

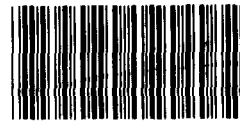
GAO

Report to the Chairman, Subcommittee
on Government Information and
Regulation, Committee on
Governmental Affairs, U.S. Senate

November 1991

FORMULA PROGRAMS

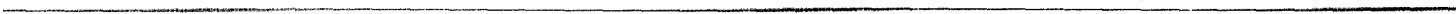
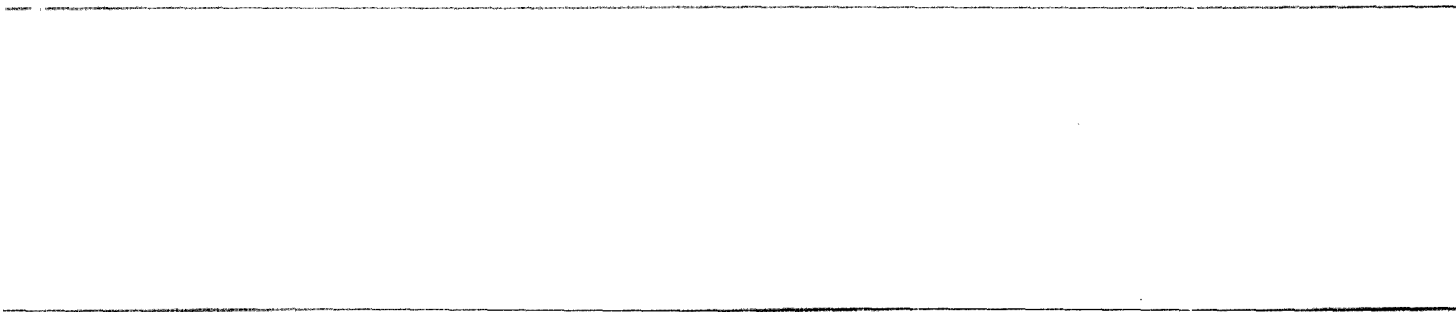
Adjusted Census Data Would Redistribute Small Percentage of Funds to States



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General Government Division

B-245672

November 7, 1991

The Honorable Herb Kohl
Chairman, Subcommittee on Government
Information and Regulation
Committee on Governmental Affairs
United States Senate

Dear Mr. Chairman:

This report responds to your request for information on (1) the use of population-related data in federal grant programs and (2) the potential implications of the proposed use of 1990 census adjusted population data by the federal government in direct allocations to states and local governments. This information should help the Subcommittee respond to its legislative directive to report to the Senate by February 1, 1992, on the use of the 1990 census Post Enumeration Survey (PES) for purposes other than political apportionment. We provided preliminary information on these issues to the Subcommittee on August 9, 1991.

Background

The Bureau of the Census used the PES to estimate the extent to which the 1990 decennial census fully counted the population. The PES was a matching study in which the Bureau interviewed a sample of households several months after the census and compared the results to census questionnaires to determine if each sampled person was correctly counted, missed, or double-counted in the census.¹ The net undercount as estimated by the PES was approximately 5.3 million persons—about 2.1 percent of the resident census count of 248.7 million persons.²

The PES and associated evaluations were the central methodology used by the Secretary of Commerce to decide whether or not to adjust the 1990 census to correct for net undercounts of the population. On July 15, 1991, the Secretary announced his decision not to adjust.³ In his decision, the Secretary noted there is general agreement that adjusted counts are more accurate than the census at the national level, but there

¹See 1990 Census Adjustment: Estimating Census Accuracy - A Complex Task (GAO/GGD-91-42, Mar. 11, 1991) for background on the methods and procedures used for the 1990 PES.

²See 1990 Census: Reported Net Undercount Obscured Magnitude of Error (GAO/GGD-91-113, Aug. 22, 1991) for a discussion of errors in the census as measured by the PES.

³The July 15 deadline was established in the Stipulation and Order in The City of New York, et al., v. United States Department of Commerce, et al., a lawsuit seeking statistical adjustment of the 1990 census. The adjustment issue is still under litigation.

is disagreement about which set of numbers is more accurate at lower levels of geography. However, he requested that the Bureau incorporate, as appropriate, information from the PES into its intercensal estimates of the population.

Between the decennial censuses, the Bureau uses surveys and other periodic programs to provide estimates of current population size and basic demographic characteristics. In the 1990s, the Bureau expects to prepare intercensal estimates annually for states, counties, and metropolitan statistical areas and biennially for incorporated places of 5,000 or more persons and for minor civil divisions in selected states.

Results in Brief

A total of 100 federal programs providing grants at the state and local levels use population count or characteristic data, such as age or income, in formulas that allocate all or a portion of program grant money. These programs had total estimated obligations of about \$116 billion in fiscal year 1991. However, the amount of funding influenced by population data was less than \$116 billion because some programs allocated only a portion of their total grants through formulas that include population data elements. Although most programs use data from current population estimates between censuses, 30 of the 100 programs use data elements in their formulas for which the decennial census is the only source of information, such as the number of persons living in "urbanized areas."

While difficult to predict precisely, the general effect of using adjusted 1990 census population data for federal funding purposes would likely be small as a percentage of total funding. This is because the level of funding is influenced by many factors, including the type of population data used, whether nonpopulation data (such as miles of road) are used, and whether other formula provisions set minimum or maximum allocations. In addition, adjusted population data at the state level used by most funding formulas would vary relatively little from the unadjusted data. Using 1990 adjusted population data in place of the decennial census figures, we simulated allocations for three major federal programs—Social Services Block Grant, certain Federal-Aid Highway Programs in which population is a factor, and Medicaid. Results showed that using adjusted data as the basis for allocations would have little relative effect on the distribution of annual funding to states. For the three programs we examined, less than half of a percent of total funding would be redistributed by using the revised population counts. However, by using the adjusted data, some individual states would incur estimated

changes of over \$1 million in their allocations; the effect of such differences becomes more substantial when applied over the course of an entire decade.

There are two primary reasons why it might be possible for the Bureau to adjust intercensal population estimates for the 1990 census net undercount, even though the Secretary decided in July that the PES results could not support adjusting the census. First, more time is available to perfect the methodology for adjustment. Second, estimates are not produced for very small geographic areas, such as census blocks, but only for larger levels of geography, such as states, counties, and cities.

Because of the time involved to complete the necessary methodological research, the Bureau believes that any intercensal population estimates incorporating a correction for census undercoverage could not be made available before mid-1992 or early 1993.

Objectives, Scope, and Methodology

Our objectives were (1) to identify the federal formula programs that use population-related data in whole or in part to distribute funds and their estimated total obligations in fiscal year 1991, (2) to provide examples of how using 1990 adjusted census population estimates in place of the official decennial census figures might affect funding allocations to states, and (3) to determine the status of Bureau efforts to integrate data on 1990 census undercounts into its population estimates.

To meet the first objective, we updated material presented in our September 1990 report on federal formula programs, which provided detailed information on programs using population data to allocate funds in fiscal year 1989.⁴ We reviewed the Catalog of Federal Domestic Assistance (CFDA) for fiscal years 1989-1991, the General Services Administration's (GSA) Federal Formula Report to Congress, and GSA's information database on federal formula programs to identify programs using data on population counts or characteristics that had been added to or eliminated from the catalog since our 1990 report. We did not verify the accuracy of the GSA database. The 1991 CFDA also provided the estimated level of fiscal year 1991 grant obligations for the programs identified. As agreed with your office, we are reporting total estimated grant obligations for these programs in fiscal year 1991.

⁴Federal Formula Programs: Outdated Population Data Used to Allocate Most Funds (GAO/HRD-90-145, Sept. 27, 1990).

To meet our second objective within the time period available to respond to the Subcommittee's request, we simulated state grant allocations for three major formula programs: Social Services Block Grant, certain Federal-Aid Highway Programs in which population is a factor, and Medicaid. The programs we selected for our case studies are of sufficient variety and size to indicate the relative magnitude of possible changes in federal allocations to states. They are three of the five largest federal programs using population data in funding formulas.⁵ The three programs account for 60 percent of all funds allocated by such programs and represent the different ways in which population data are used in funding formulas. The Social Services Block Grant formula is based entirely on each state's share of total population while the Federal-Aid Highway Programs use several data elements, including population at substate levels (such as rural population) and nonpopulation data (such as miles of public roads). Medicaid uses per capita income data, which are indirectly influenced by the size of state populations.

To calculate allocations for the Social Services Block Grant and Federal-Aid Highway Programs, we used fiscal year 1991 funding levels and existing grant formulas. To calculate allocations for the Medicaid Program, we used fiscal year 1989 state expenditures and estimated federal matching rates for the Medicaid Program's Federal Medical Assistance Percentages. We calculated the allocations in two ways, first using the 1990 census results and then using the Bureau's estimate of 1990 population based on the PES. Our calculations are based on (1) population counts and other data currently available and (2) formulas in current law. Thus, these calculations are not a projection of actual allocations in future years. We did not evaluate the potential redistributive effects of state governments using adjusted data to allocate federal and state funds to jurisdictions within the state.

To meet our third objective, we interviewed Bureau officials and reviewed Bureau documents to obtain information on the development of intercensal estimates of population and population characteristics and the possible use of adjusted 1990 population data in the estimates.

⁵The other programs are the Department of Health and Human Services Family Support Payments to States, which allows states the option to use the Medicaid formula, and the Department of Education Chapter 1 Programs—Local Educational Agencies.

We did our work in August and September 1991 in Washington, D.C., and at the Bureau of the Census in Suitland, Md., in accordance with generally accepted government auditing standards.

Federal Programs Using Population-Related Data to Distribute Funds

A total of 100 federal programs used population data directly or indirectly (as in per capita income, which is derived from aggregate income divided by total population) to allocate at least some portion of their grant funds in fiscal year 1991.⁶ The 100 programs had total estimated obligations of about \$116 billion during fiscal year 1991. (See app. I for estimates of fiscal year 1991 obligation levels by program.) However, the amount of obligations influenced by population data was less than \$116 billion because the total reflects funds allotted through provisions that prescribe minimum percentage or dollar amounts of grant funds.⁷ The total also includes programs where only a portion of total funding is based on formulas using population data elements. For example, the Department of Transportation's Federal-Aid Highway Programs include over 30 subprogram areas, of which 7 major subprograms use population-related data as a statistical factor in calculating apportionments.

Ninety-two of the 100 programs calculate fund allocations at the state level, with 8 of the 92 programs also calculating shares for other geographic segments, such as counties or urban areas. The remaining eight programs calculate shares only at regional or substate levels. Although most grant formulas calculate allocations at the state level, they may include factors for substate populations—for example, the number or proportion of persons below the poverty level, in urban or rural areas, over age 60, or under age 18. Only a few programs, such as Social Services Block Grants, base funding levels solely on a state's proportion of the total U.S. population.

While most of the programs can use data from current population or per capita income estimates between censuses, the decennial census is the only source of data for some or all of the formulas used by 30 programs, with estimated fiscal year 1991 obligations of \$33.4 billion. These 30 programs require state- and substate-level data on populations that are

⁶We counted programs according to CFDA entries and numbers. Therefore, programs with subprograms, such as Part C of Title III Special Programs for the Aging and the Federal-Aid Highway Program, are counted only once.

⁷For example, territories may receive a percentage of total funds as a set-aside, or a hold-harmless provision may guarantee states that they will receive no less than their prior year's grant.

not estimated between censuses, such as the number of persons living in urban and rural areas or in households below the poverty level.

For example, 14 funding formulas use data on “urban” or “rural” population. The Bureau determines the urbanized population at the time of the decennial census on the basis of population counts at the block level. An “urbanized area” as defined by the Bureau comprises one or more central places/cities plus the adjacent densely settled surrounding territory (“urban fringe”) that together have a minimum of 50,000 persons. The Bureau uses detailed block-level census data to define the boundaries of the densely settled surrounding territory. Territory, population, and housing units not classified as urban are designated rural.

Another four programs, distributing almost \$2.1 billion, do not use current estimates because they are required by statute to use decennial census data, even though more current data are available through intercensal estimates.

Effect on Funding Levels of Using Adjusted Population Estimates

The effect of using adjusted 1990 population data for federal funding purposes is difficult to predict. The level of funding allocations is influenced by many factors, including the type and level of population data used in funding formulas, the use of data elements other than population, and the effect of additional formula provisions. Examples of different factors and their influences include the following:

- Formulas might use data on total population or only particular subpopulations (for example, persons in specific age groups or living in urbanized or rural areas). Population can also indirectly influence a formula data element as in per capita income or per capita incidence of a given condition.
- Population data might be used in only part of a program’s formula. The formulas may include (and even emphasize) other data elements, such as income, school enrollment, public road mileage, number of rental units in urban areas, number of community water systems, or number of clients receiving a particular service.
- The level of funding allocations can be influenced by provisions that designate minimum or maximum allotments, set aside portions of an appropriation for specific grantees, establish hold-harmless allotments to insure that states or territories would receive at least a percentage of a prior year’s funding, or specify equal distributions among states for at least a portion of the available funds. In some cases, a formula applies only if the program’s funding is above a certain threshold.

Many formula grants include a combination of the situations listed above. In addition, funding levels are influenced by whether a program has a fixed pool of funds to distribute (as in Social Services Block Grants) or has no fixed amount to distribute (as in federal reimbursements to states under Medicaid) and whether a grant is constrained by matching requirements at state or local levels. Therefore, the effect of using adjusted population data would have to be calculated on a case-by-case and year-by-year basis.

However, we believe that the general effect of substituting 1990 adjusted population data for the decennial census data in federal funding formulas would be relatively small for two reasons. First, because of the multiple variables involved in determining fund allocations, the influence of an adjustment in a single data element such as population is limited. Second, most federal funding formulas use data aggregated at a state level, and the changes in the relative distribution of state populations when adjusted for net undercounts are small, with an average increase in the 1990 census counts of about 2 percent. However, if state governments used adjusted population data to redistribute federal and state funds to jurisdictions within the state this could have more of a relative impact than the redistribution of federal funds among states. Such an impact could occur because variations in net census undercount estimates are more pronounced among cities, counties, and other substate levels.

The limited effect from using adjusted data was demonstrated in examples we calculated. We estimated the changes in the distribution of state grant allocations using both adjusted and unadjusted census data in the formulas for three major federal programs: Social Services Block Grant, certain Federal-Aid Highway Programs in which population is a factor, and Medicaid.⁸ For these three simulations, using 1990 adjusted population data for states and the District of Columbia in place of the decennial figures had little relative effect on the distribution of state allocations (see app. II). However, by using the adjusted data, some individual states would incur estimated changes of over \$1 million in allocations. The effect of such differences becomes more substantial when applied over the course of an entire decade.

⁸The three simulations are from a letter to Senator Pete V. Domenici and Representative Stephen H. Schiff from GAO's Director, Human Services Policy and Management Issues, HRD, August 1, 1991 (B-244990).

The simulations also showed that an increase in a state's population to adjust for net undercounts in the 1990 census would not necessarily result in a gain in federal funding. In fact, using adjusted population data would reduce total federal spending for two of the three programs (Federal-Aid Highway and Medicaid). This occurs because of the combined effects of various formula and program provisions.

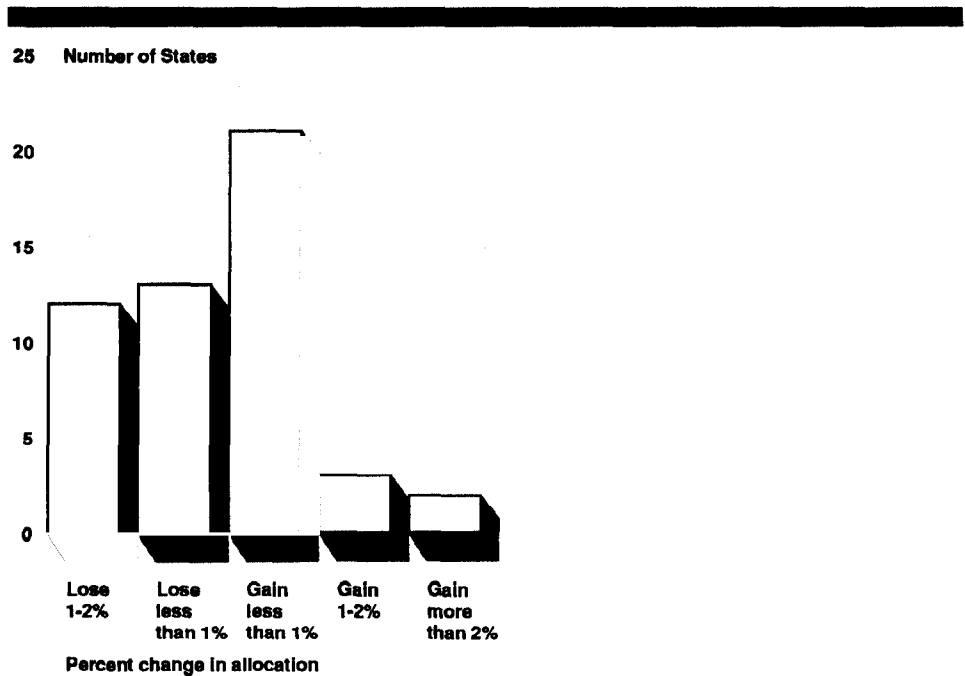
For example, under Medicaid the federal share for matching state expenditures for medical care may range from 50 percent to 83 percent, with a state's percentage within that range determined by formula. California's net undercount in the 1990 census as measured by the PES was 1.6 percent higher than the national average. Using the adjusted population data, the calculated reimbursement percentage for California would increase from 45.4 to 47.1 percent. However, because the minimum reimbursement rate is 50 percent, California's actual rate would not change from the minimum. Conversely, Pennsylvania also had a net undercount, but its undercount rate as measured by the PES was 1.5 percent below the national average. Using the adjusted figures, Pennsylvania's calculated reimbursement percentage would decline from 55.0 percent to 53.7 percent. Because these calculations are within Medicaid's allowable range, Pennsylvania's actual rate would change.

Summaries of the estimated effects of using adjusted data for the three programs and figures showing the distribution of changes in states' funding allotments appear below.

Social Services Block Grants:

- The total allocation of \$2.7 billion would not change.
- Only 0.46 percent of the total allocation would be redistributed, with 25 states and the District of Columbia gaining and 25 states losing funds.
- The percentage change in individual state allocations would range from +3.11 percent for the District of Columbia to -1.83 percent for Rhode Island. The states that gain or lose over \$1 million in actual dollar amounts are California (+\$5.3 million), Texas (+\$2.2 million), Massachusetts (-\$1.1 million), Ohio (-\$1.5 million), and Pennsylvania (-\$1.9 million).

Figure 1: Distribution of Estimated Changes in Social Services Block Grants to States Using 1990 Adjusted Population Data

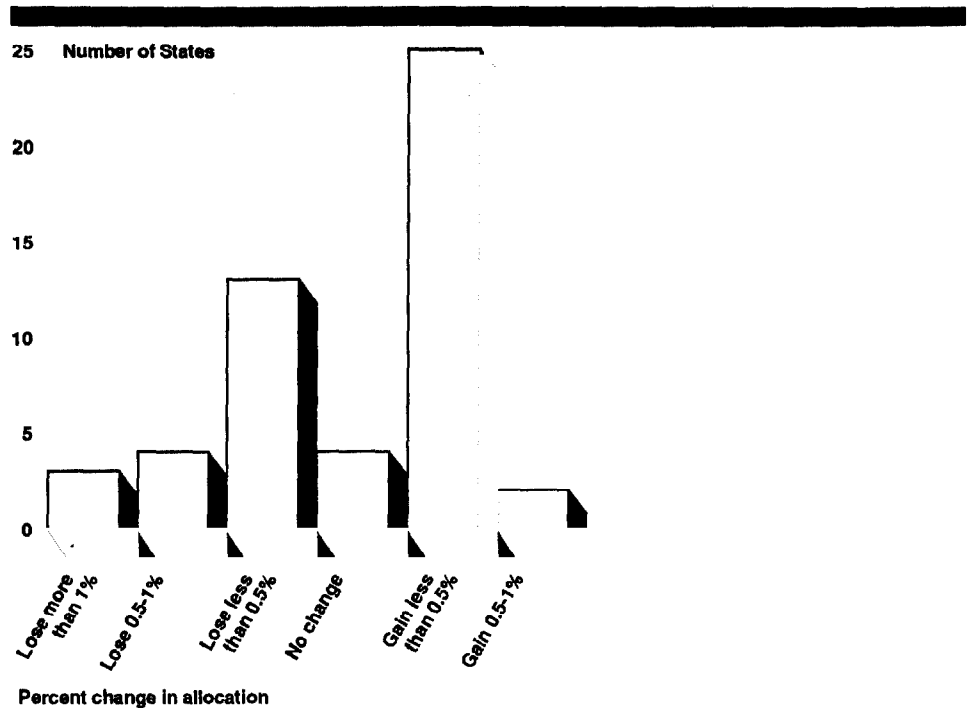


Note: Numbers reflect changes for 50 states and the District of Columbia.
 Source: GAO calculation.

Federal-Aid Highway Programs in which population is a factor:

- The total allocation to states would be reduced by \$6.3 million (falling approximately a tenth of a percent from the \$5 billion level, based on 1990 decennial census data).
- Only 0.16 percent of total program funding would be redistributed. Twenty-seven states would gain, 20 states would lose, and 3 states and the District of Columbia would have no change in their allocations.
- The percentage change in individual state allocations would range from +0.7 percent for New Mexico to -1.6 percent for Massachusetts. In actual dollar amounts, New Mexico would gain the most (+\$0.3 million), while Pennsylvania (-\$2.1 million) and Massachusetts (-\$1.2 million) would have the largest estimated reductions in funding.

Figure 2: Distribution of Estimated Changes in Federal-Aid Highway Program Allocations to States Using 1990 Adjusted Population Data



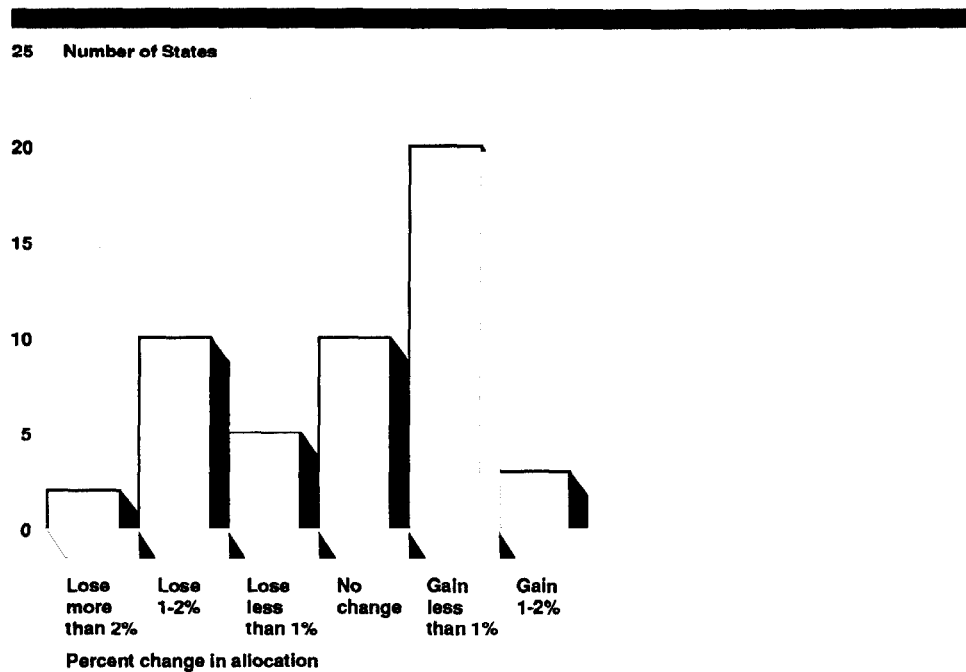
Note: Numbers reflect changes for 50 states and the District of Columbia.
Source: GAO calculation.

Federal Medicaid Allocations:

- The total allocation to states would be reduced by \$86.5 million (a change of -0.26 percent from the \$32.9 billion level, based on 1990 census figures).
- Only 0.46 percent of total funds would be redistributed, with 23 states gaining, 17 states losing, and 9 states and the District of Columbia having no change in their allocations.⁹
- The percentage change in individual state allocations would range from +1.7 percent for New Mexico to -3.3 percent for Rhode Island. In actual dollar amounts, 25 states would experience gains or reductions of over \$1 million in their allocations. The estimated range is from +\$19.9 million for Texas to -\$36.5 million for Pennsylvania.

⁹Arizona does not participate in the program.

Figure 3: Distribution of Estimated Changes in Federal Medicaid Reimbursements to States Using 1990 Adjusted Population Data



Note: Numbers reflect changes for 49 states and the District of Columbia.
 Source: GAO calculation.

Status of Bureau Efforts to Integrate Data on Census Undercounts Into Population Estimates

While the Secretary's decision not to adjust the census applies directly to matters of representational apportionment, it does not fully settle the issues arising from proposals to use adjusted data for federal formula programs and other purposes. Similar to the questions that confronted the Secretary on adjusting the census, a key technical issue needing resolution is whether using PES data for intercensal estimates would bring these estimates closer to the true population than would using unadjusted data. Therefore, according to Bureau officials, any use of the PES data would have to pass methodological reviews at the Bureau and the Department of Commerce before being incorporated into the intercensal estimation process. Because of the time involved to complete the research on how to compile the intercensal estimates, the Bureau believes that any data incorporating a correction for census net undercounts could not be made available before mid-1992 or early 1993.

There are two primary reasons why it might be possible for the Bureau to adjust the intercensal population estimates for undercoverage, even though the Secretary decided against using the PES to adjust the census. First, more time is available to perfect the methodology for adjustment. Second, estimates are not produced for very small geographic areas, like

census blocks, but only for larger levels of geography, such as states, counties, cities, and metropolitan statistical areas. The estimates also publish less characteristic data than are published for census data. Therefore, precision at lower geographic levels is not so critical for intercensal estimates as for the census itself.

There is some precedent for using information on census undercounts in compiling the intercensal estimates. During the last decade, the Bureau indirectly used information from 1980 net undercount estimates through an inflation/deflation procedure. According to a Bureau official, this procedure was designed to improve the estimates of the U.S. age and sex distribution and was based primarily on the Bureau's independent demographic estimates at the national level.

In the 1980s, the Bureau provided intercensal estimates at the national level showing age, race, sex, and Hispanic origin; at the state level showing age and sex; and at the county and city level showing population and per capita income. For the 1990s, the Bureau plans to cease its per capita income estimates.¹⁰ One methodological issue now being considered by the Bureau is the need to adjust prior population estimates (before 1990) if the 1990 decade estimates incorporate the undercount. Such an adjustment would be needed for purposes of consistency in the data series.

Incorporating data from the PES into the Bureau's intercensal estimates would still leave an important set of funding formula data elements unchanged. As noted earlier, 30 programs have formulas that require data series based on information only collected through the decennial census; examples include the number of persons in households below the poverty level or living in urban or rural areas. The PES did not collect equivalent information. However, while the Bureau cannot currently prepare intercensal estimates of the "urban" population, Bureau officials noted that research is continuing to develop a method for providing intercensal estimates of the population of urban areas as defined at the time of the last census.

Agency Comments

We did not obtain official comments from the Bureau on this report. We did, however, discuss our findings with responsible Bureau officials.

¹⁰The Bureau developed these estimates primarily for use by the federal revenue sharing program, which has been eliminated.

They generally agreed with the facts and analyses presented and suggested several technical clarifications. We incorporated the clarifications where appropriate.

As arranged with your office, we plan no further distribution of the report until 30 days from the date of this letter unless you publicly announce its contents earlier. At that time, we will send copies to the Subcommittee on Census and Population, House Committee on Post Office and Civil Service; other appropriate congressional committees; the Secretary of Commerce; the Director of the Bureau of the Census; and the Director of the Office of Management and Budget. Copies also will be made available to other interested parties upon request.

The major contributors to this report are listed in appendix III. If you have any questions concerning this report, please contact me on (202) 275-8676.

Sincerely yours,



L. Nye Stevens
Director, Government Business
Operations Issues

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Figure 3: Distribution of Estimated Changes in Federal
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Abbreviations

CFDA	Catalog of Federal Domestic Assistance
FMAP	Federal Medical Assistance Percentages
GSA	General Services Administration
PES	Post Enumeration Survey

Programs Using Population-Related Data, in Whole or in Part, to Allocate Funds (FY 1991)

Dollars in millions

CFDA number	Program name	Estimated obligations FY 1991	Codes*
Department of Agriculture			
10.203	Payments to Agricultural Experiment Stations Under Hatch Act	\$155.7	D,R
10.205	Payments to 1890 Land-Grant Colleges and Tuskegee University	25.2	D,R
10.418	Water and Waste Disposal Systems for Rural Communities	294.0	D
10.420	Rural Self-Help Housing Technical Assistance	15.5	D
10.424	Industrial Development Grants	20.8	D
10.427	Rural Rental Assistance Payments	308.1	D
10.433	Rural Housing Preservation Grants	23.0	D
10.500	Cooperative Extension Service	389.3	D,R
10.557	Special Supplemental Food Program for Women, Infants, and Children (WIC)	2,345.1	D
10.568	Temporary Emergency Food Assistance (Administrative Costs)	50.0	D
10.569	Temporary Emergency Food Assistance (Food Commodities)	120.0	D
10.571	Food Commodities for Soup Kitchens	32.0	D
Department of Commerce			
11.307	Special Economic Development and Adjustment Assistance Program	23.3	
11.419	Coastal Zone Management Program Implementation and Enhancement Awards	35.3	
Department of Housing and Urban Development			
14.218	Community Development Block Grants: Entitlement Grants	1,982.1	
14.219	Community Development Block Grants: Small Cities Program	36.3	
14.228	Community Development Block Grants: State's Program	902.9	
14.230	Rental Housing Rehabilitation	104.2	
Department of the Interior			
15.611	Wildlife Restoration	139.6	R
15.916	Outdoor Recreation—Acquisition, Development, and Planning	29.3	
Department of Justice			
16.540	Juvenile Justice and Delinquency Prevention—Allocation to States	52.7	
16.575	Crime Victim Assistance	62.8	
16.579	Drug Control and System Improvement—Formula Grant	423.0	
Department of Labor			
17.235	Senior Community Service Employment Program	390.4	
17.247	Migrant and Seasonal Farmworkers	70.3	D

(continued)

**Appendix I
Programs Using Population-Related Data, in
Whole or in Part, to Allocate Funds (FY 1991)**

CFDA number	Program name	Estimated obligations FY 1991	Codes*
17.250	Job Training Partnership Act Title II-A, Basic Program Title II-B, Summer Youth	1,778.5 682.9	D D
17.251	Native American Employment and Training Programs	59.6	D
Department of Transportation			
20.106	Airport Improvement Program: State Apportionments	1,800.0	R
20.205	Highway Planning and Construction	15,432.0	D,R
20.218	Motor Carrier Safety Assistance Program	46.7	
20.505	Urban Mass Transportation Technical Studies Grants	49.2	D
20.507	Urban Mass Transportation Capital and Operating Assistance Formula Grants	1,941.7	D,R
20.509	Public Transportation for Nonurbanized Areas	84.2	D,R
20.600	State and Community Highway Safety	139.8	R
Appalachian Regional Commission			
23.008	Appalachian Local Access Roads	5.9	D
23.010	Appalachian Mine Area Restoration	0.0	D
National Foundation on the Arts and the Humanities			
45.007	Promotion of the Arts—States Program	31.5	
45.129	Promotion of the Humanities—State Programs	6.9	
Small Business Administration			
59.045	Natural Resource Development	14.7	
Environmental Protection Agency			
66.001	Air Pollution Control Program Support	137.7	
66.432	State Public Water System Supervision	47.5	
66.433	State Underground Water Source Protection	10.5	
66.700	Consolidated Pesticide Compliance Monitoring and Program Cooperative Agreements	26.3	
66.702	Asbestos Hazards Abatement (Schools) Assistance	13.9	D
66.801	Hazardous Waste Management State Program Support	83.0	
Department of Energy			
81.041	State Energy Conservation	11.7	
81.050	Energy Extension Service	4.9	R
81.052	Energy Conservation for Institutional Buildings	39.0	
Federal Emergency Management Agency			
83.503	Civil Defense: State and Local Emergency Management Assistance	63.1	
Department of Education			
84.002	Adult Education: State-Administered Basic Grant Program	201.0	D
84.010	Chapter 1 Programs—Local Educational Agencies	5,557.8	D
84.034	Public Library Services	82.2	
84.035	Interlibrary Cooperation and Resource Sharing	19.5	
84.048	Vocational Education: Basic Grants to States	849.4	

(continued)

**Appendix I
Programs Using Population-Related Data, in
Whole or in Part, to Allocate Funds (FY 1991)**

CFDA number	Program name	Estimated obligations FY 1991	Codes^a
84.049	Vocational Education: Consumer and Homemaking Education	33.4	
84.053	Vocational Education: State Councils	8.8	
84.126	Rehabilitation Services: Basic Support	1,628.5	
84.151	Federal, State, and Local Partnerships for Educational Improvement	448.9	
84.154	Public Library Construction and Technology Enhancement	31.6	
84.161	Client Assistance for Individuals with Disabilities	8.3	
84.164	Eisenhower Mathematics and Science Education—State Grants	202.0	
84.169	Comprehensive Services for Independent Living	13.6	
84.174	Vocational Education: Community Based Organizations	11.7	
84.176	Paul Douglas Teacher Scholarships	14.6	
84.186	Drug-Free Schools and Communities: State Grants	497.7	
84.187	Supported Employment Services for Individuals with Severe Handicaps	29.2	
84.196	State Activities—Education for Homeless Children and Youth	7.3	D
84.223	English Literacy Program	1.0	D
84.243	Tech-Prep Education	63.4	
Department of Health and Human Services			
93.020	Family Support Payments to States—Assistance Payments	12,699.1	
93.036	Child Care for Families At Risk of Welfare Dependency	150.0	
93.037	Payments to States for Day Care Assistance	731.9	
93.138	Protection and Advocacy for Mentally Ill Individuals	15.3	
93.150	Projects for Assistance in Transition from Homelessness (PATH)	33.1	D
93.199	HIV Home and Community-Based Health Services	0.0	
93.552	Special Programs for the Aging—Title III, Part G—Prevention of Abuse, Neglect, and Exploitation of Older Individuals	2.9	
93.553	Special Programs for the Aging—Title III, Part A—Long-Term Care Ombudsman Services for Older Individuals	2.4	
93.600	Administration for Children, Youth and Families—Head Start	2,055.5	D
93.614	Child Development Associate Scholarships	1.4	
93.623	Administration for Children, Youth and Families—Runaway and Homeless Youth	35.1	
93.630	Administration on Developmental Disabilities	85.4	
93.633	Special Programs for the Aging—Title III, Part B—Grants for Supportive Services and Senior Centers	290.8	
93.635	Special Programs for the Aging—Title III, Part C—Nutrition Services		
	Congregate Nutrition Services	361.1	
	Home Delivered Nutrition Services	87.8	

(continued)

**Appendix I
Programs Using Population-Related Data, in
Whole or in Part, to Allocate Funds (FY 1991)**

CFDA number	Program name	Estimated obligations FY 1991	Codes^a
93.641	Special Programs for the Aging—Title III, Part D—In-Home Services for Frail Older Individuals	6.8	
93.643	Children's Justice Grants to States	9.5	
93.645	Child Welfare Services: State Grants	273.9	
93.658	Foster Care—Title IV-E	2,334.1	
93.659	Adoption Assistance	189.8	
93.667	Social Services Block Grant	2,800.0	
93.669	Administration for Children, Youth and Families—Child Abuse and Neglect State Grants	19.5	
93.671	Family Violence Prevention and Services	10.7	
93.672	Child Abuse Challenge Grants	5.4	
93.673	Grants to States for Planning and Development of Dependent Care Programs	13.2	
93.778	Medical Assistance Program (Medicaid)	51,555.0	
93.779	Health Care Financing Research, Demonstrations and Evaluations	69.8	
93.915	HIV Emergency Relief Formula Grants	87.0	
93.917	HIV Care Formula Grants	87.0	
93.991	Preventive Health and Health Services Block Grant	90.8	
93.992	Alcohol, Drug Abuse and Mental Health Services Block Grant	1,205.2	D
93.994	Maternal and Child Health Services Block Grant	470.6	D
Total		\$116,052.3	

Note: The amounts listed for individual programs may not sum to the total because of rounding.

^aCodes for use of data are as follows:

D—The decennial census is the only source for some or all of the data elements used in the program's allocation formula(s).

R—Use of decennial census data in the program's allocation formula(s) is required by statute.

All other programs can use the most current population or per capita income estimates available.

Source: Estimated fiscal year 1991 grant obligations are from the 1991 CFDA.

Simulations of Grant Allocations Using 1990 Census Population Counts and Adjusted Counts

Table II.1: Social Services Block Grant Allocations Using 1990 Census Population Counts and Adjusted Counts

Dollars in thousands

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Alabama	\$43,618	\$43,828	\$210	0.48
Alaska	5,938	5,930	-7	-0.12
Arizona	39,566	40,065	498	1.26
Arkansas	25,376	25,402	26	0.10
California	321,261	326,521	5,260	1.64
Colorado	35,563	35,688	125	0.35
Connecticut	35,485	34,948	-536	-1.51
Delaware	7,191	7,262	71	0.99
District of Columbia	6,552	6,755	204	3.11
Florida	139,666	140,364	698	0.50
Georgia	69,933	70,118	186	0.27
Hawaii	11,963	12,009	45	0.38
Idaho	10,868	10,941	73	0.67
Illinois	123,394	122,541	-853	-0.69
Indiana	59,850	59,050	-799	-1.34
Iowa	29,975	29,673	-302	-1.01
Kansas	26,746	26,491	-254	-0.95
Kentucky	39,783	39,832	49	0.12
Louisiana	45,555	45,794	239	0.53
Maine	13,256	13,108	-147	-1.11
Maryland	51,616	51,471	-145	-0.28
Massachusetts	64,948	63,839	-1,109	-1.71
Michigan	100,343	99,411	-932	-0.93
Minnesota	47,229	46,714	-516	-1.09
Mississippi	27,778	27,823	45	0.16
Missouri	55,239	54,801	-438	-0.79
Montana	8,626	8,690	64	0.74
Nebraska	17,039	16,861	-178	-1.04
Nevada	12,974	13,024	50	0.38
New Hampshire	11,974	11,797	-177	-1.48
New Jersey	83,448	82,835	-612	-0.73
New Mexico	16,355	16,766	411	2.51
New York	194,208	193,494	-714	-0.37
North Carolina	71,557	72,042	486	0.68
North Dakota	6,896	6,850	-46	-0.66
Ohio	117,095	115,574	-1,521	-1.30
Oklahoma	33,957	33,976	19	0.06

(continued)

**Appendix II
Census Population Counts and
Adjusted Counts**

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Oregon	30,683	30,635	-48	-0.16
Pennsylvania	128,263	126,399	-1,864	-1.45
Rhode Island	10,832	10,635	-198	-1.83
South Carolina	37,639	37,950	311	0.83
South Dakota	7,513	7,474	-40	-0.53
Tennessee	52,650	52,983	333	0.63
Texas	183,370	185,534	2,164	1.18
Utah	18,598	18,574	-25	-0.13
Vermont	6,075	6,036	-39	-0.64
Virginia	66,793	67,158	366	0.55
Washington	52,536	52,718	182	0.35
West Virginia	19,361	19,472	111	0.57
Wisconsin	52,807	52,052	-755	-1.43
Wyoming	4,897	4,926	30	0.61
Total	\$2,684,837	\$2,684,837	\$0	0.00

Note 1: The state allocations are made by multiplying each state's population proportion under the Bureau's official population counts for 1990 and the PES adjusted counts by the total allocations made to the states. The calculations included the District of Columbia and excluded the territories.

Note 2: The amounts listed for individual states may not sum to the grand total due to rounding.

Source: Letter to Senator Pete V. Domenici and Representative Stephen H. Schiff from GAO's Director, Human Services Policy and Management Issues, HRD, August 1, 1991 (B-244990).

**Appendix II
Census Population Counts and
Adjusted Counts**

Table II.2: Federal-Aid Highway Programs Allocations Using 1990 Census Population Counts and Adjusted Counts

Dollars in thousands

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Alabama	\$67,156	\$67,367	\$211	0.31
Alaska	113,668	113,457	-210	-0.19
Arizona	91,890	91,897	6	0.01
Arkansas	79,379	79,385	6	0.01
California	395,179	395,222	43	0.01
Colorado	60,644	60,710	66	0.11
Connecticut	41,889	41,314	-575	-1.37
Delaware	19,385	19,385	0	0.00
District of Columbia	16,182	16,182	0	0.00
Florida	285,288	285,308	20	0.01
Georgia	195,736	195,751	15	0.01
Hawaii	19,272	19,272	0	0.00
Idaho	31,820	31,855	34	0.11
Illinois	150,976	150,072	-904	-0.60
Indiana	168,660	168,670	11	0.01
Iowa	56,202	55,955	-247	-0.44
Kansas	56,487	56,261	-226	-0.40
Kentucky	66,640	66,647	7	0.01
Louisiana	62,241	62,527	286	0.46
Maine	25,222	25,057	-165	-0.65
Maryland	60,792	60,658	-135	-0.22
Massachusetts	74,342	73,167	-1,174	-1.58
Michigan	175,951	175,964	13	0.01
Minnesota	75,812	75,391	-421	-0.56
Mississippi	76,512	76,517	6	0.01
Missouri	116,333	116,344	11	0.01
Montana	42,674	42,671	-3	-0.01
Nebraska	41,060	40,936	-124	-0.30
Nevada	33,166	33,168	2	0.01
New Hampshire	19,643	19,630	-12	-0.07
New Jersey	91,347	90,718	-629	-0.69
New Mexico	42,350	42,643	293	0.69
New York	220,866	220,163	-703	-0.32
North Carolina	201,948	201,961	13	0.01
North Dakota	31,290	31,236	-54	-0.17
Ohio	231,698	231,714	17	0.01
Oklahoma	101,274	101,281	7	0.01

(continued)

**Appendix II
Census Population Counts and
Adjusted Counts**

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Oregon	65,360	65,365	6	0.01
Pennsylvania	165,684	163,624	-2,060	-1.24
Rhode Island	19,331	19,326	-4	-0.03
South Carolina	82,213	82,219	6	0.01
South Dakota	32,062	32,011	-50	-0.16
Tennessee	81,477	81,486	10	0.01
Texas	436,866	436,897	31	0.01
Utah	34,699	34,652	-47	-0.14
Vermont	19,499	19,499	0	0.00
Virginia	144,726	144,738	11	0.01
Washington	71,918	72,082	165	0.23
West Virginia	33,817	34,008	191	0.56
Wisconsin	139,257	139,265	8	0.01
Wyoming	29,306	29,287	-19	-0.06
Total	\$4,997,189	\$4,990,921	-\$6,268	-0.13

Note 1: The allocations shown include only the following programs: Primary, Secondary, Urban, Urban Transportation Planning, Hazard Elimination, and Rail-Highway Crossing. The following programs were excluded because the formula allocations are unaffected by population change: Interstate System Completion, Interstate Highway Substitution, and Bridge Replacement and Rehabilitation.

Note 2: The levels of funding and data factors (other than 1990 populations) are from U.S. Department of Transportation Computation Tables-FY 1992 Interstate and FY 1991 Non-interstate Apportionments, Memorandum HFS-30 (Dec. 28, 1990).

Note 3: No data for both the 1990 enumeration and the undercount were available for urban and rural populations and urbanized area populations. In order to arrive at all the populations, we applied their 1980 census percentages to the 1990 census data.

Note 4: We included allocations for the territories in order to correctly calculate the interstate distribution, though these allocations are excluded from the table. In order to arrive at the territorial populations, we applied their 1980 percentages to the 1990 census data.

Note 5: The amounts listed for individual states may not add up to the total because of rounding.

Source: Letter to Senator Pete V. Domenici and Representative Stephen H. Schiff from GAO's Director, Human Services Policy and Management Issues, HRD, August 1, 1991 (B-244990).

**Appendix II
Census Population Counts and
Adjusted Counts**

Table II.3: Federal Medicaid Allocations Using 1990 Census Population Counts and Adjusted Counts

Dollars in thousands

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Alabama	\$387,896	\$389,374	\$1,478	0.38
Alaska	65,738	65,738	0	0.00
Arizona ^a				
Arkansas	386,833	387,112	279	0.07
California	2,973,423	2,973,423	0	0.00
Colorado	263,236	264,837	1,601	0.61
Connecticut	526,209	526,209	0	0.00
Delaware	57,508	58,379	871	1.51
District of Columbia	186,313	186,313	0	0.00
Florida	1,136,558	1,144,816	8,258	0.73
Georgia	803,265	805,806	2,541	0.32
Hawaii	94,685	95,334	649	0.69
Idaho	95,696	96,176	480	0.50
Illinois	1,080,744	1,080,744	0	0.00
Indiana	766,082	753,710	-12,372	-1.61
Iowa	340,663	336,539	-4,124	-1.21
Kansas	218,550	215,460	-3,090	-1.41
Kentucky	602,353	602,942	589	0.10
Louisiana	814,049	817,260	3,211	0.39
Maine	234,951	231,821	-3,130	-1.33
Maryland	507,692	507,692	0	0.00
Massachusetts	1,261,931	1,261,931	0	0.00
Michigan	1,218,336	1,199,494	-18,842	-1.55
Minnesota	716,701	703,628	-13,073	-1.82
Mississippi	403,574	403,928	354	0.09
Missouri	501,540	496,091	-5,449	-1.09
Montana	121,149	121,887	738	0.61
Nebraska	171,039	168,868	-2,171	-1.27
Nevada	62,998	63,343	345	0.55
New Hampshire	97,287	97,287	0	0.00
New Jersey	983,061	983,061	0	0.00
New Mexico	185,167	188,339	3,172	1.71
New York	5,364,778	5,364,778	0	0.00
North Carolina	812,964	818,314	5,350	0.66
North Dakota	125,231	124,500	-731	-0.58
Ohio	1,644,197	1,614,676	-29,521	-1.80
Oklahoma	466,866	467,108	242	0.05

(continued)

**Appendix II
Census Population Counts and
Adjusted Counts**

State	Allocation		Change in allocation	
	Census	Adjusted	Difference	Percent
Oregon	284,976	284,486	-490	-0.17
Pennsylvania	1,500,090	1,463,634	-36,456	-2.43
Rhode Island	196,368	189,885	-6,483	-3.30
South Carolina	428,983	431,666	2,683	0.63
South Dakota	103,026	102,570	-456	-0.44
Tennessee	789,377	794,164	4,787	0.61
Texas	1,516,409	1,536,309	19,900	1.31
Utah	166,111	165,966	-145	-0.09
Vermont	78,492	77,848	-644	-0.82
Virginia	436,967	440,966	3,999	0.92
Washington	595,366	598,357	2,991	0.50
West Virginia	265,696	266,705	1,009	0.38
Wisconsin	789,862	774,800	-15,062	-1.91
Wyoming	35,378	35,612	234	0.66
Total	\$32,866,364	\$32,779,886	-\$86,478	-0.26

Note 1: The "Allocation" columns 1 and 2 are the Medicaid allocations based on the Bureau's official population counts for 1990 and the PES adjusted counts. The state allocations are calculated by multiplying the Federal Medical Assistance Percentage from table II.4 by the state's total computable spending for fiscal year 1989.

Note 2: The amounts listed for individual states may not add up to the total because of rounding.

^aArizona does not participate in the Medicaid Program.

Source: Letter to Senator Pete V. Domenici and Representative Stephen H. Schiff from GAO's Director, Human Services Policy and Management Issues, HRD, August 1, 1991 (B-244990).

**Appendix II
Census Population Counts and
Adjusted Counts**

**Table II.4: Federal Medical Assistance
Percentages (FMAP) Using 1990 Census
Population Counts and Adjusted Counts**

State	FMAP		Difference
	Census	Adjusted	
Alabama	71.5%	71.7%	0.2%
Alaska	50.0	50.0	0.0
Arizona ^a			
Arkansas	74.1	74.2	0.1
California	50.0	50.0	0.0
Colorado	53.5	53.8	0.3
Connecticut	50.0	50.0	0.0
Delaware	50.0	50.8	0.8
District of Columbia	50.0	50.0	0.0
Florida	57.7	58.1	0.4
Georgia	62.6	62.8	0.2
Hawaii	52.4	52.8	0.4
Idaho	72.7	73.0	0.3
Illinois	50.0	50.0	0.0
Indiana	62.8	61.8	-1.0
Iowa	62.8	62.1	-0.7
Kansas	57.7	56.9	-0.8
Kentucky	71.6	71.7	0.1
Louisiana	72.5	72.8	0.3
Maine	62.9	62.1	-0.8
Maryland	50.0	50.0	0.0
Massachusetts	50.0	50.0	0.0
Michigan	54.9	54.1	-0.8
Minnesota	54.9	53.9	-1.0
Mississippi	78.8	78.8	0.0
Missouri	59.6	59.0	-0.6
Montana	70.5	70.9	0.4
Nebraska	62.5	61.8	-0.7
Nevada	58.2	58.6	0.4
New Hampshire	50.0	50.0	0.0
New Jersey	50.0	50.0	0.0
New Mexico	73.9	75.1	1.2
New York	50.0	50.0	0.0
North Carolina	67.1	67.6	0.5
North Dakota	69.7	69.3	-0.4
Ohio	59.6	58.5	-1.1
Oklahoma	68.2	68.3	0.1
Oregon	64.5	64.4	-0.1
Pennsylvania	55.0	53.7	-1.3

(continued)

**Appendix II
Census Population Counts and
Adjusted Counts**

State	FMAP		Difference
	Census	Adjusted	
Rhode Island	53.2	51.5	-1.7
South Carolina	72.3	72.8	0.5
South Dakota	70.6	70.3	-0.3
Tennessee	67.4	67.8	0.4
Texas	63.9	64.7	0.8
Utah	75.4	75.3	-0.1
Vermont	61.2	60.7	-0.5
Virginia	50.0	50.5	0.5
Washington	57.8	58.1	0.3
West Virginia	75.0	75.3	0.3
Wisconsin	60.5	59.3	-1.2
Wyoming	64.5	64.9	0.4

Note 1: The "FMAP" columns 1 and 2 are based on the Bureau's official population counts for 1990 and the PES adjusted counts. The FMAPs were calculated in the following way: Personal income for each state was averaged using the state's personal income for 1987 through 1989; the 3-year average of personal income was then divided by the population to form per capita income, which then entered into the FMAP formula as follows:

$$(1 - .45 (\text{state per capita income} / \text{U.S. per capita income})^2).$$

U.S. per capita income is the ratio of the sum of the 3-year average of personal income to the sum of the states' populations.

Note 2: Under the Social Security Act, Title XIX, as amended, the federal share for matching state expenditures for medical care may range from 50 percent to 83 percent.

^aArizona does not participate.

Source: Letter to Senator Pete V. Domenici and Representative Stephen H. Schiff from GAO's Director, Human Services Policy and Management Issues, HRD, August 1, 1991 (B-244990).

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