

DATA AND METHODS

This technical brief describes the data and methods used to produce statistics for [Low-Wage California: 2014 Chartbook](#), by the UC Berkeley Center for Labor Research and Education.

Data Source

The chartbook uses three data sources:

- The Center for Economic and Policy Research (CEPR) Uniform Extracts of the Current Population Survey, Outgoing Rotation Groups (CPS ORG), 1979-2014
- The Center for Economic and Policy Research (CEPR) Annual Social and Economic Supplement (March CPS), 1979-2013
- The IPUMS-USA extract of the American Community Survey (ACS) 1-year samples, 2012-2013.

Sample Definition

Due to differences in data availability in the three sources, each dataset has a slightly different sample definition.

The ACS sample comprises 18-64 year-olds, with non-zero earnings in the past year, who were not self-employed or unpaid family workers, and who were at work last week or had a job but were not at work last week. The ACS sample only includes individuals who live and work in the state of California.

Neither CPS dataset identifies the respondent's place of work, so for each CPS dataset our sample is defined as California residents 18-64 years old, with non-zero earnings either last week (CPS ORG) or last year

(March CPS), who were employed last week, but not self-employed.

Defining Low Wage

Differences in data availability also affect the construction of the hourly wage variable in our three datasets. In the CPS ORG, we use an hourly wage variable constructed by CEPR. Specifically, for workers paid on an hourly basis, the variable is equal to their actual reported hourly wage. For workers paid on a weekly basis the variable is constructed by dividing their earnings last week by the numbers of hours worked last week. For both hourly and weekly workers, the wage measure used to determine low wages includes pay from tips, overtime, and commissions, before tax deductions.

The March CPS does not include an hourly or weekly earnings measure, so we constructed the hourly wage measure by dividing the worker's annual earnings by the product of usual hours worked per week and weeks worked last year. The March CPS earnings variable includes all income from the worker's job, including pay from tips, overtime, and commissions, before tax deductions.

The ACS hourly wage variable was also calculated as annual earnings divided by the product of usual hours worked per week and weeks worked last year.¹ In the ACS, the "weeks worked last year" variable is a categorical variable of intervals of weeks worked (such as 14-26 weeks or 50-52 weeks). We converted this variable to a continuous variable by setting the number of weeks worked to the midpoint of each interval.² The ACS annual earnings variable includes wages, salary, commissions, cash bonuses, or tips from all jobs, before tax deductions.

For each dataset, we trimmed hourly wage outliers by dropping wages less than \$0.50 or greater than \$100 in 1989 dollars.³ We then smoothed the hourly wages with a function that randomly adds or subtracts between \$0 and \$0.25 to each hourly wage. Finally, we adjusted wages from previous years to 2014 dollars using the CPI-U for California.

We used the CPS ORG dataset to identify low-wage workers. We set the hourly wage threshold at two-thirds of the median full-time wage, a widely used metric.⁴ In 2014, the value of the threshold was \$13.63, and this value was inflation-adjusted for data from previous years.

For the methodology behind the public cost of low-wage work analysis, see Allegretto, et al. (2013) "[Fast Food, Poverty Wages: The Public Cost of Low-Wage Jobs in the Fast Food Industry.](#)"

Endnotes:

¹ Since the ACS surveys respondents over the course of the year and asks about earnings in the previous 12 months, we apply the ACS-provided *adjust* variable to convert the reported earnings to real dollars.

² We tested the validity of the interval mid-point using the continuous version of weeks worked last year in the Current Population Survey (March supplement). For low-income workers in California, average weeks worked in each of the intervals was not substantially different from the interval midpoint (except for the first interval, which is dropped in our sample).

³ This step follows the methodology of [The State of Working America](#), Economic Policy Institute.

⁴ Boushey H., Fremstad S., Gragg R., and Waller M. (2007). "[Understanding Low-Wage Work in the United States.](#)" The Mobility Agenda and Center for Economic and Policy Research.

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