CoEqual

METHODOLOGY FOR ESTIMATING THE IMPACT OF A CENSUS UNDERCOUNT ON SELECTED FEDERAL PROGRAMS

Funding for many federal programs is sensitive to an undercount in the decennial U.S. Census. Co-Equal has developed a methodology to determine how many people in each congressional district are beneficiaries of several of these programs and what the impact of an undercount in the district would be. The data sources used are publicly available as described in detail below.

The estimate for the financial effect of a census undercount in each state comes from analyses by Andrew Reamer and the George Washington University Institute of Public Policy.

Federal Medical Assistance Percentage (FMAP)

The Department of Health and Human Services administers a number of critical health and human services programs that are funded with a federal match that is a percentage of state spending. These include Medicaid, the State Children's Health Insurance Program, and Title IV-E Foster Care Assistance, among others. In total, these programs disburse over $270 billion annually.[1] The federal match is called the Federal Medical Assistance Percentage (FMAP).

The FMAP provides federal matching amounts between 50% and 83% of state expenditures. The specific matching percentage is based on the state per capita income relative to national per capita income. The formula ensures that lower income states will get a greater degree of federal matching funds than higher income states. The FMAP is calculated as:

$$\text{FMAP} = 1 - ((\text{State per capita income})^2 / (\text{US per capita income})^2 \times 0.45)$$

The state per capita income is determined by dividing the state's total income by its total population. If there is a census undercount, the state's per capita income will be higher because the population is lower. The lower FMAP will mean that the state receives a lower percentage of federal cost share for these programs.

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[1] Reamer, Andrew, *The Role of the Decennial Census in the Geographic Distribution of Federal Funds* (Mar. 19, 2018) (https://gwipp.gwu.edu/sites/g/files/zaxdzs2181/f/downloads/GWIPP%20Reamer%20Fiscal%20Impacts%20of%20Census%20Undercount%20on%20FMAP-based%20Programs%2003-19-18.pdf).

Thirteen states are already at the statutory minimum FMAP of 50% because they have a high per capita income relative to the national per capita income. Because they are already at the minimum FMAP, those states are not sensitive to an undercount for FMAP programs.[2] For the remaining 37 states, any census undercount would result in a reduction in assistance of between $600 and $1,700 for each person undercounted in the state. The estimate for the effect of a census undercount on the FMAP score in each state comes from analysis by the George Washington University Institute of Public Policy.[3]

District-Specific Estimates of Programs Using the FMAP

Medicaid provides health coverage to low-income families and those with disabilities through a state-run insurance program with federal financial contribution determined by the FMAP. The Kaiser Family Foundation provides data on the amount of federal Medicaid spending per state.[4] Data for estimating the number of Medicaid beneficiaries in a congressional district can be derived from the 2018 American Community Survey (ACS).[5] Medicaid spending per congressional district can be estimated by multiplying the state Medicaid spending by the proportion of the state's Medicaid beneficiaries who are located in the district.

The Children's Health Insurance Program provides health coverage to low-income children through state insurance programs that comply with federal guidelines. These state insurance programs receive federal funding contributions determined by an enhanced FMAP.[6] Data on the number of CHIP enrollees in each state is provided by the Centers for Medicare and Medicaid

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[2] The states receiving 50% cost-share through FMAP are Alaska, California, Connecticut, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, North Dakota, Rhode Island, Virginia, Wyoming.

[3] Reamer, Andrew, *Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds*, (Mar. 19, 2018) (https://gwipp.gwu.edu/sites/g/files/zaxdzs2181/f/downloads/GWIPP%20Reamer%20Fiscal%20Impacts%20of%20Census%20Undercount%20on%20FMAP-based%20Programs%2003-19-18.pdf).

[4] Kaiser Family Foundation, *Federal and State Share of Medicaid Spending* (2018) (https://www.kff.org/medicaid/state-indicator/federalstate-share-of-spending). This table provides the state's total expenditure.

[5] United States Census Bureau, American Community Survey (https://www.census.gov/programs-surveys/acs/about.html). The ACS data has geography at the Public Use Micro Area (PUMA) level. Where local data is needed, a crosswalk can be used to match each PUMA to the county or counties in which it is located. The crosswalk is provided by the Missouri Census Data Center. Missouri Census Data Center, MABLE/Geocorr18 Version 1.0: Geographic Correspondence Engine (http://mcdc.missouri.edu/applications/geocorr2018.html).

[6] The State Children's Health Insurance Program uses the enhanced FMAP (E-FMAP) to calculate the federal reimbursement for states. The E-FMAP is calculated as: E-FMAP = FMAP + (30/FMAP). The E-FMAP is similarly sensitive to census undercounting.

Services.[7] The number of CHIP enrollees in each congressional district can be estimated by multiplying the state enrollees by the proportion of low-income children in each congressional district. This proportion can be derived from the data in the ACS. The Kaiser Family Foundation provides data on the amount of federal CHIP spending per state.[8] CHIP spending per district can be estimated by multiplying the state CHIP spending by the proportion of the state's CHIP enrollees who are located in the district.

The Title IV-E Federal Foster Care Program provides assistance to state agencies to help place and maintain foster children in safe, home environments.[9] The number of children for whom foster care programs in the district receive funding is based on estimates from the 2018 American Community Survey.[10] HHS provides the amount of 2017 federal funding for the state for the Title IV-E Federal Foster Care Program.[11]

Title I Education Grants

Title I-A of the Elementary and Secondary Education Act provides support for school systems across the country, including funding for systems with a high number of students living in poverty.[12] These funds are distributed based on the census count of youth living in low-income households in a geographic area.

The estimate for the effect of a census undercount amount of Title I funding in each state comes from analysis by the Project on Government Oversight (POGO).[13]

The number of youth (ages 5-17) living in poverty in each congressional district is available through the ACS.[14] Data on the amount of federal funding for Title I by state is provided by

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[7] Centers for Medicare and Medicaid Services, *State Medicaid and CHIP Applications, Eligibility Determinations and Enrollment Data*, (Dec. 2017) (https://data.medicaid.gov/Enrollment/2017-12-Updated-applications-eligibility-determina/7424-hneq).
[8] Kaiser Family Foundation, *Total CHIP Spending* (2017) (https://www.kff.org/medicaid/state-indicator/total-chip-spending/). This table provides the state's total expenditure.
[9] Administration for Children & Families, Department of Health and Human Services, *Title IV-E Foster Care* (May 17, 2012) (https://www.acf.hhs.gov/cb/resource/title-ive-foster-care).
[10] This is estimated by taking the number of reported children in foster care for the district.
[11] Administration for Families and Children, Department of Health and Human Services, *FY2019 Congressional Budget Justification*, "State Table – Title IV-E Foster Care" (Feb. 2018) (https://www.acf.hhs.gov/sites/default/files/olab/acf_master_cj_acf_final_3_19_0.pdf).
[12] Department of Education, Improving Basic Programs Operated by Local Educational Agencies (Title 1, Part A) (https://www2.ed.gov/programs/titleiparta/index.html).
[13] Project on Government Oversight, *Census Project* (July 18, 2019) (https://www.pogo.org/census-project/).
[14] United States Census Bureau, American Community Survey (https://www.census.gov/programs-surveys/acs/about.html). The ACS data has geography at the Public

POGO.[15] Title I spending per congressional district can be estimated by multiplying the state Title I spending by the proportion of the state's low-income youth who are located in the district. The average cost to a school district of a year's worth of textbooks for one student is $250.[16]

Department of Labor Worker Education Funding

The Workforce Innovation and Opportunity Act (WIOA) provides for assistance to job-seekers, including job training, mentoring and apprenticeship programs, career counseling, job search assistance, and relocation assistance.[17] In addition, WIOA administers a program targeted at youths between the ages of 16 and 21 who need additional training or resources to effectively enter the labor market for the first time.[18]

The WIOA grant programs provide formula grant funding to states based on census data on the number of residents (youths and adults for each respective program) of a geographical area living under the federal poverty level.[19] The estimate for the effect of a census undercount amount of WIOA funding in each state comes from analysis by POGO.[20]

The number of young adults (age 16-21) living in poverty (relevant for Youth WIOA), and the number of adults (age 22-72) living in poverty (relevant for Adult WIOA) in each congressional district is available through the ACS. [21]

Use Micro Area (PUMA) level. Where local data is needed, a crosswalk can be used to match each PUMA to the county or counties in which it is located. The crosswalk is provided by the Missouri Census Data Center. Missouri Census Data Center, MABLE/Geocorr18 Version 1.0: Geographic Correspondence Engine (http://mcdc.missouri.edu/applications/geocorr2018.html).

[15] Project on Government Oversight, *Census Project* (July 18, 2019) (https://www.pogo.org/census-project/).

[16] Applied Educational Systems, "*Infographic: Textbook Costs Skyrocket 812% in 35 years"*, (Sep. 7, 2017) (https://www.aeseducation.com/blog/infographic-the-skyrocketing-cost-of-textbooks-for-schools-students).

[17] Employment and Training Administration, Department of Labor, "Workforce Innovation & Improvement Act: WIOA Overview" (https://www.doleta.gov/wioa/).

[18] Employment and Training Administration, Department of Labor, *Workforce Innovation and Opportunity Act: WIOA Youth Program*, (July 2019) (https://youth.workforcegps.org/resources/2017/08/29/08/48/FactSheet).

[19] Employment and Training Administration, Department of Labor, "Updated Data for Persons Defined as Disadvantaged Youth and Adults" (Apr. 2019) (https://www.doleta.gov/budget/disadvantagedYouthAdults.cfm).

[20] Project on Government Oversight, *Census Project* (July 18, 2019) (https://www.pogo.org/census-project/).

[21] United States Census Bureau, American Community Survey (https://www.census.gov/programs-surveys/acs/about.html). The ACS data has geography at the Public Use Micro Area (PUMA) level. Where local data is needed, a crosswalk can be used to match each PUMA to the county or counties in which it is located. The crosswalk is provided by the Missouri Census Data Center. Missouri Census Data Center, MABLE/Geocorr18 Version 1.0: Geographic Correspondence Engine (http://mcdc.missouri.edu/applications/geocorr2018.html).

City and county totals of WIOA funding for 2017 is from POGO.[22] WIOA spending per congressional district is estimated by allocating the county and city funding totals to each congressional district to which they belong.[23] In order to avoid double counting, city populations are removed from county populations that include the city population.

[22] Project on Government Oversight, *Census Project* (July 18, 2019) (https://www.pogo.org/census-project/).

[23] The ACS data has geography at the Public Use Micro Area (PUMA) level. Where local data is needed, a crosswalk can be used to match each PUMA to the county or counties in which it is located. The crosswalk is provided by the Missouri Census Data Center. Missouri Census Data Center, MABLE/Geocorr18 Version 1.0: Geographic Correspondence Engine (http://mcdc.missouri.edu/applications/geocorr2018.html). For Youth WIOA, the dollar amount was divided by the number of 16-21-year-old persons in households with income below the federal poverty line, based on the 2018 ACS. For Adult WIOA, the dollar amount was divided by the number of 22-72-year-old persons in households with income below the federal poverty line, based on the 2018 ACS.