

# Census-derived Datasets Used to Distribute Federal Funds

**Counting for Dollars 2020: Report #4**

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## Introduction

The **Counting for Dollars Project** aims to understand:

- The extent to which the federal government will rely on data from the 2020 Census to guide the distribution of federal funding to states, localities, and households across the nation and
- The impact of the accuracy of the 2020 Census on the fair, equitable distribution of these funds.<sup>1</sup>

To date, the Project has focused on census-guided geographic distribution of federal financial assistance (see box). With this report, it expands to include distribution of federal tax credits and procurement contracts.

### Counting for Dollars: Prior Reports

**Report #1:** “Initial Analysis: 16 Large Census-guided Financial Assistance Programs” describes the state-by-state distribution of \$590 billion in Fiscal Year (FY) 2015 spending from 16 large federal financial assistance programs.

**Report #2:** “Estimating Fiscal Costs of a Census Undercount to States” measures state fiscal impacts of an undercount for U.S. Department of Health and Human Services programs (the largest being Medicaid) reliant on the Federal Medical Assistance Percentage (FMAP). In FY2015, FMAP-determined reimbursements to and payments from state governments totaled \$286.1 billion.

**Report #3:** “The Role of the Decennial Census in Distributing Federal Funds to Rural America” identifies 55 census-guided programs specifically targeted to rural communities. These programs distributed \$30.7 billion in FY2016.

The Project has identified about 320 census-guided federal programs; these distributed over \$880 billion in FY2016. In forthcoming reports, the Project will provide a list of all census-guided programs and state-by-state distributions over 50 large ones.

As the Decennial Census is carried out once a decade and collects data on a small number of demographic characteristics, Congress recognizes that the decennial numbers, on their own, cannot guide the fair, equitable geographic distribution of federal funds. As a result, Congress has authorized a series of more current and descriptive datasets derived from the Decennial Census.

This report describes 52 census-derived datasets that the federal government uses to geographically distribute spending. Identifying the chain of federal data efforts needed to bring about a fair, equitable distribution should aid decision-makers and stakeholders in supporting an accurate Decennial Census and a well-functioning statistical system.

The report first discusses the types of federal funding guided by census-derived data and the ways that these data are used to distribute funding. It then schematically lays out and describes the 52 census-derived datasets. It concludes with observations about the uses of census-derived datasets in guiding federal spending and the implications for public policy.

## Census-guided Federal Expenditures

**Three type of federal expenditures are geographically distributed using census-derived data: financial assistance, tax credits, and procurement contracts.**

### Financial Assistance Programs

The 2017 Catalog of Federal Domestic Assistance (CFDA) identifies 2,500 assistance programs.<sup>2</sup> “Domestic assistance programs” provide financial assistance (such as direct payments to individuals, grants, loans, and loan guarantees) or non-financial assistance (such as counseling and technical assistance) to non-federal entities within the U.S.—such as individuals, state and local governments,

companies and nonprofits—in order to fulfill a public purpose. Federal domestic assistance is provided in every realm of domestic policy, including health care, education, economic development, transportation, social services, science, technology, criminal justice, and emergency management.

Four types of federal domestic assistance programs geographically distribute financial assistance on the basis of census-derived data: grants, direct payments, direct loans, and loan guarantees and insurance (see box). A significant proportion of programs in each category rely on census-derived data to distribute funds.

### Four Types of Federal Financial Assistance

**Grants** are transfers of funds that recipients are legally committed to use for certain purposes in the public interest.

- o **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. For example, the Medical Assistance Program (Medicaid, CFDA 93.778) distributes funds using a formula based on each state’s per capita income.
- o **Project grants** distribute funds for uses related to a specific project. While formulas may be used to allocate project grants, 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.
- o **Cooperative agreements** work the same way as project grants except that the funding agency is more heavily involved in the administration of the project. For example, The Department of Labor’s Work Incentive Grant Program (17.266), aimed to increase labor force participation by persons with disabilities.

**Direct Payments** provide federal funds directly to individuals or private institutions, generally for restricted uses, for the purpose of encouraging or subsidizing certain activities. For example, the Labor Department’s Work Incentive Grant Program (17.266) aims to increase labor force participation by persons with disabilities.

**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 is the Very Low to Moderate Income Housing Loans Program (10.410) operated by the U.S. Department of Agriculture (USDA).

**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 is the USDA’s Business and Industry Loans Program (10.768), which assists businesses and individuals in obtaining loans from other sources.

## Tax Credits

Congress defines **tax expenditures** as “revenue losses attributable to provisions of the Federal tax laws which allow a *special exclusion, exemption, or deduction from gross income* or which provide a *special credit, a preferential rate of tax, or a deferral of tax liability.*”<sup>3</sup> (Italics added to identify six types of tax expenditures.) According to the Office of Management and Budget (OMB), estimated federal tax expenditures for FY2018 totaled \$1.5 trillion, about 15 percent of Gross Domestic Product.<sup>4</sup>

Within the large number of federal tax expenditure provisions, several **tax credit programs** rely on census-derived datasets to establish geographic eligibility. Examples include the Low-Income Housing Tax Credit (LIHTC), the New Markets Tax Credit (NMTC), and the newly established Opportunity Zones Program.

## Procurement

In FY2017, the federal government spent \$834.6 billion on contractual services and supplies.<sup>5</sup> By law, the federal government aims to award three percent of Federal prime contract dollars to small businesses located in high-unemployment, low-income areas designated as Historically Underutilized Business Zones (HUBZones) on the basis of census-derived data. According to the Government Accountability Office (GAO), “For calendar year 2015 (the most recent year that data were available), firms in the [HUBZone] program had almost \$6.6 billion in obligations on active federal contracts directly awarded to bidders.”<sup>6</sup>

## Uses of Census-derived Data to Distribute Federal Funding

Article 1, Section 2 of the Constitution mandates a Decennial Census for the purposes of apportioning seats in the House of Representatives. In January 1790, Representative James Madison proposed, and Congress adopted, an amendment to the Census Act of 1790 to include questions on population characteristics beyond those needed for “bare enumeration” so that Congress might “adapt the public measures to the particular circumstances of the community.”<sup>7</sup> Agreeing with Madison, Congress added questions on race, gender, and age. Ever since, the Decennial Census has carried questions beyond those required for apportionment.<sup>8</sup>

For nearly 230 years, Congress has used the data from the Decennial Census to guide the design and implementation of public policies and programs. In the 20th century, these uses extended to guiding

the geographic distribution of federal funding.

As indicated earlier, Decennial Census data typically are not used to geographically distribute federal funds because they are limited to a small number of variables and quickly become out of date. Under Congress’s direction and through significant advances in the statistical sciences, the value of the Decennial Census has been greatly extended through the development of datasets derived from it.

Census-derived data are used by federal programs in four ways to guide the distribution of funds—eligibility criteria, allocation formulas, selection preferences, and interest rates (see box). The large majority of census-guided programs use census-derived data as part of eligibility criteria and/or allocation formulas.

### Four Uses of Census-derived Data in Guiding Federal Expenditures

First, programs use census-related data to define **eligibility criteria**, that is, to identify which organizations or individuals can receive funds. For instance, for several 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.” 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 the area’s median income.

Second, programs use census-related data in formulas that **geographically allocate** funds among eligible recipients across the nation. For instance:

- **HUD’s Community Development Block Grants/Entitlement Grants Program** (14.218), 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) 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.

Third, programs make funding decisions on the basis of **selection preferences**, using census-related data to score project applications. 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).

Fourth, census-related data are 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 area median household income.

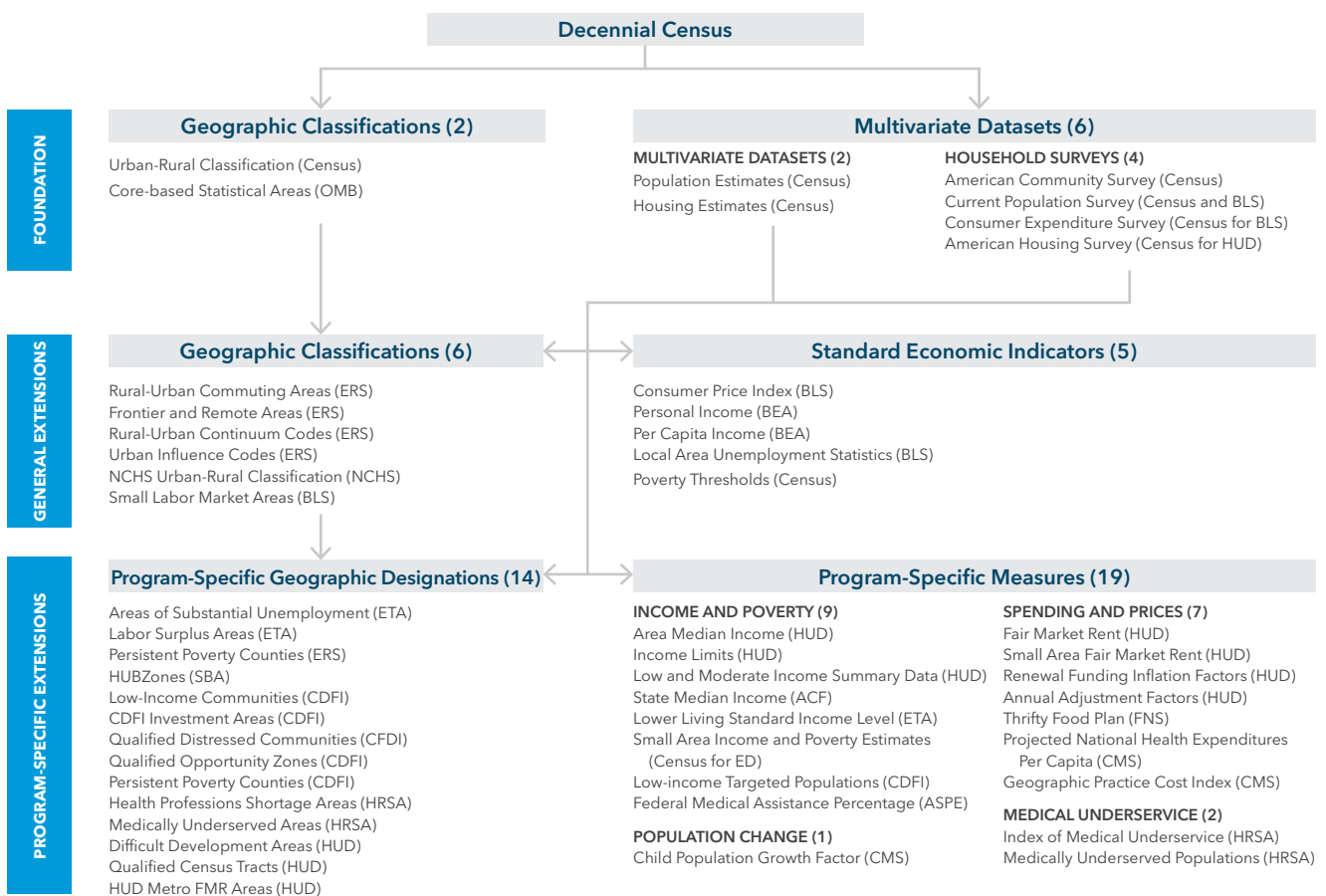
## Census-derived Datasets

**Fifty-two datasets derived from the Decennial Census are used to guide the geographic distribution of federal funding.** These datasets are displayed in the schematic below and described in more detail in the appendix.

### Schematic Organization

*Looking vertically:* Eight datasets are **foundational** (in that they make this data ecosystem possible) and 44 are **extensions** of these. Eleven extensions are **general**, that is, used by a variety of programs, and the remaining 33 extensions are **program-specific**.<sup>9</sup>

### CENSUS-DERIVED DATASETS FOR DISTRIBUTING FEDERAL FUNDS



### Agencies Responsible for Census-Derived Datasets

|        |   |      |   |
|--------|---|------|---|
| ACF    | Administration for Children and Families, Department of Health and Human Services (HHS) | ERS  | Economic Research Service, Department of Agriculture (USDA) |
| ASPE   | Asst. Secretary for Policy and Evaluation, HHS  | ETA  | Employment and Training Administration, DOL                 |
| BEA    | Bureau of Economic Analysis, Department of Commerce                                     | FNS  | Food and Nutrition Service, USDA                            |
| BLS    | Bureau of Labor Statistics, Department of Labor (DOL)                                   | HRSA | Health Resources and Services Administration, HHS           |
| CDFI   | Community Development Financial Institutions Fund, Department of Treasury               | HUD  | Department of Housing and Urban Development                 |
| Census | Census Bureau, Department of Commerce   | NCHS | National Center for Health Statistics, HHS                  |
| CMS    | Center for Medicare and Medicaid Services, HHS  | OMB  | Office of Management and Budget, White House                |
|        |   | SBA  | Small Business Administration                               |

*Looking at the left half:* Twenty-two datasets are **geographic classifications or designations**.

Two are foundational. The Census Bureau's **Urban-Rural Classification** labels every census tract as urban or rural, based on its population density in the Decennial Census. OMB delineates county-based **Core-based Statistical Areas** (CBSAs)—metropolitan areas and micropolitan areas. CBSAs are delineated around urban “cores” designated by the Urban-Rural Classification.

Six geographic classifications are general extensions of the two foundational ones; five of these distinguish among rural areas in terms of “degrees of rurality” (for example, distance from a city).

Fourteen datasets are program-specific geographic designations; thirteen of these identify geographic areas that meet the eligibility criteria for a particular program.

*Looking at the right half:* Thirty datasets provide **data on specific variables**. Six are foundational **multivariate** datasets—in that they provide data on multiple variables such as race, age, poverty, and housing costs. These are of two types:

- o Two augmented datasets (Population Estimates, Housing Estimates) annually update Decennial Census population and housing numbers with more recent data, primarily from vital statistics and tax records.
- o Four household surveys (American Community Survey, Current Population Survey, Consumer Expenditure Survey, American Housing Survey) collect information on demographic variables not on the decennial questionnaire (such as income, employment status, and housing costs).

These enable 24 **measure-specific datasets**, which provide numbers for a particular variable. Five of these are *standard economic indicators* (concerning prices, income, and employment). Nineteen are program-specific measures (concerning income and poverty, spending and prices, medical underservice, and population growth).

## Foundational Datasets

As the foundational datasets enable all the extension datasets and are important data resources in their own right, they are more fully described below.

*Geographic Classifications:* **Urban-Rural Classification** designates census tracts with population density of 1,000 or more persons per square mile (ppsm) as “urban”. In the year ending in “2” after each Census, the Census Bureau identifies two types of urban areas—*urbanized areas* (UAs) that contain 50,000 or more people and urban clusters (UCs) with a population of at least 2,500 and less than 50,000. By definition, any census tract that is not in a UA or UC is “rural.”<sup>10</sup>

In March 2012, the Census Bureau published the Urban-Rural Classification based on the 2010 Census, identifying 486 UAs and 3,087 UCs nationwide. In total, the urban areas included 80.7 percent of the nation’s population and 3.0 percent of the land.<sup>11</sup>

In **Core-based Statistical Areas** (CBSAs) framework, *metropolitan areas* have a UA as the core and *micropolitan areas* have a UC as the core. Each CBSA contains one or more central counties (the ones containing the UA or UC) plus any outlying counties economically integrated with the central counties, as measured by commuting flows.<sup>12</sup> “Non-core” means any county not in a CBSA.

*Augmented Datasets:* Each year, the Census Bureau updates **Population Estimates** by taking the previous year's numbers and adding births, subtracting deaths, and estimating net domestic and international migration (see schematic below).<sup>13</sup> The Decennial Census provides the initial population base.

The Census Bureau uses a similar method to annually update **Housing Estimates**. As the Decennial Census provides the initial population and housing base, any inaccuracies in the decennial year are carried through each subsequent year of the decade.



*Household Surveys:* The Decennial Census enables the implementation and analysis of four foundational household surveys—the **American Community Survey (ACS)**, the **Current Population Survey (CPS)**, the **Consumer Expenditure Survey (CEX)**, and the **American Housing Survey (AHS)**. It does so in five ways, as described in the following table.

The two augmented datasets and the four household surveys are intertwined. The international in-migration component of Population Estimates is drawn from the ACS, while Population Estimates serve as controls for the ACS, CPS and CEX and Housing Estimates are controls for the AHS.

## The Roles of the Decennial Census in Household Survey Implementation and Analysis

|                       |   |
|-----------------------|---|
| <b>Sampling Frame</b> | The Census Bureau's Master Address File (MAF), the underpinning of the Decennial Census operation, provides the frame from which a survey sample is drawn. <sup>14</sup>  |
| <b>Sample Design</b>  | The Decennial Census guides sample design in two ways. One is by delineating the primary sampling units from which samples are to be drawn and the sampling rates by which they are drawn. The second is to guide sample stratification, that is, the size of subsamples by characteristics such as race or educational attainment. <sup>15</sup> |
| <b>Imputation</b>     | Nonresponses to individual questions are filled in by imputing, or "borrowing," answers from other households with similar characteristics. <sup>16</sup>   |
| <b>Weighting</b>      | In preparing survey results, the weight of each household's response is determined in relation to the estimated overall number of households and the estimated number of residents of similar age, sex, race, and Hispanic origin, as derived from the Decennial Census through annual population and housing estimates. <sup>17</sup>            |
| <b>Variance</b>       | To understand the reliability of any survey result, the survey sponsors need to produce estimates of variance, or sampling error, which also is based annual population and housing estimates. <sup>18</sup>  |

Source: Census Bureau, "American Community Survey: Design and Methodology," January 2014



## Findings

Reviewing the list of census-derived datasets used to geographically distribute federal expenditures leads to several findings.

**James Madison’s vision lives.** Madison thought the collection of demographic data through the Decennial Census that would allow Congress to “adapt the public measures to the particular circumstances of the community.” One imagines that Madison would feel pride in knowing that his vision has led to a sophisticated system of census-based data collection and that Congress uses this system to geographically allocate close to \$1 trillion in funding.

**The census-based statistical system has a strong set of foundational datasets that allow flexibility and adaptability in the development of more focused ones.** Decades of experience and ongoing innovation have led to the creation of a set of geographic classifications, augmented datasets, and household surveys from which the specific needs of individual federal programs can be met.

**Urban-Rural Classification, Population Estimates, the American Community Survey, and the Consumer Expenditure Survey are particularly important to the equitable distribution of federal funds.**

- **Urban-Rural Classification** is the basis for all other geographic classifications.
- **The Population Estimates Program** allows population counts to stay current. This enables funds distribution on the basis of population share and per capita and provides controls for household surveys.
- **The American Community Survey** is the workhorse of the system, offering data on a substantial number of variables down to the neighborhood level.
- **The Consumer Expenditure Survey** is the basis for the Consumer Price Index, which is relied on by many programs for year-to-year adjustments in distributions and eligibility levels.

**Every census-derived dataset but one relies on the American Community Survey.**<sup>19</sup> The exception is Urban-Rural Classification. The ACS is the current (and fourth) incarnation of Madison’s vision to add questions to the Decennial Census and it is doing that job admirably. The appropriate distribution of federal expenditures very much depends on the integrity of the ACS.

**Congress is continually inventive in the construction of new program-specific datasets to guide the distribution of federal funding.**

As can be seen from the schematic, Congress regularly defines new program-specific geographic classifications, criteria, and indicators.

**Congress is encouraged to recognize the essential role of the 2020 Census in determining the geographic distribution of federal funding over the next decade and to see that the Census Bureau has the resources, leadership, and oversight it needs to ensure the full, accurate enumeration of every American community.**

## Appendix: Census-derived Datasets Used to Distribute Federal Funds: An Inventory

| Category                     | Census-derived Dataset               | Agency         | Description   | Methodology  |
|------------------------------|--------------------------------------|----------------|---|--|
| <b>FOUNDATION</b>            |                                      |                |   |  |
| Geographic Classifications   | Urban-Rural Classification           | Census         | A delineation of geographical areas that identifies individual urban and rural areas on the basis of population density. Includes designation of urbanized areas (50,000 or more people) and urban clusters (2,500 or more people, up to 49,999). Urban census tracts typically have densities of 1,000 or more people per square mile.   | "Defining Rural at the U.S. Census Bureau"   |
|                              | Core-Based Statistical Areas (CBSAs) | OMB            | Includes metropolitan statistical areas (at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core) and micropolitan statistical areas (have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core).   | "Standards for Delineating Metropolitan and Micropolitan Statistical Areas"        |
| <b>Multivariate Datasets</b> |                                      |                |   |  |
| Augmented Datasets           | Population Estimates                 | Census         | Estimates of the population for the United States, states, metropolitan and micropolitan statistical areas, counties, cities, towns, as well as for Puerto Rico and its municipalities.   | Population Estimates methodologies for nation, states, counties, cities, and towns |
|                              | Housing Estimates                    | Census         | Housing unit estimates for the nation and all states and counties annually.   | "Methodology for State and County Total Housing Unit Estimates"                    |
| Household Surveys            | American Community Survey            | Census         | An ongoing survey that gathers information previously contained only in the long form of the decennial census, such as ancestry, educational attainment, income, language proficiency, migration, disability, employment, and housing characteristics.  | "ACS Design and Methodology Report"  |
|                              | Current Population Survey            | Census and BLS | The primary source of monthly labor force statistics. Supplemental inquiries vary month to month and cover a wide variety of topics such as child support, volunteerism, health insurance coverage, and school enrollment.  | CPS technical documentation  |
|                              | Consumer Expenditure Survey          | Census for BLS | A nationwide household survey to find out how Americans spend their money, differentiated by income level and household characteristics.  | Consumer Expenditure Survey, BLS Handbook of Methods                               |
|                              | American Housing Survey              | Census for HUD | A longitudinal housing unit survey conducted biennially in odd-numbered years. Provides information on housing subjects such as size and composition of the nation's housing inventory, vacancies, physical condition of housing units, characteristics of occupants, indicators of housing and neighborhood quality, mortgages and other housing costs, persons eligible for and beneficiaries of assisted housing, home values, and characteristics of recent movers. | AHS technical documentation  |
| <b>GENERAL EXTENSIONS</b>    |                                      |                |   |  |
| Geographic Classifications   | Rural-Urban Commuting Areas          | ERS            | A classification scheme of census tracts using measures of population density, urbanization, and daily commuting.   | RUCA documentation   |
|                              | Frontier and Remote Areas            | ERS            | A classification scheme of sparsely-settled, remote areas of the U.S., based on ZIP-codes.  | FAR documentation  |
|                              | Rural-Urban Continuum Codes          | ERS            | A classification scheme that distinguishes metropolitan counties by the population size of their metro area, and nonmetropolitan counties by degree of urbanization and adjacency to a metro area.  | RUCC documentation   |
|                              | Urban Influence Codes                | ERS            | A classification scheme that distinguishes metropolitan counties by population size of their metro area, and nonmetropolitan counties by size of the largest city or town and proximity to metro and micropolitan areas.  | UIC documentation  |
|                              | NCHS Urban-Rural Classification      | NCHS           | A classification scheme designed for utility in studying health differences across the urban-rural continuum.   | "2013 NCHS Urban-Rural Classification Scheme for Counties"                         |
|                              | Small Labor Market Areas             | BLS            | A level of substate geography published by the BLS Local Area Unemployment Statistics (LAUS) program. The metropolitan and micropolitan areas delineated by OMB are "major" Labor Market Areas (LMAs) for LAUS purposes. The balance of the U.S. is grouped into "small" LMAs, consisting of one or more counties or county equivalents.  | Methodology and criteria for small labor market areas                              |

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|------------------------------|---|--------|--|---|
| Standard Economic Indicators | Consumer Price Index                      | BLS    | A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.  | The Consumer Price Index, Handbook of Methods   |
|                              | Personal Income                           | BEA    | The income received by, or on behalf of, all persons from all sources from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. | "State Personal Income and Employment: Concepts, Data Sources, and Statistical Methods" |
|                              | Per Capita Income                         | BEA    | The personal income of the residents of a given area divided by the resident population of that area.  | "Local Area Personal Income and Employment Methodology"                                 |
|                              | Local Area Unemployment Statistics (LAUS) | BLS    | Monthly and annual employment, unemployment, and labor force data for Census regions and divisions, States, counties, metropolitan areas, and many cities, by place of residence.  | Local Area Unemployment Statistics, Handbook of Methods                                 |
|                              | Poverty Thresholds                        | Census | A set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.        | "How the Census Bureau Measures Poverty"  |

| Category                                 | Census-derived Dataset            | Agency   | Description   | Definition   | Program   |
|--|-----------------------------------|--|---|--|---|
| <b>PROGRAM-SPECIFIC EXTENSIONS</b>       |                                   |  |   |  |   |
| Program-specific Geographic Designations | Areas of Substantial Unemployment | ETA  | Areas with an average rate of unemployment of at least 6.5 percent for the most recent 12 months.   | 29 USC § 3172(b)(1)(B)(v)(III)   | WIOA Adult Program, WIOA Youth Activities                                 |
|  | Labor Surplus Areas               | ETA  | Areas with unemployment rate 20 percent above the national annual average unemployment rate for the two-year reference period.  | "Description of Labor Surplus Areas" (webpage, 2018)   | HUBZones Program  |
|  | Persistent Poverty Counties       | ERS  | Counties in which 20 percent or more of residents were poor as measured by each of the 1980, 1990, 2000 censuses, and 2007-11 American Community Survey 5-year average.   | Description of Persistent Poverty Counties   | Community Connect Grant Program, Rural Business Development Grant Program |
|  | HUBZones                          | SBA  | Distressed rural and urban communities, typically having low median household incomes, high unemployment or both.   | 15 USC 632(p) -- HUBZone definitions   | HUBZones Program  |
|  | Low-Income Communities            | CDFI   | Census tracts with high poverty and/or outmigration   | 26 USC 45D(e)  | New Markets Tax Credit  |
|  | CDFI Investment Areas             | CDFI   | Census tracts and other geographic areas with low income or high unemployment   | 12 CFR 1805.201(b)(3)  | CDFI Fund programs  |
|  | Qualified Distressed Communities  | CDFI   | Census tracts and other geographic areas with low income or high unemployment   | 12 CFR 1806.401  | Bank Enterprise Award Program   |
|  | Qualified Opportunity Zones       | CDFI   | Census tracts and other geographic areas with low income or high unemployment   | Guidance regarding 26 CFR 601.601  | Opportunity Zones Program   |
|  | Persistent Poverty Counties       | CDFI   | Counties with 20 percent or more of its population living in poverty over the past 30 years, as measured by the 1990 and 2000 decennial censuses and the 2006-2010 American Community Survey. (Differs from ERS definition) | Persistent Poverty County definition   | CDFI Fund programs  |
| Health Professions Shortage Areas        | HRSA                              | Designations indicating health care provider shortages in primary care, dental health, or mental health. These shortages may be geographic-, population-, or facility-based. | HPSA Application and Scoring Process  | National Health Service Corps, NURSE Corps, Health Center Program, Medicare Incentive Payment, Rural Health Clinic Program |   |

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| Category                                 | Census-derived Dataset                  | Agency  | Description  | Definition   | Program  |
|--|---|---|--|--|--|
| <b>PROGRAM-SPECIFIC EXTENSIONS</b>       |   |   |  |  |  |
| Program-specific Geographic Designations | Medically Underserved Areas             | HRSA  | Geographic areas with a shortage of primary care health services for residents.  | MUA Application and Scoring Process  | National Health Service Corps, NURSE Corps, Health Center Program, Medicare Incentive Payment, Rural Health Clinic Program |
|  | HUD Metro FMR Areas                     | HUD   | Modifications of the current OMB definitions of MSAs to account for differences in rents among areas within each current MSA that were in different FMR areas under definitions used in prior years.   | "HUD Metropolitan Fair Market Rent Areas"  | Housing Assistance Programs  |
|  | Difficult Development Areas             | HUD   | Areas with high construction, land, and utility costs relative to area median income.  | "Statutorily Mandated Designation of Difficult Development Areas and Qualified Census Tracts for 2018" | Low Income Housing Tax Credit  |
|  | Qualified Census Tracts                 | HUD   | Census tracts with 50 percent or more of households with an income less than 60 percent of the area median gross income or has a poverty rate of at least 25 percent.  | "Statutorily Mandated Designation of Difficult Development Areas and Qualified Census Tracts for 2018" | Low Income Housing Tax Credit  |
| <b>Program-Specific Measures</b>         |   |   |  |  |  |
| Income and Poverty                       | Area Median Income                      | HUD   | Area Median Income serves as the basis for income limits used to determine eligibility for various HUD programs.   | "Methodology for Calculating Median Income"  | Housing Assistance Programs  |
|  | Income Limits                           | HUD   | Income limits determine eligibility for assisted housing programs. HUD develops income limits based on Area Median Income estimates and HUD Metro FMR Area definitions.  | "Methodology for Determining Section 8 Income Limits"  | Housing Assistance Programs  |
|  | Low and Moderate Income Summary Data    | HUD   | The LMISD support the Community Development Block Grant objective of providing benefit to low- and moderate-income persons on an area basis and are derived from special Census Bureau data tabulations drawn from the ACS every five years. | "Overview of the Calculation Process for the Moderate Income Level"                                    | Community Development Block Grant Program  |
|  | State Median Income                     | ACF   | The maximum income allowed in determining income eligibility for LIHEAP is 60 percent of SMI, except where 150 percent of the Federal Poverty Guidelines (FPG) is higher.  | "State Median Income Estimates for Optional Use in FY 2018 and Mandatory Use in FY 2019"               | Low Income Home Energy Assistance Program  |
|  | Poverty Guidelines                      | ASPE  | A simplification of the Census poverty thresholds for use for administrative purposes – for instance, determining financial eligibility for certain federal programs.  | Methodology for Calculating Poverty Guidelines   | 31 programs  |
|  | Federal Medical Assistance Percentage   | ASPE  | Used in determining the amount of Federal matching funds for State expenditures for assistance payments for State medical and medical insurance expenditures and certain social programs.  | Medicaid's Federal Medical Assistance Percentage (FMAP)  | Traditional Medicaid, Children's Health Insurance Program, Adoption Assistance   |
|  | Lower Living Standard Income Level      | ETA   | Income levels used to determine eligibility for DOL employment and training programs.  | "Workforce Innovation and Opportunity Act 2018 Lower Living Standard Income Level"                     | WIOA Adult Program, WIOA Youth Activities  |
|  | Small Area Income and Poverty Estimates | Census for ED   | Estimates of school-age children in poverty for all 13,000+ school districts   | SAIPE Methodology  | Title I Grants to Local Education Agencies   |
| Low-income Targeted Populations          | CDFI                                    | Individuals whose family income is not more than 80% of Area Median Income. | CDFI Fund Information Mapping System 3 (CIMS3) User Instruction Manual   | CDFI Fund programs   |  |

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| Category             | Census-derived Dataset                            | Agency | Description  | Definition   | Program  |
|----------------------|---|--------|--|--|--|
| Spending and Prices  | Fair Market Rent                                  | HUD    | The amount needed to pay the gross rent of privately owned, decent, and safe rental housing of a modest (non-luxury) nature with suitable amenities; typically set at the 40th percentile of the distribution of gross rents.  | 24 CFR 888.113   | Housing assistance programs  |
|                      | Small Area Fair Market Rent                       | HUD    | FMRs calculated for ZIP Codes within Metropolitan Areas.   | 24 CFR 888.113   | Housing assistance programs  |
|                      | Renewal Funding Inflation Factors                 | HUD    | Used to adjust the allocation of Housing Choice Voucher program funds for local changes in rents, utility costs, and tenant incomes  | RFIF Methodology   | Housing Choice Voucher Program   |
|                      | Annual Adjustment Factors                         | HUD    | Rent inflation factors used to adjust FMRs.  | AFF Methodology  | Section 8 Project-based Rental Assistance  |
|                      | Thrifty Food Plan                                 | FNS    | A representative healthful and minimal cost meal plan that shows how a nutritious diet may be achieved with limited resources.   | Thrifty Food Plan, 2006  | Supplemental Nutrition Assistance Program  |
|                      | Projected National Health Expenditures Per Capita | CMS    | Factor in determining annual increase in CHIP allotments to each state.  | Children's Health Insurance Program (CHIP) Final Allotments to States for Fiscal Year 2013                                 | Children's Health Insurance Program  |
|                      | Geographic Practice Cost Index                    | CMS    | Indicate geographic variation in the price of the three categories of inputs: physician/practitioner work (PW), practice expense (PE), and malpractice expense (MP).   | Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule and Other Revisions to Part B for CY 2018 | Children's Health Insurance Program  |
| Medical Underservice | Index of Medical Underservice                     | HRSA   | Calculated based on four criteria: the population to provider ratio; the percent of the population below the federal poverty level; the percent of the population over age 65; and the infant mortality rate. IMU can range from 0 to 100, where zero represents the completely underserved. | IMU Scoring Process  | National Health Service Corps, NURSE Corps, Health Center Program, Medicare Incentive Payment, Rural Health Clinic Program |
|                      | Medically Underserved Populations                 | HRSA   | Sub-groups of people living in a defined geographic area with a shortage of primary care health services.  | MUP Application and Scoring Process  | National Health Service Corps, NURSE Corps, Health Center Program, Medicare Incentive Payment, Rural Health Clinic Program |
| Population Change    | Child Population Growth Factor                    | CMS    | Percentage increase in each state's child population, used to adjust CHIP allotments to states.  | Children's Health Insurance Program (CHIP) Final Allotments to States for Fiscal Year 2013                                 | Children's Health Insurance Program  |

## Footnotes

- 1 Project website: <https://gwipp.gwu.edu/counting-dollars-2020-role-decennial-census-geographic-distribution-federal-funds>
- 2 See <https://beta.sam.gov/help/assistance-listing>.
- 3 As quoted in Tax Policy Center, The Tax Policy Briefing Book: A Citizens' Guide to the Tax System and Tax Policy, 2017, p. 81, available at [https://www.taxpolicycenter.org/sites/default/files/briefing-book/tpc-briefing-book\\_0.pdf](https://www.taxpolicycenter.org/sites/default/files/briefing-book/tpc-briefing-book_0.pdf). On the same page, the Tax Policy Center indicates that: "Exclusions, deductions, and deferrals of income recognition will account for 77 percent of individual income tax expenditures in fiscal year 2018, special rates for 10 percent, nonrefundable credits for 1 percent, and refundable credits for 13 percent."
- 4 *Ibid.*, p. 85. A complete list of tax expenditures is regularly prepared by the Congressional Research Service. The December 2016 edition is available at <https://www.gpo.gov/fdsys/pkg/CPRT-114SPRT24030/pdf/CPRT-114SPRT24030.pdf>.
- 5 According to USASpending.gov, at [https://www.usaspending.gov/#/explorer/object\\_class](https://www.usaspending.gov/#/explorer/object_class).
- 6 Governmental Accountability Office, "HUBZone Program: Oversight Has Improved but Some Weaknesses Remain," Testimony before the Subcommittee on Contracting and Workforce, Committee on Small Business, House of Representatives, March 2, 2017, GAO-17-456T, available at <https://www.gao.gov/products/GAO-17-456T>.
- 7 An extended quote from Rep. Madison lays out his thinking: "Mr. Madison Observed that they had now an opportunity of obtaining the most useful information for those who should hereafter be called upon to legislate for their country if this bill was extended so as to embrace some other objects besides the bare enumeration of the inhabitants; it would enable them to adapt the public measures to the particular circumstances of the community. In order to know the various interests of the United States, it was necessary that the description of the several classes into which the community was divided, should be accurately known; on this knowledge the legislature might proceed to make a proper provision for the agricultural, commercial and manufacturing interests, but without it they could never make their provisions in due proportion. This kind of information, he observed, all legislatures had wished for; but this kind of information had never been obtained in any country. He wished, therefore, to avail himself of the present opportunity of accomplishing so valuable a purpose. If the plan was pursued in taking every future census, it would give them an opportunity of marking the progress of the society and distinguishing the growth of every interest." (Italics added.) Source: "Article 1, Section 2, Clause 3: James Madison, Census Bill, House of Representatives," The Founders Constitution website, University of Chicago, at [http://presspubs.uchicago.edu/founders/documents/a1\\_2\\_3s19.html](http://presspubs.uchicago.edu/founders/documents/a1_2_3s19.html).
- 8 Through 1930, each household was required to answer each Decennial Census question. Sampling began in 1940. In 1960, most census questions were placed on the "long form" that went to a sample of households. The last "long form" was used in 2000. In 2005, "long form" questions were shifted to the new American Community Survey.
- 9 It is possible that additional census-derived datasets will be identified in future iterations of this analysis.
- 10 The Census Bureau issued proposed criteria for defining urban areas in the Federal Register on August 24, 2010 and published its final criteria ("Urban Area Criteria for the 2010 Census") on August 24, 2011. See <https://www.federalregister.gov/documents/2011/08/24/2011-21647/urban-area-criteria-for-the-2010-census>.
- 11 U.S. Census Bureau, "2010 Census Urban and Rural Classification and Urban Area Criteria" at <https://www.census.gov/geo/reference/ua/urban-rural-2010.html>. The Census Bureau announced the publication of data based on its classification in a press release on March 26, 2012 in "Growth in Urban Population Outpaces Rest of Nation, Census Bureau Reports" ([https://www.census.gov/newsroom/releases/archives/2010\\_census/cb12-50.html](https://www.census.gov/newsroom/releases/archives/2010_census/cb12-50.html)).
- 12 An adjacent outlying county is part of the CBSA if at least 25 percent of its workers commute to the central county or counties or if at least 25 percent of its jobs are filled by workers from the central county or counties. The ACS is the source of the commuting data.
- 13 Detailed information on the Census Bureau's Population and Housing Unit Estimates, including methodology, is available at <https://www.census.gov/programs-surveys/popest.html>.
- 14 See, for example, Census Bureau, "Chapter 3. Frame Development" in "American Community Survey: Design and Methodology," January 2014. ([http://www2.census.gov/programs-surveys/acs/methodology/design\\_and\\_methodology/acs\\_design\\_methodology\\_ch03\\_2014.pdf](http://www2.census.gov/programs-surveys/acs/methodology/design_and_methodology/acs_design_methodology_ch03_2014.pdf)).
- 15 See, for example, Danielle Neiman, Susan King, David Swanson, Stephen Ash, Jacob Enriquez, and Joshua Rosenbaum, "Review of the 2010 Sample Redesign of the Consumer Expenditure Survey," presented at the Joint Statistical Meetings, October 2015. (<https://www.bls.gov/osmr/pdf/st150200.pdf>).
- 16 See, for example, Census Bureau, "Section 10.6: Editing and Imputation" in "American Community Survey: Design and Methodology," January 2014. ([http://www2.census.gov/programs-surveys/acs/methodology/design\\_and\\_methodology/acs\\_design\\_methodology\\_ch10\\_2014.pdf](http://www2.census.gov/programs-surveys/acs/methodology/design_and_methodology/acs_design_methodology_ch10_2014.pdf)).
- 17 See, for example, Census Bureau, "Chapter 11. Weighting and Estimation," in "American Community Survey: Design and Methodology," January 2014. ([http://www2.census.gov/programs-surveys/acs/methodology/design\\_and\\_methodology/acs\\_design\\_methodology\\_ch11\\_2014.pdf](http://www2.census.gov/programs-surveys/acs/methodology/design_and_methodology/acs_design_methodology_ch11_2014.pdf)).
- 18 See, for example, Census Bureau, "Chapter 14: Estimation of Variance" in "Current Population Survey: Design and Methodology," Technical Paper 66, October 2006. (<https://www.census.gov/prod/2006pubs/tp-66.pdf>).
- 19 The ACS even relies on itself in that Population Estimates, the controls for the ACS, are based in part on ACS international immigration data.