to more traditional methods of enumeration.

Id.

In a later appeal in this same case, the Second Circuit reversed a court order requiring the Bureau to adjust population figures for the State and City of New York. Carey v. Klutznick, 653 F.2d 732 (2d Cir. 1981). In so doing, the Court of Appeals was concerned primarily with the possibility that an adjustment in one state's representation in the House of Representatives could adversely affect other states that were not represented in the litigation and which were entitled to the same adjustment. Id., at 737. Thus, although the Second Circuit did not specifically refer to Section 195, its opinion suggests that it might find an adjustment permissible if it encompassed all 50 states.

One district court case, Orr v. Baldrige, (S.D. Ind. 1985), Cause No. IP 81-604-Cy has stated that Section 195 prohibits adjustment for apportionment purposes. In an unpublished opinion involving a challenge by the State of Indiana to the Census Bureau's imputation practices in the 1980 decennial census, the court stated that Section 195 prohibits adjustment by means of sampling in the apportionment context.

The force of this opinion is muted by the fact that the parties agreed going into the litigation that Section 195 should be read in this manner. Slip Op., at 4-6. Additionally, plaintiffs conceded the method of imputation used in the 1980 census was not sampling, a position that was accepted by the court. Id., at 5. Consequently, in reaching its conclusion, the court did not engage in an in-depth analysis and did not consider the legislative history of Section 195 or the preceding three district court decisions that found statistical adjustment permissible under the statutory provision.

### C. The Census Bureau's Position on Adjustment

The longstanding interpretation of a statute by the agency charged with its enforcement is traditionally entitled to great weight by the courts when construing that statute. Red Lion Broadcasting v. FCC, 395 U.S. 367, 381 (1969). This is particularly true where Congress has re-enacted the statute without pertinent change. Zemel v. Rusk, 381 U.S. 1, 11-12 (1965).<sup>7</sup> Here, the Bureau's practices, along with congressional reaction to the agency's practices, can be construed as supporting either of the two alternative interpretations of Section 195.

For example, as noted by the court in Young v. Klutznick, 497 F. Supp. at 1333, the Bureau used sampling in the 1970 census to add several million people to the actual headcount. The Bureau's sampling operation, entitled the National Vacancy Check, was initially planned as "a postcensus evaluation study to measure the extent and distribution of errors," in population counts resulting from the misreporting of occupied units as vacant in the census. See United States Bureau of the Census, Census of Population and Housing 1970, Evaluation and Research Program, PHC(E)-6, Effective Procedures To Improve Coverage In the 1970 Census, issued December 1974, at 11.

However, during the early stages of the 1970 census field enumeration it became apparent that these errors were still a significant

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<sup>7</sup> Subsequent agency interpretations at variance with earlier views may also receive deference from the courts where accompanied by a reasoned analysis of the change. Rust v. Sullivan, 59 U.S.L.W. 4451, 4455 (May 23, 1991).

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problem and that, unless corrective action were taken, serious coverage losses would result.

Since there seemed to be no practical way to identify and obtain questionnaires for all of the misclassified units and still adhere to the time limits and budget established for the census, a sample program was initiated to correct for these errors.

Id. The results of the sample were then "used to adjust the census counts as part of the computer processing of the census." Id. In effect, a portion of the population was not tabulated directly in 1970. Instead, the Bureau obtained an estimate of its size from the results of statistical sampling and added that estimate to the total population count.

Arguably, by the National Vacancy Check the Bureau implicitly recognized that Section 195 does not preclude sampling for apportionment purposes. Further, Congress' amendment of the Census Act in 1976 "to make numerous technical changes throughout Title 13, United States Code, to conform more properly to the current language and practices used by the Bureau of the Census," S. Rep. No. 94-1256, 94th Cong., 2d Sess. at 6, reprinted in 1976 U.S. Code Cong. & Ad. News 5463, 5464, can be construed as congressional approval of the Bureau's practice.

However, in litigation concerning the 1980 decennial census, Dr. Barbara Bailar, former Bureau Associate Director for Statistical Standards and Methodology, testified concerning the National Vacancy Check that

it was clear to the Census Bureau that we had added an element of approximation to the census that came about from sampling that we were uneasy about. It is clear that we are not supposed to use sampling for the basis of the apportionment counts.

Thus, the Bureau, itself, concluded that its sampling practices in 1970 could not be repeated in future decennial censuses as a replacement for enumerating any portion of the population for apportionment purposes.

Moreover, congressional intent, as expressed in 1976, to conform to Bureau practices in amending the Census Act, neither refers to Section 195, nor suggests any congressional awareness of the Bureau's 1970 sampling practices. Thus, this portion of the legislative history does not demonstrate any congressional approval of the Bureau's National Vacancy Check.

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On the other hand, congressional hearings preceding the 1980 decennial census suggest that neither Congress nor the Bureau considered the agency precluded from using sampling to determine the population for apportionment purposes. Questioning of Bureau officials as to the statistical feasibility of adjusting population counts indicates congressional endorsement of Bureau efforts to develop sufficient technical expertise to carry out an adjustment. No congressional concern was expressed that Section 195 is a bar to adjustment for apportionment purposes. *See*, 1980 Census, Hearings Before the Subcomm. on Census and Population of the House Comm. on Post Office and Civil Service, 94th Cong., 2d Sess. (1976).

Further, Bureau officials testified at the hearings that research concerning adjustment's feasibility was ongoing, but that adjustment of the 1980 Census was unlikely, because the Bureau did not have the technical capability to carry out an accurate adjustment at that time. *See*, 1980 Census, Hearing before the Subcomm. on Census and Population of the House Comm. on Post Office and Civil Service, 94th Cong., 2d Sess. (1976). For example, in response to questioning concerning the Bureau's ability to "distribute and publish corrected figures" in 1980, the Census Bureau Director stated:

[W]e try, to the extent we can, to indicate the extent of that undercount. So that we will be able to provide you with an enumeration and an estimate . . . at the State and large metropolitan areas of the undercount. The decision as to for what purposes that undercount information will be used, it seems to me - if somebody is concerned about revenue sharing or other allocation grants, they could write into the legislation - that you will use the enumeration and the best estimate of the undercount. But to make the Census Bureau say the official count is now such and such, which we know to be not true, because we are not confident of the estimating procedure to the extent that we are of the enumeration, I think that raises other kinds of questions.

*Id.* at 20. (exchange between Vincent P. Barabba and Congresswoman Patricia Schroeder) (emphasis added). The Bureau testimony suggests that, prior to the 1980 decennial census, its hesitancy to adjust census counts resulted from a lack of technical proficiency at that time, as opposed to a statutory prohibition.

Nevertheless, as previously noted, the Bureau took the position following the 1980 decennial census that adjustment of

the census is statutorily impermissible. Specifically, in deciding not to adjust census counts on the basis of a Post Enumeration Program (PEP) the Census Bureau determined "that Federal Statutes do not permit adjustment for [apportionment] purpose[s] . . . ." 45 Fed. Reg. 69366 (1980). According to the Bureau's reasoning, Section 195 "clearly continues the constitutional mandate and historical precedent of using the 'actual Enumeration' for purposes of apportionment, while eschewing estimates based on sampling or other statistical procedures, no matter how sophisticated." *Id.*, at 69372.

Thus, what may appear to have been the Bureau's approval of adjustment prior to the 1980 census may, in fact, solely reflect the Bureau's failure to consider the legal implications of its research at an early stage of the adjustment methodology's development. Moreover, Congress' failure to amend the Act to require adjustment following the Bureau's public pronouncement that adjustment is statutorily impermissible could be construed as a ratification of the Bureau's position. *See, e.g., United States v. Rutherford*, 442 U.S. 544, 554 n.10 (1979); *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 275 (1974).

In any event, after its public pronouncement the Census Bureau committed significant resources toward making adjustment feasible for all purposes in 1990. In 1983, the Bureau established the Undercount Research Staff to conduct research on undercount measurement and adjustment methodologies. It then formed an Undercount Steering Committee of senior Bureau employees the following year to oversee the research staff's adjustment work. By 1985, the Bureau had already focused on the PES as the principal adjustment methodology for implementation in conjunction with the 1990 decennial census.

In its exhaustive consideration of whether adjustment could be completed in time for congressional apportionment, the Bureau never revived and reiterated its 1980 position that such an adjustment was statutorily impermissible. Instead, in numerous briefings of Congress on the status of the Bureau's adjustment research, Bureau officials and employees discussed the sampling which would be performed as part of its adjustment operation as well as the Bureau's plans to release adjusted counts as the "official 1990 census counts" if specified technical standards were satisfied. 1990 Census Adjustment Procedures and Coverage Evaluation: Hearing Before the Subcomm. on Census and Population of the House Comm. on Post Office and Civil Service, 99th Cong. 2d Sess. 10 (1986) (statement of Dr. Barbara Bailar, former Bureau Associate Director for Statistical Standards and Methodology).<sup>8</sup>

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<sup>8</sup> *See*, Census Bureau Planning for the 1990 Decennial Census: New York City Field Hearing Before the Subcomm. on  
(continued...)

The Bureau's testimony, evidencing its commitment of significant resources for an adjustment program, suggests a departure from its position in 1980 that adjustment for purposes of apportionment directly violates its statutory mandate for the conduct of the decennial census. On the other hand, in preparing for the 1990 decennial census, the Bureau may have chosen to apply its technical expertise in resolving technical and operational feasibility issues concerning adjustment (since adjustment is also useful as a census evaluation tool, if not for purposes of congressional apportionment) and to leave constitutional and statutory interpretations to its legal advisors.

#### D. Conclusion

We therefore conclude that Section 195's sampling provision is subject to two divergent interpretations and that either interpretation can be supported by the Census Act's legislative history, caselaw and Bureau practices. Given the weight of existing caselaw that Section 195 does not preclude statistical adjustment, we also conclude that the majority of courts considering this issue are unlikely to find that Section 195 acts as a bar to adjustment. Nevertheless, as we stated earlier, the statutory issue is a closer question than the interpretation of constitutional language. We can foresee a court deciding that Section 195, on its face, prohibits statistical adjustment.

Further, similar to our concern with untenable extensions of a "pro-adjustment position" with respect to the constitutionality issue, we acknowledge that arguments favoring the statutory permissibility of statistical adjustment could also be expanded. We could support the position that a statistical adjustment is permissible when carried out in conjunction with an enumeration. However, a statistical adjustment that was carried out as a substitute for a headcount could violate Section 195.

In closing, we reiterate the procedural point that the ultimate authority in matters relating to the census, and this includes statistical adjustment, lies with Congress. There is no clear statutory procedure guiding this post-December 31 exercise of determining whether to adjust. Whatever decision the Secretary reaches is therefore subject to second-guessing by the

<sup>8</sup>(...continued)

Energy, Nuclear Proliferation, and Government Processes of the Comm. on Governmental Affairs, 99th Cong., 2d Sess. 13-14 (1986) (statement of John G. Keane, former Bureau Director) ("[I]f the 1987 decision is that adjustment is statistically and operationally feasible, the machinery will be put in place. Coverage estimates will be made and population and housing estimates adjusted for an undercount will be produced").

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Congress in this almost unique circumstance of executive branch exercise of delegated Congressional power. That is in fact of considerable assistance in litigation, as whatever decision is reached is somewhat insulated from judicial assault for failure to comply with statute, since Congress affirmatively must act to implement the use of adjusted figures, and certainly can act to overturn a Commerce Department decision not to use them.

Sincerely,



Stuart M. Gerson  
Assistant Attorney General

Enclosure

Mr. MCINTOSH. My recollection was, in the early 1980's, they interpreted it to prohibit the use of sampling for apportionment, but I don't know for sure, and if you could check that for me, that would be helpful.

In your document, I think entitled "The Plan for Census 2000," you state that, withstanding all legal challenges, you're in favor of samples, "but we are hesitant to sample a larger share of the population."

How did you choose 10 percent as the cutoff of what might be legal and not legal?

Mr. EHRLICH. Because that way most of the population, 91 percent, approximately, would be met through some individual contact, either through the mail or a personal visit.

Specifically, there are critics of the plan who believe that we should stop after enumerating 70 percent of the population face-to-face, and then sample the remaining 30 percent. Our view is that that would jeopardize the political tradition of the census.

Specifically, let me give you this example. If we were to stop at 70 percent and then sample, we would meet less than three-quarters of the population and, therefore be apportioning the Congress on the basis of face-to-face interviews with less than three out of four Americans.

It's not clear that that would be tolerable in the eyes of the Congress regarding their own apportionment, and it would be a radical departure, in some sense.

Mr. MCINTOSH. Let me say, I think there are many of us who have problems with 10 percent, on that same basis.

Mr. EHRLICH. So I gather.

Mr. MCINTOSH. Any type of sampling, I think, runs into that problem of politicalization.

The second series of questions I wanted to ask about was the corrections or adjustments for accuracy where there would be comparison to records held by other agencies, such as the IRS and other agencies of the Government where citizens interact with them.

Isn't it the case that there's a growing consensus or feeling among Americans that the Government is too intrusive in their lives and that, as you embark upon comparing their answers with records that are held about Americans by the Government, that you're going to see an increasing number of people decline to even make the first step of filling out the form, because they don't want to submit their name and address and have the information that might be on that form compared to other records?

Ms. RICHE. You've certainly raised an important concern. We've been exploring with the public just how they would feel about using administrative records, and many people feel as you suggested.

We also find about as many people who feel that we are causing a lot of trouble with our information collection, and they don't understand why we're not using information that some other agency has already collected from them, rather than bothering them again; and those two strains are sort of going like this.

Mr. MCINTOSH. Of that latter group, do they tend to be people in that 2 percent who don't respond?

Ms. RICHE. Actually, the more educated people tend to be the ones who feel that we should be using records that we already have, surprisingly enough.

Mr. MCINTOSH. So you won't necessarily increase participation, but you might find that those who are currently participating, but would find it an intrusion in their privacy, might be less likely to participate?

Ms. RICHE. We haven't gone far enough in exploring it to be able to quantify how these conflicting strands play out.

Mr. MCINTOSH. Let me ask, for the record, was there any legal opinion on the Privacy Act concerns about doing that without getting consent in advance? Do you know if there was any work done on that?

Mr. EHRLICH. I don't know. I would be happy to respond for the record.

Mr. MCINTOSH. If you could, do that.

Mr. EHRLICH. If I may make a clarification as to the question you raised, the use of administrative records in the census plan that you have in front of you is to identify nonrespondents, it's not to compare the information we obtained from an interview with a respondent with a Social Security Administration record but rather, we will have a list of the addresses that did not respond through the mail and, before we send expensive people out into the field, we will see if we can identify the residents at those addresses from, for example, SSA or IRS records.

[The information referred to follows:]

The use of administrative records to supplement and verify census records is a longstanding and widely accepted practice which saves time and money while improving accuracy. The Privacy Act, 5 U.S.C. Section 552a(b)(4), explicitly permits other agencies to share personal information with the Census Bureau, and a variety of other statutes specifically permit the sharing of data by Federal agencies. For example, both the Census Bureau and the Bureau of Economic Analysis are allowed access to Internal Revenue Service records to assist them in their statistical functions (see 26 U.S.C. Section 6103(j)). Please be assured that the Census Bureau holds the information it receives from administrative records in the strictest confidence, the same way it maintains the confidentiality of data that it collects independently. The use of administrative records saves money and improves accuracy, while assuring confidentiality.

Mr. MCINTOSH. If I might, Mr. Chairman, just to followup on that, so that, if somebody actually does respond, would you be able to make an assurance to them that their answers would not be compared to those records?

Mr. EHRLICH. Not only that, but the confidentiality of responses to the census is ensured by title XIII and, although it sounds like an extreme statement, there has never been at the Bureau a violation of that confidentiality.

Mr. MCINTOSH. And, Mr. Chairman, if I could just put on the record, could either of you supply a table of historical estimates of accuracy through the years, whether it's increased?

Mr. EHRLICH. Sure.

[The information referred to follows:]

Table 1 presents historically-consistent estimates of percent net undercount for the decennial censuses from 1940 to 1990. Two significant observations stand out. First, the demographic estimates document the long term decline in net census undercounts over the last 50 years. The net undercount in the 1990 census is estimated to have been under 2 percent, well below the estimated 5.4 percent in 1940.

The estimated undercount has declined for both Blacks (from 8.4 in 1940 to 5.7 percent in 1990) and Non-blacks (5.0 to 1.3 percent). For all groups, the net undercount in 1990 was higher than in 1980, but below 1970 levels.

The second observation is that despite the overall declines in net undercount, the undercount rate of Blacks has remained persistently higher than the rate of Non-blacks in each census between 1940 and 1990. In fact, the excess of the net undercount rate of Blacks has hovered in the range of 3.4 to 4.4 percentage points over the last six censuses (see last row of table).

TABLE 1.—DEMOGRAPHIC ANALYSIS ESTIMATES OF PERCENT—NET UNDERCOUNT, BY RACE:  
1940–1990

	1940	1950	1960	1970	1980	1990
Total .....	5.4	4.1	3.1	2.7	1.2	1.8
Black .....	8.4	7.5	6.6	6.5	4.5	5.7
Non-black .....	5.0	3.8	2.7	2.2	0.8	1.3
Difference (Black—Non-black) .....	3.4	3.6	3.9	4.3	3.7	4.4

Source: Howard Hogan and Gregg Robinson, What the Census Bureau's Coverage Evaluation Programs Tell us About Differential Undercount, Proceedings of the 1993 Research Conference on Undercounted Ethnic Populations, May 5–7, 1993, Richmond, Virginia

Mr. McINTOSH. Because my recollection was 1990, although you were saying it was pretty bad, was actually the most accurate census.

Mr. EHRLICH. But 1994 was the highest percentage, yes.

Mr. CLINGER. The gentleman's time has expired.

Mr. McINTOSH. Thank you, Mr. Chairman.

Mr. CLINGER. We'll have a second round of questions, and I will take the first 5 minutes, if I may, to lead off with a somewhat parochial question, but having to do with Pennsylvania.

In 1990, as an effort to adjust the census, as I understand it, you did a sample of 150,000 households, to match them up with the original count and adjust upward, using the estimated undercount that was the result of that. It was, I believe, one of the largest surveys ever undertaken, and it turned out it was not free from error, as I understand it. You learned that, if the adjusted number had been used, a seat in the House would have been shifted from Pennsylvania to Arizona and that shift would have been accomplished by an error in the computer program.

Now, that was compared with what you are proposing to do in this census, which is going to be much more complex, much more difficult. How do you expect to overcome the operational difficulties that you're going to face and that you faced in 1990 and that sampling procedure?

I get a little nervous about the potential here for an egregious kind of error that would arise out of a glitch in the sampling program.

Mr. EHRLICH. Mr. Chairman, let me respond as a fellow Pennsylvanian and resident of Wayne and Radner Township, before I came here to Washington.

The coding error you referred to would have erroneously shifted a congressional seat, as you described. It's also important to understand that, first, such a coding error could arise in any aspect of the operation, as we go through the computer programs and algorithms and do these tabulations, sampling or not.

Moreover, the errors in the 1990 original census were so profound that a data set that had a coding error of the magnitude that you described was still statistically superior to the original data,

and I think that there are two lessons that we should take from that comparison.

One of them is that coding errors and technical logistical errors can play an important role in the census. The other is that it is very easy to lose sight of the extent of the error in the 1990 census. It was so flawed from that distributional perspective that even an alternative with a coding error that affected four tenths of a percent of the population was still statistically superior.

It's not an excuse for the coding error. My point is that the result without improvement is that dire.

We learned a lot in the process of doing what was called the PES in 1990. We've also taken a lot of that logistical improvement and taken it to our demographic surveys in the intervening decade. We're fairly confident that we can execute the program that we've devised.

To some extent, the PES was rushed into play, as you understand, because its fate was being determined in court, *ex ante*, and the like. That's why we have tried to emerge early in the process with a very specific view of what is it we intend to do in the way of what we call the ICM, so that it can be widely understood and these errors anticipated and not made.

Mr. CLINGER. Let me just again ask you to expound upon how you arrived at the 10 percent. I applaud the efforts you're making, the eight contacts and so forth, the real effort to improve and increase the actual count that takes place here. But shouldn't you assume that you're going to have better luck as a result of all of these efforts that you're making to make personal contact, to do an actual count?

How did you arrive at the 10 percent, given that? It seemed to me that you ought to assume that you might do better because of the extraordinary effort you're going to to ensure getting an accurate count.

Ms. RICHE. Well, actually, Mr. Chairman, yesterday the National Academy of Sciences released an interim report that the panel that's evaluating our plan, and they concluded, if I might quote, "We see no evidence from the 1995 census test to suggest that these enhancements alone will come acceptably close to eliminating the under-coverage and erroneous enumeration problems."

I would like to, if I may, introduce this rather short interim report into the record.

Mr. CLINGER. Without objection, so ordered.  
[The information referred to follows:]

#### SAMPLING IN THE 2000 CENSUS

##### INTERIM REPORT I

##### INTRODUCTION

This first interim report of the Panel on Alternative Census Methodologies focuses on the use of statistical procedures, especially sampling, in the conduct of the 2000 census. The panel has examined the research memoranda (Bureau of the Census, 1995-1996) resulting from the 1995 census test in Paterson, New Jersey, Oakland, California, and northwest Louisiana. We have also heard presentations provided by staff of the Bureau of the Census on the test and their work. Additional analysis of the 1995 census test is anticipated, and further information will be available from the 1996 census test. However, since decisions concerning many important features of the 2000 census are now being made by the Bureau of the Census, the panel be-

lieves that it is timely to offer its assessment on certain aspects of the design for the 2000 census.

The Census Bureau has proposed a new design for the year 2000 census that includes sampling to follow-up households that do not mail back their questionnaires or provide a telephone response. Sampling will also be used as part of an integrated coverage measurement<sup>1</sup> procedure to obtain as complete a count as possible and to reduce differential undercoverage among areas and population groups. The 1990 census, in contrast, attempted to count every household by personal follow-up of those households that did not return a mail questionnaire. These procedures were both expensive and did not yield the desired goal: estimated by demographic analysis, 1.8 percent of the population was not counted in 1990 (up from 1.2 percent in 1980), including an estimated 5.7 percent of blacks. Hispanics, Asian and Pacific Islanders, American Indians and Alaska Natives, renters, and residents of poor inner-city areas were also undercounted by larger percentages than the nation as a whole (Edmonston and Schultze, 1995). Demographic analysis has estimated that the undercount rate was higher in 1990 than in 1980, after steadily decreasing since 1940.

In 2000, the Census Bureau is likely to face an environment of constrained funding, decreasing survey response rates (Edmonston and Schultze, 1995), increasing cynicism toward government, and decreasing availability of a qualified temporary work force (Stuart, 1995). Consequently, it is likely that repeating 1990 methods with the same relative level of resources to conduct the 2000 census will yield results that are of worse quality than obtained in 1990 and that have bias and undercoverage problems of unknown size and direction at levels of geography not addressed by subsequent post-enumeration surveys. To reduce costs, increase response, increase accuracy across the various levels of geography, and reduce differential undercoverage of population groups and among areas, the Census Bureau is redesigning the census process. The Census Bureau has identified innovative ways to improve the response rate of households and to use sampling and statistical estimation techniques as integral parts of the census enumeration methodology that are needed to deal cost-effectively with household nonresponse. These techniques are critical to the success of the year 2000 census.

The panel is very encouraged by the considerable progress that the Census Bureau has made in work on improving response (by mail or telephone) to the questionnaire, including: redesigning the questionnaire, facilitating response to the mail questionnaire with reminders and a replacement questionnaire, providing multiple response options including use of the telephone and Be Counted forms,<sup>2</sup> use of non-English questionnaires, use of partnerships with local officials, advertising and other outreach efforts, use of service-based and special targeted enumeration methods, and developing in cooperation with local governments (and the U.S. Postal Service) a full and accurate master-address list geographically referenced to the street locations in the TIGER (Topologically Integrated Geographic Encoding and Referencing) database. Many of these initiatives are new to decennial census procedures, and the significant improvements documented in the 1995 census test research memoranda on these ideas demonstrate serious efforts at revising the census process towards the goals of reducing costs, increasing response and accuracy, and reducing differential undercoverage for population subgroups. The panel intends to comment further on these initiatives in its subsequent reports; however, this report addresses only the use of sampling and statistical procedures in the 2000 census because of the Census Bureau's need to make decisions immediately on these topics.

#### BENEFITS OF SAMPLING

Even with the potential for great improvement in the 2000 census through use of the operational initiatives mentioned above, the use of sampling and other statistical procedures will be fundamental to achieving the goals of reduced costs, increased accuracy, and reduced differential undercoverage. The panel endorses the general recommendations of both the Panel to Evaluate Alternate Census Methods (Steffey and Bradburn, 1994) and the Panel on Census Requirements (Edmonston and Schultze, 1995). We support the use of sampling procedures in the follow-up of households that do not respond by mail (or telephone call) to the census (sampling for nonresponse follow-up). We also endorse the recommendations of those panels to use sampling procedures to collect relevant data that will be used in conjunction with the appropriate statistical procedures to derive a final enumeration that has

<sup>1</sup> See the report of the Panel to Evaluate Alternative Census Methods (Steffey and Bradburn, 1994) for a discussion of coverage measurement.

<sup>2</sup> Be Counted forms are unaddressed census questionnaires available in public places.

acceptably low levels of differential undercoverage and other enumeration errors (sampling for integrated coverage measurement). The Census Bureau's use of sampling for these purposes is consistent with past approaches. We note that the Census Bureau has expertise second to none in the many aspects of sampling and in fact has a long history of applying sampling to certain parts of census operations (Goldfield, 1992). The research memoranda that the panel has seen from the 1995 census test give valuable insight into which components of the operations for non-response follow-up and integrated coverage measurement succeeded and which components require further research for the 2000 census. Although some design decisions remain to be made and tested, the panel argues below that nothing in the census test, nor any other development, suggests that a decennial census that reduces costs, reduces nonresponse bias, increases accuracy, and reduces differential undercoverage can be conducted without the use of some form of sampling for mail non-response follow-up and some form of sampling for integrated coverage measurement.

The traditional census method (used in 1990) begins with the mailing of census forms to a comprehensive list of residential addresses. For households that do not respond to the mail questionnaire, census enumerators undertake an intensive follow-up effort to contact the households and elicit responses. This process is continued for an extended period of time in an attempt to physically enumerate every household and all the people in every household.

Despite the gains in address list development, form design, prenotice and reminder mailings, and various outreach efforts, exclusive reliance on physical enumeration of all households cannot be successful in 2000. Based on the results of the 1990 census, it is highly unlikely that the Census Bureau can carry out this type of decennial census with acceptable accuracy within the current expected levels of funding. An effort to conduct a census in 2000 using 1990 methods—that is, attempting to the fullest extent to physically enumerate every household, with the funding levels that now seem probable—will likely result in a census of substantially lower quality than previous censuses. That lower quality will be readily apparent to all knowledgeable users of census data. The panel's view that sampling and statistical estimation are essential ingredients to the 2000 census does not derive only from a concern that there will not be sufficient resources to pay for using 1990 methods. Even if the resources were available to conduct such a census, we believe it is likely that the use of statistical procedures can allow more effective use of those resources.

Our view that statistical procedures can improve quality at any census funding level is based on several limitations of the 1990 census and earlier censuses that are not always recognized in discussions of the relative merits of statistical procedures. We have considered four issues. First, there is an issue of timeliness. Any approach that attempts physically to enumerate every household through several field visits invariably takes considerable time to complete. The amount of time varies considerably by area, depending upon the mail return rate and the difficulty in contacting households. More important, it is inevitable that the quality of the information obtained from those households contacted late is of lesser quality than information from other households. Respondents simply do not remember or know who exactly was present on census day, or the characteristics of those people.

A second, related issue is that there is a biased and uncontrolled sample of cases left over at the end of every field period about which little is known. Census forms for these households are inevitably completed using information from neighbors, landlords, and others. These "last-resort" cases constitute a significant proportion of census returns in some areas: in 1990 they accounted for nearly 4 percent of all households in the country. Although the information on these households is useful, it must be recognized that these data are collected by temporary employees who are generally inexperienced and under considerable pressure to complete their workloads in a timely fashion and that these data are often of much lower quality than those collected on the resumed questionnaires and from field follow-up of household occupants. Therefore, last-resort data are not necessarily more reliable than estimates based on statistical methods, although they are likely to be much more expensive. (Further analysis of these last-resort cases would be extremely valuable for understanding when they are and are not reliable and how to best make use of this information.)

This discussion leads to a third issue, which is the availability of a work force that is capable of competently carrying out the census enumeration. Census takers are temporary employees, paid at a low hourly rate, who must be recruited locally in all areas of the country—most heavily in those areas with the lowest mail return rates. Evidence from the 1990 decennial census (Stuart, 1995) and from the 1995 census test strongly suggests that it will not be possible to locate enough temporary competent employees to complete a 100 percent mail nonresponse follow-up in the

2000 census. Even if it were possible, the cost would greatly exceed current expected levels of funding. Furthermore, it is likely that the areas with the lowest mail return rates and the highest concentration of groups that historically have been undercounted in the census are also those in which it will be most difficult to find sufficient numbers of enumerators.

Fourth, there is ample evidence from recent censuses that the methods used in the 1990 census resulted in a substantial amount of both undercoverage and erroneous enumeration and that these errors are very differentially spread across demographic and geographic subgroups. From the 1990 experience, attempts to contact every household that does not return a form by mail do not appear capable of reducing these problems, and especially the differential undercount, to any appreciable extent. Although the initiatives to improve the master address list, develop outreach, make use of respondent-friendly instruments, use reminder cards, and other process improvements will help to reduce undercoverage and erroneous enumeration, we see no evidence from the 1995 census test to suggest that these enhancements alone will come acceptably close to eliminating the undercoverage and erroneous enumeration problems.

The combination of the problems mentioned above indicates that it will also be necessary to include procedures for sampling for nonresponse follow-up (to address the first three issues) and for integrated coverage measurement (to address the fourth issue). In the next two sections we discuss these procedures in more detail.

#### SAMPLING FOR NONRESPONSE FOLLOW-UP

In addition to addressing the limited work force problem, sampling for nonresponse follow-up provides an effective means of addressing the related issues of timeliness, the use of last-resort returns, and the quality of field enumeration. By requiring that only a sample of those households that do not return a form by mail or telephone be followed up, more effort can be concentrated on the process of completing household enumeration in a given area, which can be carried out more quickly and more intensively (so that there remain fewer nonresponding cases that require last-resort procedures), and which can make use of better trained, more experienced personnel. Thus, the introduction of sampling will reduce other sources of error inherent in operations. These benefits of sampling are well recognized in survey research and are generally accepted when survey instruments are involved. The panel believes that these benefits are also likely to be substantial in the decennial census.

It is not realistic to expect that costs, staffing, and time expended will all decrease in direct proportion to the sampling rate. Thus, a decision to sample 25 percent of households (not returning a form by mail) in an area does not mean that the enumeration can be done in one-quarter of the time, using one-quarter of the field staff, with the elimination of last-resort enumerations. However, the enumeration can very likely be done in less time than would a full enumeration, using fewer staff, and with a smaller fraction of last-resort enumerations. It is for this reason that the panel believes that sampling for nonresponse follow-up needs to be an integral part of the plans for the 2000 census.

In discussing the comparative accuracy of census counts and the quality of census data with alternative methodologies, it is very important to consider the uses of census data. In particular, the effects of sampling on the accuracy of counts and other data will differ by the level of geography. In concluding that procedures for sampling for nonresponse follow-up will give better results than use of 100 percent follow-up, the panel is considering the use of data at broad and intermediate levels of geography, such as those identified in constitutional and legislative requirements for the use of census data. In sampling, a measurable sampling variance will be substituted for the bias resulting from an uncontrolled sample. Thus, for enumerating the populations of states, congressional districts, state legislative districts, and many governmental units, we believe that it is likely that reductions in errors and omissions in enumeration will outweigh the introduction of sampling error. However, for sufficiently small levels of geography, this assertion may not hold because sampling error (relative to the size of the population) increases as the population of a geographic area decreases. Other errors are more likely to have effects of similar relative magnitude at all geographic levels (although they will vary across geographic units, at any given level). Therefore, at the block level, for example, it seems unlikely that the average level of (relative) error will be less when sampling is used (although this conclusion would depend upon the extent of sampling).

There is a tradeoff between the demands for accuracy for very small geographic areas and those of larger areas. In the panel's view, the needs for data for larger domains should take precedence. For example, while block unit data are important,

they are almost always aggregated to form larger geographic areas. When such aggregation occurs, the relative effects of sampling error decrease, and the benefits of sampling for nonresponse follow-up will tend to outweigh the effects of sampling error. Sampling for nonresponse does not introduce bias when particular groups are sampled at higher or lower rates because appropriate methods will be used to create the final counts that account for the designed variations in sampling rate. In sum, it appears that the error introduced by sampling at the block and tract levels would not vitiate the value of census data for research and policy making.

Another significant concern about census operations involves equity. It is important that the procedures used ensure results of uniform (and acceptable) quality for geographic areas or groups of similar size. The use of sampling for nonresponse follow-up has great potential to further this aim. In contrast, there is substantial evidence that the use of 100 percent follow-up of mail nonresponse in the 1990 census did not result in uniform and high quality to a satisfactory extent. There was considerable variation in the use of last-resort enumerations for different geographic regions, and it has been clearly demonstrated that census undercoverage varied greatly across geographic and demographic groups. Much money and effort were concentrated at the end of the census operations but data quality decreased at the same time.

The use of sampling for nonresponse follow-up has an equitable effect in that, on average, no group's estimated population is made systematically larger or smaller by sampling, regardless of whether certain groups have lower response rates and regardless of the rate of sampling among nonrespondents. A secondary issue is that estimates for some groups, particularly in small areas, may be less precise (although not systematically biased either upwards or downwards) because high nonresponse makes these estimates more dependent on sampling. It is possible to attain more nearly uniform accuracy for areas of comparable size by appropriate choices of sampling rates. Similarly, it is also possible to provide greater accuracy for small political units than for comparably sized areas that are not political divisions by appropriate sample allocation. Consideration of these tradeoffs within the budget allocated to sampling will be part of the sample design process.

The use of sampling for nonresponse follow-up gives reasonable promise that accuracy can be improved and differences in the quality of enumeration can be diminished by concentrating the efforts of better enumerators on the sampled cases. While there should be gains in accuracy for all areas, those places where the methods used in 1990 were the least successful, and produced the most bias, stand to benefit most, in terms of improved accuracy of enumeration, through the adoption of sampling for nonresponse follow-up.

Although the panel endorses the use of sampling for nonresponse follow-up as part of the operations for the 2000 census, the decisions concerning the design of the sampling plan should not be made without due consideration of a broad range of issues. Six issues that need to be considered are: (1) the levels of sampling and other error across geographic units at different levels of aggregation; (2) the costs of enumerating different types of households that do not respond by mail; (3) the estimation methodology; (4) how the estimation will be implemented in practice; (5) the timing of the data collection; and (6) the public perception of the use of sampling. The Bureau of the Census should adopt a systematic approach to developing a good sample design and associated estimation procedure. This cannot necessarily be achieved by postulating a small number of designs and determining which appears to optimize various criteria. Some further exploration of criteria is needed. We offer several examples of the need to proceed in this manner.

First, consider two ways to truncate full-scale direct enumeration prior to initiating sampling for nonresponse follow-up: (1) after a given date (this procedure is called the direct application of sampling), and (2) after a given fraction of the population has been counted in an area. It has been suggested (Killion, 1995) that the former would be superior to the latter. Consideration only of sample size and sampling error, using an assumption that every household costs the same to enumerate, shows that this conclusion obtains. However, some households are more expensive to enumerate than others. Assuming a fixed number of completed household enumerations and comparing direct versus truncated sampling then yields the result that direct application of sampling will likely sample these higher cost cases at a substantially greater rate than a plan that introduces sampling after some threshold response rate is achieved. By continuing to enumerate physically to a threshold without sampling, a larger percentage of the less costly cases may be completed.

Second, conversely, it has been suggested (Killion, 1995) that a plan that enumerates 90 percent and then samples 1 in 10 remaining households would be more acceptable than a plan that enumerates 70 percent and then samples 7 in 10 households (for example). Both of these procedures result in data collection from 91 per-

cent of households. The view is that the former is seen as placing much less reliance on sampling than the latter. But the public perception of the reliance on sampling might be represented as well by the number of households that each sampled household is expected to represent as by the size of the population represented by sampling. In this case, it is not clear that having each sampled household represent nine others<sup>3</sup> is preferable to having each sampled household represent itself and possibly one other. Moreover, we believe that the issue of truncation cut-off points should be resolved scientifically, using statistical criteria and examining the expected sampling variance at various levels of geography. Such a resolution could consider operational criteria such as the percentage of responses after a certain period of time. A variable cut-off strategy depending on local response rates could also be considered.

Third, up to the present, the Bureau of the Census has proposed 100 percent follow-up until either 70 percent or 90 percent of a region has been physically enumerated. This choice begs the question as to whether some other percentage might produce superior results. Indeed, the best performance may come from a design with a variety of different truncation percentages to optimize enumeration in different areas.

Finally, and perhaps most important, the advantages of a given sampling scheme will depend dramatically on the level of geography at which it is implemented. For example, a scheme that requires 90 percent completion at the block level before going to sampling will have greatly different characteristics than one that requires 90 percent completion at the county level. The former will be much more expensive than the latter, but the latter would lead to very great inequities in the level of precision available at various lower levels of geographic aggregation, e.g., at the tract level within each county. A county will often include areas that differ greatly with respect to census enumeration, e.g., areas with high and low mail back response, and areas with easy and difficult field follow-up. If the completeness criterion is set at the county level, then higher rates of completion will be obtained where it is easiest and other areas may still have much lower completion rates.

It is important to win general acceptance of the concept of sampling for non-response follow-up. Although it may be necessary to propose some examples for public debate, the Census Bureau should not constrain itself to choose a specific and possibly oversimplified design at this time. Thus, the panel urges the Bureau to continue to apply a flexible approach to developing a sampling scheme for nonresponse follow-up on the basis of the results of the 1990 census and the 1995 test census in order to achieve a sensible balance among all of the important considerations. This might include different truncation points and different sampling rates in different places. This plan must be based on reasonable cost assumptions and must integrate the estimation and imputation procedures into its design. We recognize, however, that 2000 is fast approaching, and the Census Bureau should identify the most promising design(s) as soon as possible.

#### INTEGRATED COVERAGE MEASUREMENT

As indicated above, even with the successful implementation of the various improvements in census methodology explored in the 1995 census test (other than sampling and statistical procedures), there will remain some people who are missed and some smaller degree of erroneous enumeration. These coverage errors will undoubtedly occur differentially across geographic areas and among different population subgroups, as they have in past censuses. Because this systematic error component will dominate other forms of error at broad levels of aggregation, it is essential to use integrated coverage measurement in the process of computing the final census count. Integrated coverage measurement involves two steps: first, sampling is used to identify the nature of the undercoverage problem; second, statistical procedures are used to incorporate the results of the sampling. Such integrated coverage measurement, as part of the census, is critical to reducing the differential undercount among population groups.

Integrated coverage measurement in 2000 will differ from the coverage measurement component of previous censuses in several important ways. Two key instances are that it will have a larger sample size so that accurate estimates can be made at lower levels of aggregation, and it will be completed earlier than the postenumeration survey conducted in 1990. In addition, integrated coverage measurement will account for a larger fraction of the census count because it will replace several coverage improvement activities used in recent censuses, such as the recanvass operations and the parolee/probationer check. It will also partially replace va-

<sup>3</sup> With the use of imputation, this is a literal statement.

cancy/delete operations. In addition, it will be more closely connected operationally and temporally with the major census field activity and therefore will be a more integral and necessary part of completing an accurate census.

The panel also sees an important interrelationship between the operations of the nonresponse follow-up plan and integrated coverage measurement. The quality of the integrated coverage measurement operation will almost certainly be affected by the length of delay between census day and the conduct of the integrated coverage measurement interview. With a longer time interval, it will be more difficult to get accurate information from a respondent about the household on census day. Also, a greater proportion of households will have moved, contributing substantially to the difficulty of obtaining accurate information. The use of sampling for nonresponse follow-up offers the potential to minimize any time interval between the date of the census and the conduct of the integrated coverage measurement interview. Minimizing the delay improves the quality of the census counts.

Moreover, an integrated coverage measurement program, based necessarily on a relatively small sample, argues in favor of the use of sampling for nonresponse follow-up. Since a component of the final count is to be based on data from the integrated coverage measurement sample, a consideration of the total error of the census as a whole argues that it is not logical to expend tremendous resources to enumerate every last household physically prior to integrated coverage measurement. A portion of those resources would be better spent increasing the size of the integrated coverage measurement sample used in combination with nonresponse follow-up sampling.

The Census Bureau's plans for selecting an integrated coverage measurement procedure involve comparing the performance of a dual systems estimation approach with the performance of a new methodology called Census Plus. The panel expects to learn more about the performance of these alternative approaches to integrated coverage measurement in the 1995 census test in its continuing work and to comment on them in a subsequent report. At this juncture, the panel endorses the use of integrated coverage measurement without commenting on the two specific approaches being considered. The panel emphasizes that the success of any approach depends heavily on the structure of the integrated coverage measurement interview and the rules used to establish the list of persons present on census day. The Census Bureau has identified deficiencies in this regard in the 1995 census test, which were to be expected with the first trial of a novel approach. The panel is very much encouraged by the rapid developments that have taken place in this area in the months since the 1995 census test, and the panel is optimistic that a sound set of procedures can be in place for the 2000 census.

#### FINAL COMMENTS

A combination of sampling for nonresponse follow-up and for integrated coverage measurement is key to conducting a decennial census at an acceptable cost, with increased accuracy and overall quality, and reduced differential undercoverage. Sampling and statistical procedures build on the strengths of traditional census operations to collect the information quickly, reduce the dependence on last-resort information, and aid in the development of a competent enumeration staff. Building on considerable evidence from past Census Bureau tests that it is feasible to conduct follow-up sampling to reduce cost and nonresponse to field follow-up, the 1995 census test has provided sound evidence that mail nonrespondents can be followed up effectively on a sample basis and that sampling for nonresponse follow-up can be integrated successfully with coverage improvement sampling. The Census Bureau has made considerable progress in a wide range of techniques for conducting the census, including sampling, to improve the 2000 decennial census. The panel intends to comment further on these initiatives in its subsequent reports.

Ms. RICHE. I think that Dr. Ehrlich covered the sense of people's level of confidence in the results, of having an acceptable level of hands-on, fact-to-face visits. I also would like to add that, and I think you said, that it's very important that the public understand what we're doing and perceive, and 90 percent is somehow easier for people to understand than 93 or 88 percent. It's an easier way to explain to people.

Mr. CLINGER. Several studies have shown that sample surveys, even those conducted by the Census Bureau, have a higher undercount than the census itself. Do you have any research that

indicates that this will not be true of the 10 percent sample, or nonresponse?

Ms. RICHE. The research that you refer to basically addresses the 1980 census, when we used another survey called the Current Population Survey instead of this Post-Enumeration Survey that Dr. Ehrlich just mentioned.

As you may recall, the Current Population Survey is something we conduct every month to find out the unemployment rate, and what we've found is that a survey that's designed to do something else is not a good way to address something like the undercount.

It takes a survey that is designed to address the undercount, and that is what we have been experimenting with in 1990. It worked very well. We tested it last year, and it worked extremely well.

Mr. CLINGER. You've indicated that the National Academy of Sciences panel is reviewing the methodology. Do you have any other thoughts of getting other groups to review the methodology and the results, or are you going to rely on the National Academy of Sciences to do this?

Ms. RICHE. The National Academy of Sciences is generally considered to be the Supreme Court in intellectual research endeavors among social scientists. We do, in addition, though, have several advisory committees.

We have ongoing advisory committees from the professional associations, including the American Statistical Association, who are reviewing our efforts. We have the advisory committee that Mrs. Meek referred to, our Race and Ethnic Advisory Committee.

We also have a very large advisory committee that the Secretary of Commerce has organized that represents all of these groups—the professional associations, racial and ethnic groups, mayors, groups of mayors, Governors association, transportation planners, just about everybody. These people very kindly give us their time to come and talk with us.

In addition, the inspector general and the General Accounting Office both have what seems to me substantial staffs located at the Census Bureau that are looking at us every day.

Mr. CLINGER. Thank you. My time has expired. I'm going to recognize Mrs. Meek, but let me also note the presence of Congressman Petri, who has introduced a piece of legislation today, and just inquire if Mr. Petri would like to testify or sit on the panel with us.

Mr. PETRI. I have prepared some testimony.

Mr. CLINGER. Very good. What we might do, if you have time, we have two more questioners here, and then we would like to ask you if you would like to testify.

I would now recognize Mrs. Meek.

Mrs. MEEK. Thank you, Mr. Chairman. I strongly believe, Chairman Clinger—and certainly I hope you will help me in trying to do this—I strongly believe that Congress should amend the current statutes regarding the census. Let me tell you why I feel that way.

I feel that way, No. 1, because there is some uncertainty regarding the legal aspects of the law in terms of whether or not it's legal to do sampling or whatever.

The second reason I strongly believe it is that you mentioned that you're going to rely on administrative waivers when it comes

to getting the information that you need. You're doing that because of HHS's position, I'm sure, on these administrative waivers.

Let me point up a scenario that may cause you some time and would put constraints on your methodology.

First, HHS's position would require each of the 50 States to submit a waiver application. Second, HHS may not grant all of the 50 waivers. Finally, HHS could only grant waivers to programs under its jurisdiction.

Presumably, each State would also have to submit separate applications to the Department of Agriculture for waivers for food stamps and school lunches and breakfasts, to the Department of Labor for waivers for job training, and to the Department of Housing and Urban Development for waivers for public housing.

Now, my question to you, administratively, how would you handle this morass in trying to get the waivers which you seek? I think that's important.

And, if I may just finish it so I won't have to ask you another question, please give me some insight on whether or not field testing is a good technique.

You are beginning some new approaches to the census, and I'm sure that it will improve the census. But you have a lot of confidence in your methodology. Have you, as an economics person or statistician, have you done any field testing to see whether this is going to improve over the 1990 census? Would you explain the field testing?

But please, Dr. Ehrlich, will you answer my first question regarding HHS and the waivers, first?

Mr. EHRLICH. I'm going to then ask Dr. Riche to answer the second question, so you'll get the best answer, perhaps, from both of us.

Mrs. MEEK. All right.

Mr. EHRLICH. I share your concerns about what you very correctly call a morass. Right now, we're trying to wade through that morass.

As I indicated earlier, we are providing for the record our summary of what we think the state of play at the different agencies is and, as your counsel understands, my counsel is working in this and communicating with the committee and with personal staffs as to what the state of our research is.

We do not have a priority objection to a wholesale statutory remedy that clears away the morass and, very frankly, Congresswoman, I believe you're to be complimented for making this issue visible and important and driving a resolution in whatever form it may be achieved.

We need to have these kinds of remedies one way or another, because our ability to reach into communities and have them navigate the census through their neighborhoods depends on having individuals who are indigenous to hard-to-count neighborhoods working with the census and showing us how to get the right job done.

We are prepared, if our legal research instructs us, to embrace a statutory remedy to clean away the morass. If the morass can be trimmed back and made manageable through waivers or through an administrative process, we're prepared to do that, but we are committed to doing whatever will work.

Let me have Dr. Riche speak to the second part of your question. Mrs. MEEK. Thank you.

Ms. RICHE. Last year, 1995, spring, we conducted a test census of three different locations around the country, six rural counties in Louisiana; Patterson, NJ; and Oakland, CA. They were designed to be representative of the most difficult situations we run into.

The test went extremely well. We found some changes that we plan to make, obviously. That's why we do the test. We will be testing more things this year in an interesting neighborhood in Chicago and on two Indian reservations, as well as another national test. So we are continuing to test.

Mrs. MEEK. Thank you. Were there any implications or inferences in your field testing that your methodology would improve the undercount of minorities?

Ms. RICHE. Absolutely. The Integrated Coverage Measurement Test, particularly, in Oakland, where we concentrated our field testing there, went very well. We are using computers with the interviewers now. We are using technology to get the results directly into our data base, so not only did we correct the undercount, but we got done on time, for the first time ever.

Mrs. MEEK. Thank you, and thank you, Mr. Chairman. I yield back the balance of my time.

Mr. CLINGER. Thank you, Mrs. Meek, and I now recognize the gentleman from California for 5 minutes.

Mr. HORN. Thank you very much. Let me ask the director some questions that are a little more technical than those I usually ask.

How would you translate or impute the county sampled figures down to the city, the census tract, and the census block level? How does that work? Since I represent part of a county of 8 to 10 million people with probably several million illegal aliens, how do you do that?

Ms. RICHE. Mr. Horn, I have to say I'm not a statistician, I'm a demographer. I'm somebody who uses the data. I would be happy to get you an answer to that.

[The information referred to follows:]

When referring to the "county level," the Census Bureau's plan has been to keep track of the overall response rate at the county level; we noted in our presentation that we are willing to use the census tract as an alternative geographic level for keeping track of overall response rates. Regardless of the geographic level used to measure overall response rates, we intend to keep track of individual responses address by address. Our cooperative program with the U.S. Postal Service, as well as many local and tribal governments, will help ensure that our address list is complete and that each address is assigned to the correct city block.

We intend to select the actual sample of nonresponding households, nonresponding address by nonresponding address. This means there are likely to be sample households in nearly every small area, such as city blocks. Each nonresponding household in the sample will "represent" the nearest nine other nonresponding addresses; that is, we will impute the data from each sampled household into those other nine specific nonresponding addresses, each of which is located in its appropriate census block. (We do not consider addresses identified as vacant by the U.S. Postal Service to be "nonresponding," so vacant units will not be included in this sample nor will they have people imputed into them as a result of this process.) This means the imputed answers apply to the city blocks in which each nonresponding address is located. Collections of those city block totals then add up to census tract totals, city totals, and county totals.

The decennial census does not differentiate between citizens and other residents of the United States, whether legal or illegal. The mandate is to count everyone who lives in the United States at the time of each decennial census.

Mr. HORN. OK. Let's just file that for the record. The next one is somewhat similar. What would be the margin of error or the degree of confidence for the proposed sampling method? Has that been worked out?

Ms. RICHE. Yes, we've been working on that, and that again is something the National Academy addresses in its report. It concludes that the methods that we have proposed would increase accuracy, not only at the national level and the State level, but also at the congressional district level and at the level of large governmental units.

They point out as well that the increased uncertainty at a small area like a block is more than outweighed by the increased accuracy, given that blocks are generally aggregated to larger areas for research purposes or policy purposes.

Mr. HORN. I gathered from one of your footnotes on pages 7 and 8 of your plan that you note the General Accounting Office documented 14.1 million erroneous enumerations in the 1990 census and several evaluation studies documented various types of bias in the official totals.

Do you believe the methods you're now proposing to implement for the year 2000 census will reduce that number of enumerations in terms of error?

Ms. RICHE. Absolutely.

Mr. HORN. A vacant house obviously doesn't return a form. However, it seems that your sampling proposal would then create people for that house. Am I reading that sampling proposal wrong? How do you handle the vacant house that might be a vacation home, it might be someone's second home, whatever? How do we deal with that?

Ms. RICHE. Well, we're using the post office at the beginning of the census to identify vacant units for us, and then we will be using our quality check survey to in fact check the Postal Service's identification of vacant units.

Mr. HORN. At the March 22 hearing—Mr. Ehrlich, you might want to get in on this—the question was asked, what is the current status of legislative proposals to permit data sharing among your various agencies, and you responded that, because the proposal had not been released, you did not feel it was appropriate for you to comment.

Well, I'm considering introducing the data sharing legislation submitted by OMB, and I would just like you to comment now on the usefulness of the legislation.

Mr. EHRLICH. I've not seen the legislative form you're describing, but we're very hopeful that there will be data sharing that will allow us to resolve some of the issues that are endemic in the statistical system, particularly with regard to the business side in terms of business lists and the like.

Mr. HORN. I noticed the comment was made, director, that under title XIII, there had never been a violation of confidentiality within the census. I would like to know from both of you what difficulties exist today in terms of added operating costs or respondent burden because of the current limitations on data sharing for statistical purposes. Are there any problems that run into cost?

Mr. EHRLICH. I think that, not in the decennial census, but particularly, again, for the purposes of our economic statistics, we probably do incur some incremental costs because there are different business lists or lists of business establishments drawn in four different places in the Government.

I think that that's the primary issue that I had hoped we would address that data sharing.

Mr. HORN. What are some of the other activities the census engages in that are limited by the confidentiality problem? Can you think of any besides the business-related list?

Ms. RICHE. I think confidentiality is essential to our work, that whether it's for a business or a household, assuring confidentiality of responses is absolutely essential.

Mr. HORN. Are there problems with some Federal agencies to even share their lists with you or do they willingly share some of their lists with you and, if so, what agencies are we having a problem with?

Ms. RICHE. I can't at the moment bring something to mind, but I'll—

Mr. HORN. OK. File it for the record.

Mr. EHRLICH. The issue goes to the point raised in your legislation, as I understand it, and that is there should be a uniform standard for confidentiality that allows agencies to trade those lists without that concern.

Mr. HORN. Yes. I agree with you completely. I would just be interested to know what is the impact now and what will improve if that legislation goes through. So if you could give me some comments on that in the next week or so, I would be most grateful.

Mr. EHRLICH. I'll be happy to.

Mr. HORN. Thank you. Thank you, Mr. Chairman.

Mr. CLINGER. Thank you. Now, I would recognize the gentleman from Arizona, Mr. Shadegg, for 5 minutes.

Mr. SHADEGG. Thank you, Mr. Chairman. I want to ask a few questions which are not directly related to the topic here but, since we have some people from the census before us, this looks like an opportune opportunity.

Mr. Ehrlich, perhaps you're the gentleman that can answer these questions for me, or can get them to the person who can answer them.

First of all, are you at all involved in the decision to construct the new Census Bureau facility which I understand is under construction at Bowie, MD?

Mr. EHRLICH. Insofar as it's within an agency that I direct, yes.

Mr. SHADEGG. OK. So you are involved in that?

Mr. EHRLICH. Yes.

Mr. SHADEGG. My understanding is that that will be the primary facility, is that correct?

Mr. EHRLICH. Yes.

Mr. SHADEGG. And then there is the question of a backup facility.

Mr. EHRLICH. There won't be a separate backup facility. It will be the capacity in Suitland.

Mr. SHADEGG. OK. That's kind of where I want to go. First of all, it's my understanding that there was no third party review performed prior to the construction of the Bowie facility. Isn't that cus-

tomary, to have a third-party review performed before the start of a—

Mr. EHRLICH. As I understand it, there was a GSA review and we produced our own cost estimates. I don't know if there was another review, but I would be happy to produce that for you for the record.

Mr. SHADEGG. I would very much appreciate that.

Second, my understanding is that the Suitland facility has had a number of difficulties, that it is an aged facility, it has had power outages, it has had roof leaks, it has had other similar problems—no doubt, why you would like a new facility; is that correct?

Mr. EHRLICH. Well, particularly because of the requirements of a computing center, that's right.

Mr. SHADEGG. OK. Dr. Riche, is that correct, also?

Ms. RICHE. Yes, that's correct. There's also the question of the power supply, in the case of a power outage. I understand that at the new facility there would be an alternate power supply if something were to happen to the one that we call on, something about a power grid, they explained to me.

Mr. SHADEGG. OK. My understanding is that there is a competing facility currently being used by the Census Bureau in Charlotte; is that correct?

Ms. RICHE. We rent a facility in Charlotte.

Mr. SHADEGG. Right. My understanding is that that facility has had no down time whatsoever; is that your understanding?

Ms. RICHE. I'm not aware of any.

Mr. SHADEGG. It is my understanding that that facility in fact has not had any down time. I would like you to confirm whether that's true, as compared with the Suitland facility, which I understand, for the reasons you've outlined, has had a fair amount of down time.

I guess my further question is, I've been given information to suggest that you could keep or acquire the Charlotte facility, which is a much better facility, and use it as an alternative for significantly less money than the Suitland facility.

Mr. EHRLICH. In our economic analysis of the decision to go to Bowie, we compared staying in Charlotte with the Bowie facility. I would be happy to supply that comparison to you.

Is your question as to whether or not an upgrade of Suitland would be—

Mr. SHADEGG. Well, the figures that have been given to me suggest that you could save \$18 million by using the Charlotte facility or purchasing it, as your backup facility, rather than continuing to use the Suitland facility, which has been plagued with these power problems, roof leaks, and other difficulties.

Mr. EHRLICH. Let me provide our understanding of the situation to you for the record. I can't answer that.

Mr. SHADEGG. Dr. Riche, maybe you can answer that?

Ms. RICHE. I agree with Dr. Ehrlich but, certainly, our goal is to have our computer staff in one place.

Mr. SHADEGG. These are obviously tight fiscal times. I want to make sure that the decision to make the Suitland facility—which has, in fact, apparently been plagued with problems, roof leaks, it's an aged facility, it has power outage problems, there are problems,

as you say with the power grid—I want to make sure that the decision to use that as the backup facility, rather than any other facility, whether it's the Charlotte facility or some other location, is a sound business-based decision and not a decision based on political pressure or some pork politics within the U.S. Congress, to be blunt.

Mr. EHRLICH. Absolutely.

Ms. RICHE. Absolutely.

Mr. SHADEGG. To the extent that you can supply that information to me, will you do so, and I would appreciate it if you would support it also with documentation which shows you've looked at these issues and studied them.

Ms. RICHE. Absolutely, yes, sir, we will.

[The information referred to follows:]

The central computer center at Suitland, Maryland was established in 1958. The Census Bureau has been attempting to secure a replacement facility since the 1980's. Occupancy of new computer space is necessary in 1997 in order for systems and equipment to be in place for the 2000 decennial census.

PL 102-141, signed by President Bush in 1991, authorized GSA to accept property, at no cost, from the State of Maryland, to construct a computer facility for the Bureau of Census. The law appropriated \$2.7 million to the GSA Federal Buildings Fund to plan and design the computer center. The GSA prospectus for the project included an economic analysis of whether to buy or lease space and recommended constructing rather than leasing new space. PL 103-123, enacted in 1993, appropriated \$27.9 million to GSA to construct a computer center for the Census Bureau in Bowie, Maryland.

The building is now in its 50th week of construction. It is on schedule and within budget. To date, the interior walls are completed; the steel supports for the roof have been erected; the boilers, chillers and water circulating pumps are on-site; and the Uninterruptible Power Supply systems are on-site. The Census Bureau is slated for occupancy during the spring of 1997.

The Charlotte, North Carolina site currently being leased by the Census Bureau was originally selected to provide back-up power, space, and CPU for the 1990 Census Post Collection processing. The lease on the Charlotte facility was to run eight years from 1989 to 1997. During the period that the Census Bureau has made use of the Charlotte facility, it has not experienced downtime. However, the facility is unsuitable to serve as the Census Bureau's primary facility, replacing Suitland, for a number of reasons, including it is too small and too far away from the Bureau's Suitland Headquarters. Bowie, on the other hand, is nearby Suitland.

It would not be cost effective to maintain Charlotte even as a backup facility. Minimal space is needed for Bowie backup, and Charlotte is too large for this purpose. The rent in Charlotte is about \$1.6 million per year plus another \$600,000 per year of associated costs for telecommunications, utilities, security, etc., for a total annual cost of \$2.2 million. This compares to the cost of using Suitland as a backup facility, which would be between \$300,000-\$500,000 per year. Because of the design of the Bowie facility, which includes a number of advanced features and safeguards, the building is able to serve as its own hot backup contingency site. The modular design of the building also provides containment capability, so that disaster damage, such as smoke or fire, would be contained in the module in which it occurred and would have little or no impact on the surrounding modules at the site. In addition, the Bureau's headquarters in Suitland will still need to maintain certain computer capabilities, including telecommunications lines between Bowie and Suitland. To continue to maintain these telecommunications and capabilities in three locations, including Charlotte, would be overly redundant and not cost-effective.

Mr. SHADEGG. Great. Because I guess the Bowie facility is going to cost about \$27 million. An \$18 million savings would be significant to this Member of Congress.

Thank you very much. That's all I have, Mr. Chairman.

Mr. CLINGER. Thank you, Mr. Shadegg, and thank you, Mr. Ehrlich and Ms. Riche.

Mr. EHRLICH. Thank you, Mr. Chairman.

Mr. CLINGER. We are going to hold the record open. We probably will have some additional questions that we would like to submit to you to answer in writing, if that would be agreeable, and we'll keep the record open for those questions to be propounded.

Mr. EHRLICH. We look forward to receiving them, Mr. Chairman.

Mr. CLINGER. Thank you very much. I appreciate it, and wish you well in the months ahead as you record the census.

I am now pleased to welcome our colleague, and a thoughtful student of the whole census problem, the former ranking member on the committee of jurisdiction, who has introduced a piece of legislation, as well as Mrs. Meek's piece of legislation, and I welcome him to the committee and ask for his testimony, and indicate that, whereas I don't believe that the minority was advised of Mr. Petri's appearance here, I am sure he would be pleased to welcome any questions, also, that might come.

#### **STATEMENT OF HON. TOM PETRI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN**

Mr. PETRI. I'd like to thank the committee for the opportunity to reiterate my concerns about proposals to adjust the 2000 census based on statistical sampling techniques. As I testified before the committee in February, I am concerned about the possible adjusting of the census, especially when it comes to the apportionment and redistricting of the House of Representatives or State legislatures or other electoral districts.

Such adjustment would be open to political manipulation and would tend to undermine the public's confidence in the census. To rely on sampling rather than a physical count could be compared to changing election returns if they are at variance with public opinion polls.

I also have to point out that the law already seems clear to me, at least regarding the use of sampling in apportionment. Title XIII, section 195 of the United States Code reads, and I quote: "Except for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall authorize the use of statistical methods known as 'sampling.'"

Yesterday, I introduced legislation to ensure that this point of law is absolutely clear. My bill states that no sampling techniques may be used to adjust the census for apportionment. It is also the clear intent and assumption of the bill that only one set of census numbers will be provided for apportionment, including both congressional and State legislative apportionment.

In any case, it would be quite difficult to adjust numbers for population units as small as State legislative districts in most States. Estimation techniques become less reliable the smaller the population, which is another reason that adjustment is not a good idea in this area.

It isn't fair for an adjustment to be made for, say, Los Angeles, while an undercount in a small town goes unadjusted because statisticians have less basis for estimating the population of smaller areas.

I believe a greater effort should be made to reach all Americans to provide an accurate hard count, and I commend the Census Bureau's efforts in that regard.

However, I remain opposed to adjusting the census based on statistical sampling, and would oppose amending existing law to allow the use of adjusted figures for electoral apportionment. I thank you very much.

[The prepared statement of Hon. Thomas E. Petri follows:]

PREPARED STATEMENT OF HON. THOMAS E. PETRI, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF WISCONSIN

I would like to thank Chairman Clinger and the Committee for the opportunity to reiterate my concerns about proposals to adjust the 2000 census based on statistical sampling techniques. As I testified before the committee in February, I am concerned about the possible adjusting of the census especially when it comes to the apportionment and redistricting of the House of Representatives or state legislatures.

Such adjustment would be open to political manipulation and would tend to undermine the public's confidence in the census. To rely on sampling rather than a physical count could be compared to changing election returns if they are at variance with public opinion polls.

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I believe a greater effort should be made to reach all Americans to provide an accurate hard count and I commend the census bureau's efforts in that regard. However, I remain opposed to adjusting the census based on statistical sampling.

Mr. CLINGER. We thank you very much, and look forward to considering your bill in greater detail.

Mrs. MEEK, do you have any comments or questions?

Mrs. MEEK. First of all, I would like to compliment Mr. Petri. He appeared in one of our other hearings, Mr. Chairman, with considerable experience in looking at the census.

I hope you don't think, Mr. Chairman, I'm trying to belabor these hearings, but is it possible that we could have one more so that the other members on the committee could hear Mr. Petri's testimony and be able to ask him questions?

Mr. PETRI. It is going to be in the record, I think.

Mr. CLINGER. As I indicated, certainly I think Mr. Petri is prepared to respond to any questions in writing that might be submitted by any members, and his testimony will appear in full in the record, and we will have further considerations, obviously, of this whole Census Bureau matter.

Mrs. MEEK. Thank you, Mr. Chairman.

Mr. CLINGER. Mr. Petri, we thank you very much, and appreciate your testimony. The committee will stand adjourned.

[Whereupon, at 11:20 a.m., the committee was adjourned.]

[Additional material submitted for the record follows:]

PREPARED STATEMENT OF HON. LOUISE MCINTOSH SLAUGHTER, A REPRESENTATIVE  
FROM THE STATE OF NEW YORK

First, Mr. Chairman, I want to thank you and commend you for having this hearing today. It is vital that we carefully examine the processes for the 2000 Census and ensure that the problems experienced in the 1990 Census are not repeated.

I also want to thank the representatives from the U.S. Census Bureau for coming here today to help us understand how they intend to improve the 2000 Census. The men and women who work at the Census Bureau are probably the most able and the most talented statisticians in the world. They ought to be able to find the best way to conduct an accurate Census, a Census with an increasingly lower undercount. I hope they will shed some light on this topic today.

As we all know, the Census is an extremely important tool used by the government for a variety of purposes. The Constitution established it as a means to apportion representatives, electoral votes and direct taxes among the states. In addition, the snapshot of America that the Census provides is increasingly utilized to determine the need for and the allocation of resources for a wide variety of programs ranging from low-income housing and combating unemployment to bilingual education and child assistance.

Because of this, it is crucial for the Census to be accurate. The ramifications of a general undercount, and the subsequent differential undercount, can be staggering. The livelihood and economic situation of each State, and the people of the States, will clearly be influenced by the Census, and we must realize we are affecting people's lives.

Following the 1990 Census, I am increasingly disturbed by the undercount of the Census—an undercount which, for the first time in the history of the Census, was worse in 1990. New York State, and my home town of Rochester, have been victims of the undercount of the Census. In 1990, it was estimated that New York was undercounted by over 300,000 people, or 1.7 percent. This undercount has significant and tangible effects. Minorities are deprived of their fair share of political representation and resources to meet their communities' needs. The addition of over 300,000 people to the official 1990 Census figure would have meant millions of dollars in additional federal funds to New York and its localities—funds that are designed to help provide needed services to our constituents.

Clearly, the debate must be over the best way to solve the undercount issue. It is simply not acceptable to have such a large undercount—and an undercount problem that is apparently getting worse. The Census Bureau has now proposed two methods to attempt to combat this problem: Sampling for Nonresponse, and the Integrated Coverage Measurement. If the experts believe these methods are the best way to improve the problem, then we should implement them. If there are other ways to better improve the problem, then we should implement those.

In closing, we must do everything we can to ensure that the 2000 Census accurately reflects the population of the United States in the year 2000. The Census Bureau must continue its programs aimed at reducing the undercount. But the difference in undercounting of minorities is too severe, and the resulting inequities in the distribution of economic resources and political power are too inequitable to stop there. We have the statistical adjustment tools to make the Census more accurate, and we must use them.

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PREPARED STATEMENT OF HON. BARBARA-ROSE COLLINS, A REPRESENTATIVE FROM  
THE STATE OF MICHIGAN

Mr. Chairman, thank you for convening this hearing regarding the Census Bureau's plan for the 2000 census of population and housing. I join the ranking minority member, Congresswoman Cardiss Collins, in her assessment that the constitutional promise of one person one vote can only be realized by a census that counts on all our citizens.

The committee last met on this issue in February and heard testimony from outside experts on the Census Bureau's strategy for conducting the 2000 census. The most disturbing aspect of their testimony was the Bureau's proposal to replace a count of the last 10 percent of the population with an estimate based on a sample of those not counted. This is a very dangerous proposal because once 90 percent of the population has been counted, the census is planning to estimate the last 10 percent, therefore running the risk of missing a large chunk of the population in urban areas.

This proposal is not good enough and certainly unfair. Most minority populations will be highly affected by this action, because they are often located in small neighborhoods that run the risk of being included in the 10 percent count that will be estimated. Inevitably, this community will be short changed as a direct result of this proposal.

In an effort to circumscribe the Census Bureau's proposal to sample, my colleague, Congresswoman Carrie Meek, recently introduced H.R. 3558. I am a cosponsor of this bill and strongly support Representative Meek's concerns about the 2000 census and its effect on minority neighborhoods.

It is my hope that through these hearings the Census Bureau will realize that fairness to all Americans should not be compromised in an effort to save money. To that end, I look forward to working with my colleagues to ensure that the 2000 census will be the most complete and comprehensive census ever.

Thank you, Mr. Chairman.

