Methodology for Estimating the Distributional Effects of Public Law 119-21 and Tariffs in Congressional Districts

This document describes Co-Equal's methodology for estimating (1) the number of households in each congressional district that would lose income under the 2025 budget reconciliation law (Public Law 119-21) and the Trump Administration's tariff policies and (2) the average annual income loss that households made worse off by these policies would experience. The methodology draws on analysis and data from the Congressional Budget Office (CBO), the Joint Committee on Taxation (JCT), the Budget Lab at Yale University, and the Census Bureau's American Community Survey (ACS).

Overview

The methodology uses three main data sources:

1. The CBO's distributional analysis of how P.L. 119-21 affects households' income through federal and state transfer programs, primarily Medicaid and the Supplemental Nutrition Assistance Program (SNAP), by income decile against a current law baseline.[1]
2. The JCT's distributional analysis of P.L. 119-21's tax provisions, which estimates changes in households' tax liability by income level and percentile against a current policy baseline.[2]
3. The Yale Budget Lab's distributional analysis of how President Trump's tariff policies, as of September 26, 2025, affect households' income by income decile.[3]

The methodology estimates the combined effects of the policies in CBO, JCT, and the Budget Lab's analyses in congressional districts using data from the Census's 2021-2023 ACS. ACS data is used to determine how many households in each income group live in each district. It then

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[1] Congressional Budget Office, *Distributional Effects of Public Law 119-21* (August 11, 2025) (https://www.cbo.gov/publication/61367) (overview of distributional analyses); Congressional Budget Office, *How the 2025 Reconciliation Act (Public Law 119-21) Will Affect the Distribution of Resources Available to Households* (August 11, 2025) (http://cbo.gov/interactive/2025-reconciliation-act) (supplemental data with additional detail by fiscal year). CBO's analysis of federal and state transfer programs also includes effects associated the Children's Health Insurance Program and Supplemental Security Income. The analysis reports changes in household hold income after federal taxes and transfers.

[2] Joint Committee on Taxation, *Distribution of the Estimated Revenue Effects Relative to the Current Policy Baseline of the Tax Provisions in Public Law 119-21* (July 29, 2025) (https://www.jct.gov/publications/2025/jcx-36-25/). This analysis includes most, but not all, of the tax provisions of P.L. 119-21.

[3] Yale Budget Lab, *State of U.S. Tariffs: September 26, 2025* (September 26, 2025) (https://budgetlab.yale.edu/research/state-us-tariffs-september-26-2025).

applies the CBO, JCT, and the Budget Lab's estimated distributional income effects to households in each income group.

Estimating the Distributional Impacts of P.L. 119-21

The methodology estimates the distributional impacts of P.L. 119-21 by combining the distributional impacts of two sets of the law's policies:

- The law's new tax changes, excluding the extension of the 2017 Tax Cuts and Jobs Act's (TCJA) provisions that were set to expire at the end of 2025;
- The law's benefit reductions and eligibility restrictions on SNAP and Medicaid.

The distributional estimates of P.L. 119-21's tax changes are based on the JCT's analysis of the law's effects on household tax liability, relative to JCT's current policy baseline that assumes the expiring TCJA provisions continue.[4] JCT's analysis provides separate estimates by annual income and income percentile. This methodology uses JCT's percentile distribution, which shows impact by income quintile and additional subgroups within the top quintile.[5]

The distributional estimates of P.L. 119-21's changes to means-tested transfer programs are based on CBO's distributional analysis, which provides estimates of how the law's changes to SNAP and Medicaid will affect households' financial resources.[6] CBO reports these impacts by income decile.[7]

Data from the U.S. Census Bureau's 2021-2023 ACS are used to determine the number of district households in each income group.[8] Because JCT and CBO use different income groups, this analysis organizes district households into seven categories: four quintiles (0-80th percentile), 80-90th percentile, 90-99th percentile, and top 1 percentile. This methodology assumes JCT's national average tax impacts for each income group apply equally to each

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[4] Joint Committee on Taxation, *Distribution of the Estimated Revenue Effects Relative to the Current Policy Baseline of the Tax Provisions in Public Law 119-21* (July 29, 2025) (https://www.jct.gov/publications/2025/jcx-36-25/).
[5] The additional subgroups within the upper quintile are: 80-90th decile, 90-95th percentile, 95-99th percentile, 99-99.9th percentile and the highest 0.1 percentile. The latter four subcategories were combined into two groups: 91-99th percentile and the top 1%. Additionally, JCT's analysis provides estimates for four calendar years: 2027, 2029, 2031, 2033.
[6] Congressional Budget Office, *Distributional Effects of Public Law 119-21* (August 11, 2025) (https://www.cbo.gov/publication/61367) (overview of distributional analyses); Congressional Budget Office, *How the 2025 Reconciliation Act (Public Law 119-21) Will Affect the Distribution of Resources Available to Households* (updated August 11, 2025). (https://www.cbo.gov/interactive/2025-reconciliation-act) (supplemental data with additional detail by fiscal year).
[7] CBO's analysis covers fiscal years 2026 through 2034.
[8] U. S. Census Bureau, *American Community Survey, 2021-2023 American Community Survey Estimates.*

district's income groups.[9] To estimate the impact of the law's changes to transfer programs, the methodology assumes CBO's national average effects for each income group apply equally to each district's income groups. Because CBO does not provide separate estimates for the top 1%, the methodology assumes that CBO's top decile estimate applies to the top 1% in each district.

CBO's analysis of P.L. 119-21 also included $499 billion in savings from student loan changes and Affordable Care Act (ACA) premium subsidy restrictions.[10] CBO grouped these effects with JCT's current-law estimates of tax changes, but did not separately report their household impacts.[11] Therefore, these effects were excluded from this methodology. In addition, the methodology excludes (1) CBO's "Other spending and revenue" ($308 billion) and "States' fiscal responses" ($11 billion) categories in CBO's distributional analysis;[12] (2) the impact of failing to extend the enhanced premium tax credits for health insurance under the Affordable Care Act, which CBO has estimated would cost $350 billion over 10 years,[13] and (3) other effects of P.L. 119-21, such as additional federal borrowing costs.[14] If the distributional impacts of these policies had been included, the adverse impact on households would likely be larger.

Estimating the Distributional Impacts of the Trump Tariffs

President Trump's tariff policies have fluctuated significantly since taking office. This analysis provides an estimate based on the tariffs that were announced or in effect by September 26, 2025.[15]

This analysis uses the same approach for estimating the distributional impacts of the tariffs in districts as it uses for estimating the distributional impacts of P.L. 119-21. The Yale Budget Lab reports estimate the tariffs' effect on household incomes by income decile. This analysis matches the average impacts for each income group in the Budget Lab's analysis to the seven

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[9] The exact percentiles used are the bottom four quintiles, 80-90th decile, 91-99th percentile, and the top 1%. All average dollar amounts from the reports are adjusted to reflect relevant percentile bin.
[10] Congressional Budget Office, *Details About CBO's Allocation of Provisions of Public Law 119-21* (https://www.cbo.gov/system/files/2025-08/61452-Supplemental-Info.xlsx) (total of deficit effects of provisions in Title VII, Subtitle B and Title VIII categorized as "Federal Taxes and Cash Transfers").
[11] Congressional Budget Office, *Distributional Effects of Public Law 119-21*, page 3 (August 11, 2025) (https://www.cbo.gov/publication/61367).
[12] Congressional Budget Office, *Distributional Effects of Public Law 119-21*, page 3-4 (August 11, 2025) (https://www.cbo.gov/publication/61367).
[13] Congressional Budget Office, *Letter to Senators Chuck Schumer, Bernie Sanders, Jeff Merkley, and Ron Wyden* (September 18, 2025) (https://www.cbo.gov/system/files/2025-09/61734-Health.pdf).
[14] Congressional Budget Office, *Effects on Deficits and the Debt of Public Law 119-21 and of Making Certain Tax Policies in the Act Permanent* (August 4, 2025) (https://www.cbo.gov/publication/61466).
[15] Yale Budget Lab, *State of U.S. Tariffs: September 26* (September 26, 2025) (https://budgetlab.yale.edu/research/state-us-tariffs-september-26-2025).

income groups used for estimating the impacts of P.L. 119-21 described above. The impacts for the top 1% is assumed to be the same as the impact for the Budget Lab's top decile.

The tariff impacts estimated by the Budget Lab represent short-term effects with no behavioral changes. In the long term, consumption patterns may shift in response to higher prices, potentially altering the distributional impacts.

Estimating the Combined Distributional Impacts and Effects for Households Made Worse Off

The methodology combines the income effects from P.L. 119-21 and tariffs to estimate the average net change in household incomes in each district.

Each underlying distributional analysis divides households differently: JCT uses quintiles with added detail in the top quintile, while CBO and the Budget Lab use deciles. To make these sources comparable, this analysis adjusts each underlying analysis's income impacts to match the seven household categories described above (four quintiles covering the bottom 80%, the 80-90th percentile, 90-99th percentile, and top 1%). This methodology weights the national impacts for each income group by an estimate of the number of district households within each income category using the ACS. For the CBO and Budget Lab's analyses, the methodology assumes that households in the top decile face the same average effect for that decile.

Under this methodology, all households in the bottom 99% lose income. To calculate the average income loss in a district among households made worse off from the policies, this analysis takes a weighted average across the six affected income groups (excluding the top 1%), where the weight for each group is the number of district households reported in the ACS.

Total and Average Change in High-Income Tax Units Nationwide

The estimates of the total and average tax changes for tax units in the top 0.1% use JCT's distributional analysis of P.L. 119-21's tax provisions relative to a current policy baseline.[16] JCT's analysis provides estimates of tax liability changes and the number of tax returns by income group for 2027, 2029, 2031, and 2033. For the 2027-2033 statistics, the methodology imputes values for the intervening years by averaging adjacent years (e.g., 2028 is the average of 2027

[16] Joint Committee on Taxation, *Distribution of the Estimated Revenue Effects Relative to the Current Policy Baseline of the Tax Provisions In Public Law 119-21* (July 29, 2025) (https://www.jct.gov/publications/2025/jcx-36-25/

and 2029).[17] The 2027 to 2033 amounts were summed to calculate the total tax liability and the number of tax returns for each income group over the period.

The methodology calculates average annual tax changes for tax units with incomes in the top 0.1% by dividing the total tax change by the number of tax returns in that group. For multi-year averages, the methodology averaged each year's average change. JCT's analysis reports the estimated annual income for this group, which exceeds $2 million in each year.[18]

The same methods were used to calculate three additional amounts: the total tax benefits for tax units earning over $1 million, this group's share of all tax benefits, and the average tax increase for tax units in the lowest income quintile.

[17] Joint Committee on Taxation, *Distribution of the Estimated Revenue Effects Relative to the Current Policy Baseline of the Tax Provisions In Public Law 119-21* (July 29, 2025) (https://www.jct.gov/publications/2025/jcx-36-25/).
[18] Joint Committee on Taxation, *Distribution of the Estimated Revenue Effects Relative to the Current Policy Baseline of the Tax Provisions In Public Law 119-21* (July 29, 2025) (https://www.jct.gov/publications/2025/jcx-36-25/).