

Counting for Dollars: The Role of the Decennial Census in the Geographic Distribution of Federal Funds

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“For a number of programs aimed at serving households in need, greater participation in the census . . . means communities are more likely to get their fair share of federal funds”

Findings

An analysis of federal domestic assistance program expenditures distributed on the basis of census-related data indicates that:

- **The accuracy of the 2010 Census will determine the geographic distribution of a substantial proportion of federal assistance, particularly in the form of grants, over the coming decade.** In FY2008, 215 federal domestic assistance programs used census-related data to guide the distribution of \$446.7 billion, 31 percent of all federal assistance. Census-guided grants accounted for \$419.8 billion, 75 percent of all federal grant funding.
- **The bulk of census-guided federal assistance goes to state governments through a handful of large formula grant programs to aid low-income households and support highway infrastructure.** Medicaid alone accounts for 58 percent of census-guided funding. In general, census-guided funding is highly concentrated in a small number of programs, recipients (states), departments, and budget functions.
- **State per capita census-guided funding is positively related to income inequality (high annual pay, high poverty), Medicaid income limits, and the percent of the population that is rural.** The higher any of these measures, the higher per capita funding tends to be.
- **The decennial census facilitates federal funds distribution largely through being the basis for ten other federal datasets, most importantly the Bureau of Economic Analysis' per capita income series and the Census Bureau's population estimates.** Decennial census data are directly used to guide a relatively small proportion of the funding.
- **To illustrate the fiscal impact of decennial census accuracy, each additional person included in the Census 2000 resulted in an annual additional Medicaid reimbursement to most states of between several hundred and several thousand dollars, depending on the state.**

The findings have several implications for local efforts to promote greater 2010 Census participation. First, they show that efforts to increase 2010 Census participation by indicating the link between the census and the flow of federal funds are valid. Second, state governments stand to gain the greatest fiscal benefit from increased census participation. Third, raising the response rate of hard-to-count populations, particularly among the subset of families with children, will serve to increase the flow of federal funds. Finally, census participation will have a positive impact on federal fund flows regardless of whether a household is in a rural or urbanized area.

I. Introduction

The federal government's role in annually dispensing hundreds of billions of dollars to state and local governments, nonprofit organizations, businesses, and individuals is highly visible and political, with substantial economic impact in every corner of the nation.

It has been understood for some time that a substantial proportion of federal domestic assistance is distributed on the basis of population data gathered through the decennial census, the once-a-decade headcount mandated by the Constitution and managed by the U.S. Census Bureau. The appropriateness and fairness of the geographic distribution of federal assistance over the coming decade depends on the accuracy of 2010 Census, which takes place this coming April 1.

However, a rigorous determination of the extent to which the geographic distribution of federal assistance relies on decennial census data has not been carried out. Moreover, the absence of dependable subnational data means that state and local efforts to encourage census participation are not as effective as they might otherwise be.

The Counting for Dollars Project aims to build a more current, accurate national estimate of census-guided federal funding; supply similar estimates for states and large metro areas and counties; and provide an understanding of the dynamics behind the figures. The result could stimulate increased participation and greater accuracy in the 2010 Census.

The benefits of an accurate census go well beyond equitable federal funds flows. They include fair congressional apportionment, more intelligent public policy at all government levels, and a stronger economy.

The next section offers background on federal domestic assistance, the decennial census, previous efforts to estimate the impact of the latter on the former, and the rationale for this effort. The sections following discuss methodology, findings, and implications for efforts to increase census participation. Over 300 state and local funding tables, as well as a reference document, are provided on the project's website (www.brookings.edu/metro/CountingforDollars).

II. Background

The Flow of Federal Funds and Census Participation

In Fiscal Year (FY) 2008, the federal government provided over \$1.4 trillion in grants, loans, loan guarantees and insurance, and direct payments (e.g., Medicare) through nearly 1,400 domestic assistance programs.¹ This distribution equaled about 11 percent of the nation's Gross Domestic Product (GDP).

For a number of decades, the Census Bureau has known that decennial census data provide a basis for distributing a substantial amount of federal aid. To promote Census 2000 participation and so stimulate a more accurate count, the Census Bureau sought to raise the public's awareness about this dynamic. Census 2000 literature indicated that "decennial census results are used to distribute almost \$200 billion annually in federal and state, local, and tribal funds."² The underlying message was that a high participation rate would ensure that an area received its fair share of federal funds.

The figure cited was a quite conservative estimate based on a 1999 review by the U.S. General Accounting Office (GAO) of the 25 largest federal formula grant programs for states. GAO found that 22 of these programs used data based on the 1990 Census to allocate \$162 billion in FY1998.³

In 2009, the Census Bureau's Governments Division prepared a report estimating the extent to which federal domestic assistance programs relied on federal population and income data, particularly from the bureau itself, to distribute federal funds.⁴ The report concluded that 133 federal domestic assistance programs used Census Bureau population and income data, directly or indirectly, to distribute \$435.7 billion in FY2007. On the basis of this finding, promotional material for the 2010 Census says, "Every year, the federal government distributes more than \$400 billion to states and communities based on census data."⁵ The 2010 Census communications campaign is actively promoting this sizable link between census participation and the flow of federal funds to local areas.

The Census Bureau has strong incentive to employ all legitimate means, including highlighting federal funds flow, to encourage household participation in the census. The decennial census is essential to major dimensions of the nation's functioning—its democracy, its public policies at all levels of government, and its economy. (See box)

The Value of the Decennial Census to the Nation

Democracy

- As directed by the Constitution, the seats in the House of Representatives, and by extension Electoral College votes, are apportioned among the states on the basis of population.
- States and localities redraw legislative boundaries that comply with standards for population equity (“one person, one vote”) and racial and ethnic balance (Voting Rights Act, Sections 2 and 5).

Public Policy

- Census data provide key benchmarks for federal enforcement of civil rights and antidiscrimination laws and court decisions.
- Census data guide the flow of hundreds of billions of dollars in federal domestic assistance across the nation.
- Federal agencies use census data to inform the design, implementation, and evaluation of programs and policies in every government realm, such as education, health, housing, transportation, small business development, human services, and environmental protection.
- State and local governments rely on census data to make real, on-the-ground investment decisions across all domains of government.

Economy

- Businesses of all types and sizes use census data to identify markets, select business locations, make investment decisions in plant, equipment, and new product development, determine goods and services to be offered, and assess labor markets.
- Nonprofit organizations such as hospitals and community service organizations rely on census data to better understand and serve the needs of their constituencies.
- Census data are essential to efforts by state and local governments, chambers of commerce, and public-private partnerships to promote business attraction, expansions, and startups that lead to job creation and a larger tax base.

Consequently, it is desirable for national and local census communications efforts to stimulate participation by incorporating an estimate of the extent to which federal domestic assistance is distributed on the basis of decennial census statistics.

The Need for a New Analysis

An examination of the Governments Division’s report, the list of 1,400 federal domestic assistance programs, and the Census Bureau’s geographic database of federal spending suggests that estimates regarding census-driven federal funds distribution could be enhanced and strengthened in several ways.

First, it is possible to provide estimates, by program, at the state, metropolitan, and county level. Promotional materials from state and local Complete Count Committees that contain estimates specific to their geographic areas would have a larger impact in stimulating census participation than those that referred to a national number. By showing the sources and extent of census-driven funding flows to an area, an estimate of local impact is more likely to motivate households to return their form.

Second, the Governments Division’s report estimate (133 programs generating \$435.7 billion in FY2007) is not an optimal data source for purposes of promoting 2010 Census participation.

- FY2008 data are now available. In that one year, federal spending on grants, direct payments, loans, and loan guarantees and insurance climbed 22 percent. Medicaid expenditures, the largest program using census data, grew from \$197.6 billion to \$261.1 billion.
- On the other hand, the report’s total includes \$93.5 billion unrelated to the decennial census. The report was intended to identify federal programs that rely on **any** Census Bureau population and

income data, not just those generated by the decennial census. Four programs, with \$60.0 billion in expenditures, rely on the Census Bureau's poverty thresholds, which are unrelated to the decennial census.⁶ Another \$32.9 billion in unemployment compensation benefit payments to states is not attributable to the decennial census.⁷

- The report does not capture a number of federal programs that rely on census data. Poring through the nuances of 1,400 domestic assistance programs to identify those making use of census figures is a difficult, time-consuming task. A substantial amount of looking at laws, regulations, and websites and communicating with agency staff is required.
- A number of federal programs use census-related statistics to distribute part, but not all, of their funds. The Governments Division report did not estimate the proportion of identified program funds reliant on these data. Again, such an effort is difficult and time-consuming.

The aim of this analysis is to:

- Construct a more current, accurate national estimate of the number of assistance programs reliant on census statistics and the amount of funds distributed by these programs
- Supply similar estimates for states and large metro areas and counties
- Provide an understanding of dynamics behind the national figures, including the type, source, and purpose of assistance; how much of the program funding in fact is census-driven; and the variables that explain the geographic differences in per capita spending; and
- Supply information on the use of and legal basis for reliance on various census-related datasets.

III. Terms and Methodology

The Uses of Census-Related Data to Distribute Federal Domestic Assistance—An Overview

Categories of federal domestic assistance using census-related data. A major function of the federal government is redistributing tax dollars (and borrowed funds) for a variety of public purposes, including:

- **Equity**—providing assistance to low income households and individuals, usually in realms basic to daily existence, such as health, housing, nutrition, employment, and education and training
- **Economic capacity**—providing funds to states and localities to ensure that the nation maintains the necessary physical infrastructure, particularly in transportation; and
- **Business development**—providing financial assistance, in the form of loans and loan guarantees and insurance, to deserving firms and individuals who cannot otherwise obtain such assistance in the private market

The *Catalog of Federal Domestic Assistance* (CFDA) indicates that four categories of federal domestic assistance programs use census statistics to distribute funds: grants, direct loans, loan guarantees and insurance, and direct payments.⁸

- **Grants** are transfers of funds that recipients are legally committed to use for certain purposes in the public interest.
 - **Formula grants** provide funds to states or local governments according to allocation formulas defined by law or by the granting agency, for ongoing activities not related to a single project. One example of a formula grant is the Medical Assistance Program (93.778), or Medicaid, which distributes funds using a formula that is based partly on each state's per capita income.⁹
 - **Project grants** distribute funds for uses related to a specific project for a fixed period of time. Formulas may be (and often are) used to allocate project grants, but funds must be used only for the intended project. The Head Start Program (93.600), for example, provides federal dollars to local agencies for the purpose of providing high-quality child care for low-income children. Functionally, some project grant programs ultimately serve as direct payment programs, e.g., Section 8 Housing Vouchers (14.871) gives grants to public housing authorities, which in turn distribute vouchers to eligible families.

- **Cooperative agreements** essentially work the same way as project grants except that the funding agency is more heavily involved in the administration of the project. The Department of Labor's Work Incentive Grant Program (17.266), aimed to increase labor force participation by persons with disabilities, relies on cooperative agreements.
- **Direct loans** are federal dollars provided to a business or individual recipient for a specific period of time, with the expectation of repayment to the federal government. An example of a direct loan is the U.S. Department of Agriculture's Very Low to Moderate Income Housing Loans Program (10.410), which makes loans to low- and moderate-income families for specific uses.
- **Guaranteed/insured loans** are those in which the federal government agrees to protect a lender against part or all of any defaults by a borrower. One example of this type of program is the U.S. Department of Agriculture's Business and Industry Loans Program (10.768), which is intended to assist businesses and individuals in obtaining loans from other sources.
- **Direct payments** provide federal funds directly to individuals or private institutions, generally for restricted uses, for the purpose of encouraging or subsidizing certain activities. An example is Rent Supplements—Rental Housing for Lower Income Families (14.149), operated by the Department of Housing and Urban Development (HUD).

The Census Bureau's *Consolidated Federal Funds Report* (CFFR) estimates annual federal obligations or expenditures for all forms of federal financial activity, e.g., the four assistance categories above, retirement and disability, procurement (contracts), and salaries and wages. According to the CFFR, in FY2008 (the latest year available), the federal government made \$1.43 trillion in federal assistance awards from programs listed in the CFDA, including:

- Grants—\$562.2 billion
- Direct loans—\$37.8 billion
- Guaranteed/insured loans—\$312.7 billion
- Direct payments—\$520.7 billion¹⁰

Uses of census-related data. A federal assistance program may use data related to the decennial census in any of four ways to guide the distribution of funds.

A program may use census-related data to define its **eligibility criteria**, that is, identifying which organizations or individuals can receive funds. So, for instance, for several Department of Agriculture (USDA) assistance programs, eligible recipients must be in a rural area, "rural" being defined as "any area other than a city, town, or unincorporated area that has a population of greater than 20,000 inhabitants."¹¹ To be eligible to receive payments from HUD's Rent Supplements Program (14.149), a household must be "low income," defined as earning 80 percent or less of area median income (AMI).

A program may use census-related data in one or more formulas that **allocate** funds among eligible recipients across the nation. For instance:

- HUD's Community Development Block Grants/Entitlement Grants Program (14.218), a formula grant program, allocates funds to metropolitan cities and urban counties on the basis of population size, extent of poverty, extent of overcrowding, growth lag, and age of housing share.
- The Department of Transportation's Job Access—Reverse Commute Program (20.516), a project grants program, allocates funds among eligible recipients on the basis of poverty level, population size, and location in an urbanized area, all statistics related to the census.
- USDA's Very Low to Moderate Income Housing Loans Program (10.410) allocates direct loans among the states on the basis of share of rural population, share of rural occupied substandard housing units, share of rural households with incomes of between 50 and 80 percent of area median income, and other census-related factors. And it allocates guaranteed loans based on state share of rural occupied substandard housing, rural population, rural households between 80 and 100 percent of AMI, and rural renter households paying more than 35 percent of income for rent.

In some instances, a program is asked to make funding decisions on the basis of **selection preferences**, using census-related data to score project applications. So, for instance, HUD's Community Development Block Grants/Brownfields Economic Development Initiative (14.246) selects projects, in part, on the basis of extent of need (which includes poverty rate and unemployment rate).

Finally, census-related data may be used to determine **interest rates** for federal loan programs. USDA's Water and Waste Disposal Systems for Rural Communities (10.760) sets interest rates on the basis of median household income.

As can be seen in the reference document, allocation formulas often are complex. Two illustrations are in the box below.

The formula for allocating loans under the USDA's Very Low to Moderate Income Housing Loans Program (10.410) is:

- State's percentage of the national number of rural occupied substandard units (weight of 25 percent)
- State's percentage of the national rural population (weight of 10 percent)
- State's percentage of the national rural population in places of less than 2,500 population (weight of 15 percent)
- State's percentage of the national number of rural households between 50 and 80 percent of the area median income (weight of 30 percent)
- State's percentage of the national number of rural households below 50 percent of the area median income (weight of 20 percent)

The rate at which the Medicaid Program (93.778) reimburses a state for providing medical financial assistance:

...shall be 100 per centum less the state percentage; and the state percentage shall be that percentage which bears the same ratio to 45 per centum as the square of the per capita income of such State bears to the square of the per capita income of the continental United States (including Alaska) and Hawaii; except that (1) the federal medical assistance percentage shall in no case be less than 50 per centum or more than 83 per centum, (2) the federal medical assistance percentage for Puerto Rico, the Virgin Islands, Guam, the Northern Mariana Islands, and American Samoa shall be 50 per centum.¹²

Census-related datasets. The decennial census is a once-a-decade enumeration of every household in the nation required by Article I, Section II of the Constitution to apportion seats in the House of Representatives (and, before the income tax, federal tax payments) among the states on the basis of share of population.

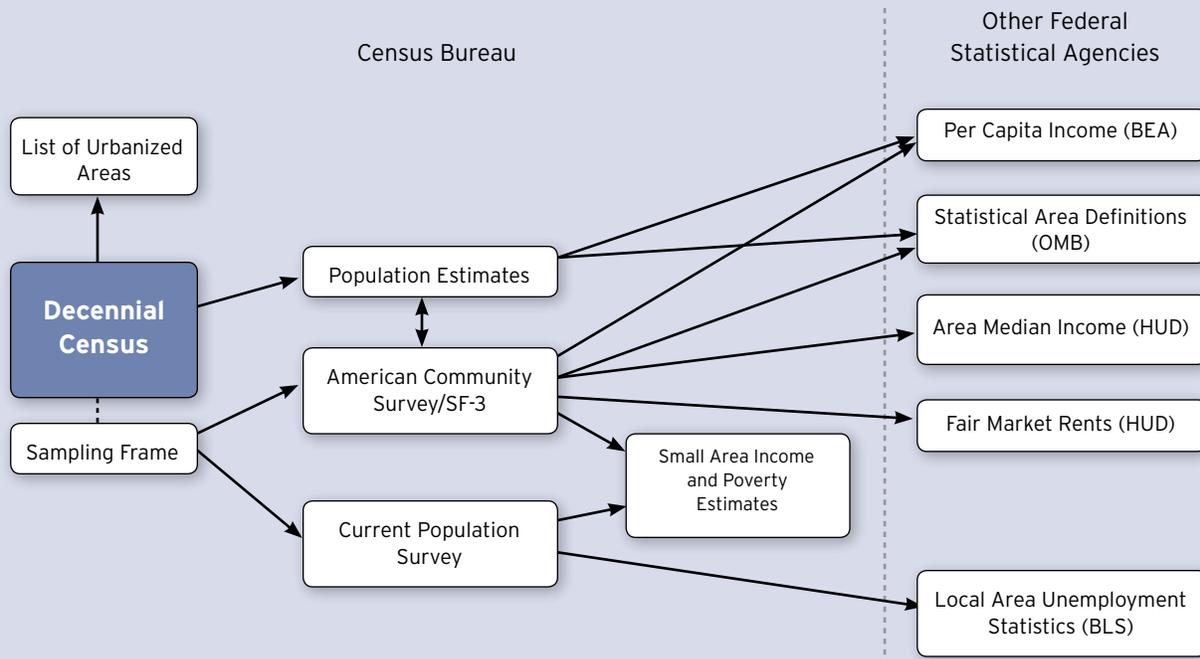
From the first census forward, though, the census has collected data for public purposes beyond those indicated by the Constitution. For instance, in 1790, the number of males aged 16 and older were counted for military and industrial policy purposes. Over the decades, for example, information on occupation, literacy, country of origin, and employment status has been collected. From 1940 to 2000, a "short form" census was asked of five of six households, gathering the demographic basics such as age, gender, race/ethnicity, while one of six households responded to a "long form" that asked the same demographic and basic housing questions along with detailed questions on social and economic topics such as income, education, occupation, housing costs, and journey to work.

A review of federal programs suggests that the census-related datasets and classifications used to guide FY2008 federal spending can be thought of in three groups (Figure 1).

The first group consists of the Census 2000 "short form" dataset and the list of urbanized areas drawn from it.¹³

The second group is based on the Census Bureau's annual population estimates. Each year, the bureau provides a population estimate for every state, metropolitan area, county, and place of any size. It does so by starting with the decennial estimate for each geographic area and, year by year, adding births, subtracting deaths, and adjusting for net migration, both domestic and international. The Bureau of Economic Analysis (BEA) uses the population estimates to calculate per capita income (PCI) for states and counties (dividing its personal income estimate by population). And the White House Office of Management and Budget (OMB) uses population estimates to delineate the nation's metropolitan and micropolitan statistical areas.

Figure 1. Datasets Related to the Decennial Census



The third group of datasets is based on two monthly Census Bureau surveys, the American Community Survey (ACS) and the Current Population Survey (CPS), that use the decennial census as a sampling frame. The decennial census generates a database of the universe of U.S. households; the ACS and the CPS use a picture of that universe to design a sample that reflects the distribution of households by geography and type.

Going nationwide in 2005, the ACS is the relatively new replacement for the decennial census “long form.” The nation is beginning to get annually updated data for smaller areas on poverty, income, journey to work, and other characteristics that previously were published only once a decade (in long form based SF-3 and SF-4 files).^{14,15} The ACS, and before it the SF-3 file, in turn, provides the basis for two datasets produced by HUD to guide its assistance programs—area median income (AMI) and fair market rents (FMR).

The CPS, which is co-owned by the Bureau of Labor Statistics (BLS), provides the basis for estimating rates of unemployment and national and state poverty. The ACS and the CPS are both used in modeling the Census Bureau’s Small Area Income and Poverty Estimates (SAIPE).

Methodology

The analysis was carried out in two steps. First, a review was conducted of the CFDA to identify those programs that distributed funds on the basis of decennial census statistics. (CFDA text on each program covers authorization, objectives, uses, eligibility rules, allocation formulas, and other basic information.) Second, a database was created that included FY2008 funding for each identified program for the nation and for every county, metro area, and state, according to the Census Bureau’s CFFR. The approach is discussed in more detail below.¹⁶

Criteria for identifying programs guided by census data. The review of the CFDA sought to identify any program that distributed funds based on decennial census, using the following criteria.

- To guide the distribution of funds, the program uses decennial census data **directly**, that is, from the decennial itself, or **indirectly**, that is, from datasets based on the decennial, such as population estimates, the ACS, and AMI.
 - Use of census-related data for funds distribution may include determination of eligibility, allocation formulas, selection preferences, and interest rates.
- The program uses census-related data to distribute **any part** of its expenditures. While a number of programs allocate all their funds using census-related data, some, as noted, have multiple streams of allocations of which part, but not all, are based on census-related data.

In summary, the analysis sought to identify those federal assistance programs that distribute funding on the basis of census statistics, directly or indirectly, in whole or in part.

Program identification, confirmation, and classification process. Using the above criteria, the list of programs using census-related data was identified through a review of program descriptions in the CFDA and programs listed in the Census Bureau's Governments Division's study.

For each identified program, information then was collected on:

- FY2008 total spending
- Objective
- Type of assistance
- Eligibility, allocation, selection preferences, and interest rate criteria
- The census-related datasets used to implement these
- The legal basis for their use
- When possible, the portion of program funds distributed using census-related data.

Information sources included the CFDA, the U.S. Code, the Code of Federal Regulations (CFR), the CFFR, program websites, and, as necessary, program staff (via e-mail and telephone). The CFDA was found to be often incomplete and periodically inaccurate. Regarding type of assistance, when the CFDA and the CFFR differed, the CFFR categorization was used, with two exceptions for technical reasons.

The reference document provides the information collected on each program.

Program spending by geographic area. To determine the amount of federal domestic assistance distributed on the basis of census data, FY2008 CFFR data by county, state, and the nation were downloaded into an Access database.^{17,18} Data were deleted for outlying areas (American Samoa, Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Palau, Puerto Rico, and Virgin Islands). As result, total figures are for the 50 states and the District of Columbia.

CFFR data for each program represent the total obligation or expenditure for a particular geography.¹⁹ While the effort was made to determine the percentage of each program's total funding distributed on the basis of decennial census data, such information was not available in many cases. Moreover, a review of the allocation formulas made clear that percentage could vary quite significantly from place to place. Consequently, of necessity, the analysis was carried out on the basis of total program funding. (As will be seen in the appendix, available information indicates that over 90 percent of the total funding across all identified programs is in fact distributed using census data.)

A number of census-guided programs provide grants to state governments, which then spend the funds across their respective states. While the Census Bureau estimates pass-through allocations for the largest state grant programs (e.g., Medicaid, Highway Planning and Construction, Special Education Grants to States), it does not determine pass-through allocations for smaller ones. Instead funds for such programs are attributed to the county of the state capital. Consequently, figures for counties and metropolitan areas with a state capital include funds intended for pass-through from the state government to local governments or other in-state recipients.

A per capita expenditure estimate is provided to allow comparisons among states and areas. Population estimates for all states, counties, and metropolitan areas were imported into the Access database from the Census Bureau website. Per capita total census-guided program expenditures were determined by dividing the sum of total program distributions by the area's 2008 population estimate.

A review of the 215 identified programs makes clear that there is a general positive connection between headcount and the flow of federal funds. That said, **the per capita estimate is not intended to suggest that each additional person identified in the census will add the per capita figure to federal flows to the region.**

While some programs do allocate funds on the basis of share of national population, a large number

do not have a linear relationship between headcount and funds flows. Such programs include those that use census-related data to determine eligibility (e.g., if a region is urban or rural); those that allocate on the basis of certain characteristics (e.g., average or median income level), which means the impact depends on the characteristics of the household that gets added; and those with funding formulas insensitive to very small changes in data, e.g., the 50 percent Medicaid reimbursement rate for most wealthy states is unlikely to change with a slight increase in population.

The Findings section does offer a state-by-state assessment of the sensitivity of Medicaid reimbursement (by far the largest census-guided program) to a small increase in population count.

Report Materials

The output of the Counting for Dollars Project consists of three sets of materials, available at www.brookings.edu/metro/CountingforDollars.

First is this report describing and analyzing findings. Upcoming section topics include:

- Federal funds distribution on the basis of census data – total amount, largest programs, by budget function and department, by type of assistance (e.g., grants, direct payments), and factors that explain state differences
- The uses of census-related datasets for funds distribution – reliance by dataset (e.g., ACS), nature of use (e.g., eligibility criteria, allocation formulas), and level of geographic detail (e.g., state, census tract); and
- Implications of findings for efforts to increase participation in the 2010 Census.

Second is a reference document that, in a standard format, describes each federal program that uses census-related statistics to guide spending in terms of objective; census-related factors for eligibility, allocation, selection preferences, and interest rates; the census-related dataset used; and the legal basis for the factors, typically in the U.S. Code or the CFR. Appropriate excerpts from the legal source are provided as well.

Third, a table that lists and sums individual program expenditures is available for the nation and each of the 50 states and the District of Columbia, the 100 largest metropolitan areas, and the 200 largest counties.

IV. Findings

A. The accuracy of the 2010 Census will determine the geographic distribution of a substantial proportion of federal assistance, particularly in the form of grants, over the coming decade.

In FY2008, 215 federal domestic assistance programs, or 15.9 percent of all programs, used census-related datasets to help guide the distribution of \$446.7 billion.²⁰ This funding accounted for 31.2 percent of spending by all assistance programs listed in the CFDA.

Since FY2008, spending on federal domestic assistance has increased substantially, in part due to the massive multi-year stimulus package enacted in early 2009. Consequently, it is very likely that the results of the 2010 Census will be used to help guide annual distributions of over a half trillion dollars.

Most census-guided programs (91 percent) make grants (Table 1). In fact, 94 percent of funding by census-guided programs is in the form of grants.

Census-guided grant programs account for 74.7 percent of all CFDA program grant funding. This means the accuracy of the decennial census will determine the fairness of the distribution of a substantial majority of federal grant funds over the coming decade.

In contrast, use of census-related data to guide loan, guaranteed/insured loan, and direct payment efforts is relatively small.

Table 1. Census-Guided Programs by Type of Federal Domestic Assistance, FY2008

Type of Assistance			Total Expenditures of	
	Census-Guided Programs	% of CFFR programs	Census-Guided Programs	% of CFFR Expenditures
Grants	196	16.3%	\$ 419,811,875,589	74.7%
Direct loans	13	43.3%	\$ 4,881,839,570	12.9%
Guaranteed/Insured loans	7	25.0%	\$ 10,401,572,793	3.3%
Direct payments	9	7.1%	\$ 11,566,933,309	2.2%
Total (note)	215	15.9%	\$ 446,662,221,261	31.2%

Source: Brookings database and U.S. Census Bureau, Consolidated Federal Funds Report On-Line Query System (<http://harvester.census.gov/cffr/>)

Note: Several programs offer two types of assistance and so are counted in each relevant category. For such programs, the CFFR disaggregates expenditures by type of assistance.

Among the 196 census-guided grant programs, slightly more programs rely on formula grants than on project grants. (Use of cooperative grants is confined to just three programs). However, the flow of funds from formula grant programs is about five times greater than from project grant programs. As will be seen below, four of the five largest census-guided programs provide formula grants.

As noted in Section III, a program met the criteria for selection if it used census-related data to guide distribution of any part of its total funding. It is a fair question to ask: What portion of the \$446.7 billion provided by the 215 programs is actually distributed on the basis of census-related statistics? Analysis (provided in the appendix) indicates the answer is at least 90 percent, though an exact answer is not possible. In the absence of better data and with the knowledge that the gap between total funding and the true answer is relatively small, subsequent analysis relies on total program funding numbers.

B. The bulk of census-guided federal assistance goes to state governments through a handful of large formula grant programs to aid low-income households and support highway infrastructure.

In FY2008, the ten largest programs distributed 81.4 percent (\$363.8 billion) of census-guided funding. State governments received the bulk of the top ten share (\$329.5 billion) through readily recognizable formula grant programs (Table 2). One state formula grant program alone, Medicaid (93.778), provided 58.5 percent of the total (\$261.1 billion).

Table 2. Ten Largest Census-Guided Assistance Programs, FY2008

CFDA #	Program Name	Department	FY08 Expenditures	Type of Assistance and Recipient
93.778	Medical Assistance Program	Department of Health and Human Services	\$261,143,624,624	Formula grants to states
20.205	Highway Planning and Construction (Federal-Aid Highway Program)	Department of Transportation	\$36,795,552,695	Formula grants and project grants to states
14.871	Section 8 Housing Choice Vouchers	Department of Housing and Urban Development	\$15,340,853,794	Project grants to public housing agencies
84.027	Special Education Grants to States	Department of Education	\$10,786,318,120	Formula grants to states
84.010	Title I Grants to Local Educational Agencies	Department of Education	\$7,513,986,185	Formula grants to state educational agencies (local agencies are subgrantees)
10.410	Very Low to Moderate Income Housing Loans	Department of Agriculture	\$7,268,193,451	Direct loans and guaranteed/insured loans to very low- to moderate-income families and individuals
93.767	State Children's Insurance Program	Department of Health and Human Services	\$7,100,682,976	Formula grants to states
10.557	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program)	Department of Agriculture	\$6,138,491,549	Formula grants to states
14.195	Section 8 Housing Assistance Payments Program (Project-based Section 8)	Department of Housing and Urban Development	\$6,002,587,454	Direct payments to public housing agencies
93.600	Head Start	Department of Health and Human Services	\$5,681,535,945	Project grants to local service providers

While information on the exact proportion of census-guided funding that goes to state governments is not readily available, a look at the jurisdictional level of the census-related data used to distribute funds strongly indicates that state governments receive the large majority of funds. Table 3 indicates that 116 programs use state-level data to distribute \$386.0 billion (86.4 percent of census-driven funds). Of these, 111 are grant programs using allocation formulas (\$375.0 billion, 84.0 percent).

Table 3. Geographic Level of Census-Related Data Used to Distribute Federal Funds, FY2008

Geographic Level	Programs	Expenditures	% of Total
State	116	\$ 386,010,112,242	86.4%
Local area	75	\$ 78,414,681,652	17.6%
County	49	\$ 50,328,367,597	11.3%
MSA	45	\$ 49,445,382,829	11.1%
School district	7	\$ 10,379,706,538	2.3%
Census tract	7	\$ 76,214,360	0.0%

Note: One program can use data for more than one geographic level.

Census-guided funding is concentrated in another way—it focuses on aiding low-income households and supporting transportation infrastructure. Four budget functions (Table 4) accounted for 93.1 percent of FY2008 census-guided expenditures—health (e.g., Medicaid), transportation (e.g., Highway Planning and Construction), income security (e.g., Section 8 Housing Vouchers), and education, training, employment, and social services (e.g., Special Education Grants to States).²¹ Five departments accounted for 97.4 percent of all funding in FY2008, with HHS being dominant, followed by DOT and HUD (Table 5).

Table 4. Census-Guided Programs by Budget Function, FY2008

Budget Function	Programs	Expenditures	% of Total
550 - Health	24	\$ 272,211,736,358	60.9%
600 - Income Security	31	\$ 55,315,204,783	12.4%
400 - Transportation	11	\$ 48,313,360,107	10.8%
500 - Education, Training, Employment, and Social Services	54	\$ 40,066,912,669	9.0%
450 - Community and Regional Development	34	\$ 10,573,986,913	2.4%
370 - Commerce and Housing Credit	13	\$ 9,813,476,553	2.2%
270 - Energy	4	\$ 2,345,544,580	0.5%
300 - Natural Resources and Environment	17	\$ 524,156,001	0.1%
750 - Administration of Justice	12	\$ 456,857,387	0.1%
800 - General Government	1	\$ 228,469,000	0.1%
350 - Agriculture	2	\$ 160,955,827	0.0%
700 - Veterans Benefits and Services	1	\$ 78,095,000	0.0%
050 - National Defense	1	\$ 9,446,959	0.0%
999 - Multiple Functions	10	\$ 6,564,019,124	1.5%
Total	215	\$ 446,662,221,261	

Table 5. Census-Guided Programs by Federal Department, FY2008

Department	Programs	Expenditures	% of Total
Department of Health and Human Services	51	\$ 295,670,922,417	66.2%
Department of Transportation	11	\$ 48,313,360,107	10.8%
Department of Housing and Urban Development	29	\$ 37,518,341,810	8.4%
Department of Education	24	\$ 27,528,646,772	6.2%
Department of Agriculture	41	\$ 25,937,377,027	5.8%
Department of Labor	11	\$ 7,056,484,678	1.6%
Department of Homeland Security	7	\$ 2,449,088,796	0.5%
Department of Justice	10	\$ 439,997,553	0.1%
Department of Commerce	6	\$ 362,910,860	0.1%
Department of the Interior	6	\$ 293,547,428	0.1%
Environmental Protection Agency	8	\$ 237,312,232	0.1%
Corporation for National and Community Service	1	\$ 236,777,250	0.1%
Department of Energy	2	\$ 233,461,988	0.1%
National Foundation on the Arts and Humanities	3	\$ 207,725,065	0.0%
Small Business Administration	1	\$ 86,441,643	0.0%
Appalachian Regional Commission	2	\$ 62,769,222	0.0%
Delta Regional Authority	1	\$ 17,609,454	0.0%
Department of Defense	1	\$ 9,446,959	0.0%
Total	215	\$ 446,662,221,261	

C. State per capita census-guided funding is positively related to income inequality (high annual pay, high poverty), Medicaid income limits, and the percent of the population that is rural.

On a per capita basis, the amount of funds distributed by programs that rely on census statistics varies greatly from state to state, metro to metro, and county to county. (See www.brookings.edu/metro/CountingforDollars for tables.) The highest and lowest ranking, according to the CFFR:

- The District of Columbia received \$4,656 per capita in FY2008, compared to Nevada's \$742.
- Among the 100 largest metro areas, Albany, New York received \$5,217 per capita, compared to Bradenton, Florida's \$336.
- Among the 200 largest counties, Suffolk County, Massachusetts got \$6,032 per capita, while Collin County, Texas received \$182.

It is desirable, of course, to understand the reasons for the per capita differences across geographies. However, such an analysis for metropolitan areas and counties is not possible based on existing data. As discussed in Section III, the CFFR overstates the amount of funds going to state capitals and, conversely, understates the flows elsewhere. State governments are the single largest recipient of census-guided federal funds, which they further distribute, often according to their own rules, to sub-state recipients. While the Census Bureau does its best to determine the final destinations of "pass-through" funds for the larger programs, it is unable to accurately allocate funds geographically for many. Such funds are attributed to the state capital area and so their per capita numbers tend to be higher.²²

This problem is avoided in analyzing differences among states. As the bulk of federal funds are allocated on a state basis, such analysis is germane.

Regression analysis suggests that 75 percent of the per capita funding differences among the states can be explained by four positively correlated factors:

- 2008 average annual pay (correlation coefficient 0.47, R squared 0.22)²³
- Percent of children in poverty in 2005 (0.43, 0.19)
- 2008 Medicaid family income limits for children aged 6-19 (0.39, 0.15); and
- Percent rural population in 2008 (0.07, 0.01).²⁴

The explanatory power of the child poverty rate is logical given that a substantial number of large programs serve that population.²⁵

Medicaid income eligibility limits vary widely among states. The higher a state's limit, the greater the number of people who qualify for Medicaid, and the more money that goes from HHS to the state. Given Medicaid's dominance among census-guided programs, it is also logical that family income eligibility limits have explanatory power.²⁶

Less obvious is the reason for the strong positive correlation with average annual wage. Why should average annual wage have a positive correlation, particularly as Medicaid, which accounts for over half of census-driven funding, is designed to have a negative correlation with a closely aligned variable, per capita income? ²⁷

As indicated by Table 6, the reason is wealthier states tend to have Medicaid programs with more generous eligibility levels. Higher eligibility levels mean greater federal reimbursements, even if the reimbursement rate itself is lower.²⁸

Table 6. Explanatory Variables for States with Highest and Lowest Per Capita Census-Guided Funding

		Income Eligibility as a % of poverty Medicaid/CHIP Expansion Children (6-19) (2008)	Federal Medical Assistance Percentage (FMAP) (FY08)	Per Capita Federal Medicaid Reimbursement
Top 5 States	Average Annual Pay (2008)			
District of Columbia	\$ 76,518	300	70.00	\$1,862
Vermont	\$ 38,328	300	59.03	\$1,916
Alaska	\$ 45,805	175	52.48	\$1,010
New York	\$ 60,288	100	50.00	\$1,568
Massachusetts	\$ 56,746	150	50.00	\$1,393
		Income Eligibility as a % of poverty Medicaid/CHIP Expansion Children (6-19) (2008)	Federal Medical Assistance Percentage (FMAP) (FY08)	Per Capita Federal Medicaid Reimbursement
Bottom 5 States	Average Annual Pay (2008)			
Utah	\$ 37,980	100	71.63	\$411
Florida	\$ 40,568	100	56.83	\$460
Colorado	\$ 46,614	100	50.00	\$347
Virginia	\$ 47,241	133	50.00	\$372
Nevada	\$ 42,984	100	52.64	\$287

Note: A table that shows per capita census-guided funding by state is available at www.brookings.edu/metro/CountingforDollars.

The 2005 child poverty rate and 2008 average annual pay together can explain 44 percent of the variation in state per capita funding. In other words, states with relatively high numbers of poor children and good paychecks tend to receive more federal funds per capita.²⁹ When 2008 Medicaid family income limits for children is added to the equation, the explanatory power rises to 53 percent.

Per capita program funding has a slight positive relationship with the percent of a state's population living in rural areas in 2008.³⁰ This perhaps makes sense in light of the fact that the Senate is dominated by rural interests; for some program authorizations and appropriations to pass, senators from rural states will want to know their states will benefit.

State per capita funding is sensitive to percent rural population when the three other independent variables are taken into account.³¹ Together, the four variables explain 75 percent of the differences in state per capita federal funding.

Data for two of these variables are census-related—the child poverty rate and percent rural population. The implications of this fact for encouraging census participation will be discussed in Section V.

D. The decennial census facilitates federal funds distribution largely through being the basis for ten other federal datasets, most importantly the Bureau of Economic Analysis' per capita income series and the Census Bureau's population estimates.

As discussed earlier and illustrated in Figure 1, a variety of datasets based on the decennial census are used to guide funds distribution by federal assistance programs.

Table 7 indicates that BEA's per capita income figure is the most important in terms of driving funding, largely because it determines FMAP (Federal Medical Assistance Percentages) for Medicaid. The most frequently used dataset is the Census Bureau's population estimates, directly relied on by 132 programs. Nine different datasets were relied on by at least 17 programs each.

Table 7. Census-Related Datasets Used to Distribute Federal Assistance Funds, FY2008

Dataset	Programs	Expenditures	% of Total
Per capita income	25	\$ 275,598,022,408	61.7%
Population estimates	132	\$ 93,360,164,495	20.9%
SF-3/ACS	43	\$ 78,838,009,420	17.7%
Urbanized Areas	18	\$ 51,472,981,433	11.5%
Census 2000	19	\$ 46,791,356,166	10.5%
AMI	38	\$ 45,489,438,197	10.2%
CPS	17	\$ 24,772,102,337	5.5%
Fair Market Rents	6	\$ 23,549,013,042	5.3%
MSA	32	\$ 22,108,938,799	4.9%
SAIPE	7	\$ 10,379,706,538	2.3%
LAUS	27	\$ 8,515,841,540	1.9%

Note: Certain programs rely on more than one census-related data set. Consequently, the table reflects the counting of these programs more than once.

Among the Census Bureau's four primary data products:

- The single most influential dataset is population estimates, in its own right and as it serves as the basis for per capita income and OMB's statistical areas.
- Next most influential is the SF-3/ACS, in its own right and as a basis for HUD's area median income and fair market rents datasets, OMB's statistical areas, and the Census Bureau's SAIPE.
- Third is the decennial census itself, in its own right and as the basis for the list of urbanized areas.
- Least influential is the CPS, which serves as a basis for SAIPE and the Bureau of Labor Statistics' Local Area Employment Statistics program (LAUS).

It should be noted that the current annual cost of the nine annually updated datasets used to determine federal funding flows is somewhat above \$300 million, or .07 percent of the amount of federal funds being distributed.³² Come annual budget and appropriations time, the Administration and Congress should recognize that relatively small investments in federal statistics will ensure the fair distribution of far greater sums of money.

As discussed previously, census-related data are used to guide funds distribution in four ways—eligibility, allocation formulas, selection preferences, and interest rate setting. (See p. 5 for program examples.) Far and away, the primary use of census-related data is in allocation formulas (Table 8). Eligibility determination is the second most important use. A few programs use census-related data to implement selection preferences. Only one relies on census-related data to determine interest rates. Thirty-nine programs rely on these data for more than one type of use.

Table 8. Assistance Program Uses of Census-Related Data, FY2008

Use	Programs	Expenditures	% of Total
All allocation	149	\$ 430,833,963,261	96.5%
Allocation only	120	\$ 373,216,348,228	83.6%
All eligibility	92	\$ 68,771,854,950	15.4%
Eligibility only	54	\$ 13,296,213,639	3.0%
All selection preferences	14	\$ 7,500,146,770	1.7%
Selection preferences only	2	\$ 6,745,558	0.0%
All interest rate	1	\$ 2,317,463,815	0.5%
Interest rate only	0	\$ 0	0.0%

Note: Row titles with "all" include any program that uses census-related data for this purpose. A number of programs use the data for more than one purpose. Row titles with "only" include those programs that use census-related data only for this purpose.

E. To illustrate the fiscal impact of decennial census accuracy, each additional person included in the Census 2000 resulted in an annual additional Medicaid reimbursement to most states of between several hundred and several thousand dollars, depending on the state.

While the complexities of 215 programs do not allow the computation of the amount of funds an area would get for each person added, there clearly is a strong positive connection between population count and the amount of funding that jurisdictions receive.

A sense of the scope of this dynamic can be illustrated by looking at the possible impact of higher Census 2000 participation on a state's FY2008 FMAP. Here are the key points:

A state's Medicaid reimbursement rate has an inverse relationship to its per capita income. Lower per capita income means a higher reimbursement rate. (See the FMAP formula in Section III.)

BEA computes state per capita income by dividing its estimate of state total personal income by the Census Bureau's state population estimate.

State total personal income is determined from administrative records, not the census. So an increase in a state's population count affects the denominator only; the numerator is constant.³³ More

people counted means a lower per capita income and so a higher reimbursement rate.

When HHS set the FY2008 FMAP, the most recently available BEA per capita income dataset was for 2005. Analysis across the states indicates that a 0.1% increase in a state's 2005 population count due to greater participation in Census 2000 would have yielded an increase in the FY2008 FMAP of between 0.06%-0.12% in states with an initial FMAP greater than 50. Reimbursement per additional person counted would have ranged from \$2,564 in Vermont to \$382 in Utah. (Figures vary due to differences in state programs and the FMAP.) Table 9 provides the figures for each of the states.

Table 9: Projected Increase in Federal Medicaid Reimbursement to States with a 0.1% Increase in Population, FY2008

State	FY2008 FMAP	2005 Pop Increase of 0.1%	Resulting Increase in FMAP	Resulting Increase in Federal Share of Medicaid (\$)	Resulting Increase per Person Added (\$)
Alabama	67.62	4,537	0.06	2,587,903	570
Alaska	52.48	669	0.10	1,346,534	2,013
Arizona	66.27	5,961	0.07	5,704,287	957
Arkansas	72.94	2,769	0.05	1,812,025	654
California	50.00	35,885	NA	0	0
Colorado	50.00	4,663	NA	0	0
Connecticut	50.00	3,479	NA	0	0
Delaware	50.00	839	NA	0	0
District of Columbia	70.00	582	NA	0	0
Florida	56.83	17,702	0.09	14,015,414	792
Georgia	63.10	9,094	0.07	7,169,210	788
Hawaii	56.50	1,264	0.09	1,204,870	953
Idaho	69.87	1,424	0.06	775,103	544
Illinois	50.00	12,704	NA	0	0
Indiana	62.69	6,249	0.07	4,413,488	706
Iowa	61.73	2,952	0.08	2,263,347	767
Kansas	59.43	2,742	0.08	1,931,341	704
Kentucky	69.78	4,166	0.06	3,840,358	922
Louisiana	72.47	4,496	0.06	4,004,613	891
Maine	63.31	1,311	0.07	1,679,456	1,281
Maryland	50.00	5,576	NA	0	0
Massachusetts	50.00	6,434	NA	0	0
Michigan	58.10	10,093	0.06	11,627,084	1,152
Minnesota	50.00	5,105	NA	0	0
Mississippi	76.29	2,898	0.05	2,129,956	735
Missouri	62.42	5,785	0.07	5,371,531	929
Montana	68.53	935	0.07	641,967	687
Nebraska	58.02	1,751	0.08	2,804,859	1,602
Nevada	52.64	2,402	0.12	1,721,954	717
New Hampshire	50.00	1,301	NA	0	0
New Jersey	50.00	8,635	NA	0	0
New Mexico	71.04	1,913	0.06	2,087,460	1,091
New York	50.00	19,336	NA	0	0
North Carolina	64.05	8,661	0.08	8,551,763	987
North Dakota	63.75	635	0.08	513,780	809
Ohio	60.79	11,451	0.07	9,322,056	814
Oklahoma	67.10	3,530	0.07	2,675,178	758

Table 9: Projected Increase in Federal Medicaid Reimbursement to States with a 0.1% Increase in Population, FY2008 (continued)

State	FY2008 FMAP	2005 Pop Increase of 0.1%	Resulting Increase in FMAP	Resulting Increase in Federal Share of Medicaid (\$)	Resulting Increase per Person Added (\$)
Oregon	60.86	3,622	0.07	2,409,817	665
Pennsylvania	54.08	12,352	0.09	14,932,184	1,209
Rhode Island	52.51	1,064	0.10	1,881,554	1,768
South Carolina	69.79	4,249	0.06	2,664,326	627
South Dakota	60.03	779	0.08	603,497	775
Tennessee	63.71	5,983	0.07	9,420,446	1,575
Texas	60.53	22,811	0.07	21,628,481	948
Utah	71.63	2,501	0.06	955,002	382
Vermont	59.03	619	0.08	1,587,183	2,564
Virginia	50.00	7,547	NA	0	0
Washington	51.52	6,255	0.09	6,436,633	1,029
West Virginia	74.25	1,804	0.05	1,198,428	664
Wisconsin	57.62	5,539	0.08	4,432,794	800
Wyoming	50.00	506	NA	0	0

Note: For states at the minimum threshold of a 50 percent reimbursement rate, it is assumed that a 0.1 percent increase in population would not change the rate. The District of Columbia rate of 70 percent is fixed by law.

While Medicaid is by far the largest census-guided assistance program, a larger state headcount due to greater census participation also would have increased federal funds flows to a state in a number of the other 214 programs. For instance, funds from Highway Planning and Construction (20.205) are allocated in part on the basis of state share of national population. Numerous additional examples can be seen in the reference document.

V. Implications

To encourage a high level of 2010 Census participation, the Census Bureau is sponsoring the organization of local 2010 Census partners and Complete Count Committees across the country.³⁴ What are the implications of this report's findings for local efforts to promote greater 2010 Census participation?

First, **efforts to increase 2010 Census participation by indicating the link between the census and the flow of federal funds are valid.** This report confirms the Census Bureau's assertion that "Every year, the federal government distributes more than \$400 billion to states and communities based on census data." The project's additional contribution is to provide estimates for every state and the largest metropolitan areas and counties. Complete Count Committees can use these data to make explicit the extent of the local impact of the count.

Second, **state governments stand to gain the greatest fiscal benefit from increased census participation.** The large majority of census-guided federal funding goes to state coffers. The discussion in the last section makes clear that each person added through the census can yield significant benefits for Medicaid reimbursements alone.

Third, **raising the response rate of the hard-to-count populations, particularly families with children, will serve to increase the flow of federal funds.** Census Bureau analysis indicates a strong inverse correlation between poverty rate and census participation rate.³⁵ To support 2010 Census

planning activities, the Census Bureau built a database that assigns each census tract in the nation a “hard-to-count” score based on twelve demographic characteristics correlated with low participation rates—one of these factors is the tract’s poverty rate (based on Census 2000).³⁶ A major emphasis of the Census Bureau’s complete count effort is to boost participation in hard-to-count communities and so reduce the undercount.

In years past, when poverty rate estimates were developed from data collected on the decennial census “long form,” census participation by the hard-to-count would have a direct impact on the accuracy of an area’s poverty estimate.³⁷ However, the 2010 Census will not collect income data—that task has been shifted to the annually updated American Community Survey. As noted earlier, the 2010 Census will serve as the sampling frame for the ACS in the years ahead. The greater the census participation rate of a community’s “hard-to-count” population, the more likely that future ACS samples will accurately mirror the distribution of households by income and the more likely ACS poverty numbers will reflect reality.³⁸

That the bulk of the census-driven funding is distributed using state-level data does not decrease the need for hard-to-count communities to participate in the census. Better community numbers improve the state figures. Moreover, for a number of programs aimed at serving households in need, greater participation in the census and the ACS means communities are more likely to get their fair share of federal funds distributed by the state.

Finally, ***census participation will have a positive impact on federal fund flows regardless of whether a household is in a rural or an urbanized area.*** Key is the fact that the bulk of funding is allocated by formula on the basis of state data. The positive rural bias to the pattern of state per capita funding only suggests that an additional rural person might bring in slightly more funds than an additional urban person.

In conclusion, then, a substantial fraction of federal domestic assistance is determined on the basis of decennial census numbers and an undercount, particularly among the hard-to-count, will serve to drive down the flow of federal funds to states and local areas. Consequently, a high participation rate and an accurate count are in all communities’ fiscal interests. It is hoped that this report and its associated resources serves to support complete count efforts to boost 2010 Census participation.

Appendix: The Extent to Which Census-Guided Programs Actually Use Census-Related Data Determine Funding Distribution

As noted in Section III, a program met the criteria for selection if it used census-related data to guide distribution of any percent of its total funding. It is a fair question to ask: How much of the \$446.7 billion provided by the 215 programs is actually distributed on the basis of census-related statistics?

The answer is: at least 90 percent. Given the complexities of many federal programs and the limited resources available to this project, providing an exact figure is not possible. That said, a scan of the 215 programs indicates the following:

- 146 programs, with total FY2008 funding of \$370.4 billion (83 percent of \$446.7 billion), distributed 100 percent of their funds on the basis of census-related statistics
- 69 programs, with total funding of \$76.2 billion, distributed less than 100 percent of their funds on the basis of census-related statistics
 - 44 programs distributed \$23.5 billion of \$47.9 billion in total funding (49 percent)
 - For 25 programs, with total expenditures of \$28.3 billion, the proportion was not estimated (due to lack of information).

Among the 44 programs for which the census-guided portion could be estimated, the largest by far is the DOT Highway Planning and Construction Program (CFDA #20.205)—40 percent of its \$36.8 billion uses census-related data for distribution.³⁹ This program accounts for \$22.1 billion of the \$24.4 billion gap between total program funding and census-directed funding in this group. If the highways program is removed from this group, then 79 percent of the funds for the remaining 43 programs is census-driven.

For the remaining 25 programs, uncertainty regarding percent reliance on census statistics can be attributed to several reasons. For most, census-related data are applied to sums remaining after certain indeterminate set-asides are distributed (e.g., HUD's HOME Investment Partnership [14.239]). Other reasons include: census-based reimbursement is allowable only on certain costs and these are unknown ahead of time (HHS' Foster Care Title IV-E [93.658]), and an agency has flexibility regarding choice of allocation formulas (HUD's Mark to Market Program [14.197]).

In sum, the analysis indicates that of the \$446.7 billion distributed in FY2008 by census-guided programs, between \$393.9 billion and \$413.3 billion was actually distributed on the basis of census-related statistics. It is highly probable that the true FY2008 figure is greater than \$400 billion—to reach that figure, only 21 percent of the funds provided by the 25 programs would need to be census-driven.

Moreover, some portion of the \$1.8 billion distributed by assistance programs not in the CFDA likely relies on census-related data. As domestic assistance budgets have increased in the past several years, the Census Bureau's assertion that "Every year, the federal government distributes more than \$400 billion to states and communities based on census data" is certainly true.

Endnotes

1. The source for the size of expenditures is U.S. Census Bureau, *Consolidated Federal Funds Report for Fiscal Year 2008*, U.S. Government Printing Office, Washington, DC, 2009. The total figure used here excludes direct retirement and disability payments to individuals, e.g., Social Security retirement, disability, and survivors insurance.
2. U.S. Census Bureau, *Census 2000 Basics*, U.S. Government Printing Office, Washington, DC, p. 1.
3. U.S. General Accounting Office, "Formula Grants: Effects of Adjusted Population Counts on Federal Funding to States," GAO/HEHS-99-69, February 1999. The figure used by the Census Bureau is deemed conservative because the GAO estimate only included formula grants (not project grants, loans, loan guarantees or direct payments) and then only included grants to states (not to counties or other local areas). The Census Bureau added a further qualifying element by saying that the "almost \$200 billion" also included "state, local, and tribal funds."
4. Lisa M. Blumberman and Philip M. Vidal, "Uses of Population and Income Statistics in Federal Funds Distribution - With a Focus on Census Bureau Data," U.S. Census Bureau, Governments Division Report Series, Research Report #2009-1. The Governments Division is part of the Economic Programs Directorate, which is separate from the Decennial Census Directorate.
5. This text is used in multiple 2010 Census factsheets available at <http://2010.census.gov/2010census/>.
6. These include the Supplemental Nutrition Assistance Program (\$30.3 billion), the Temporary Assistance for Needy Families Program (the basic and supplemental portions, \$16.1 billion), and the Pell Grant Program (\$13.7 billion). A poverty threshold identifies the level of income below which a household of a particular composition (e.g., two adults, two children) would be in poverty. Each year, the Census Bureau adjusts its 50 poverty thresholds for inflation using the Consumer Price Index published by the Bureau of Labor Statistics. For an overview, see <http://www.census.gov/hhes/www/poverty/povdef.html#2>.
7. The distribution for state unemployment insurance program administration funds is census-based (\$3.0 billion in FY2007).
8. The CFDA, published by the U.S. General Services Administration, describes about 2,000 federal domestic assistance programs that provide assistance to States or local governments, organizations, institutions, and individuals in the form of a transfer of money, services, or goods. The CFDA includes nine program types not relevant to this analysis, as they do not distribute federal funds, e.g., training, advisory services and counseling, and investigation of complaints.
9. The CFDA gives each program a two-digit-dot-three-digit identifying number. The first two digits indicate the federal department (e.g., the U.S. Department of Health and Human Services is 93); the second three digits provide the unique program identifier within that department.
10. U.S. Census Bureau, *Consolidated Federal Funds Report for Fiscal Year 2008*, U.S. Government Printing Office, Washington, DC, 2009. Programs providing retirement and disability payments for individuals, e.g., Social Security retirement, disability, and survivors insurance, are excluded from this analysis. Such programs do not rely on decennial census-related statistics. In FY2008, according to the CFFR, a total of \$1.56 trillion in awards was made in the four categories of grants, direct loans, guaranteed and insured loans, and direct payments. The figures in the text above were determined by subtracting spending by all programs not listed in the CFDA, e.g., payments for excess earned income tax credits (\$42.5 billion), unemployment compensation (\$40.0 billion), and federal employee life/health insurance premiums (\$23.7 billion). Spending for outlying areas also was subtracted. In a few instances, the CFFR and the CFDA assigned a program to different categories; in all but two such cases, the CFFR category was used.
11. 7 U.S.C. 1991(a)(13)(c)
12. 42 U.S.C. 1396d(b)
13. Once early in each decade, the Census Bureau issues a list of urbanized areas developed by applying certain criteria to decennial census data. See http://www.census.gov/geo/www/ua/ua_2k.html.
14. In Figure 1, the two-way arrow between population estimates and the ACS reflects the use of the former as population controls for the latter and the use of the latter to estimate the net international migration component of the former.
15. "SF" stands for "Summary File." The SF-4 disaggregated SF-3 data by race, ethnicity, and ancestry categories. Analysis indicates that only five federal programs rely on SF-4 type data. Consequently, for simplicity's sake, we will refer to the SF-3 alone throughout this document.
16. As comprehensive as the CFDA is, it does not capture every federal funding program. The FY2008 CFFR identifies 87 assistance programs without a CFDA number, with expenditures of \$1.8 billion.
17. Although New York City is comprised of five separate counties, the CFFR combines these into one geographic entity.
18. Data for one program did not come from the CFFR. FY2008 distributions of the TANF Contingency Fund (\$428 million) were provided by the Center for Law and Social Policy, which obtained the data from HHS; only state distributions were available.
19. A detailed discussion regarding the methodology used to collect data for the CFFR is available in U.S. Census Bureau, *Consolidated Federal Funds Report for Fiscal Year 2008*, U.S. Government Printing Office, Washington, DC, 2009.
20. The complete list of 215 census-guided programs is available at www.brookings.edu/metro/CountingforDollars.

21. "Budget function" is the framework used by federal government to categorize each assistance program by its purpose. A listing of the 215 programs organized by budget function is available at www.brookings.edu/metro/CountingforDollars.
22. For discussion of CFFR substate distribution methodology, see U.S. Census Bureau, *Consolidated Federal Funds Report for Fiscal Year 2008*, U.S. Government Printing Office, Washington, DC, 2009, pp. xv-xvi and Appendix F.
23. The correlation coefficient measures the extent to which there is a linear relationship between two variables, in this case, per capita funding (the dependent variable) and the average annual pay. The R squared is the square of the correlation coefficient and is a measure of the extent to which, in this case, differences in observations for the average annual pay can explain differences in per capita funding. In lay terms, the state average annual pay can explain 22 percent of the variation in state per capita funding.
24. Each of the four independent variables is statistically significant (t statistics run from 2.98 to 8.41). The regression equation itself is: state per capita census-driven federal funding = -3201.69 + 0.07 (2008 average annual pay) + 5328.65 (2005 child poverty rate) + 2.29 (2008 Medicaid income limit for children 6-19) + 21.87 (2008 percent rural). Percents are expressed in proportion to 100.
25. The 2005 poverty rate is used as a number of federal programs set allocation formulas in advance of the fiscal year. The total poverty rate was found to have less explanatory power (0.35, 0.12). The source of the child poverty rate data is the Annie E. Casey Foundation, "Kids Count Data Center," with data provided by the Population Reference Bureau on the basis on census statistics. <http://datacenter.kidscount.org/data/acrossstates/Rankings.aspx?loct=2&by=a&order=a&ind=43&dtm=322&tf=16>.
26. The explanatory power of Medicaid income limits for children is greater than that for income limits for working adults. Data on Medicaid family income limits are from Kaiser Commission on Medicaid and the Uninsured, "Health Coverage for Children and Families in Medicaid and SCHIP: State Efforts Face New Hurdles (2008)." While the greatest share of federal Medicaid spending (43 percent in 2007) goes to blind and disabled persons, there does not appear to be a simple chart of state eligibility levels for this group. The second largest recipient group was age 65 and over (21 percent), followed by dependent children under 21 (19 percent), and adults in households with children (12 percent). Center for Medicare and Medicaid Services, *Data Compendium*, 2009, Table II.4, available at <http://www.cms.hhs.gov/DataCompendium/>.
27. Correlation of per capita funding with 2008 per capita income is slightly lower (0.44, 0.20). Average annual pay data are from the Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2008.
28. That said, while the linear correlation between average annual pay and Medicaid income limits for children is positive, it is not that high (0.23), suggesting other factors (e.g., values, politics) influence the income limit.
29. A measure of state income inequality (the ratio of income received by the top-earning quintile of families divided by income of bottom-earning quintile of families, published by the Center on Budget and Policy Priorities) is an excellent proxy for these two measures, with an R squared of 0.39. The explanatory power of the model increases slightly when child poverty rate and average annual pay are used instead of income inequality. The income inequality measure and the Medicaid eligibility level for children ages 6-19 together explain 49 percent of differences in per capita funding.
30. Source: Economic Research Service, *State Fact Sheets*, available at <http://www.ers.usda.gov/StateFacts/> (January 2010). Data are for 2008. (Latest previous year was 2000.)
31. This is largely because there are negative correlations between percent rural population and average annual pay (-0.67) and Medicaid family income limits (-0.18).
32. In FY2010, the appropriation for the ACS Program was \$200.5 million; for the Census Bureau's part of the Current Population Survey, \$46.5 million; for the Population Estimates Program, \$10.3 million. The costs of producing PCI, AMI, and FMR are small as well. The current annual cost of producing the datasets derived from the 2010 Census would be within the range of \$300-\$350 million.
33. That said, the numerator is influenced by journey-to-work data from the ACS—used to convert earnings by place of work to earnings by place of residence. Consequently, a marginal increase in decennial census participation could possibly affect the numerator in a very slight way by changing the ACS sample and so changing journey-to-work estimates.
34. The list of current partners can be found at <http://2010.census.gov/partners/partners/current-partners.php>.
35. De la Puente, Manuel, "Why Are People Missed or Erroneously Included by the Census: A Summary of Ethnographic Coverage Reports." Proceedings of the 1993 Research Conference on Undercounted Ethnic Populations. Richmond, VA.
36. See Table 2 in Bruce, Antonio and J. Gregory Robinson, "The Planning Database: Its Development and Use as an Effective Targeting Tool in Census 2000." Paper presented at the Annual Meetings of the Southern Demographic Association, Arlington, VA, October 24, 2003.
37. To correct for household nonresponse, the Census Bureau would impute the characteristics of the missing households. Higher participation meant less imputation and a more accurate estimate.
38. The ACS sample is drawn from the Census Bureau's Master Address File (MAF). Through nationwide address canvassing, the MAF was thoroughly updated before the 2010

Census. Basic household information collected in the 2010 Census, such as household size and person age, sex, race/ethnicity, will be used in stratifying ACS sample selection. While 2010 Census participation will have an impact on ACS accuracy, a far more important factor affecting ACS accuracy is the participation rate in the ACS itself.

39. The program has 13 separate funding pools, an indication of the complexity of seeking to estimate the percent reliance on census-related data.

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