

## Methodology for Joint Economic Committee District Fact Sheets

### Employment Growth

- **District Job Growth under Biden** – District-level payroll growth numbers are based on the State-level numbers from BLS (see below). State job growth totals are allocated to Congressional Districts according to each district’s proportion of state-wide employment totals as estimated in tables from the 2021 American Community Survey (ACS 1-year estimates).
- **State Job Growth under Biden** – Growth in payroll jobs since January of 2021 is calculated from the monthly BLS State Employment Situation reports, which are based on a large employer survey. Our headline measure of State Job Growth is Total Nonfarm Payroll Employment.

### Manufacturing Jobs

- **District Manufacturing Job Growth under Biden** - Manufacturing payroll growth is allocated from State-level to District-level similarly to overall job growth (see above), but using industry-specific shares of employment from the 2021 ACS 1-year estimates.
- **State Manufacturing Job Growth under Biden** – State-level manufacturing job growth, like State-level overall job growth above, is available monthly from the BLS State Employment Situation report. Our measure is payroll employment at establishments in NAICS 2-digit Industries 31-33.

### Clean Energy Transition Jobs

- **District Clean Energy and Emerging Sector Employment** – The number of people employed in “Green New and Emerging” occupations in a district is estimated by combining data from several sources. O\*NET, the BLS-run clearinghouse for information on occupations, has [identified](#) a set of “Green New and Emerging” occupations, and we adopt their definitions, rolled up to the level of six-digit SOC codes (the most granular definitions available in other data sources). We use research estimates from the Occupational Employment and Wage Statistics program at BLS to estimate a proportion of jobs within each State and Industry (defined by 2-digit NAICS codes) which corresponded to one of the “Green New and Emerging” occupations in 2021.

These State and Industry-specific proportions of “Green New and Emerging” employment are then applied to estimates of total employment by Industry in each Congressional District from the 2021 American Community Survey (ACS).

- **District Increasing Demand Occupation Employment** – Employment in occupations which will see increased demand for their skills during the Green Transition is estimated in the same way as above, based on a similar classification of occupations by O\*NET.

### Business Growth

- **District Business Applications** – County-level annual totals of Business Applications are available from the [Business Formation Statistics](#) program at the Census Bureau. County-level data were summed to Congressional Districts (116<sup>th</sup>-117<sup>th</sup> Congress), where necessary attributing

business starts within a county on the basis of population in the 2020 Census. This was done using a “crosswalk” obtained from the Missouri Census Data Center’s [Geocorr](#) tool.

Current totals are reported for 2021, and pre-pandemic averages are calculated as the simple mean of yearly values from 2015 through 2019.

- **State Business Applications** - District-level data on business applications (described above) are summed to provide State-level equivalents.

#### Health Insurance and Prescription Drugs

- **Number of People Benefitting from Enhanced PTCs** – State level estimates on the number of Americans who will benefit from the extension of the enhanced premium tax credits (PTC) come from this public [ASPE report](#) from March 2022. The report used a health insurance enrollment model to forecast the effects of the ARPA’s enhanced subsidy expiration on the number of Americans who would lose coverage and become uninsured, lose their entire subsidy amount but remain insured or lose some subsidy amount but remain insured. These values are shown in the last three columns of Table 1. We summed together these estimates for each state and used the totals as an estimate of the number of people in each state who would maintain access to affordable health insurance because of the Inflation Reduction Act’s extensions.

We then allocated these state-level totals down to each Congressional District (116<sup>th</sup>) using congressional district-level data from the 2021 American Community Survey’s (ACS) 1-Year estimates on the number of people in each district under 65 who “directly purchase” their health insurance. To create a given district level estimate, we multiplied the relevant state’s number of people who will benefit from the IRA’s PTC provisions by the fraction of that state’s 2021 population under 65 who both directly purchased their insurance and lived in the relevant district.

- **Premium Cost Savings by State** – Data on the annual premium cost savings comes from this public [report](#) from the Center on Medicare and Medicaid Services (CMS) the estimated monthly cost savings in the 33 states that use Healthcare.gov for their ACA marketplace. For the remaining states plus the District of Columbia we report the national average annual cost savings based on national monthly savings amounts [reported](#) by HHS.
- **Number of Seniors on Medicare prescription drug plans** – Both state and district enrollment data comes from the 2021 Congressional District [report](#) from CMS. The state and district estimates combine the total number of people enrolled in a stand-alone PDP plan, in a Medicare Advantage plan with prescription drug coverage or in other Medicare plans that provide prescription drug coverage.

#### Student Loan Relief

- **Median Student Loan Debt and Income** – Data on the median student loan debt held by young borrowers in each congressional district comes from the [Jain Family Institute](#). Young borrowers are defined as 18-35 year-olds who had an active student loan in 2018 or 2019. A loan is considered active if a payment is made, the payment status changes (i.e. from current to delinquent), the loan account is created, or the loan status is deferred or in forbearance. Median

income data refers to the whole population and is from the 2021 American Community Survey. Median income is then inflated from up to 2023 dollars using a forecast of the CPI-U for 2023 from by the Congressional Budget Office found [here](#).

- **Monthly Payments** – Parameters for the income-based repayment plan (IBR) comes from the [Department of Education](#). Details about the changes to income-driven repayment plans under President Biden’s relief plan come from the [White House](#). This report applies these parameters to an example person making the median income and holding the median debt in each congressional district. We assume that this example person has a family size of one and borrowed at least \$12,000 on a date before July 1, 2014. We also assume that all borrowers are eligible for and use income-driven repayment plans.
- **Lifetime Savings Through Lower Payments Under President Biden’s Relief Plan** – Lifetime savings are defined as the difference between the amount paid with and without President Biden’s relief plan between January 2023 and the end of the repayment period. We assume that wages grow by 3.5% each year (nominal) and that inflation over the long term is 2% per year. In addition to the assumptions noted above, we assume this loan was used for four years of undergraduate study, that the borrower did not receive any Pell grants and that the loan was subsidized. Per the [Department of Education](#), the annual interest rate for this loan is 4.99%. To define the end of the repayment period, we assume that the loan was taken out in 2010 and nine years of payments were made between 2014 and 2023. Because we assume an income-based repayment plan, the pause in student loan payments during the COVID-19 pandemic counts towards the total months of payments.

We calculate the monthly payment for each year from 2023 to the end of the payment period both with and without the Biden relief plan. The monthly payment will change each year as they are based on discretionary income, which is reevaluated each year as the borrower’s income increases with wage growth and the poverty guidelines increase with inflation. We then iteratively calculate the balance for each month using the equation  $\text{balance} = \text{previous\_balance} * (1 + \text{monthly\_interest\_rate}) - \text{monthly\_payment}$ . For the calculation without Biden’s relief plan, the balance for January 2023 is set at the median balance for that congressional district from the Jain Family Institute. Under President Biden’s relief plan, the January 2023 balance is the median balance minus \$10,000. Payments cannot exceed the balance in any month and are zero after the maximum repayment period.

Finally, we subtract the payments made under Biden’s relief plan from the payments made under the old plan for each month to get the monthly savings. Lifetime savings are defined as the sum of all monthly savings.

