DISTRIBUTION OF CENSUS-GUIDED FEDERAL FUNDS

Establishing the Feasibility of an Essential-Data Decennial Census and 21st Century Census Information Platform

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Abstract

We propose to return the decennial census to its original focus to fully enumerate the population for apportionment through an *Essential-Data Count of the Resident Population*. This would be connected to a *21st Century Census Information Platform* designed to provide continuous measurements over the decade through the augmentation of the 2020 decennial census with multi-source federal and private sector data sources. This would be designed to provide continuous measurements for use in the allocation of federal funds, redistricting, and many other uses. **Here we describe the feasibility of this proposal in the context of federal funding distributions.**

The use of the decennial census data for taxation and allocation of federal funds was sporadic until the 1950s and 1960s when Congress expanded federal aid to state and local governments through grants and other mechanisms. This flow of federal funds provided resources to support housing assistance, employment, training, and assistance programs to poor and low-income households, to create and maintain the interstate highway system, and water and sewer infrastructure. In FY 2017, $1.504 trillion is distributed to state and local governments, nonprofit organizations, and households for 316 federal spending programs (Reamer 2019). These allocations are significant, accounting for 7.8% of Gross Domestic Product (Reamer 2019). Thus, obtaining accurate population counts by geographic areas and need is important to state and local areas to ensure they receive their share of federal funding.

Distribution of Census-Guided Federal Funds - Establishing the Feasibility of an Essential-Data Decennial Census and 21st Century Census Information Platform

1. Introduction

We propose to return the decennial census to its original focus to fully enumerate the population for apportionment through an *Essential-Data Count of the Resident Population*. This would be connected to a *21st Century Census Information Platform* designed to provide continuous measurements over the decade through the augmentation of the 2020 decennial census with multi-source federal and private sector data sources. This would be designed to provide continuous measurements for use in the allocation of federal funds, redistricting, and many other uses. **Here we describe the feasibility of this proposal in the context of federal funding distributions.**

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To undertake this feasibility assessment, we examine how decennial census data and derived-census data products are used to distribute federal funds. This analysis was guided by the Counting for Dollars project, specifically the report on Census-derived Datasets Used to Distribute Federal Funds (Reamer 2018). Derived-census data products rely on the most recent decennial census for their sampling frame or are used to define key concepts, e.g., urban and rural classifications. The enhanced ACS would still carry forward a sampling frame, however, its use will not be a necessary component of the Essential-Data Count of the Resident Population.

Three types of federal expenditures are distributed using census and census-derived data,

(1) financial assistance programs, such as grants, formula grants; cooperative agreements; direct payments, direct loans, and guaranteed/insured loans,
(2) tax credit programs which are a type of tax expenditure, defined as revenue losses allowed through special provisions in Federal tax laws, e.g., the Work Opportunity Tax Credit and the Low-Income Housing Tax Credit (LIHTC), and
(3) procurement contracts to meet government aims such as awarding 3% of Federal prime contract dollars (contractual services, supplies) to small businesses in high unemployment, low-income areas (HUB Zones) (Reamer 2018).

The census and census-derived data are used to determine (Reamer 2018):

- Eligibility criteria to identify which organizations or individuals are qualified to receive federal funds.
- Geographic allocation of funds to eligible participants across metropolitan areas, urban counties and cities, rural areas based on population size, poverty, or areas with slower growth.
- Selection preferences to score project applications to determine extent of need based on specific criteria, such as poverty rates or unemployment rates
- Determination of interest rates for federal loan programs, setting interest rates based on need, e.g., median household income in the area

The census and census-derived data are also used to define urban rural classifications. The Census Bureau's first defines urban uses residential population density and other land-use characteristics. They then define rural areas as those that are not urban. Rural areas are the remaining areas after defining individual urban areas (Ratcliffe et al. 2016).

The Office of Management and Budget's definition of Core Based Statistical Areas or Metropolitan (metro) and Micropolitan (micro) statistical areas relies on the Census Bureau's delineation of urban areas and urban clusters. The OMB classification provides the basis for metro, micro, and nonmetropolitan (approximately rural) areas are nationally delineated for statistical purposes. The laws and executive orders requiring OMB to create these classifications do not specify the data sources to do this[1].

We conclude that essential-data decennial census in 2030 combined with an enhanced ACS is feasible. Virtually all data sources, except the current urban-rural classifications, used to distribute federal funds rely on the American Community Survey (Reamer 2018). OMB is not required to use decennial data to create the urban-rural classifications and could use other data sources, such as the ACS or ACS and additional data, such as what the US Department of Agriculture (USDA) and National Center for Health Statistic (NCHS) do to refine the urban-rural classifications. The few other programs (described in the next section) could use ACS data in lieu of the decennial census.

2. Data Sources Used to Distribute Federal Funding

Here we review examples of mentions from the U.S. Code (USC) and Code of Federal Regulations (CFR) use of decennial census and census-derived data. This is followed by a description of the various datasets used in the funding allocation determinations.

Use of Census-Derived Products from US Code and Code of Federal Regulations

The US Code (USC) codifies the laws passed by Congress and the Code of Federal Regulations (CFR) provides the interpretation and implementation of USC by federal agencies. The USC does not apply until there is a CFR interpretation.

[1.] See 44 U.S.C. 3504(e)(3) and 31 U.S.C. 1104(d) and Executive Order No. 10253 (June 11, 1951).

There are three types of mentions of decennial census in USC and CFR. The first specifically requires use of decennial census data or census-derived data, e.g., 24 CFR § 92.604 (American Dream Downpayment Initiative). The allocations defined under paragraph (c) of this section shall be made only if the local participating jurisdiction "has a total population of 150,000 individuals or more, as determined on the basis of the most recent available U.S. census data (as adjusted by HUD); or …"

The second type mentions decennial census or census-derived data but does not require the use of them, e.g., 7 CFR § 1940.588 (Business and Industry Guaranteed and Direct Loans) specifies that "the data sources for each of the criteria identified in paragraph (a) of this section are:

(A) For the criterion specified in paragraph (a)(2)(i)(A), the most recent decennial census data.
(B) For the criterion specified in paragraph (a)(2)(i)(B), 5-year income data from the American Community Survey (ACS),
Or if needed, other Census Bureau data. …

The third type does not mention decennial census data or census-derived data. For example, 34 CFR § 303.732 (Early Intervention Program for Children and Toddlers), specifies that "Infants and toddlers means children from birth through age two in the general population, based on the most recent satisfactory data as determined by the Secretary; and ..."

Foundational, General, and Program-specific Census and Census-Derived Datasets Used to Distribute Federal Funds (Reamer 2018)

Decennial census and American Community Survey (ACS) data provide the underpinnings for surveys and other statistics derived from survey data, including the sampling frame; the sample design to select the primary sampling units, sampling rates; stratification; imputation for nonresponse; weighting; and estimation of variance. These data products, used for funding allocations, are produced by 15 federal agencies (Reamer 2018).

Foundational data sets. There are 8 datasets that provide the statistical foundation for other measures described below. These measures supply information about geography, population, housing, and households and are listed in Exhibit 1.

Exhibit 1. Foundational Datasets used in Distribution of Federal Funds

Geographic Classifications (2)	Multivariate Datasets (2)	Household Surveys (4)
Urban-Rural Classification (Census)	Population estimates (Census)	American Community Survey (Census)
Core-based Statistical Areas (Office of Management & Budget OMB)	Housing estimates (Census)	Current Population Survey (Census and Bureau of Labor Statistics)
		Consumer Expenditure Survey (Census for BLS)
		American Housing Survey (Census for Housing & Urban Development-HUD)

Source: Reamer (2018)

Every census-derived dataset relies on the American Community Survey. Hence, "the appropriate distribution of federal expenditures very much depends on the integrity of the ACS" (Reamer 2018).

General Extensions. These 11 data sets are used by a range of programs to distribute federal funds. They provide data to describe an area geographically by economic conditions of an area (see Exhibit 2). They are used by multiple programs (Reamer 2018).

Exhibit 2. General Extensions that Rely on the Foundational Datasets used in Distribution of Federal Funds

Geographic Classifications (6)	Standard Economic Indicators (5)
(Economic Research Service-ERS)	Consumer Price Index (Bureau of Labor Statistics -BLS)
Frontier and Remote Areas (ERS)	Personal Income (Bureau of Economic Analysis-BEA)
Rural-Urban Continuum Codes (ERS)	Per Capita Income (BEA)
Urban Influence Codes (ERS)	Local Area Unemployment Statistics (BLS)
NCHS Urban-Rural Classification (National Center for Health Statistics)	Poverty Thresholds (Census)
Small Labor Market Areas (BLS)	

Source: Reamer (2018). Note: These geographic classifications start with the OMB classification of Urban and Rural and then expand using a mix of decennial, American Community Survey, and other data sources to create these classifications. OMB is not required to use decennial data.

Program-specific census-derived data are the remaining datasets used by a variety of programs (see Exhibit 3). They primarily rely on the use of the data mentioned above or a combination of these data. The primary data sources used in these programs are the American Community Survey, Consumer Price Index, Current Population Survey, Core-based Statistical Areas, and small area estimation models. They are used to compute population estimates, income, poverty, and other data to assess geographic and individual/household eligibility for federal funding (Reamer 2018).

Exhibit 3. Program-Specific Census-Derived Data (Reamer 2018)

Program-Specific Geographic Designations	Program-Specific Measures	
Areas of Substantial Unemployment (Economic Training Administration-ETA)	**INCOME AND POVERTY**	**SPENDING AND PRICES**
Labor Surplus Areas (ETA)	Area Median Income (HUD)	Fair Market Rent (HUD)
Persistent Poverty Counties (ERS)	Income Limits (HUD)	Small Area Fair Market Rent (HUD)
HUBZones (Small Business Administration - SBA)	Low- and Moderate-Income Summary Data (HUD)	Renewal Funding Inflation Factors (HUD)
Low-Income Communities (Community Development Financial Institutions-CDFI)	State Median Income (ACF)	Annual Adjustment Factors (HUD)
CDFI Investment Areas (CDFI)	Lower Living Standard Income Level (ETA)	Thrifty Food Plan (Food & Nutrition Services-FNS)
Qualified Distressed Communities (CFDI)	Small Area Income and Poverty Estimates (Census for ED)	Projected National Health Expenditures Per Capita (Center for Medicare and Medicaid Services-CMS)
Qualified Opportunity Zones (CFDI)	Low-income Targeted Populations (CDFI)	Geographic Practice Cost Index (CMS)
Persistent Poverty Counties (CDFI)	Federal Medical Assistance Percentage (ASPE)	
Health Professions Shortage Areas (Health Resources & Services Administration-HRSA)		**MEDICAL UNDERSERVICE**
Medically Underserved Areas (HRSA)	**POPULATION CHANGE**	Index of Medical Underservice (HRSA)
Difficult Development Areas (HUD)	Child Population Growth Factor (CMS)	Medically Underserved Populations (HRSA)
Qualified Census Tracts (HUD)		
HUD Metro FMR Areas (HUD)		

Source: Reamer (2018)

3. Summary

Data sources used to distribute federal funds to state and local governments are primarily derived from the American Community Survey (ACS), except the urban-rural classification that relies on decennial census data (but is not required to do so). We propose that an Essential-Data Decennial Census of the resident population would be a more accurate description of population totals, and the corresponding 21st Century Census Information Platform would provide timelier and more granular data for distribution of federal funding. The variables currently used from census and census-derived data are age, poverty, income, and geography. Race and ethnicity are not used for determining eligibility or program funding allocations. Raising stakeholder awareness about the changes and improvements that the proposed change would bring will be crucial to alleviating concerns.

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Appendix. Data Sources Used for the Distribution of Funds for Selected Programs

316 federal programs use decennial and census-derived data to allocate **$1,504,191,364,000** in FY 2017 (Reamer 2019).

- Top 19 programs account for ~90%
- Top 39 programs account for ~95%
- Top 78 programs account for ~98%
- 180 programs account for ~ 2%

In exhibit A-1 the data sources used for the distribution of funds for many of the top-funded programs are examined. Many of these data sources already rely on the American Community Survey for their derivation.

Exhibit A-1. Data Sources Used for the Distribution of Funds for Many of the Top-funded Programs

Federal Program	Census-derived data	Level of geography	N
Medical Assistance Program	Poverty Guidelines (HHS) for beneficiary eligibility. Per Capita Income (BEA) for the FMAP.	State	Any state with approved medical assistance plan
Medicare Supplementary Medical Insurance	Geographic Practice Cost Indices (HHS), which are based in part on Core-based Statistical Areas (OMB) and data from the American Community Survey (Census)	N/A (payment to individuals)	reimbursement adjusted based on GPCI for 89 payment localities
Highway Planning and Construction	Population Estimates (Census) for population count, Urban/Rural Classification (Census) for urbanized areas, and American Community Survey (Census) for state median income.	State	50 States, the District of Columbia, or Puerto Rico
Federal Pell Grant Program	Maximum Pell Grant award for the 2018-2019 academic year is $6,095. Two income thresholds - $20,000 and $50,000	N/A (payment to individuals)	
National School Lunch Program	Per 42 USC 1758, Poverty Guidelines (HHS) are used to determine household eligibility and benefits. Per 7 CFR 210.4, the Consumer Price Index for Urban Consumers (BLS), food away from home series, is used to annually adjustment the federal per meal reimbursement rate.	N/A (reimbursements to states based on number of school lunches served)	Any state that participates in NSLP
Temporary Assistance for Needy Families	Federal law limits TANF eligibility to needy families with a dependent child. Aside from these rules, states have broad discretion in designing their cash assistance programs.	N/A (state block grant share based on amount received from AFDC program in mid 1990)	
Title 1 Grants to Local Educational Agencies	Model-based Small Area Income and Poverty Estimates (Census), which estimates the number of children, and children in poverty, by age and is designed specifically to allocate Title I grants.	Default: School district/local educational agency. Backup: County	1,196 education service agencies 3007 counties include PR
Special Education Grants to States	Grants to states and subgrants to LEAs are determined in part through the direct use of four Census Bureau datasets: Population Estimates, Current Population Survey, American Community Survey, and the model-based Small Area Income and Poverty Estimates (SAIPE).	State	50 states + DC
Head Start	Poverty Guidelines (HHS) for program eligibility. Consumer Price Index (BLS) for annual inflation adjustment on the base grant. American Community Survey (Census) for the allocation of program expansion funds.	Head Start Agency + Indian Head Start Agency + Migrant/Seasonal Head Start Agency	1600 head start agencies
SNAP	Eligibility-Per 27 CFR 273.09, Poverty Thresholds (Census) and Poverty Guidelines (HHS): Waivers- Per 27 CFR 273.24, Local Area Unemployment Statistics (BLS)	State	50 states + DC + Indian reservations
WIC	Poverty Guidelines (HHS) for household eligibility and Consumer Price Index (BLS) for annual inflation adjustment for monthly fruit and vegetable voucher. American Community Survey (Census) to determine each state's fair share target for foods funding. (Grants for supplemental food equal about 70 percent of WIC grants to states.)	State agency + Indian state agency	50/48 states + DC + Indian reservations