

## Earnings Disparity Data: Summary of Methodology

### OBJECTIVE

The primary objective of this analysis is to measure earnings disparities by sex, race, and ethnicity at the national and state levels. By “disparity” we mean an unequal distribution of earnings across the various participants in an economy by sex, race, or ethnicity.<sup>1</sup> To ascertain where disparities exist, we used three-year estimates from the Current Population Survey (CPS). This allowed us to increase the statistical reliability of the data for less populated states (e.g., Wyoming) and small population subgroups (e.g., Asians).

### DATA SOURCE

The data source for this project was the CPS three-year dataset for the January 2017 – December 2019 period.<sup>2</sup> The CPS is sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS). It is the primary source of labor force statistics for the population of the United States.

The CPS is a monthly household survey of about 60,000 households used to gather labor-related data. It is the basis of the unemployment number published by BLS. Along with labor force status (employed, unemployed, not in the labor force), the CPS collects information on earnings in the 4th and 8th month of interview. The income measured in the CPS reflects the weekly earnings of wage and salary workers of the week of the 12th of the month. The CPS earnings include overtime, commission, and tips, but exclude self-employed earnings.<sup>3</sup>

### METHODOLOGY

The methodology calculates population estimates from the CPS microdata using survey weights with 36 months of data from January 2017 to December 2019. Monthly weights are divided by 36 to get composite estimates from 2017 to 2019. No adjustments were made for hours worked, educational attainment, or industry that were factored into the pay disparity estimates. Using earnings weights from the CPS, population level estimate of total employed and mean weekly earnings are estimated from the CPS microdata. The pay disparity is calculated by dividing each group by the reference group (male, white, or white male).

The CPS includes multiple racial categories and has Hispanic/Latino(a) as a separate variable. We combined the racial/ethnicity variable and the Hispanic/Latino(a) variable to create the 6 categories in the pay disparity estimates. The race/ethnicity variable includes 6 categories: 1) Non-Hispanic White; 2) Non-Hispanic Black; 3) Non-Hispanic Native American/American Indian; 4) Non-Hispanic Asian-Pacific Islander; 5) Hispanic/Latino; and 6) Non-Hispanic Multiracial.

### NATIONAL AND STATE TABLES

The Earnings Disparity Data contains two tables per state, as well as two national tables. Each table consists of five columns. Below is an explanation of the data in each column.

#### Table: Earnings Disparity Relative to Male Workers

- *Sex:* Male or Female.
- *Average Weekly Earnings:* Weekly earnings that include overtime, commission, and tips, but exclude self-employed earnings. The average is the weighted mean.

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<sup>1</sup> Inequality does not necessarily indicate discrimination, as other, nondiscriminatory factors may contribute to this imbalance.

<sup>2</sup> The 2017 - 2019 dataset was the most current data available when this analysis was conducted in 2020.

<sup>3</sup> U.S. Bureau of Labor Statistics, [Labor Force Statistics from the Current Population Survey Link](#).

- *Number of Workers:* This number includes all full-time and part-time workers.
- *Earnings Disparity:* This is the mean weekly earnings for female workers divided by the mean weekly earnings for male workers.
- *Employed Percent:* These are the percentages of all workers who are female and all workers who are male.

**Table: Earnings Disparity Relative to White Workers**

- *Race or Ethnicity:* The race/ethnicity variable includes 6 categories: 1) White; 2) Black; 3) Native American/American Indian; 4) Asian-Pacific Islander; 5) Hispanic/Latino; and 6) Multiracial.
- *Average Weekly Earnings:* Weekly earnings that include overtime, commission, and tips, but exclude self-employed earnings. The average is the weighted mean.
- *Number of Workers:* This number includes all full-time and part-time workers.
- *Earnings Disparity:* This is the mean weekly earnings for Black, Native American/American Indian, Asian-Pacific Islander, Hispanic/Latino, or Multiracial workers divided by the mean weekly earnings for White workers.
- *Employed Percent:* These are the percentages of all workers who are White, Black, Native American, Asian-Pacific Islander, Hispanic/Latino, and Multiracial.