Squeezing the Budget: Methodology

National Women's Law Center (NWLC) Squeezing the Budget products use various years of data from the Bureau of Labor Statistics (BLS) Consumer Expenditure Survey (CE) interview data.[1] The following document explains key methods in NWLC's analysis of this data. For more information on the CE data, refer to the BLS.[2]

Calendar Year Estimates

The BLS CE Public Use Microdata is released in quarters. Five quarters are used to create a calendar year estimate wherein those observations are restricted to only those which occur in the calendar year reference period. For more information refer to "Consumer Expenditure Surveys Public Use Microdata Getting Started Guide," U.S. Bureau of Labor Statistics, (last modified November 4, 2024), https://www.bls.gov/cex/pumd-getting-started-guide.htm.

Households and Restrictions

NWLC products use the term "household" in place of "consumer unit" used by BLS. Consumer units are households of related individuals, single individuals living in housing units with others but who are financially independent, or unrelated persons living together who pool their income to make joint expenditure decisions.[3]

Many of NWLC's analyses do not account for household size or the number of earners in a household unless specifically stated. Note that higher-income households tend to be those with multiple earners and/or a larger family size.

Basic Need Spending and Income

Much data in the products is presented as expenditure-to-income ratios over a calendar year, calculated as the median essential expenditure spent – collectively or by category – divided by the median pre-tax household income. We interpret these ratios as the shares of income spent on essential expenditures. All incomes and expenditures presented are weighted.

Pre-tax income includes salary or wages, self-employment income, social security benefits, railroad benefits, supplemental security income, retirement, survivor, or disability pensions, income from interest and dividends, royalty income, income from estates and trusts, rental income, income from public assistance or welfare, value of food stamps, and other sources such as Veterans' Administration payments, unemployment, child support, or alimony. Income data used for these analyses includes collected and imputed data by BLS. BLS began income imputations in 2004.[4]

For some analyses, household income is split into thirds—lower-income, middle-income, and higher-income households. In 2024, among working-age populations (20-64), lower-income households' income fell largely under $46,700 (with a weighted median of $26,000), middle-income households' income range largely fell between $46,700 and $110,000 (with a weighted median of $76,095), and higher-income household's income range is primarily over $110,000 (with a weighted mean of $176,657). There is slight overlap in the highest income households in the lower-income third and the lowest income households in the middle-income third groups due to the calculation of the weighted cumulative income ranking variable in CE data being done before top and bottom coding of income that is present in public use data. Similarly, there is slight overlap in the highest income households in the middle-income third and the lowest income households in the higher-income third. The income ranges presented above are at the 1st and 99th percentile.

CE data on expenditures is split into two categories: expenditures and outlays. Expenditures are the full cost of the transaction, even if full payment has not been made yet while outlays are only the payment that has been made. Outlays and expenditures are frequently the same for items.[5] Outlays are not available for all CE spending categories, such as health care. A combination of expenditures and outlays have been used in this analysis to capture actual spending as accurately as possible among households.[6]

NWLC's calculations of basic need categories (also referred to as essentials) include spending on housing, grocery food, transportation, health care, and childcare as those categories are defined by the BLS CE survey. Some analyses compare expenses for essential categories over time, without measuring the quantity of goods and services in those categories. Rising household spending on basic needs categories today likely reflects both higher prices and increased consumption. For example, greater spending on transportation may stem not only from rising costs of vehicles, maintenance, and insurance, but also from growing reliance on cars. The CE data does not allow the tracking of quantity or consumption of goods or services at this time.

Categories of basic needs:

- Housing is limited to shelter and utility spending for the purposes of NWLC's analysis. Shelter includes mortgage payments plus interest, property taxes, rent, maintenance, repairs, and insurance among other homeowning and rental expenses. Shelter spending also includes other lodging such as vacation homes and their spending, housing while attending school, and lodging on out-of-town trips. Utility spending includes natural gas, electricity, fuel, telephone services (including cell phones), water, sewer/septic tank, and trash spending. Housing spending does not include household operation and housekeeping supplies such as lawn care, furniture, and major appliances among others.
- Grocery food includes food at home and food prepared for out-of-town trips but not alcohol or household supplies such as toilet paper or cleaning supplies. Grocery food also do not include food outside of the home, such as at restaurants or at school.
    - BLS adjusted the reporting of food at home data in 2023 and 2024 CE data.[7] Starting in quarter 2 of 2023, BLS removed a follow-up question on what portion of grocery expenses was for non-food items. As a result, BLS' summary of food at home was a much lower value than in previous quarters. To maintain consistency, BLS allocated 80% of all grocery purchases as food at home purchases in 2023. The ratio of grocery spending on food in 2022 was used as a guide to allocate 80%. For 2023 data, BLS reports food at home in this way. However, starting in quarter 2 of 2024, BLS only reports the combined grocery summary variable that includes food and non-food items. To maintain comparability with past data, NWLC enacted a similar approach to the grocery data as BLS did in 2023. NWLC allocated 80% of the grocery purchases as food at home in 2024.
- Transportation includes vehicle purchases, vehicle financing or leasing spending, gas and other fuels and oils, vehicle maintenance and repair, vehicle insurance, vehicle rentals, parking spending, vehicle registration spending, driver's license spending, vehicle inspection spending, and public transportation spending including airfare and taxis.
- Health care spending includes health insurance, medical services, prescription drugs, and medical supplies.
- Child care spending includes babysitting, child care, day care centers, nurseries, and preschools.

Income and spending in dollar amounts are compared over time by adjusting for inflation. Annual averages of Consumer Price Index data are used to adjust data to 2024 dollars.[8]

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1 Data is from the Consumer Expenditure Survey's (CE) interview data. Consumer Expenditure Surveys, U.S. Bureau of Labor Statistics, https://www.bls.gov/cex/.

2 Also see the BLS Handbook of Methods on Consumer Expenditures and Income at https://www.bls.gov/opub/hom/cex/home.htm.

3 U.S. Bureau of Labor Statistics, "Consumer Expenditures and Income: Concepts" (Last modified September 12, 2022), https://www.bls.gov/opub/hom/cex/concepts.htm.

4 U.S. Bureau of Labor Statistics, CE Income Imputation Explanatory Note (last modified December 14, 2015), https://www.bls.gov/cex/csximpute.htm.

5 For example, expenditures and outlays are the same for grocery food spending as the full cost of the transaction is the same as what is paid at the time of purchase.

6 Example provided during BLS's 2025 Consumer Expenditure Survey Microdata Users' Symposium: In purchasing a vehicle which costs $25,000 with a $5,000 down payment and a $250 monthly payment, the expenditure will appear as the full $25,000 but unless the vehicle was purchased outright, the consumer did not pay $25,000 in that moment. The outlay is then the cost of a down payment and/or monthly payment – the payments that were made. See U.S. Bureau of Labor Statistics, 2025 Consumer Expenditure Surveys (CE) Microdata Users' Symposium (last modified July 22, 2025), https://www.bls.gov/cex/csxworkshop.htm.

7 U.S. Bureau of Labor Statistics, "Consumer Expenditure Surveys Public Use Microdata: Quarter 2 2023-Quarter 1 2024 Interview Survey Data," (September 25, 2024), https://www.bls.gov/cex/pumd/errata/errata-2023.htm.

8 US Inflation Calculator, "Consumer Price Index Data from 1913 to 2026," (retrieved March 30, 2026), https://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/.