The Growing Gap, 2020 Edition
Methodology and Data Selection

There are many ways to evaluate institutional affordability. Total price, student living situations, financial aid packages, and contributing wages represent moving parts that can change affordability for any given student. Making macro-level assessments to inform policy and the public requires us to be concrete about our affordability model.

We restrict our analysis of four-year public institutions to only on-campus students for three reasons:

1) Ease of analysis and presentation of an already complicated topic.
2) Students matriculating directly to college from high school are those most often served by NCAN members.
3) Not every student can commute to a four-year campus, and so the cost of living on campus needs to be part of the affordability discussion.

We restrict our analysis of two-year public institutions to only students living off-campus not with family because students living off campus with family can experience significant savings by not paying for room and board, but this is not an option available to all students. Students who live at home are often expected to contribute to the family budget, which is not credited in the analysis of their financial need.

This analysis draws data from a number of sources. The Integrated Postsecondary Education Data System (IPEDS) provides the total price for in-state students; average amount of federal, state, and institutional grants; and average disbursement of federal loans. The Department of Education provides longitudinal data on campus-based programs, including Federal Work-Study (FWS), as well as Pell Grant awards for calculating expected family contribution (EFC) of the average grant recipient. The Department of Labor provides longitudinal data on minimum wage by state. We combine these data together for academic years 2013-14 through 2017-18 for all of the two- and four-year public institutions included in IPEDS, greater than 99% of which participate in Title IV financial aid programs.

Wherever possible, our model aims to err on the side of making institutions appear affordable. Some examples of assumptions that may result in our model overstating affordability:

- It includes gross wages derived from summer work. Gross wages are likely an overestimate of the amount students can contribute to their college education because they will pay taxes and are likely to have other life expenses over the summer.

- It assumes students have the funds to pay their EFC and then put their wages toward the financial aid package gap beyond what the Free Application for Federal Student Aid (FAFSA) expects students or their families to pay.
- It assumes all students receive FWS, even though the program is neither large enough to fund all students from low-income backgrounds nor distributed evenly. For example, in the 2017-18 award year, public two-year institutions received 16% of FWS allocations but enrolled 30% of students. Meanwhile, public four-year institutions enrolled 43% of students but received 38% of FWS allocations.[1] However, Work-Study does serve as a proxy for reasonable part-time work while enrolled full time in school.

These trends this analysis observes, namely an increasing affordability gap and a decreasing percentage of affordable institutions, hold whether we examine affordability according to which data are missing within each academic year and whether or not we trim outliers (either very affordable or very unaffordable institutions according to our model) from the data set. Those data are available upon request.

[1] NCAN calculations based on the federal campus-based programs annual data book. https://www2.ed.gov/finaid/prof/resources/data/cb-data.html

1001 Connecticut Ave NW #300
Washington, DC 20036
(202) 347-4848
ncan.org