State and National Economic Value Contribution for Public Four-Year Colleges Methodology

The Economic Value Contribution (EVC), developed by the Postsecondary Value Commission, estimates the net earnings advantage of college graduates, compared to high school graduates, after accounting for annualized cumulative net college costs. Our analysis adapts this measure to calculate annual EVC at both the state and national levels for bachelor's completers from public four-year colleges between the ages of 25-34. The formula is as follows:

Economic Value Contribution for public four-year colleges = (**Bachelor's Workforce Returns** Bachelor's degree median earnings - **High School Graduate Workforce Returns** High school graduate median earnings + **College Costs** Public four-year annualized cumulative net cost) x **College Completion** Estimated Number of Public Four-Year Bachelor's Degree or Higher Graduates Ages 25–34

Median Earnings by State

Both high school and bachelor's median earnings are calculated at the state level, using the American Community Survey (ACS) 2020-2024 5-year sample, accessed through IPUMS. The median earnings are calculated separately for individuals whose highest degree is a high school diploma, and for those who have completed a bachelor's degree. Individuals ages 25-34, who are not currently enrolled in school, and who have positive earnings are included in the earnings calculations. ACS earnings are reported in 2024 dollars, and inflation adjusted to 2025 dollars using the CPI-U.

ACS data cannot differentiate bachelor's degree earnings by institution type, therefore we assume that graduates experience similar earnings regardless of the institution where their bachelor's degree was earned.

Annualized Cumulative Net Price by State

To estimate average annualized cumulative net price at the state level, we calculate an enrollment-weighted average of the cumulative net price for undergraduate degree-seeking students at public predominantly bachelor's-granting institutions in the state. This is done by multiplying each institution's undergraduate, degree-seeking enrollment by its cumulative net price (see below), summing these values across all public four-year

institutions in the state, and dividing by total enrollment to obtain the average cumulative net price for public four-year institutions.

To calculate cumulative net price for each institution, we start with cost of attendance (COA) reported to Integrated Postsecondary Data System (IPEDS) in the 2024 Cost survey. COA includes colleges' published costs for tuition and fees, books and supplies, room and board, and other expenses for first-time, full-time (FTFT) students. Room and board and other expenses are estimated separately for students living on-campus, off-campus with family, or off-campus without family, and we weigh the average cost of attendance for an institution based on the distribution of its students' living arrangements. We also apply the estimated room and board expenses for students living off-campus, not with family to those living off-campus, with family, to acknowledge that many students living with family still purchase food and/or pay rent. The data are limited to colleges that operate on a standard academic calendar and report cost of attendance to IPEDS across a full academic year.

Annual net price is then calculated by subtracting average grant aid awarded to all FTFT degree-seeking students, as reported in the 2023-24 Student Financial Aid IPEDS survey, from the annual COA calculated above.

To calculate the cumulative net price over the course of a degree, we multiply the annual net price by the estimated number of years it takes the average graduate at a particular institution to finish their credential. There are no institution-level data publicly available that track graduates' actual time to degree, so we estimate time-to-credential using data from the 2023 and 2024 IPEDS Graduation Rate (GR) surveys.

In cases where colleges do not have available graduation rate data to estimate time-to-credential, we apply assumptions about expected time-to-credential. For institutions that report no completers within 150% of normal time to completion, we assume it takes six years to complete a bachelor's degree. For institutions that do not report GR data to IPEDS, we assume bachelor's degrees on average, take 5 years.

Because approximately 70 percent of students who finish a bachelor's degree complete with student debt, which incurs additional costs due to interest, we estimate the cost of student loan interest. We assume that cumulative net price is amortized over 10 years, using the 2024-25 federal undergraduate student loan interest rate (6.53%) to calculate the annual amount paid towards their degree. Finally, this amortized amount is inflation-adjusted to 2025 dollars using the CPI-U.

Estimated Number of Bachelor's Degree Graduates from Public Four-Year Colleges

Estimates on the number of bachelor's degree graduates from public four-year colleges are calculated using ACS 2020-2024 5-year sample and include respondents that have a bachelor's or graduate degree. Person-level weights from the ACS files are used to generate approximate population counts of the number of adults with a bachelor's degree or higher through frequency weighting.

This population count is then adjusted by the share of bachelor's degree students in each state who are enrolled in a public predominantly bachelor's degree institution. This share is calculated by summing undergraduate degree-seeking enrollment at public, predominantly bachelor's degree institutions in each state, and dividing by the total number of undergraduate degree seeking students across all predominantly bachelor's degree institutions in the same state.