

RESEARCH REPORT

Variation in Community College Funding Levels

A Focus on Equity

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Variation in Community College Funding Levels

Funding for community colleges varies significantly, even within the same state. Several factors account for these differences, including more generous funding for smaller institutions to compensate for their higher costs per student, unequal local funding from property tax revenues, and political forces. In theory, this variation could lead to systemic inequities in funding levels by race, ethnicity, and economic status. Such inequities could arise if students from historically underserved groups are concentrated in community colleges that receive the lowest levels of funding from state and local appropriations. Our analysis finds no such consistent patterns across the nation but does find concerning patterns in a few states.

Concerns about underfunding community colleges, frequently based on comparisons of per student funding between public two-year institutions and public four-year institutions, are widespread (Baum and Kurose 2013; Romano and Palmer 2016; Yuen 2020). Recent increases in per student funding, at least partially the result of declining community college enrollment, have narrowed this gap, with funding per full-time equivalent (FTE) student at public two-year colleges reaching \$10,086 in fiscal year 2022 (FY 2022) compared with \$11,294 at public four-year institutions. In 12 states, average funding per student is higher at public two-year institutions than at public four-year institutions (SHEEO 2022).¹ But regardless of average funding levels and comparisons with the four-year sector, inequities across community colleges and within community college systems have the potential to create additional and unnecessary challenges for low-income students, students from historically underserved racial and ethnic groups, and others with weaker precollege educational experiences.

Significant differences in funding levels across states are likely to be the result of differences in state and local postsecondary support at all levels, priorities attached to two-year versus four-year institutions, and methods of allocating resources among eligible institutions. In addition, allocation systems, combined with demographic differences among community college students, can create sizeable differences in funding levels among the institutions within a state.

Our analysis focuses on these funding differences across community colleges within states, investigating the prevalence of differences in state and local funding levels between Black students and all other students, Hispanic students and all other students, and low-income students (proxied by the receipt of Pell grants) and higher-income students.

Existing Evidence on Funding Equity

Some recent research has sought to apply ideas about equitable funding in K–12 education to postsecondary funding. It is widely accepted that the historical association between school district wealth and public school funding, generated using property tax revenues, is inequitable, and this consensus has spurred reforms.² Evidence indicating that students from less privileged backgrounds require more resources to reach the same level of academic success as more privileged students has led to the conviction that equity requires that the schools that disadvantaged students attend receive more funding than others.

Despite clear differences between K–12 and postsecondary education, including the fact that postsecondary education is not legally required and that there is a wider range of desired outcomes for postsecondary institutions than for K–12 schools, researchers have found constructive ways to apply lessons learned in K–12 to the analysis of community college funding (Baker and Levin 2017; Kahlenberg et al. 2018; Ward et al. 2020).

Levin and coauthors (2022) analyzed the spending levels necessary to bring success levels among students at Texas community colleges facing particular barriers up to the statewide average of all students. The researchers found that spending was, in fact, higher for most of the groups needing extra support. Average spending on academically disadvantaged students is an exception, as it was lower than spending on students with stronger academic backgrounds, but community colleges in Texas with higher percentages of students older than 24, first-generation college students, English learners, and students who are economically disadvantaged have higher average spending per student than other institutions. But spending on these students is not high enough to bring their success levels up to the statewide average. This study did not address racial and ethnic differences.

Other studies have pointed to the problem that community college funding is less likely than K-12 funding to incorporate the reality that promoting equity in outcomes requires more generous funding for students with weaker academic backgrounds (Kolbe and Baker 2019).

Comparing Funding Levels

Our study relies on funding per FTE student as a metric. But it is critical to recognize the limitations of these comparisons. One issue is that differences in FTE funding may be associated with differences in the costs of educating students at different institutions. Students with weaker academic backgrounds and other challenges to college success likely require more funding than others to achieve the same

level of success. In addition, there may be large differences in the costs of delivering programs, with those requiring specialized equipment and laboratories being more expensive than purely academic courses (Hemelt et al. 2021; Morphew and Baker 2007). If community colleges offering more occupational training have the same funding per student as those specializing in transfer preparation, they may be more constrained in their capacity for supporting student success.

Another problem relates to the relationship between FTE enrollment and head count enrollment. The standard FTE approach is based on the reality that delivering coursework is the core mission of higher education institutions, and students enrolled for more credit hours require more resources than those enrolled part time. But many of the services on which community college students depend are connected to individuals and may not be less expensive for part-time students than for full-time students. For example, the costs of advising students about financial aid and program planning or providing counseling services may be more a function of the total number of students served than of the number of courses for which they are enrolled.³ The difference between FTE enrollment and head count enrollment is highly variable across institutions and states. The share of community college students enrolled part time ranges from 34 percent in South Dakota to 75 percent in Wisconsin,⁴ complicating comparisons among states in funding per student.

Variation in noncredit enrollment across institutions could also cause inconsistencies within the funding-per-FTE-student measure. Although funding amounts include funding for noncredit courses, FTE student counts do not include noncredit enrollment. Therefore, institutions with large noncredit programs will appear to be better funded than they actually are.

And average costs per student or per FTE student are likely to be higher at smaller institutions than at larger institutions. Many states account for this in their allocation of funds to individual colleges. They may provide a set amount of base funding to cover fixed expenses at all institutions. Or they may use a sliding scale of funding per FTE student to compensate smaller institutions for the lack of economies of scale. The Levin et al. (2022) study of community college costs in Texas attempted to model these cost differences, but there is no precise way to compare the adequacy of funding per FTE student across institutions.

Funding Models

Many states use different models for funding their two-year and four-year postsecondary institutions. In some states, funding goes to the community college system,⁵ which allocates it to individual institutions. In other states, institutional allocations are determined centrally. Funding systems fall into several categories, and many states combine multiple systems.

The simplest strategy is a "base plus" model or "incremental funding," which sets an annual budget and, with some exceptions, increases each institution's funding by the same percentage each year. About half the states use such a model for at least a portion of their community college funding. But this approach accounts for only about 21 percent of total state operating appropriations for public two-year institutions, a smaller share than at four-year institutions (Laderman et al. 2022; Ward et al. 2020).

Many states use a formula based on inputs such as enrollments, sometimes supplemented by program mix, costs, student characteristics, or other factors. The formulas may not yield precise amounts but provide the grounding for determining allocations. Just over half of all funding for two-year public colleges comes through such formulas, which tend to place the greatest weight on enrollments—a larger share than at four-year institutions (Laderman et al. 2022).

An increasing number of states use formulas that incorporate outcomes, generally knowns as "performance-based funding." Recently, some of these formulas have been designed to include incentives for reducing racial inequities.⁶ These formulas usually apply to a small share of the state's funding. Notably, Texas is implementing an entirely new community college funding system based on specific outcome goals, including educating students from economically and academically disadvantaged backgrounds.⁷

Requests from individual institutions and their political influence may also affect how the state allocates funds.

Even when a state changes its funding model, inequities that resulted from the prior funding model can still be present for several years. If the new model uses the prior year's funding levels as its baseline and adjusts those levels according to the new specifications, any unequal funding levels occurring under the old model could persist indefinitely, even if the new funding formula is more equitable.

Unequal Spending Levels

Kolbe and Baker (2019) found that in many states, community colleges in lower-income counties spend less on instruction than their counterparts in higher-income communities. Covering 2003 to 2015, this study suggests that increases in the share of community college revenues coming from the state are associated with declines in inequities in instruction and education and general spending. Cuts to state appropriations that occurred during this time may have exacerbated such differences. Similar to K-12 education, this effect leaves community colleges vulnerable to increasing inequality during recessions or periods when the state faces fiscal stress.

Funding from local governments is likely to be more uneven across institutions within the state than state funding, as it is associated with funding districts' different resource levels and priorities. Twenty-nine states rely to some extent on local funding, and in some states, only a small share of community colleges receive local funding. In 26 of these 29 states, at least 14 percent of funding comes from local sources, but this does not necessarily mean all institutions in these states receive local funding.

Some states have mechanisms for addressing the inequalities arising out of differences in available local resources. Oregon funds a Community College Support Fund to compensate for differences in property tax revenues devoted to community colleges.⁸ A 2013 study of community colleges in California found that institutions with high proportions of students of color receive less local funding than those with lower proportions (Melguizo and Kosiewicz 2013). But California's practice of setting targets for total funding levels and using state funds to fill in the shortfalls left by local funding compensates for these differences. Other states, including Illinois and Wisconsin, also have policies designed to diminish the differences in total per student funding at community colleges (Bombardieri 2020).

Analysis of Community College Funding Levels

Data and Methodology

For this analysis, we use data on institutional characteristics, finance, and enrollment from the Integrated Postsecondary Education Data System (IPEDS). For institutional funding levels, we rely on state and local appropriations,⁹ excluding any federal appropriations institutions receive because these funds are not determined by state or local sources. We also exclude state operating and nonoperating grants and contracts.¹⁰ We focus on funding levels in FY 2019, assessing funding equity before the sudden shocks to enrollment caused by the COVID-19 pandemic, as these funding levels are likely more representative of a typical year.

Our sample consists of only community colleges, defined consistently with the Community College Research Center as public institutions that award predominantly associate degrees.¹¹ This includes

some institutions that are considered four-year institutions in IPEDS because they offer some four-year degrees. After excluding tribal colleges because they are funded at the federal level, four institutions for which state appropriations data are missing, and three institutions located in US territories, we are left with a sample of 911 community colleges.

To calculate funding levels for different groups of students within states, we find the average funding per FTE student and the distribution of Black, Hispanic, and Pell students at each institution. We use weighted averages to estimate average per student funding for each group, similar to methods used to assess funding equity in K–12 school districts (Chingos and Blagg 2017). For example, to find the difference in funding levels between Black students and all other students, we calculate a weighted average funding level for Black students enrolled at community colleges and compare it with the weighted average funding level for all other students enrolled at these institutions.¹²

For enrollment statistics by race, we use 12-month enrollment rather than fall enrollment. We use this measure to account for the full student population that is exposed to these funding levels rather than only the student population as of the beginning of the academic year. But the share of community college students who attend part time differs by race, ethnicity, and Pell status. Although we are most interested in including every student in this calculation, variation in the share of part-time students could provide additional context to these estimates.

IPEDS includes a variable that describes the level of urbanicity for each institution's location, with several degrees of urbanicity. We convert this into a binary variable, which considers a school as rural if it is in a fringe, distant, or remote town or rural area and considers a school as urban if it is in a small, midsize, or large city or suburb.

Enrollment in Community Colleges

In the United States, 44 percent of all public undergraduate students attend community colleges.¹³ But Alaska does not have a community college system, and the shares of undergraduate students enrolled in state community colleges ranges from 24 percent in South Dakota and Montana to 66 percent in Wyoming and 67 percent in California (Ma and Pender 2022).

Enrollment by race, ethnicity, and household income also varies significantly across states, which is important context when assessing funding disparities. For example, because of small sample sizes, it can be more difficult to find possible causes of a funding gap in a state that serves a more homogenous student body than one with substantial variation in the demographic composition of its students. The share of students who are Black ranges from 1 percent in Hawaii, Idaho, Montana, New Hampshire, South Dakota, and Wyoming to 40 percent in Mississippi and Louisiana. In Maine, Mississippi, Montana, and West Virginia, 2 percent of community college students are Hispanic, compared with 46 percent in California and 48 percent in New Mexico. In Maine, Montana, New Hampshire, North Dakota, South Dakota, and West Virginia, less than 10 percent of community college students are either Black or Hispanic; in California, Florida, Georgia, Louisiana, New Mexico, and Texas, 45 percent or more are either Black or Hispanic. The share of students receiving Pell grants ranges from 19 percent in North Dakota and 20 percent in Wyoming to 49 percent in Connecticut and 51 percent in Louisiana.

Community College Funding Patterns

In FY 2019, state and local funding per FTE community college student averaged \$6,858, but the average funding level varies significantly across states.¹⁴ It ranged from \$2,061 in Vermont and \$2,918 in Louisiana to \$16,836 in Wisconsin, where the institutions focus on technical programs.¹⁵ The share of funding coming from local sources also varies considerably.

Nationally, a few factors are correlated with state, local, and total funding at individual community colleges, which can reveal possible reasons for unequal funding levels. For example, larger FTE enrollment is negatively correlated with state funding. Specifically, according to FY 2019 data, an additional 1,000 FTE students is associated with a statistically significant decrease in state and total funding of about \$130 per student (figure 1). This estimate is an aggregate national one, but in some states, this effect is larger, and in others, there is no significant relationship between enrollment and per student funding. Enrollment has no statistically significant relationship with local funding at the national level.

Urbanization is also correlated with state and local funding levels, nationally. Even after controlling for FTE enrollment, rural institutions receive \$1,078 more per student in state funding than urban and suburban institutions. But these rural institutions receive \$933 less per student in local funding than urban institutions, which leads to only a small gap in total funding that lacks statistical significance. These results suggest the differences in state funding may be driven by states that fill in funding gaps left by local sources.

Although we find no consistent patterns between the share of funding that is local and unequal total funding levels by race or ethnicity, we do find that, on average, states that rely more on local sources to fund their institutions have higher overall funding levels. Specifically, a 10 percentage-point

increase in the share of total funding that is from local sources is associated with a statistically significant increase of \$458 in total funding per FTE student at the state level.

FIGURE 1

Relationships between Funding Levels and Enrollment, Urbanicity, and Reliance on Local Funding



Association with funding per FTE student

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Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Notes: FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year. The figure presents the magnitudes of regression coefficients. Enrollment and urbanicity analyses are at the institution level and control for the state in which an institution is located. Urbanicity analysis also controls for FTE enrollment. Analysis of the share of local funding is at the state level.

* = not statistically significant.

Differences in Funding Levels, by Race, Ethnicity, and Pell Status

To examine potential funding inequities for Black, Hispanic, and low-income students, we focus on differences in funding levels per FTE student, recognizing the limitations of this approach. If, for example, one group of students enrolls disproportionately in larger urban institutions, lower per student funding may reflect adjustments for economies of scale rather than funding differentials

representing unequal opportunities. And equal funding may not represent equal opportunities, given the differences in supports required for success among different groups of students.

Comparisons of overall funding per student between Black students and others, Hispanic students and others, and Pell grant recipients and others within the 46 states with multiple community colleges reveal no consistent pattern of lower funding for any of these groups than for other students (appendix tables A.1, A.2, and A.3).¹⁶ Although we do not see these patterns nationally, we do find unequal funding in some individual states.

In only one state is average funding per Pell recipient at least 10 percent lower than average funding per nonrecipient. In Colorado, this funding deficit for Pell recipients is 12 percent. In West Virginia, funding per Pell recipient is 31 percent higher than funding per non-Pell recipient.

Five states have at least a 10 percent deficit in overall funding for Black students: Colorado, Kentucky, Maine, Nebraska, and New Hampshire. In all these states, Black students are less than 10 percent of the total student body at community colleges, meaning that the relatively few Black students are largely concentrated at colleges with less funding than what is typical in their state. Five states (Alabama, Arkansas, Michigan, Missouri, and New York) have at least 10 percent higher funding per Black student. In these states, Black students make up 12 to 26 percent of students.

Six states have at least this 10 percent deficit in overall funding for Hispanic students: Arkansas, Illinois, Kentucky, New Hampshire, Virginia, and West Virginia. Of these states, Hispanic students make up as much as 10 percent of students only in Illinois and Virginia. In Colorado, Maryland, and New York, funding per Hispanic student is at least 10 percent higher than funding per non-Hispanic student.

There is more variation in local funding than in state funding. Among the 29 states with local funding, the differences between local funding per FTE Black student and local funding per all other FTE students ranges from –77 percent to +51 percent.

Including all states, both with and without local funding, does not change the range of state funding gaps. Gaps are 20 percent or larger in 9 percent of states (compared with 31 percent of states for local funding) and are less than 10 percent in 74 percent of states (compared with 41 percent for local funding).

The patterns within states sometimes differ for Black, Hispanic, and low-income students. In West Virginia, where most students are white, funding per student is lower for Black and Hispanic students than for other students but is significantly higher for Pell grant recipients than for others. Overall, in states with significant shares of Black and Hispanic students, funding per FTE student across racial and

ethnic groups is largely equal or even somewhat higher for underrepresented groups. This is not to say funding is necessarily adequate for each group of students or even that funding is equally sufficient for each group. Different groups of students may require different funding levels to maintain the same educational quality and opportunity.

Relationship between State and Local Funding per FTE Student and Number of FTE Students

Levin and coauthors (2022) define "adequate cost" as the amount of spending per student required to achieve a desired level of student outcomes, given student needs or institutional contextual factors that influence necessary spending. Using spending required to achieve the average level of student success in the state as a benchmark, the study finds that community colleges in the state with lower enrollments have higher costs and bigger gaps between actual and necessary spending than larger colleges.

Some states provide more per student funding to smaller institutions, recognizing the economies of scale benefiting larger institutions. Texas uses a fixed base funding amount for core operations for this purpose. Other states, including Arkansas and Colorado, just allocate more funds per student to smaller institutions.

There are declining marginal costs for additional students as institution size increases, resulting in lower average costs for larger institutions, but there is little empirical evidence to support estimates of appropriate adjustments for size.

We looked closely at variation in funding across institutions in seven states: Arkansas, California, Colorado, Missouri, Texas, Virginia, and West Virginia (table 1). In five of these states, state and local funding per student is negatively correlated with FTE enrollments, but in Missouri, the correlation is positive, with larger schools receiving more funding per student. The negative association is far stronger in West Virginia than in other states, and Texas shows no significant correlation.

TABLE 1

Correlation between FTE Enrollment and Funding per FTE Student

State	Correlation coefficient
Missouri	0.48
Texas	0.05
California	-0.30
Colorado	-0.37
Virginia	-0.46
Arkansas	-0.48
West Virginia	-0.95

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Notes: FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Regressions of state and local funding on FTE enrollments, also controlling for the student body's demographic composition, tell a similar story (appendix figure A.1). In Missouri, the coefficient on enrollment is positive but not significant. In the other six states, it is negative, and four of them are significant. The magnitude of the relationship is largest in West Virginia.

Although we do not know the optimal adjustment based on institution size, examining how large some of these funding differences are between smaller and larger institutions can reveal differences in how states compensate for declining marginal costs (table 2). In Arkansas and West Virginia, the smallest 50 percent of institutions receive about 150 percent of the per student funding of the largest 50 percent. In California and Texas, the difference is small, but smaller institutions still receive more funding per FTE student. In Missouri, the smallest 50 percent of institutions receive about the smallest 25 percent of institutions receive only 57 percent of the funding that the largest 25 percent receive. In West Virginia, the smallest 25 percent of community colleges receive more than twice the funding per student allocated to the largest 25 percent.

TABLE 2

	Funding received by the smallest 50 percent of community colleges relative to	Funding received by the smallest 25 percent of community colleges relative to
State	the largest 50 percent	the largest 25 percent
Missouri	98%	57%
Texas	107%	115%
California	114%	129%
Colorado	172%	303%
Virginia	151%	190%
Arkansas	148%	165%
West Virginia	173%	231%

Per Student Funding Levels of Smaller Institutions Relative to Larger Institutions

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Notes: Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Because of the small shares of Black and Hispanic students in West Virginia, the effect of the large adjustment for size on racial equity is unclear, despite the lower per student funding for these small groups of students. But Pell recipients in West Virginia are concentrated in the smaller community colleges and receive significantly more funding per student than nonrecipients.

In Missouri, where funding per student is lower at the smaller institutions, Black students tend to enroll in larger institutions, and funding per Black student is substantially greater than that of all other students.

Variation in Funding Levels within States

We take a closer look at funding models, funding levels, and enrollment compositions for community colleges in Arkansas, California, Colorado, Missouri, Texas, Virginia, and West Virginia. We look at these states because they represent various funding structures, funding outcomes, and enrollment compositions. Therefore, they allow us to identify different ways in which these factors could lead to equal or unequal funding levels by race, ethnicity, and low-income status.

Arkansas

Our sample contains 22 community colleges in Arkansas, 17 of which are in rural areas. These community colleges enroll 31 percent of public college students in the state. Arkansas's overall average appropriations per student at community colleges in FY 2019 was \$6,942, which is similar to the national average.¹⁷ Most community college funding comes from the state, but 14 percent is allocated

from local sources. At four-year institutions, where 99 percent of appropriations are at the state level, Arkansas provides somewhat higher funding (\$8,198 per student).¹⁸

In Arkansas, where 18 percent of community college students are Black and 8 percent are Hispanic, enrollment by race and ethnicity is not uniform across the state. For example, at 9 of the 22 community colleges, less than 10 percent of the students are Black, but at four others, more than 40 percent of students are Black. Hispanic student enrollment shows a similar pattern, with a few institutions enrolling substantially more Hispanic students than most other institutions. The share of Pell recipients at Arkansas's community colleges ranges from 25 percent to 84 percent.

FUNDING MODEL

Arkansas uses a combination of a base plus funding model and performance-based funding. Current funding levels are generally protected, but new appropriations can be allocated based on performance (Lingo et al. 2021). The base plus funding allocation includes a fixed percentage applied to all institutions and accounts for additions of new assets and institution-specific initiatives (Laderman et al. 2022). The portion of funding based on performance is allocated largely based on institutional effectiveness, measured by credentials awarded, progression, transfer success, and gateway course success. The effectiveness measures include weights for underserved students and for high-demand and STEM (science, technology, engineering, and mathematics) credentials. A smaller portion of performance funding is based on affordability, including incentives for shorter time to degree and lower excess credits at completion (ADHE 2020). As of 2019–20, annual funding gains and losses for individual institutions were capped at 1.5 percent.¹⁹

Arkansas's performance-based funding also includes a "diseconomies of scale" adjustment that increases funding for institutions that serve rural areas and have fewer students (ADHE 2020). The state uses this adjustment in allocating funds because it recognizes that institutions with fewer students are subject to a higher average cost per student than larger institutions.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

Funding per Pell student in Arkansas is similar to that of non-Pell students. In FY 2019, local funding averaged \$899 for Pell recipients at community colleges, compared with \$1,163 for non-Pell recipients. But higher state funding for low-income students compensates for this difference.

Eighteen percent of Arkansas's community college students are Black, higher than the 12 percent average across all states. As is the case for Pell recipients, local funding per student is substantially lower for Black students than for others. But state funding per Black student is high enough that combined state and local funding per Black student exceeds that of all other students by 24 percent.

Arkansas has a small Hispanic population at its community colleges—8 percent compared with an average of 14 percent across all states. The funding pattern for these students is the reverse of that for Black students. Average local funding is higher for Hispanic students than for others, but state funding is 22 percent lower, yielding a 13 percent deficit in total per student funding for Hispanic students (figure 2).

FIGURE 2





Funding per FTE student

State Local

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. **Notes:** FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Pell grant recipients and Black students in Arkansas's community colleges are more likely to be enrolled at smaller institutions, whereas Hispanic students are more likely to be enrolled at larger institutions. Among the 11 smallest community colleges, 26 percent of students are Black, and 7 percent of students are Hispanic, on average. At the 11 largest community colleges, these shares are 14 percent and 6 percent, respectively. The smaller colleges received \$9,480 per FTE student in FY 2019,

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48 percent more than the \$6,387 at larger institutions. State funding per student was 45 percent higher at smaller institutions, and local funding was 77 percent higher. So the concentration of Black students at smaller institutions explains at least a portion of their higher per student funding.

There is wide variation in local funding among the 22 Arkansas community colleges. Five institutions do not receive local funding, and among those that do, funding ranges from \$415 to \$3,588 per FTE student. At the largest community college, the local funding of \$2,208 per FTE student is almost half the total. There is a negative correlation between local funding and the share of students receiving Pell grants. Average local funding per student is \$1,483 at colleges where less than 40 percent of students receive Pell grants and is \$656 per student at colleges with larger shares of Pell recipients. But there is no similar pattern for Black and Hispanic students.

It is not clear, however, that these unequal levels of appropriations lead to significant disparities in educational quality. The average and marginal costs of educating students are likely higher at smaller institutions, so unequal spending levels do not necessarily imply a difference in opportunity, but the size of the appropriate differential is not clear. Northwest Arkansas Community College, with almost 5,000 FTE students, enrolls 16 percent of the state's community college students, 19 percent of whom are Hispanic. The college's \$4,576 in state and local funding per student is just one-third of the funding at the highest-funded institution.

IMPLICATIONS FOR FUNDING EQUITY

In a state like Arkansas that relies somewhat on local funding in addition to state funding, a few pieces of the state funding model are important factors for funding equity. Although it is unclear exactly what the appropriate adjustment would be; the diseconomies-of-scale adjustment for smaller schools in rural areas may help supplement funding in areas with smaller tax bases that cannot receive much local funding. Further, the performance-based funding structure could help equalize these local funding gaps through its additional weight for underrepresented students, particularly if those students are concentrated in areas with less local funding.

California

Our sample includes 111 California community colleges, and 94 of these are in urban areas. Community colleges enroll 59 percent of public college students in the state. On average, California community colleges received \$8,193 per student in state and local appropriations in FY 2019, which is 119 percent of the national average but still less than the \$10,794 the state's four-year institutions received.

California's large community college system gets about half its funding from the state and the other half from local governments, but there is wide variation in this ratio across institutions. A few community college districts collect enough local revenues to meet the state's target for their funding levels. These "basic aid" districts may still receive some state categorical funding for specific purposes. State funding per FTE student, in FY 2019, ranged from \$0 at Mission College and \$112 at Gavilan College to \$11,123 at Copper Mountain Community College and \$12,040 at College of the Siskiyous. Four community colleges did not receive local funding, which exceeded \$15,000 per FTE student at two colleges. State funding levels are negatively correlated with local funding levels, reducing the variation in resources among institutions, but the range of combined funding is still large, from \$2,611 to \$18,793 per FTE student in FY 2019.

In 2018–19, the number of FTE students at California community colleges ranged from 1,082 to 20,449. Sixteen of the 111 schools enrolled fewer than 3,000 students, and 9 enrolled more than 15,000. The smallest 25 percent of community colleges received the highest per student funding from both state and local governments, but among the other 75 percent of colleges, funding was not highly correlated with size.

Looking at the outliers in size and funding levels in California provides more perspective on the funding differences. The 10 best-funded institutions, with funding per FTE student of \$12,151 or higher, averaged less than half the size of the least-funded institutions, which received \$5,264 per student or less. The shares of Black, Hispanic, and Pell students were similar at the most and least well-funded community colleges.

Local funding differences were larger than state funding differences, with the highest-funded schools receiving more than five times as much average local funding per student as the lowest-funded schools.

California community colleges enroll few Black students (6 percent of students) but have one of the largest populations of Hispanic students in the nation (46 percent). The share of Hispanic students at individual institutions ranges from 17 percent to 92 percent. The largest and smallest colleges have similar shares of Hispanic students.

FUNDING MODEL

California adopted its new Student Centered Funding Formula for state allocations in 2018–19, the year to which our data apply. Because the system, which replaces an enrollment-based formula, is being phased in gradually, the old formula dominates the allocations we report. The new system includes base

funding that depends on enrollment and sets a minimum of the inflation-adjusted 2017–18 funding level at least through 2024–25. The system also includes a supplemental allocation based on the number of students eligible for state tuition waivers (College Promise Grant) or Pell grants. There is also a student success allocation based on outcomes that include the number of students earning associate degrees and credit certificates, transferring to four-year colleges and universities, completing transferlevel math and English within their first year, completing nine or more career education units, and attaining the regional living wage. There is a student success allocation for each student and an added premium for low-income students who achieve specified outcomes, such as a certificate or degree (SRI 2022). The allocations the formula determines are for the combination of state and local appropriations. In addition, some of the state's funds are allocated for specific purposes and are outside the formula.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

On average, local funding per Pell recipient is 9 percent lower than local funding per nonrecipient. But state funding compensates for the lack of local funding, and, on average, combined funding is similar for low-income students and others. The pattern is similar for Black students, who compose just 6 percent of California's community college students, and for Hispanic students, who make up almost half of community college students. In other words, even with half of the total appropriations coming from local governments, and with this funding skewed away from underrepresented and low-income students, the state's funding pattern generates similar average funding levels for students from all backgrounds (figure 3).

FIGURE 3



State and Local Funding Comparison in California

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. **Notes:** FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Regression analysis of state and local funding levels at California community colleges confirms these relationships, indicating that total appropriations per FTE student are negatively correlated with enrollment, with both state and local governments contributing to this pattern, though local governments contribute more than state governments. Higher shares of Black and Hispanic students and higher shares of Pell recipients are associated with lower levels of per student local funding but are associated with higher levels of state funding. These patterns persist when controlling for enrollment. But only about 10 percent of the variation in funding across institutions is explained by FTE enrollments and demographics, and though there is a high correlation between local funding and total funding at California's community colleges, local funding explains even less of the variation in total funding.

Other sources of variation in total funding levels among California community colleges may be the Student Centered Funding Formula elements, differences in categorical allocations, and the way districts distribute funding across their multiple institutions.

IMPLICATIONS FOR FUNDING EQUITY

California illustrates the importance of the interaction of state and local funding for community colleges. State policy is explicitly designed to compensate for differences in local resources and effectively eliminates significant funding inequality among demographic groups. Despite sharp differences in funding among institutions, the dispersion of Hispanic students across institutions prevents obvious patterns of racial inequity. But it is unlikely that students facing particular challenges to success at California community colleges are receiving the supplemental funding they would need to overcome the obstacles they face.

Colorado

The Colorado Community College System includes 13 institutions that get their funding through the system. Two other public two-year colleges, both Hispanic-serving institutions (HSIs), are not in the system and depend largely on local funding. Of these 15 institutions, 7 are in rural areas. Colorado's community colleges enroll 74 percent of public college students in the state.

Since 2005, Colorado has awarded stipends to individual state residents to pay for college instead of appropriating the funds directly to institutions. Overall funding is relatively low, with state and local funding (including stipends) averaging \$4,923 per FTE community college student, compared with a national average of \$6,858 in FY 2019.²⁰

The two institutions that are outside the system are the only ones with local funding—\$14,296 and \$17,350 per FTE student in 2018–19. These levels are significantly higher than the total funding for the system's colleges, which ranged from \$2,201 to \$8,320 per FTE student. Hispanic students made up 22 percent and 33 percent of students at these HSIs, respectively, with the average for the 13 other institutions being 25 percent. Black students made up only 1 percent and 2 percent of students at these HSIs, compared with an average of 5 percent for the system's colleges. The share of Pell recipients was lower at the two nonsystem institutions (14 percent and 23 percent) than at the other colleges (averaging 30 percent).

The share of Black students at community colleges in Colorado is positively correlated with enrollments, but Hispanic students and Pell recipients disproportionately attend small colleges.

The two locally funded colleges are in the middle in terms of size—ranked 7th and 8th out of 15. Among the 13 state-funded colleges, an average of 4 percent of students at the smaller institutions, with average funding of \$6,956 per student, are Black, as are 7 percent of those at the larger institutions, with average funding of \$2,661 per student. The two groups of institutions enroll similar shares of Hispanic students, on average (26 and 24 percent), but the smaller colleges enroll a slightly higher share of Pell recipients (33 percent compared with 27 percent). The correlation between FTE enrollments and funding per student is -0.37, about average for the seven states on which we focus.

Students at the larger colleges are more likely to enroll part time. There is a positive correlation between the Black and part-time shares, no significant correlation between the Hispanic and part-time shares, and a negative correlation between the Pell and part-time shares.

FUNDING SYSTEM

The state allocates funds to the community college system, which distributes them to the individual colleges. The Colorado Community College System allocates its funds based on enrollments, with funding per FTE student inversely related to institution size. The six smaller institutions, averaging 864 FTE students, received an average of \$6,956 per FTE student in 2018–19, compared with \$2,661 for the seven larger institutions enrolling an average of 6,446 FTE students. Some of the funds are allocated based on performance outcomes.

Only two community colleges in Colorado receive local funding, and that funding is generous.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

Funding per Black student in Colorado community colleges is much lower (-31 percent) than funding for all other students, but funding per Hispanic student is substantially higher (+14 percent). Funding per Pell recipient shows a similar pattern to funding per Black student, though the gap is not as large (-12 percent) (figure 4).

FIGURE 4



State and Local Funding Comparison in Colorado

URBAN INSTITUTE

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Notes: FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Funding levels are negatively correlated with the shares of Black students, but they are positively correlated with the shares of Hispanic students. These correlational directions persist after excluding the two locally funded institutions, but the negative correlation between the share of Black students and total funding is exacerbated by the two locally funded institutions. Given the small share of Black students in the state (5 percent of students), this finding may not be practically meaningful, as much of this gap is driven by the small shares of Black students in the two colleges outside the system. The strong association between enrollment and state funding levels is the most salient relationship in Colorado.

IMPLICATIONS FOR FUNDING EQUITY

Despite the small share of Black students in Colorado, the funding patterns provide some indication of the potential effects of the extent of funding adjustments based on enrollments. Black students in the state tend to attend larger community colleges, which receive lower funding per student. Hispanic

students and Pell recipients are more likely to attend smaller institutions. These patterns—plus the anomaly of two HSIs with unusually high levels of local funding—lead to relatively low funding for Black students and relatively high funding for Hispanic students. Funding systems not designed with race and ethnicity in mind can create unequal funding patterns attributable to enrollment patterns.

Missouri

Our sample has 14 community colleges in Missouri, of which 10 are in rural areas. These community colleges enroll 37 percent of public college students in Missouri. On average, Missouri's community colleges received \$5,618 per student in appropriations in FY 2019, which is about 82 percent of the national average.²¹ Fifty-three percent of this funding came from local sources. Appropriations per FTE student at two-year colleges lagged behind those of four-year institutions by about \$1,700.

In Missouri, 12 percent of community college students are Black, and 6 percent are Hispanic. Enrollment by race and ethnicity varies substantially. The two largest community colleges, enrolling almost 40 percent of the sector's students, enroll the highest shares of Black students in the state. These two institutions also have the highest and the fourth-highest per student funding in the state. Hispanic students are less concentrated in just a few institutions. The share of Pell recipients ranges from 22 percent to 50 percent, with the institutions with the largest Black populations enrolling fewer Pell students than the average community college in the state.

FUNDING MODEL

In Missouri, state appropriations are determined using a base plus approach combined with an enrollment-based model. As a result, institutions have a protected base of funding that does not allow them to lose more than a certain amount per year, while changes to appropriations are determined by changes in enrollment, or at least changes in enrollment relative to other institutions in the state (Lingo et al. 2021). For example, if every institution's enrollment increases, those that increase the least could lose funding.

Missouri's community colleges are independent from one another rather than part of a single system, so funds are allocated directly to institutions.²² Because Missouri has a large share of local funding, much of the community college funding is allocated in different ways across institutions. Although the state funding allocations are based on one funding formula for all institutions, localities can determine separately how to fund their community colleges with local appropriations. This flexibility allows community colleges to respond to local labor market demand but creates a possibility

for different funding patterns in different parts of the state. Voters in these localities have a role in determining how much funding goes to their local community college. For example, in 2021, voters in the St. Louis Community College district opted to raise property taxes to increase funding for the institution.²³

Some states, such as Oregon, make up for local funding differences with state-level funds. But Missouri does not appear to use a system that equalizes funding. In FY 2019, the seven community colleges with the least local funding received an average of \$2,652 per student in state appropriations, similar to the \$2,651 the seven community colleges with the most local funding received. Because state funding does not make up for differences in local funding, areas with more local funding receive, on average, more total funding. The seven community colleges with the least local funding receive an average of \$3,237 per student in total appropriations, compared with \$6,319 for the seven colleges with the most local funding.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

As of FY 2019, funding per Pell student and per Hispanic student in Missouri was similar to that of non-Pell and non-Hispanic students, respectively. But funding per Black student was 38 percent higher than funding for all other students (figure 5). In Missouri, Black students account for 12 percent of total community college enrollment and are more likely than others to be enrolled in larger institutions and in more urban areas. St. Louis Community College and Metropolitan Community College account for much of this concentration in larger, urban areas. Thirty and 15 percent of those colleges' students are Black, respectively. State funding levels vary substantially across institutions, but in contrast to states that adjust funding to compensate smaller colleges for their higher costs, funding levels in Missouri do not appear to differ systematically by school size or urbanicity. We do, however, see large differences in local funding by these factors. Local funding per student in Missouri tends to be much higher for institutions that enroll more students and for institutions in more urban areas.

FIGURE 5



State and Local Funding Comparison in Missouri

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. **Notes:** FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

The 10 smallest community colleges in Missouri, which are all in rural areas, receive more than \$2,000 less per student in local appropriations, on average, than the four largest colleges, which are all in urban areas. These smaller institutions receive only about \$100 more in state appropriations, leading to large differences in overall funding. This pattern contrasts sharply with states that provide additional funding to smaller and more rural institutions to compensate for their higher costs and has implications for funding differences across racial and ethnic groups.

The larger tax base in more urban, population-dense areas could lead to this disparity that is largely based on local funding, but there are exceptions. East Central College is the fourth-smallest community college in the state and is located in a rural area but has the second-highest per student funding level because it receives the second-highest per student local appropriations in the state.

IMPLICATIONS FOR FUNDING EQUITY

Missouri's absence of extra funding for smaller institutions reduces differences in state funding levels across institutions. But because local funding varies across the state, the same is not true for total funding levels. The concentration of Black students—but not Hispanic or Pell students—at larger institutions might otherwise lead to less funding for Black students. But because these larger urban areas have strong local funding, average funding per Black student is higher in Missouri than average funding for other students.

Texas

Our sample contains 56 institutions in Texas, and 33 of them are in urban areas. Texas community colleges enroll 47 percent of public college students in the state. In FY 2019, Texas's community colleges received an average of \$7,311 per FTE student in appropriations, which is slightly more than the national average.²⁴ Texas is one of 11 states where more than half the sector's funding comes from local governments (63 percent). Per student funding is more weakly correlated with enrollment than in many other states. Larger institutions get somewhat more per student funding from local governments than smaller institutions, but they receive less state funding.

For comparison, Texas's public four-year institutions received \$9,990 per FTE student in FY 2019, which is slightly less than the national average of \$10,473.

In Texas, where 43 percent of community college students are Hispanic, and 12 percent are Black, Black and Hispanic students largely attend different community colleges. Black students make up 13 percent of students at institutions where less than a quarter of students are Hispanic, and they make up 5 percent of students at institutions where more than half of students are Hispanic. These two groups of schools receive similar average state appropriations, but the predominantly Hispanic schools receive much higher levels of local funding and therefore higher total funding.

The share of Hispanic students ranges from less than 10 percent at five community colleges to more than 90 percent at three institutions. Less than 5 percent of students are Black at 14 institutions, and 20 percent or more are Black at 7 institutions (shares range from 0 to 29 percent).

With more than 50 community colleges in the state, almost half the students in the sector attend one of the seven largest institutions. There is not a strong correlation between institution size and enrollment demographics.

FUNDING MODEL

Texas recently passed legislation reforming its system for funding community colleges. The new system will fund community colleges primarily based on how many of their students graduate with a degree or certificate or transfer to a four-year university. Community colleges will see a large increase in funding for fiscal year 2024.²⁵ The Texas Higher Education Coordinating Board will determine the exact allocation of funds among institutions. But the new system also includes weights that would provide extra money for students who might be more expensive to educate, including economically disadvantaged students, academically underprepared students, or students older than 25 who have been out of school for several years. There is also a funding adjustment to support smaller institutions. State funding would be used to diminish inequalities in the availability of local funding across districts.

Currently, every college receives a little more than \$1.3 million for core operations from the state in each two-year budget, but most of the funding depends on how many hours of instruction or contact hours students receive. About 10 percent is awarded based on milestones such as the number of students who complete their first year of math, earn 15 credit hours, or graduate with an associate degree.²⁶ This funding is a fixed pot of money divided among institutions depending on their relative success with this metric. The \$1.3 million in state appropriations for general operations provides a larger subsidy per student at smaller institutions.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

Texas community colleges have similar per student funding levels for each demographic group, with the largest gap being just a 3 percent funding deficit for Pell recipients relative to nonrecipients (figure 6).

FIGURE 6



State and Local Funding Comparison in Texas

URBAN INSTITUTE

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. **Notes:** FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

Regression analysis indicates that neither race or ethnicity nor enrollment is a significant predictor of total per student funding at Texas community colleges. But high shares of Pell recipients are associated with lower total funding levels, mainly a result of lower local funding levels at institutions with high shares of Pell recipients.

The Texas funding system does provide base funding for operations that increases per student funding for small colleges, but this subsidy is apparently too small to fully compensate for differences in local funding, which tends to be a bit higher at larger community colleges.

IMPLICATIONS FOR FUNDING EQUITY

Texas's existing community college funding system does not lead to any substantial funding gaps among the groups of students in this analysis. In a large and diverse system, several forces, including significant local funding levels, combine to yield this result. But equal funding is not always the same as equitable funding, and the new funding system will provide additional funding for smaller colleges, rural institutions, and student success, particularly among students facing educational barriers.

Virginia

The Virginia Community College System includes 23 institutions, 14 of which are in rural areas.²⁷ The system enrolls 37 percent of all public college students in the state. Virginia appropriates less funding to community colleges than the typical state. In FY 2019, Virginia community colleges received an average of \$4,128 per student in appropriations, compared with the national average of \$6,858.²⁸ In Virginia, nearly all this funding comes from the state, with less than 1 percent of appropriations coming from local sources. This community college funding level is much lower than Virginia's funding of public four-year institutions, which is \$8,590 per FTE student.

Overall, 18 percent of Virginia's community college students are Black, and 12 percent are Hispanic. These numbers vary significantly by institution. At Northern Virginia Community College, which has the lowest level of state and local funding per FTE student, 21 percent of students are Hispanic. But at 12 community colleges in the system, less than 5 percent of students are Hispanic. The share of Pell grant recipients ranges from 20 percent to 51 percent, and the share of students enrolled part time, which is strongly negatively correlated with the share of Pell recipients, ranges from 48 percent to 80 percent. In other words, enrollment patterns vary considerably among Virginia community colleges.

FUNDING MODEL

Virginia's state funding for public institutions uses a base plus approach, meaning its funding levels are determined by adding a similar percentage to the previous year's funding for each institution. In determining additions to the base, Virginia accounts for enrollment changes, changes in input costs, additions of new assets, and institution-specific initiatives (Laderman et al. 2022). But this funding approach determines funding to the community college system, which then allocates it to individual institutions using its own funding model. The system determines its individual allocations using a combination of enrollment and performance metrics, with no protected base funding for individual institutions (Lingo et al. 2021). The performance metrics are based on measures of retention, progression, and completion and include a completion measure for underserved populations (VCCS 2017). The Virginia Community College System phased in its performance-based funding, starting with

12 percent of state funding dedicated to this formula in the 2016–17 academic year and increasing the share each year up to 20 percent in 2019–20.

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

Black students accounted for 18 percent of Virginia's community college enrollment, and Hispanic students accounted for 12 percent in FY 2019. Funding per Pell student in Virginia is similar to funding per non-Pell student, and funding per Black student is similar to funding per non-Black student (figure 7). But funding per Hispanic student was about 11 percent less than funding per non-Hispanic student (\$3,726 compared with \$4,174 in FY 2019).

FIGURE 7

State and Local Funding Comparison in Virginia



URBAN INSTITUTE

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. **Notes:** FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

The college with the lowest per student funding has the largest share of Hispanic students. This institution, Northern Virginia Community College, is the largest, enrolling about one-third of all students in the sector. Virginia's larger community colleges generally have larger shares of Hispanic students than the smaller institutions, even excluding this outlier. At the smallest 11 institutions,

Hispanic students make up 4 percent of students, on average, compared with 8 percent for the largest 11 institutions, excluding Northern Virginia Community College. Larger institutions receive less funding per student than smaller institutions because of efforts to account for economies of scale. In contrast, the shares of Black students are similar at smaller and larger institutions. Hispanic students are also somewhat more concentrated at urban institutions than are Black students, though that difference is small.

IMPLICATIONS FOR FUNDING EQUITY

In a state where community colleges rely almost entirely on state funding, such as Virginia, groups of students who are primarily enrolled in larger institutions, Hispanic students in this case, can be exposed to less overall funding per student if the state adjusts for economies of scale by appropriating more funding per student to smaller institutions. But these unequal funding levels do not necessarily translate to unequal educational quality or opportunity, as it is unclear how much is the appropriate amount to adjust for economies of scale. Further investigation into this question could shed light on whether these unequal funding levels cause an equity problem, as potential inequities could appear more severe or less severe than they are when looking only at funding per FTE student.

West Virginia

Our sample includes eight community colleges in West Virginia, split evenly between rural and urban areas and enrolling just 17 percent of all public college students in the state. In West Virginia, community colleges received \$5,016 in education appropriations per FTE student in FY 2019 (73 percent of the national average), while four-year institutions received \$7,160 (68 percent of the national average).²⁹ West Virginia's eight community colleges receive only state appropriations, not local funding.

In West Virginia, only 5 percent of community college students are Black, and only 2 percent are Hispanic. Black students make up no more than 7 percent of enrollment at any institution, and Hispanic students make up no more than 5 percent. But there is much variation in representation of low-income students, with the share of Pell recipients ranging from 15 percent to 65 percent. Pell recipients are generally more concentrated at smaller, urban institutions.

FUNDING MODEL

The state approved a new performance-based funding model in 2022, which applies to 30 percent of appropriations.³⁰ The other 70 percent of appropriations to each college are simply given an inflation adjustment. One description of the performance-based piece of the model said,

The model being developed would base public funding to colleges/universities and community and technical colleges on several metrics, including credit hours, the number of degrees or certificates awarded, the number of graduates working in the state, academic research and more.³¹

The prior system did not involve any written metrics for allocation of funds across institutions.³²

FUNDING LEVELS FOR DEMOGRAPHIC GROUPS

Funding per Black student is similar to funding for other students, and funding per Hispanic student is 23 percent lower (\$3,568 versus \$4,642). But given the small Hispanic population at these institutions, it is difficult to attach much significance to this difference. And in contrast, the 34 percent of students receiving Pell grants benefit from \$5,431 per student in state funding, compared with \$4,151 for non-Pell students, a 31 percent premium (figure 8).

FIGURE 8



State and Local Funding Comparison in West Virginia

At the four largest West Virginia community colleges, enrolling 6,404 FTE students in 2018–19, per student funding averaged \$4,311. At the four smallest colleges, enrolling 3,228 students, that figure was \$7,454. Per student state appropriations ranged from \$9,401 at the smallest institution to \$2,501 at the largest. Pell grant recipients are disproportionately enrolled at smaller colleges, where the average share is 48 percent, compared with 34 percent at larger colleges.

Regression analysis controlling for total enrollment confirms that neither racial or ethnic differences nor differences in shares of Pell grant students are associated with significant differences in per student funding at West Virginia community colleges. But enrollment differences predict about 90 percent of the variation in per student enrollment.

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System. Notes: FTE = full-time equivalent. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year. West Virginia's community colleges do not receive any local appropriations.

IMPLICATIONS FOR FUNDING EQUITY

Because of small sample sizes, it is difficult to assess funding differences among racial and ethnic groups and their possible causes in a state as homogeneous as West Virginia. But the dispersion of low-income students provides important information. Low-income students are concentrated at smaller institutions in the state, where funding per student is dramatically higher than at larger institutions. So Pell students benefit from higher average funding levels than non–Pell students. But there is no reliable way to know whether the differences are of the appropriate magnitude to account for the cost differences associated with size, which motivate the funding differences. And the extra funding for low-income students is an artifact of their enrollment patterns, not a policy effort to provide the resources lowincome students are likely to need to compensate for their educational backgrounds.

Conclusion

Our study of state and local funding for community colleges does not reveal systematic national differences in funding among Black, Hispanic, and low-income students relative to others. In many states, there are no measurable differences in average funding across demographic groups. In some states, funding levels favor one group, and in other states, that group receives less funding than others. Funding levels in California are relatively equal across the groups we studied. But in Virginia, Hispanic students receive 11 percent less funding, on average, than all other students, and in Colorado, they receive 14 percent more.

Many funding differences among demographic groups are associated with funding levels that are purposely varied depending on enrollments, with many states attempting to compensate for the limited economies of scale available on smaller campuses. If, for example, Black students are concentrated at larger urban institutions, they are likely to experience lower per student funding than other groups more concentrated at smaller institutions. We see this effect in Virginia, with Hispanic students concentrated at large institutions, leading to less funding per student. Although we see these patterns in a few states, we do not see these same enrollment patterns and their effects on a national scale.

There is wide variation in the extent to which states rely on local funding to supplement state funding for community colleges. Local funding tends to vary more than state funding across institutions within a state. Some states work to use their funds to even out these imbalances, but others are more likely to let them lead to overall funding differences. This funding compensation at the state level is likely why California can keep its funding levels consistent across groups, but a lack of these adjustments can leave community colleges and their students vulnerable to larger funding disparities. Because local funding largely comes from property taxes, these state adjustments to compensate for local disparities are important tools in mitigating unequal funding levels for students with low incomes.

The absence of systematic funding gaps for Black, Hispanic, and low-income students does not mean that community college funding patterns are equitable. As is the case for K-12 students, those facing more significant challenges to completing their programs—because of weak academic preparation, constrained finances, or other life circumstances (e.g., need for on-site child care facilities)—may require supplemental funding to have the same chance of success as their more privileged peers.

As states modify their funding patterns, increasingly to incorporate some performance-based funding, they may find it constructive to gather more evidence about the appropriate magnitude of adjustments for differences in costs attributable to size or rural or urban status and to study the demographic distribution of students among institutions with these different characteristics. Programmatic differences also contribute to differences in the funding required to create equal opportunities for all students.

It is encouraging not to find blatant inequalities in how funds are distributed among community colleges, but developing funding patterns that come as close as possible to allowing for equal opportunities will require more in-depth study.

Appendix

TABLE A.1

Funding Equity for Pell Recipients, by State

Funding Gaps for Pell Recipients Relative to All Other Students

	State funding	Local funding	Total funding	Share of students receiving Pell	Share of funding that is local
AL	4%	-10%	4%	41%	1%
AR	7%	-23%	2%	43%	14%
AZ	-12%	9%	8%	26%	94%
CA	10%	-9%	0%	24%	50%
CO	4%	-33%	-12%	26%	40%
СТ	4%		4%	49%	0%
FL	-2%		-2%	40%	0%
GA	3%	-11%	3%	45%	0%
HI	3%		3%	23%	0%
IA	3%	2%	3%	26%	39%
ID	9%	0%	6%	28%	31%
IL	-2%	0%	-1%	27%	67%
IN	-5%		-5%	32%	0%
KS	-3%	-7%	-5%	25%	63%
KY	0%		0%	39%	0%
LA	0%		0%	51%	0%
MA	1%		1%	41%	0%
MD	8%	-4%	1%	31%	58%
ME	9%		9%	38%	0%
MI	2%	-3%	-1%	33%	59%
MN	0%		0%	32%	0%
MO	-3%	-9%	-6%	36%	53%
MS	2%	3%	2%	47%	25%
MT	3%	-21%	-4%	29%	30%
NC	-1%	-2%	-1%	37%	20%
ND	3%		3%	19%	0%
NE	0%	-2%	-1%	26%	64%
NH	6%		6%	33%	0%
NJ	1%	4%	2%	36%	60%
NM	-1%	-17%	-9%	32%	49%
NV	-3%		-3%	27%	0%
NY	4%	11%	8%	40%	55%
OH	-1%	2%	0%	31%	32%
ОК	2%	-6%	-1%	37%	36%
OR	-1%	1%	0%	32%	56%
PA	-4%	-4%	-4%	38%	33%
SC	4%	-2%	2%	42%	34%
SD	0%		0%	38%	0%
ΤN	1%		1%	37%	0%
ТΧ	1%	-6%	-3%	29%	63%
UT	1%		1%	22%	0%
VA	3%	16%	3%	28%	1%
WA	4%		4%	22%	0%
WI	1%	7%	4%	28%	48%

Funding Gaps for Pell Recipients Relative to All Other Students

Funding Gaps for Black Students Relative to All

	State funding	Local funding	Total funding	Share of students receiving Pell	Share of funding that is local
WV	31%		31%	34%	0%
WY	2%	0%	1%	20%	29%

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Note: Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

TABLE A.2

Funding Equity for Black Students, by State

	Other Students					
				Share of students	Share of funding that	
	State funding	Local funding	Total funding	who are Black	is local	
AL	13%	-20%	13%	26%	1%	
AR	31%	-17%	24%	18%	14%	
AZ	-42%	0%	-2%	6%	94%	
CA	12%	-13%	0%	6%	50%	
CO	2%	-77%	-31%	5%	40%	
СТ	-2%		-2%	17%	0%	
FL	-3%		-3%	18%	0%	
GA	3%	-54%	3%	38%	0%	
HI	-6%		-6%	1%	0%	
IA	-1%	4%	1%	7%	39%	
ID	-7%	-5%	-6%	1%	31%	
IL	-25%	6%	-5%	13%	67%	
IN	0%		0%	10%	0%	
KS	-4%	5%	2%	9%	63%	
KY	-11%		-11%	8%	0%	
LA	-1%		-1%	40%	0%	
MA	-3%		-3%	15%	0%	
MD	17%	-8%	2%	30%	58%	
ME	-18%		-18%	4%	0%	
MI	-2%	37%	21%	15%	59%	
MN	-5%		-5%	13%	0%	
MO	25%	51%	38%	12%	53%	
MS	3%	7%	4%	40%	25%	
MT	-5%	22%	3%	1%	30%	
NC	-4%	1%	-3%	21%	20%	
ND	6%		6%	5%	0%	
NE	-16%	-18%	-17%	6%	64%	
NH	-13%		-13%	1%	0%	
NJ	3%	1%	1%	14%	60%	
NM	-2%	15%	6%	3%	49%	
NV	-6%		-6%	8%	0%	
NY	5%	15%	10%	16%	55%	
OH	-6%	37%	7%	16%	32%	
ОК	0%	17%	6%	8%	36%	
OR	3%	-4%	-1%	2%	56%	
PA	-10%	8%	-4%	16%	33%	

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	State funding	Local funding	Total funding	Share of students who are Black	Share of funding that is local
SC	9%	-1%	6%	29%	34%
SD	0%		0%	1%	0%
ΤN	-5%		-5%	16%	0%
ΤX	-4%	5%	2%	12%	63%
UT	-2%		-2%	2%	0%
VA	0%	-27%	0%	18%	1%
WA	-1%		-1%	5%	0%
WI	1%	16%	8%	8%	48%
WV	-5%		-5%	5%	0%
WY	-2%	5%	0%	1%	29%

Funding Gaps for Black Students Relative to All Other Students

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Note: Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

TABLE A.3

Funding Equity for Hispanic Students, by State

Funding Gaps for Hispanic Students Relative to All Other Students

	State funding	Local funding	Total funding	Share of students who are Hispanic	Share of funding that is local
AL	-7%	-21%	-7%	4%	1%
AR	-22%	47%	-13%	8%	14%
AZ	-37%	3%	1%	34%	94%
CA	16%	-12%	1%	46%	50%
CO	3%	30%	14%	23%	40%
СТ	-3%		-3%	24%	0%
FL	-8%		-8%	30%	0%
GA	-7%	-6%	-7%	8%	0%
HI	0%		0%	13%	0%
IA	-1%	-12%	-5%	8%	39%
ID	-1%	-18%	-6%	15%	31%
IL	-4%	-12%	-10%	23%	67%
IN	8%		8%	5%	0%
KS	3%	11%	8%	13%	63%
KY	-10%		-10%	4%	0%
LA	0%		0%	5%	0%
MA	-1%		-1%	19%	0%
MD	-5%	26%	12%	10%	58%
ME	-8%		-8%	2%	0%
MI	0%	-3%	-2%	5%	59%
MN	-2%		-2%	7%	0%
MO	-5%	-6%	-5%	6%	53%
MS	-5%	-1%	-4%	2%	25%
MT	5%	-37%	-8%	2%	30%
NC	-4%	1%	-3%	11%	20%
ND	-3%		-3%	4%	0%
NE	0%	8%	5%	13%	64%
NH	-12%		-12%	5%	0%

				Share of students	Share of funding that
	State funding	Local funding	Total funding	who are Hispanic	is local
NJ	-4%	9%	4%	24%	60%
NM	-2%	2%	0%	48%	49%
NV	-2%		-2%	29%	0%
NY	8%	38%	24%	23%	55%
OH	-16%	13%	-7%	6%	32%
ОК	-2%	0%	-1%	10%	36%
OR	-3%	-1%	-2%	15%	56%
PA	-5%	-13%	-7%	11%	33%
SC	-4%	5%	-1%	6%	34%
SD	1%		1%	3%	0%
ΤN	-4%		-4%	5%	0%
ТΧ	2%	-1%	0%	43%	63%
UT	-2%		-2%	17%	0%
VA	-11%	-42%	-11%	12%	1%
WA	-2%		-2%	13%	0%
WI	2%	8%	5%	9%	48%
WV	-23%		-23%	2%	0%
WY	-2%	8%	1%	10%	29%

Funding Gaps for Hispanic Students Relative to All Other Students

Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Note: Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

FIGURE A.1

Relationship between Total Funding per FTE Student and FTE Enrollment, by State



Association between an additional 100 FTE students and funding per FTE student

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Source: Urban Institute analysis of data from the Integrated Postsecondary Education Data System and the Colorado Community College System.

Notes: FTE = full-time equivalent. This analysis controls for the share of Pell grant recipients enrolled at each institution. Funding data are for fiscal year 2019, and enrollment data are for the 2018–19 academic year.

* = not statistically significant.

Notes

- ¹ For most of this report, we use funding data from the Integrated Postsecondary Education Data System (IPEDS). But we use State Higher Education Executive Officers Association data for these FY 2022 measures because they are more recent than available IPEDS data.
- ² Because both residential and commercial properties generate revenues, there is not always a direct correlation between household income and property tax revenues.
- ³ Concerns about the equity of the distribution of federal relief funds to colleges during the pandemic brought the issue of the relative roles of total and FTE enrollment to the forefront. See Danielle Zaragoza and Scott Boelscher, "Equitable Distribution of Postsecondary Funds," HCM Strategists, accessed October 24, 2023, https://hcmstrategists.com/resources/equitable-distribution-of-postsecondary-funds.
- ⁴ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ⁵ Examples include Colorado, New Jersey, and Virginia.
- ⁶ Sarah Weissman, "'More Refined' Performance-Based Funding for Community Colleges," Inside Higher Ed, June 15, 2023, https://www.insidehighered.com/news/institutions/community-colleges/2023/06/15/new-performance-based-funding-formulas-community.
- ⁷ "Community College Finance," Texas Higher Education Coordinating Board, accessed October 24, 2023, https://www.highered.texas.gov/our-work/supporting-our-institutions/community-college-finance/.
- ⁸ "Community College Support Fund," Oregon Higher Education Coordinating Commission, accessed October 24, 2023, https://www.oregon.gov/highered/institutions-programs/ccwd/Pages/community-college-support-fund-distribution.aspx.
- ⁹ Colorado does not fund its community college system through state appropriations but, rather, through tuition stipends and contracts with the Department of Higher Education. For the 13 colleges in this system, we use data from the Colorado Community College System and treat funding for these stipends and contracts as state appropriations.
- ¹⁰ In contrast to state appropriations, which are directly for meeting current operating expenses, state operating grants and contracts are revenues for specific projects or programs. See "IPEDS Finance GASB Revenue Category," Common Education Data Standards, accessed October 24, 2023, https://ceds.ed.gov/element/001672.
- ¹¹ John Fink and Davis Jenkins, "Shifting Sectors: How a Commonly Used Federal Datapoint Undercounts Over a Million Community College Students," *Mixed Methods* (blog), Community College Research Center, April 30, 2020, https://ccrc.tc.columbia.edu/easyblog/shifting-sectors-community-colleges-undercounting.html.
- ¹² Delaware, Rhode Island, and Vermont each have just one community college. With just one institution, each student is exposed to the same level of per student funding, meaning there are no differences in funding levels by race, ethnicity, or income. Therefore, we exclude these three states from our analysis of funding gaps within states.
- ¹³ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ¹⁴ We calculate average funding per FTE student as an unweighted state-level average. The weighted state-level average funding amount per FTE student is \$7,043.
- ¹⁵ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ¹⁶ This method yields similar results to one in which we compare funding for Black and Hispanic students with that of white students instead of all other students. One exception, however, is funding in New York. New York's

funding for Black students is 25 percent greater than funding for white students but only 10 percent greater than funding for all non-Black students. This difference arises because Hispanic students also receive more funding than white students in New York, and they make up a substantial share of community college enrollment in the state.

- ¹⁷ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ¹⁸ We define public four-year institutions consistent with the Community College Research Center as those that predominantly offer bachelor's degrees. Many institutions that offer predominantly associate degrees and some bachelor's degrees are defined in IPEDS as four-year institutions, but they are not included in this calculation.
- ¹⁹ Emily Walkenhorst, "State Cash for Higher Education Rises Again, but Fund Formula Hits Some Schools," Arkansas Democrat Gazette, August 5, 2019, https://www.arkansasonline.com/news/2019/aug/05/state-cashfor-higher-education-rises-a/.
- ²⁰ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System and the Colorado Community College System. Because of how Colorado funds its higher education system, IPEDS data do not provide an accurate estimate of state support for four-year institutions. Therefore, we do not include this measure for Colorado.
- ²¹ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ²² "Missouri Colleges," Missouri Community College Association, accessed October 24, 2023, https://www.missouricolleges.org/missouri-colleges/.
- ²³ "August 3, 2021 The Community College District of St. Louis, St. Louis County Missouri Special Election," City of St. Louis, accessed October 24, 2023, https://www.stlouis-mo.gov/government/departments/board-electioncommissioners/elections/election.cfm?customel_datapageid_524494=889697.
- ²⁴ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ²⁵ Megan Menchaca, "Gov. Greg Abbott Signs House Bill 8 to Provide \$683M More for Texas Community Colleges," Austin American-Statesman, June 12, 2023, https://www.statesman.com/story/news/education/2023/06/12/gov-abbott-signs-bill-providing-millions-fortexas-junior-colleges/70313008007/.
- ²⁶ "Community College Finance in Texas Explained," Texas 2036, accessed April 14, 2023, https://texas2036.org/community-college-finance/community-college-finance-in-texas-explained/.
- ²⁷ There is one other public two-year college in the state, Richard Bland College, which is a branch of the College of William and Mary.
- ²⁸ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ²⁹ Urban Institute analysis of 2018–19 data from the Integrated Postsecondary Education Data System.
- ³⁰ Jeff Jenkins, "HEPC Approves Emergency Rule for New Funding Formula Impacting Colleges, Universities," *Metro News*, June 10, 2022, https://wvmetronews.com/2022/06/10/hepc-approves-emergency-rule-for-newfunding-formula-impacting-colleges-universities/.
- ³¹ Steven Allen Adams, "West Virginia Senate Takes Up House Version of Higher Ed Funding Formula," The Intelligencer: Wheeling News-Register, March 4, 2022, https://www.theintelligencer.net/news/topheadlines/2022/03/west-virginia-senate-takes-up-house-version-of-higher-ed-funding-formula/.
- ³² Ryan Quinn, "WV Colleges Working on Funding Formula, without Controversy of Blue Ribbon Commission," *Herald-Dispatch*, October 12, 2021, https://www.herald-dispatch.com/news/wv-colleges-working-on-fundingformula-without-controversy-of-blue-ribbon-commission/article_3550cc70-4da1-5d6d-9f79-8c77c3cf9986.html.

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