

Pell Access and Completion Series

Part I: Community College

JUNE 2022

The first brief in a three-part series on Pell Access and Completion by TICAS fellow Dr. Nick Hillman

INTRODUCTION

In 2020-21, the federal Pell Grant program invested over \$26 billion to some 6 million undergraduate students nationwide.¹ The Pell Grant is targeted to students with the greatest financial need, so most recipients are from lower- and moderate-income backgrounds.² Accordingly, many higher education policymakers find the Pell Grant a useful policy lever for promoting access and success for lower-income students. For example, several states have “equity provisions” in their performance-based funding models that give bonus funds to colleges serving Pell-eligible students.³ Federally, the U.S. Department of Education’s formula for disbursing emergency aid (via the Higher Education Emergency Relief Fund) gave extra money to colleges based on the number of Pell recipients.⁴ There are several more examples where policymakers use Pell eligibility to allocate resources and hold colleges accountable for their outcomes; however, basic information about Pell access and completion is not well documented in policy research.

To address this problem — and to provide baseline statistics useful in policy conversations — this analysis provides new information about Pell enrollments and degree completion rates for community colleges. As the first in a three-part series on the Pell Grant, this brief provides background on the community college sector and data used in the analysis, followed by trends on the percentage of undergraduates receiving Pell Grants over time. Today, approximately one in four students attending community colleges receive a Pell Grant. It also reports trends in degree completion rates, where the typical community college has increased its Pell completion rate by twofold over the past decade. By documenting these trends, this brief aims to help researchers and policymakers gain a common understanding of key metrics for monitoring and ultimately improving college access and completion rates among Pell Grant recipients.

COMMUNITY COLLEGE CONTEXTS

Across the United States, there are more than 1,200 community colleges serving approximately 8 million students.⁵ Each institution has its own unique history, mission, and set of challenges that make for a diverse educational landscape. Contributing to this diversity is the fact that most community colleges are broad-access institutions enrolling nearly all students who apply.⁶ Students come to community colleges from all walks of life, often enrolling part-time and taking classes while working full-time or caring for dependents.⁷ This accessibility is core to their educational mission, where community colleges tend to enroll disproportionate shares of students who have historically been under-represented in higher education.⁸ Additionally, community colleges often have deep connections to their local or regional communities, where they play an important role in workforce and economic development often done via vocational training programs.⁹ They also serve a crucial role in promoting transfer, where students may earn credits at their local community college and have them count towards their bachelor’s degree at a university.¹⁰ While every state has a unique governance model and policy agenda for its community college sector, the federal Pell Grant plays a significant role across all states in helping students pay for college.

DATA AND MEASURES

The following analysis draws from two U.S. Department of Education public data sources: College Scorecard and Pell Grant Volume reports.¹¹ The College Scorecard provides data on: (a) the predominant degree program and control of each institution;¹² (b) 12-month undergraduate unduplicated headcount;¹³ and (c) completion rates for Pell Grant recipients.¹⁴ Completion rates include students who completed a certificate or associate’s degree at either their original institution or a different institution within three years of first entry (i.e., 150 percent time).¹⁵ In conjunction with other existing data sources, College Scorecard data enhances “estimates of institutional progression and completion related outcomes.”¹⁶ The Pell Grant Volume reports provide data on: (d) total number of Pell Grant recipients during an award year and (e) total Pell Grant dollars disbursed during an award

year.¹⁷ In these two data sources, Pell recipients, disbursements, and degree completers are reported at the “main” (or “parent”) campus but 12-month enrollments are reported at each “child” location; to harmonize the two sources, this analysis sums all child enrollment data up to the main campus.¹⁸ Taking this step allows for the full inclusion of all available years of data, beginning with the 1999-00 academic year and going through 2020-21, a period spanning two recessions and the first year of the COVID-19 pandemic.¹⁹ The key indicators of interest are the share of undergraduates receiving Pell Grants and 150 percent completion rate of Pell recipients.²⁰ Notably, students who successfully transfers to a four-year university to earn a bachelor’s degree without earning a certificate or associate’s degree en route are excluded from these three-year completion rates.

TRENDS IN PELL ACCESS

College enrollments surged during the Great Recession and, given the recession’s wide-ranging economic impacts, so did the financial needs of students.²¹ The number of Pell Grant recipients and the total cost of the Pell Grant program doubled during this time, only to steadily decline for the following decade.²² Today, approximately 2 million Pell Grant recipients — approximately 1 in 3 of all recipients — attend community colleges. Figure 1 shows the proportion of community college students receiving Pell Grants (“Pell access” rate) for all available years of data.²³ The solid line represents the median Pell access rate for community colleges, where approximately 20 percent of community college students received the Pell Grant in the early 2000s; this rate nearly doubled, growing to roughly 40 percent, during the height of the Great Recession.

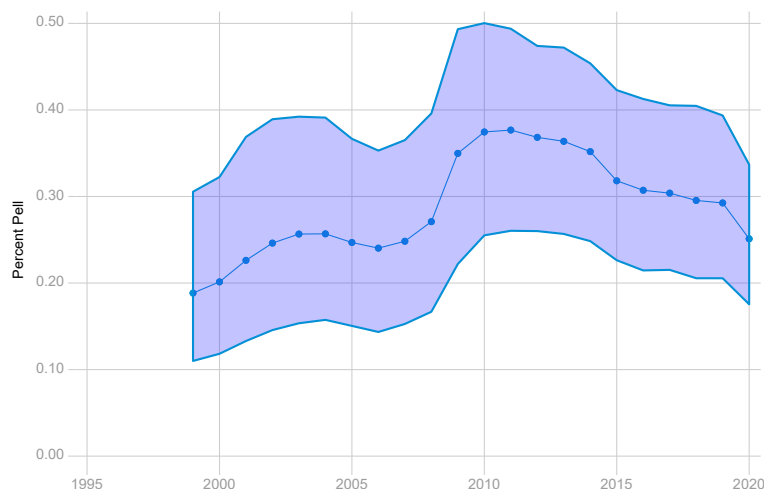
Since then, the proportion of students receiving Pell Grants has steadily fallen. In 2020-21, approximately 25 percent of community college students received a Pell Grant.²⁴ The sharp decline in 2020-21 is largely due to the COVID-19 pandemic rather than policy changes to the Pell Grant program itself. College enrollments have fallen substantially since the pandemic, namely among students from lower-income communities.²⁵

To add context to these trends, the blue band around the solid line in Figure 1 represents the interquartile range. This range represents the middle 50 percent of

the entire distribution of community colleges, where the bottom part of the range represents the 25th percentile and the upper part is the 75th percentile. Plotting the data in this way helps show the distribution around the median, where (in 2020-21) half of all community colleges fall somewhere between approximately 20 percent and 35 percent for Pell access rates. This range is higher today than it was in the early 2000s, but it has steadily fallen for several years indicating community colleges are regressing to their pre-recession levels. These enrollment declines have been occurring across all of higher education but are most pronounced among community colleges where students generally have more demanding work, family, and life responsibilities that have been negatively affected by recessions and the onset of the COVID-19 pandemic.²⁶

FIGURE 1: TRENDS IN PELL ACCESS RATES

The share of undergraduates receiving Pell Grants surged during the Great Recession and has returned to pre-recession levels with a steep decline at the onset of the COVID-19 pandemic



Note: The solid line represents the median community college, the band represents the 25th to 75th percentile of community colleges.

Source: Author’s calculations using U.S. Department of Education’s Office of Federal Student Aid Pell Volume data (or numerator) and U.S. Department of Education’s College Scorecard 12-month unduplicated headcount for denominator.

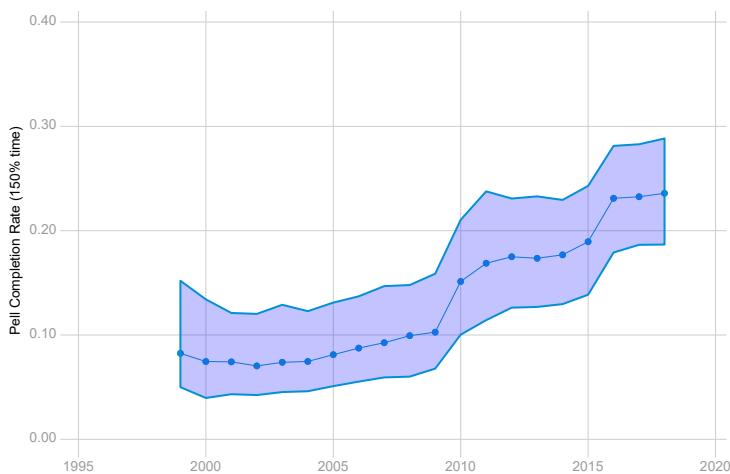
TRENDS IN PELL COMPLETION

Shifting to Pell completion rates, Figure 2 provides the median (solid line) and interquartile range (blue

area), for all years available in the dataset.²⁷ Unlike the fluctuation in the total enrollment of Pell Grant recipients, Pell completion rates have steadily risen over the entire time horizon and in the most recent year, the median 3-yr completion rate for Pell recipients was approximately 25 percent. For the most recent years, the interquartile range hovers between approximately 20 percent to 30 percent, meaning half of all community college completion rates for Pell recipients fall within this range. These are promising trends that are not well documented in the literature, though there is evidence that community college retention rates for all students, not just Pell recipients, has risen over time.²⁸ Community colleges are helping sizable shares of students – many of whom have demanding responsibilities – earn credentials even when their financial resources tend to be far lower than other types of colleges.²⁹ Several factors likely contribute to these improvements and what works for one college may not work for another; nevertheless, there is a growing body of evidence on “what works” for supporting community college completion suggesting this upward trend may continue as effective programs are brought to scale.³⁰

FIGURE 2: TRENDS IN PELL COMPLETION RATES

The completion rate for Pell Grant recipients attending community colleges has more than doubled since the early 2000s



Note: The solid line represents the median community college, the band represents the 25th to 75th percentile of community colleges. Students who successfully transfers to a four-year university to earn a bachelor’s degree without earning a certificate or associate’s degree en route are excluded from these completion rates, so completion rates represent lower bounds.

Source: Author’s calculations using U.S. Department of Education’s College Scorecard Pell completion variables; completion rates include any

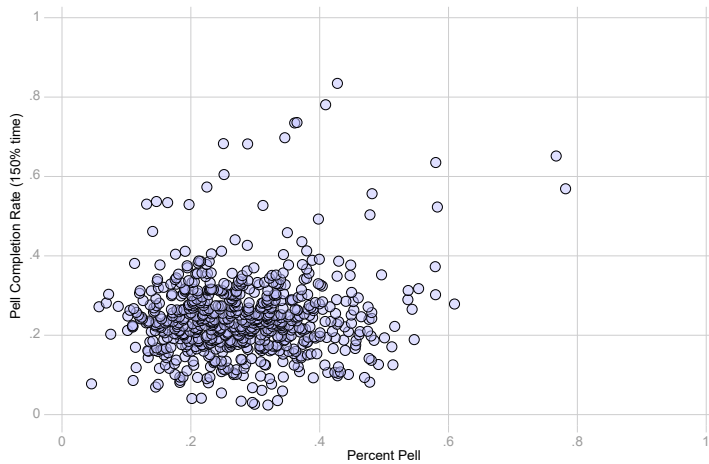
credential from the student’s original or transfer-out location within three years of entry (150% time).

PELL ACCESS AND COMPLETION RATES

Figure 3 offers new insights into the relationship between Pell access rates and Pell completion rates. Instead of focusing on trends over time, this figure uses 2018-19 data (the most recent completion data available) to show how much variation exists on these two key measures. Each circle represents a community college and the horizontal axis shows these colleges have anywhere between 5 percent and 80 percent of their students receiving Pell Grants. The vertical axis shows completion rates, which have similarly large ranges. Unlike other sectors (as will be described later in the series) the relationship between access and three-year completion is not strong among community colleges, which is likely a reflection of the broad access mission discussed above.³¹ Researchers have credited this broad access mission as a key factor in promoting upward mobility and improving students’ earnings potential through affordable community college pathways.³² Additionally, students may enroll in a community college, transfer to a four-year university, and then earn a bachelor’s degree *outside* the three-year window explored in this analysis. Accordingly, three-year completion rates reported here underestimate the longer-term outcomes of transfer students and should be viewed as a conservative estimate of community college completion.

FIGURE 3: RELATIONSHIP BETWEEN PELL ACCESS AND COMPLETION RATE

Due to their broad access mission, community colleges typically enroll large shares of Pell Grant students and have little correlation with completion rates



Note: Students who successfully transfers to a four-year university to earn a bachelor's degree without earning a certificate or associate's degree en route are excluded from these completion rates, so completion rates represent lower bounds.

Source: Author's calculations using completion rates from the U.S. Department of Education's College Scorecard and access rates from both U.S. Department of Education's Office of Federal Student Aid Pell Volume data and U.S. Department of Education's College Scorecard 12-month unduplicated headcount.

KEY TAKE-AWAYS

This analysis documented baseline trends on a simple but surprisingly overlooked topic: college access and completion rates among Pell Grant recipients. The findings reported here are strictly correlational with the goal of establishing baseline information to build more nuanced insights into the causes and consequences of these trends. Within the community college sector, it found:

- » Approximately 1 in 3 Pell Grant recipients attend community colleges
- » Community college Pell access rates surged during the Great Recession and have returned to pre-recession levels
- » Community college Pell access rates are likely to fall even further in response to the COVID-19 pandemic

- » Community college Pell completion rates have steadily risen over time

With these findings in mind, researchers and policymakers can anchor discussions around both the *level* and *growth* of key Pell metrics over time. For example, the figures presented above help show that most community colleges have Pell enrollments of 20 percent or higher. If policymakers wanted to classify community colleges as "Pell Serving Institutions," for example, they may find this information useful for determining eligibility levels and thresholds.³³ Similarly, policymakers interested in promoting community college improvement might use the growth rates shown in this report to inform their performance-based funding or other accountability conversations. And academic researchers could explore why, and through which mechanisms, community colleges improve access or completion rates. This report can also be useful to identify institutions that are performing exceptionally well on these metrics in order to learn and share best practices or other contexts that might contribute to these outcomes.

ENDNOTES

¹ Author's calculations based on U.S. Department of Education's Office of Federal Student Aid's Award Year Summary (2020-21, Q4) Grant Programs report: <https://studentaid.gov/data-center/student/title-iv>.

² The Pell Grant is not a perfect proxy for "low-income" students, see K. Rosinger & K. Ford (2019). Pell Grant Versus Income Data in Postsecondary Research. *Educational Researcher*, 48(5), 309-315 and J. Tebbs & S. Turner (2005). Low-Income Students: A Caution About Using Data on Pell Grant Recipients. *Change Magazine*, 37(4), 34-43.

³ M. Lingo et al. (2021). The Landscape of State Funding Formulas for Public Colleges and Universities. InformEd States Working Paper: https://static1.squarespace.com/static/5d9f9fae6a122515ee074363/t/61bbb8eebd907c6e6accdb51/1639692527480/ISPaper_TheLandscapeofStateFunding-FormulasforPublicColleges.pdf.

⁴ HEERF I <https://www2.ed.gov/about/offices/list/ope/methodologyhbcum-sitccusip.pdf>; HEERF II <https://www2.ed.gov/about/offices/list/ope/314a-1methodologyheerfii.pdf>; HEERF III <https://www2.ed.gov/about/offices/list/ope/arpa1methodology.pdf>.

⁵ Institution count is based on "PREDEG" and "CONTROL" in the 2020-21 College Scorecard and enrollment is based on 12-month undergraduate unduplicated headcount ("UG12MN") from the 2020-21 College Scorecard.

⁶ U.S. Department of Education (2021). Table 305.40: Acceptance rates; number of applications, admissions, and enrollees; and enrollees' SAT and ACT scores for degree-granting postsecondary institutions with first-year undergraduates, by control and level of institution: 2020-21. https://nces.ed.gov/programs/digest/d21/tables/dt21_305.40.asp?current=yes

⁷ See for example E. Velez; A. Bentz; & C. Arbeit. (2018). Working Before, During, and After Beginning at a Public 2-Year Institution: Labor Market Experiences of Community College Students. U.S. Department of Education. Stats In Brief, NCES 2018-428 <https://files.eric.ed.gov/fulltext/ED585106.pdf>

⁸ See for example L. Malcom-Piqueux (2018). Student Diversity in Community Colleges: Examining Trends and Understanding the Equity Challenge. J. Levin & S. Kater, Eds. *Understanding Community Colleges* (2nd Edition). CORE Concepts in Higher Education.

⁹ See for example J. Jacobs & J. Worth (2019). The Evolving Mission of Workforce Development in the Community College. Community College Research Center, Working Paper No. 107 <https://ccrc.tc.columbia.edu/media/k2/attachments/EvolvingMissionWorkforceDevelopment.pdf>.

¹⁰ See for example, J. Fink (2021). Community College Transfer. Community College Research Center, Policy Fact Sheet: <https://ccrc.tc.columbia.edu/media/k2/attachments/community-college-transfer.pdf> and D. Shapiro; A. Dunder; P. Wakhungu; X. Yuan; A. Nathan; & Y. Hwang. Tracking Transfer: Measures of Effectiveness in Helping Community College Students to Complete Bachelor's Degrees. National Student Clearinghouse Research Center: <https://nscresearchcenter.org/tracking-transfer/>.

¹¹ See <https://collegescorecard.ed.gov/data> and <https://studentaid.gov/data-center/student/title-iv> Import code for College Scorecard data uses CJ Libassi's useful and publicly-accessible code, any errors or omissions are mine alone: https://github.com/clibassi/scorecard_intake.

¹² This analysis identifies community colleges as public institutions (CONTROL) that are predominantly certificate-degree or associate-degree granting (PREDEG). For more context, see J. Fink & D. Jenkins (2020). Shifting Sectors: How a Commonly Used Federal Datapoint Undercounts Over a Million Community College Students: <https://ccrc.tc.columbia.edu/easyblog/shifting-sectors-community-colleges-undercounting.html>

¹³ According to the College Scorecard's cohort map, reported 12-month headcount represent prior year's enrollment; therefore, this analysis lags College Scorecard's reported 12-month headcount one year (e.g., 2020-21 reported 12-month headcount measure enrollment from academic year 2019-20).

¹⁴ The IPEDS Outcome Measures survey also includes completion rates for Pell Grant recipients, but this excludes transfer, so College Scorecard data tied to NSLDS records is preferred for examining completion rates.

For more details, see <https://nces.ed.gov/ipeds/use-the-data/measuring-student-success-in-ipeds>

¹⁵ This analysis sums the following variables to generate this rate: pell_comp_orig_yr3_rt; pell_comp_4yr_trans_yr3_rt; and pell_comp_2yr_trans_yr3_rt. Technically, a student could earn a bachelor's degree in this three-year period and count, though this is likely uncommon.

¹⁶ U.S. Department of Education (2017). Using federal data to measure and improve the performance of U.S. institutions of higher education. <https://collegescorecard.ed.gov/assets/UsingFederalDataToMeasureAndImprove-Performance.pdf>.

¹⁷ This analysis uses the "award year summary" for the fourth quarter of each award year, measuring the total number of recipients and dollars disbursed at the end of each respective award year.

¹⁸ This is due to the Office of Federal Student Aid reporting at the six-digit OPEID level while IPEDS enrollments are reported using UNITID.

¹⁹ Completion data are only reported through 2018-19 in the College Scorecard.

²⁰ Pell share is measured as the total number of Pell recipients in an award year divided by the 12-month undergraduate unduplicated headcount (or "d" divided by "b" from above) while Pell completion is measured by the share of students in a given cohort completing any credential (certificate or higher) within three years at any subsequent institution (or "c" from above). For example, the completion rate reported in 2018-19 represents the completion rate for the 2015-16 entry cohort.

²¹ See for example A. Barr & S. Turner (2013). Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher Education. *The Annals of the American Academy of Political and Social Science*, 650(1), 168-193. <https://journals.sagepub.com/doi/10.1177/0002716213500035>.

²² College Board (2022). Trends in Student Aid. <https://research.collegeboard.org/trends/studentaid>.

²³ This analysis uses Pell Grant disbursements to signify the number of recipients. There are many more students who are eligible for the Pell Grant but do not submit a Free Application for Federal Student Aid (FAFSA): <https://ticas.org/wp-content/uploads/2021/05/Hundreds-of-Millions-of-Federal-Pell-Grant-Dollars-Remain-Untapped-by-California-Community-College-Students.pdf>.

²⁴ Recall the denominator is 12-month undergraduate unduplicated headcount (from College Scorecard) and the numerator is the total number of Pell Grant recipients (from Pell Grant Volume reports) for each year. The advantage of using this metric rather than the "pctpell" measure in the College Scorecard is it allows us to examine trends back to 1999-00. See also: <https://nces.ed.gov/ipeds/TrendGenerator/app/answer/8/35?f=1%3D4>

²⁵ See for example J. Causey; A. Harnack-Eber; M. Ryu; & D. Shapiro (2021). A COVID-19 Special Analysis Update for High School Benchmarks. Herndon, VA: National Student Clearinghouse Research Center.

²⁶ See for example National Student Clearinghouse Research Center (2022). Current Term Enrollment Estimates: <https://nscresearchcenter.org/current-term-enrollment-estimates/>.

²⁷ Note the horizontal axis represents the reporting year, so completion rates in 2018-19 are for the cohort of students who entered three years prior (in 2015-16).

²⁸ See for example D. Monaghan & O. Sommers (2022). And Now for Some Good News: Trends in Student Retention at Community Colleges, 2004-2017. *Research in Higher Education*, 63, pp. 425-452.

²⁹ See for example V. Yuen (2021). The \$78 Billion Community College Shortfall. Center for American Progress: <https://www.americanprogress.org/article/78-billion-community-college-funding-shortfall/>.

³⁰ See for example A. Mayer & C. Brown (2021). Scaling Student Support Programs That Are Making a Big Difference. MDRC: Washington, DC. <https://www.mdrc.org/publication/scaling-student-support-programs-are-making-big-difference> and M. Dimino (2021). A \$62 Billion Revolution in College Completion. Third Way: Washington, DC. <https://www.thirdway.org/blog/a-62-billion-revolution-in-college-completion>.

³¹ See for example W. Whistle & T. Hiler (2018). The Pell Divide: How

Four-Year Institutions are Failing the Graduate Low- and Moderate-Income Students. Third Way: Washington, DC. <https://www.thirdway.org/report/the-pell-divide-how-four-year-institutions-are-failing-to-graduate-low-and-moderate-income-students>.

³² See for example R. Chetty; J. Friedman; E. Saez; N. Turner; & Y. Yagan (2020). Income Segregation and Intergenerational Mobility Across Colleges in the United States. Quarterly Journal of Economics, 135(3), 1567-1633. <https://academic.oup.com/qje/article/135/3/1567/5741707> and P. Bahr (2019). The Labor Market Returns to a Community College Education for Noncompleting Students. Journal of Higher Education, 90(2). <https://www.tandfonline.com/doi/abs/10.1080/00221546.2018.1486656>

³³ W. Whistle & T. Hiler (2018). The Pell Divide: How Four-Year Institutions are Failing the Graduate Low- and Moderate-Income Students. Third Way: Washington, DC. <https://www.thirdway.org/report/the-pell-divide-how-four-year-institutions-are-failing-to-graduate-low-and-moderate-income-students>.